SEQUENCE OF EVENTS File: mm156a.01.rsoe Source: mm156a.01.pef Generated: Sat Dec 1 00:32:57 2001
MGS (094) DKF: mm156a.01.dkf Alloc: MGS_01345_02017.SAF
Page 1 OWLT = 11:17, RTLT = 22:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1	MGS	01-347/00:00:00		Light Time: OWLT = 11:16, RTLT = 22:33		
2	MGS	01-347/00:02:21	15	NOTE: Loss Of X-Band Signal		
3	MGS	01-347/00:08:16		<<ERROR>> Resulting from 1150-B-MOLA; After initial instrument or replacement heater turn-ON, either the MOLA or its replacement heater will be ON at all times. The MOLA and its replacement heater shall never both be on at the same time.; payload::MOLA_On=TRUE, payload::MOLA_Heater_Status=Power_On;		01-346/23:57:00
4	MGS	01-347/00:08:32		NOTE: Enter Earth Occultation 12357		01-346/23:57:15
5	MGS	01-347/00:21:41		: 01:39:43	RPAONX	01-347/00:10:24
6	MGS	01-347/00:21:41		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/00:10:24
7	MGS	01-347/00:23:26		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/00:12:09
8	MGS	01-347/00:23:49		NOTE: Exit Earth Occultation 12357		01-347/00:12:32
9	MGS	01-347/00:23:49	15	Acquisition Of X-Band Signal		
10	MGS	01-347/00:23:49	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11	MGS	01-347/00:32:19		NOTE: Exit Planetary Atmosphere 12357		01-347/00:21:01
12	MGS	01-347/00:32:40		: REC_1B, F85KHZ, PART2, SE_1A, FALSE, 00:18:05	AEMPB	01-347/00:21:23
13	MGS	01-347/00:32:40		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-347/00:21:23
14	MGS	01-347/00:32:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F85KHZ, PLYBCK, PART2	STSSRC	01-347/00:21:23
15	MGS	01-347/00:32:41		SSR 1B Data Enable	CSD1BE	01-347/00:21:24
16	MGS	01-347/00:32:41		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=85333		01-347/00:21:24
17	MGS	01-347/00:32:41	15	D/L Change: X/20, 1-Way, BW=10, BR=85333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18	MGS	01-347/00:43:10		NOTE: Exit Solar Eclipse 12357		01-347/00:31:53
19	MGS	01-347/01:00:05		NOTE: Periapsis 12358 ----------		01-347/00:48:48
20	MGS	01-347/01:08:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/00:56:51
21	MGS	01-347/01:08:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/00:56:51
22	MGS	01-347/01:08:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/00:56:52
23	MGS	01-347/01:08:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/00:56:52
24	MGS	01-347/01:30:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/01:18:52
25	MGS	01-347/01:30:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/01:18:52
26	MGS	01-347/01:43:19		SSR 1B Data Disable	CSD1BX	01-347/01:32:02
27	MGS	01-347/01:43:19		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=361642666, DUR=01:10:38		01-347/01:32:02
28	MGS	01-347/01:43:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-347/01:32:02
29	MGS	01-347/01:43:19	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
30	MGS	01-347/01:50:52		NOTE: Start Block (MAP_RT)		01-347/01:39:34
31	MGS	01-347/01:50:53		: 00:18:59, 01:44:46, FALSE, TRUE, FALSE, 00:01:15, 00:11:10, 01:21:31, 00:10:49	AEMINI	01-347/01:39:35
32	MGS	01-347/01:50:53		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/01:39:35
33	MGS	01-347/01:50:53		NOTE: Start EVP data return script		01-347/01:39:35
34	MGS	01-347/01:50:54		: SE_2A, RTM, 01:21:30, MRC, 2001-347T02:21:01.000	AEMRTI	01-347/01:39:36
35	MGS	01-347/01:58:10		NOTE: Enter Planetary Atmosphere 12358		01-347/01:46:53
36	MGS	01-347/01:58:55		NOTE: Apoapsis 12358 -		01-347/01:47:38
37	MGS	01-347/02:00:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/01:49:35
38	MGS	01-347/02:00:53		NOTE: Enter Solar Eclipse 12358		01-347/01:49:35
39	MGS	01-347/02:01:24		NOTE: End EVP script		01-347/01:50:07
40	MGS	01-347/02:01:25		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/01:50:07
41	MGS	01-347/02:01:25	15	NOTE: Loss Of X-Band Signal		
42	MGS	01-347/02:01:25		NOTE: End Block (MAP_PB_ODY)		01-347/01:50:08
43	MGS	01-347/02:06:18		NOTE: Enter Earth Occultation 12358		01-347/01:55:01
44	MGS	01-347/02:16:07		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/02:04:49
45	MGS	01-347/02:19:52		: 01:44:46	RPAONX	01-347/02:08:34
46	MGS	01-347/02:19:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/02:08:34
47	MGS	01-347/02:21:07		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/02:09:49
48	MGS	01-347/02:21:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/02:09:49
49	MGS	01-347/02:21:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/02:09:49
50	MGS	01-347/02:21:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/02:09:49
51	MGS	01-347/02:21:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/02:09:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
52	MGS	01-347/02:21:38		NOTE: Exit Earth Occultation 12358		01-347/02:10:21
53	MGS	01-347/02:21:38	15	Acquisition Of X-Band Signal		
54	MGS	01-347/02:21:38	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
55	MGS	01-347/02:21:38	15	NOTE: Carrier Only -- No Telemetry Modulation		
56	MGS	01-347/02:25:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/02:13:52
57	MGS	01-347/02:25:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/02:13:52
58	MGS	01-347/02:25:15		Set eclipse egress script address: 019A	SWSEES	01-347/02:13:57
59	MGS	01-347/02:30:07		NOTE: Exit Planetary Atmosphere 12358		01-347/02:18:49
60	MGS	01-347/02:32:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/02:20:59
61	MGS	01-347/02:32:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/02:20:59
62	MGS	01-347/02:32:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/02:20:59
63	MGS	01-347/02:32:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/02:20:59
64	MGS	01-347/02:32:17	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
65	MGS	01-347/02:32:18		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/02:21:00
66	MGS	01-347/02:32:18		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/02:21:00
67	MGS	01-347/02:32:18		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/02:21:00
68	MGS	01-347/02:32:18	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
69	MGS	01-347/02:32:22		NOTE: End fixed Sub-Reflector for Radio Science		01-347/02:21:04
70	MGS	01-347/02:40:57		NOTE: Exit Solar Eclipse 12358		01-347/02:29:40
71	MGS	01-347/02:57:47		NOTE: Periapsis 12359 ----------		01-347/02:46:30
72	MGS	01-347/03:01:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/02:50:39
73	MGS	01-347/03:01:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/02:50:39
74	MGS	01-347/03:01:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/02:50:40
75	MGS	01-347/03:01:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/02:50:40
76	MGS	01-347/03:23:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/03:12:40
77	MGS	01-347/03:23:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/03:12:40
78	MGS	01-347/03:48:38		NOTE: Start EVP data return script		01-347/03:37:20
79	MGS	01-347/03:48:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/03:37:30
80	MGS	01-347/03:53:48		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/03:42:30
81	MGS	01-347/03:53:48		: 00:10:49, FALSE	RDSCII	01-347/03:42:30
82	MGS	01-347/03:53:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/03:42:30
83	MGS	01-347/03:53:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/03:42:30
84	MGS	01-347/03:53:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/03:42:30
85	MGS	01-347/03:53:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/03:42:30
86	MGS	01-347/03:53:48	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
87	MGS	01-347/03:53:48	15	NOTE: Carrier Only -- No Telemetry Modulation		
88	MGS	01-347/03:55:54		NOTE: Enter Planetary Atmosphere 12359		01-347/03:44:36
89	MGS	01-347/03:56:24		NOTE: Apoapsis 12359 -		01-347/03:45:07
90	MGS	01-347/03:58:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/03:47:20
91	MGS	01-347/03:58:38		NOTE: Enter Solar Eclipse 12359		01-347/03:47:21
92	MGS	01-347/04:00:00	45	Begin Pre-Cal		
93	MGS	01-347/04:00:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
94	MGS	01-347/04:00:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
95	MGS	01-347/04:00:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
96	MGS	01-347/04:00:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
97	MGS	01-347/04:00:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
98	MGS	01-347/04:00:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
99	MGS	01-347/04:00:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
100	MGS	01-347/04:00:00	45	Config: TGC: DEST=37		
101	MGS	01-347/04:00:00	45	Config: TGC: BAND=X, BR=40000.000000		
102	MGS	01-347/04:00:00	45	Config: FSS: CH=2, PRI_FL=10000		
103	MGS	01-347/04:00:00	45	Config: RSR		
104	MGS	01-347/04:00:00	45	Config: TXL		
105	MGS	01-347/04:00:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
106	MGS	01-347/04:00:00	45	Config: BVR		
107	MGS	01-347/04:00:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
108	MGS	01-347/04:00:00	45	Config: MDA: SMPL=0.1		
109	MGS	01-347/04:00:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
110	MGS	01-347/04:00:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
111	MGS	01-347/04:00:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
112	MGS	01-347/04:04:01		NOTE: Enter Earth Occultation 12359		01-347/03:52:43
113	MGS	01-347/04:04:01	15	NOTE: Loss Of X-Band Signal		
114	MGS	01-347/04:04:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/03:53:19
115	MGS	01-347/04:04:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/03:53:19
116	MGS	01-347/04:04:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/03:53:19
117	MGS	01-347/04:04:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/03:53:19
118	MGS	01-347/04:04:38		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/03:53:20
119	MGS	01-347/04:04:38		NOTE: End EVP script		01-347/03:53:20
120	MGS	01-347/04:04:42		NOTE: End fixed Sub-Reflector for Radio Science		01-347/03:53:24
121	MGS	01-347/04:13:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/04:02:34
122	MGS	01-347/04:17:37		: 01:44:46	RPAONX	01-347/04:06:19
123	MGS	01-347/04:17:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/04:06:19
124	MGS	01-347/04:18:52		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/04:07:34
125	MGS	01-347/04:18:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/04:07:34
126	MGS	01-347/04:18:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/04:07:34
127	MGS	01-347/04:18:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/04:07:34
128	MGS	01-347/04:18:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/04:07:34
129	MGS	01-347/04:19:22		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/04:08:04
130	MGS	01-347/04:19:27		NOTE: Exit Earth Occultation 12359		01-347/04:08:09
131	MGS	01-347/04:19:27	15	Acquisition Of X-Band Signal		
132	MGS	01-347/04:19:27	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
133	MGS	01-347/04:19:27	15	NOTE: Carrier Only -- No Telemetry Modulation		
134	MGS	01-347/04:22:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/04:11:40
135	MGS	01-347/04:22:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/04:11:40
136	MGS	01-347/04:23:03		Set eclipse egress script address: 01DC	SWSEES	01-347/04:11:45
137	MGS	01-347/04:27:54		NOTE: Exit Planetary Atmosphere 12359		01-347/04:16:37
138	MGS	01-347/04:30:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/04:18:44
139	MGS	01-347/04:30:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/04:18:44
140	MGS	01-347/04:30:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/04:18:44
141	MGS	01-347/04:30:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/04:18:44
142	MGS	01-347/04:30:02	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
143	MGS	01-347/04:30:03		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/04:18:45
144	MGS	01-347/04:30:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/04:18:45
145	MGS	01-347/04:30:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/04:18:45
146	MGS	01-347/04:30:03	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
147	MGS	01-347/04:30:07		NOTE: End fixed Sub-Reflector for Radio Science		01-347/04:18:49
148	MGS	01-347/04:38:43		NOTE: Exit Solar Eclipse 12359		01-347/04:27:25
149	MGS	01-347/04:55:34		NOTE: Periapsis 12360 ----------		01-347/04:44:16
150	MGS	01-347/04:59:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/04:48:24
151	MGS	01-347/04:59:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/04:48:24
152	MGS	01-347/04:59:43		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/04:48:25
153	MGS	01-347/04:59:43		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/04:48:25
154	MGS	01-347/05:00:00	45	Begin Tracking		
155	MGS	01-347/05:00:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
156	MGS	01-347/05:10:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
157	MGS	01-347/05:12:00	45	Range Modulation On: SUP=3.0dB		
158	MGS	01-347/05:13:00	45	Begin Ranging Acquisition		
159	MGS	01-347/05:15:24	15	NOTE: Below Uplink Interlock Limit		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
160	MGS	01-347/05:20:22	45	NOTE: Transmitter Off in 15 minutes		
161	MGS	01-347/05:21:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/05:10:25
162	MGS	01-347/05:21:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/05:10:25
163	MGS	01-347/05:25:00	15	End Tracking		
164	MGS	01-347/05:31:03		NOTE: Start Block (SSRMGR)		01-347/05:19:45
165	MGS	01-347/05:31:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/05:19:45
166	MGS	01-347/05:31:46		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, CLRALL, PART1	STSSRC	01-347/05:20:28
167	MGS	01-347/05:31:47		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-347/05:20:29
168	MGS	01-347/05:31:48		SSR 1B Data Enable	CSD1BE	01-347/05:20:30
169	MGS	01-347/05:31:48		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-347/05:20:30
170	MGS	01-347/05:32:35	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
171	MGS	01-347/05:33:22	45	Range Modulation Off		
172	MGS	01-347/05:35:22	45	Transmitter Off		
173	MGS	01-347/05:40:00	15	End Post-Cal		
174	MGS	01-347/05:46:21		NOTE: Start Block (MAP_PB_ODY)		01-347/05:35:03
175	MGS	01-347/05:46:22		: 00:18:59, 01:44:47, FALSE, FALSE, FALSE, 00:01:15, 00:09:30, 01:24:52, 00:09:09	AEMINI	01-347/05:35:04
176	MGS	01-347/05:46:22		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/05:35:04
177	MGS	01-347/05:46:22		NOTE: Start EVP data return script		01-347/05:35:04
178	MGS	01-347/05:46:23		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-347T06:14:48.000	AEMPBI	01-347/05:35:05
179	MGS	01-347/05:46:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/05:35:15
180	MGS	01-347/05:51:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/05:40:15
181	MGS	01-347/05:51:33		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9480000, DUR=00:19:45		01-347/05:40:15
182	MGS	01-347/05:51:33		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-347/05:40:15
183	MGS	01-347/05:51:33		: 00:10:49, FALSE	RDSCII	01-347/05:40:15
184	MGS	01-347/05:51:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/05:40:15
185	MGS	01-347/05:51:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/05:40:15
186	MGS	01-347/05:51:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/05:40:15
187	MGS	01-347/05:51:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/05:40:15
188	MGS	01-347/05:51:33	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
189	MGS	01-347/05:51:33	45	NOTE: Carrier Only -- No Telemetry Modulation		
190	MGS	01-347/05:53:36		NOTE: Enter Planetary Atmosphere 12360		01-347/05:42:18
191	MGS	01-347/05:54:05		SSR 1A Data Disable	CSD1AX	01-347/05:42:47
192	MGS	01-347/05:54:05		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-347/05:42:47
193	MGS	01-347/05:54:06		NOTE: End Block (SSRMGR)		01-347/05:42:48
194	MGS	01-347/05:54:13		NOTE: Apoapsis 12360 -		01-347/05:42:55
195	MGS	01-347/05:56:22		NOTE: Enter Solar Eclipse 12360		01-347/05:45:04
196	MGS	01-347/05:56:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/05:45:04
197	MGS	01-347/05:58:22	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
198	MGS	01-347/06:00:23	45	Range Modulation On: SUP=3.0dB		
199	MGS	01-347/06:01:23	45	Begin Ranging Acquisition		
200	MGS	01-347/06:01:42		NOTE: Enter Earth Occultation 12360		01-347/05:50:24
201	MGS	01-347/06:01:42	45	NOTE: Loss Of X-Band Signal		
202	MGS	01-347/06:02:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/05:51:04
203	MGS	01-347/06:02:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/05:51:04
204	MGS	01-347/06:02:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/05:51:04
205	MGS	01-347/06:02:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/05:51:04
206	MGS	01-347/06:02:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/05:51:05
207	MGS	01-347/06:02:23		NOTE: End EVP script		01-347/05:51:05
208	MGS	01-347/06:02:24		NOTE: End Block (MAP_RT)		01-347/05:51:06
209	MGS	01-347/06:02:27		NOTE: End fixed Sub-Reflector for Radio Science		01-347/05:51:09
210	MGS	01-347/06:15:21		: 01:44:47	RPAONX	01-347/06:04:03
211	MGS	01-347/06:15:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/06:04:03
212	MGS	01-347/06:17:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/06:05:48
213	MGS	01-347/06:17:13		NOTE: Exit Earth Occultation 12360		01-347/06:05:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
214	MGS	01-347/06:17:13	45	Acquisition Of X-Band Signal		
215	MGS	01-347/06:17:13	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
216	MGS	01-347/06:20:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/06:09:25
217	MGS	01-347/06:20:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/06:09:25
218	MGS	01-347/06:20:47		Command the PSE with included data word: 3990	SWPSEL	01-347/06:09:29
219	MGS	01-347/06:20:48		Set eclipse egress script address: 0158	SWSEES	01-347/06:09:30
220	MGS	01-347/06:20:58	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
221	MGS	01-347/06:25:39		NOTE: Exit Planetary Atmosphere 12360		01-347/06:14:21
222	MGS	01-347/06:26:06		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:23:23	AEMPB	01-347/06:14:48
223	MGS	01-347/06:26:06		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-347/06:14:48
224	MGS	01-347/06:26:06		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-347/06:14:48
225	MGS	01-347/06:26:07		SSR 1A Data Enable	CSD1AE	01-347/06:14:49
226	MGS	01-347/06:26:07		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-347/06:14:49
227	MGS	01-347/06:26:07	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
228	MGS	01-347/06:36:26		NOTE: Exit Solar Eclipse 12360		01-347/06:25:08
229	MGS	01-347/06:53:16		NOTE: Periapsis 12361 ----------		01-347/06:41:59
230	MGS	01-347/07:01:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/06:50:07
231	MGS	01-347/07:01:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/06:50:07
232	MGS	01-347/07:01:26		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/06:50:08
233	MGS	01-347/07:01:26		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/06:50:08
234	MGS	01-347/07:18:04	45	NOTE: Transmitter Off in 15 minutes		
235	MGS	01-347/07:23:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/07:12:08
236	MGS	01-347/07:23:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/07:12:08
237	MGS	01-347/07:31:04	45	Range Modulation Off		
238	MGS	01-347/07:33:04	45	Transmitter Off		
239	MGS	01-347/07:36:45		SSR 1A Data Disable	CSD1AX	01-347/07:25:27
240	MGS	01-347/07:36:45		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-347/07:25:27
241	MGS	01-347/07:36:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-347/07:25:27
242	MGS	01-347/07:36:45	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
243	MGS	01-347/07:44:02		NOTE: Start Block (MAP_RT)		01-347/07:32:44
244	MGS	01-347/07:44:03		: 00:18:59, 01:44:46, FALSE, TRUE, FALSE, 00:01:15, 00:11:10, 01:21:31, 00:10:49	AEMINI	01-347/07:32:45
245	MGS	01-347/07:44:03		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/07:32:45
246	MGS	01-347/07:44:03		NOTE: Start EVP data return script		01-347/07:32:45
247	MGS	01-347/07:44:04		: SE_2A, RTM, 01:21:30, MRC, 2001-347T08:14:11.000	AEMRTI	01-347/07:32:46
248	MGS	01-347/07:51:19		NOTE: Enter Planetary Atmosphere 12361		01-347/07:40:00
249	MGS	01-347/07:52:00		NOTE: Apoapsis 12361 -		01-347/07:40:42
250	MGS	01-347/07:54:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/07:42:45
251	MGS	01-347/07:54:04		NOTE: Enter Solar Eclipse 12361		01-347/07:42:46
252	MGS	01-347/07:55:40	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
253	MGS	01-347/07:56:04	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
254	MGS	01-347/07:58:05	45	Range Modulation On: SUP=3.0dB		
255	MGS	01-347/07:59:05	45	Begin Ranging Acquisition		
256	MGS	01-347/07:59:25		NOTE: Enter Earth Occultation 12361		01-347/07:48:07
257	MGS	01-347/07:59:25	45	NOTE: Loss Of X-Band Signal		
258	MGS	01-347/08:00:08		NOTE: End EVP script		01-347/07:48:50
259	MGS	01-347/08:00:08		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/07:48:50
260	MGS	01-347/08:00:09		NOTE: End Block (MAP_PB_ODY)		01-347/07:48:51
261	MGS	01-347/08:09:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/07:58:00
262	MGS	01-347/08:13:02		: 01:44:46	RPAONX	01-347/08:01:44
263	MGS	01-347/08:13:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/08:01:44
264	MGS	01-347/08:14:17		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/08:02:59
265	MGS	01-347/08:14:17		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/08:02:59
266	MGS	01-347/08:14:17		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/08:02:59
267	MGS	01-347/08:14:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/08:02:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
268	MGS	01-347/08:14:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/08:02:59
269	MGS	01-347/08:14:56		NOTE: Exit Earth Occultation 12361		01-347/08:03:38
270	MGS	01-347/08:14:56	45	Acquisition Of X-Band Signal		
271	MGS	01-347/08:14:56	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
272	MGS	01-347/08:14:56	45	NOTE: Carrier Only -- No Telemetry Modulation		
273	MGS	01-347/08:18:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/08:07:08
274	MGS	01-347/08:18:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/08:07:08
275	MGS	01-347/08:18:31		Set eclipse egress script address: 019A	SWSEES	01-347/08:07:13
276	MGS	01-347/08:23:22		NOTE: Exit Planetary Atmosphere 12361		01-347/08:12:04
277	MGS	01-347/08:25:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/08:14:09
278	MGS	01-347/08:25:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/08:14:09
279	MGS	01-347/08:25:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/08:14:09
280	MGS	01-347/08:25:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/08:14:09
281	MGS	01-347/08:25:27	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
282	MGS	01-347/08:25:28		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/08:14:10
283	MGS	01-347/08:25:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/08:14:10
284	MGS	01-347/08:25:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/08:14:10
285	MGS	01-347/08:25:28	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
286	MGS	01-347/08:25:33		NOTE: End fixed Sub-Reflector for Radio Science		01-347/08:14:15
287	MGS	01-347/08:34:08		NOTE: Exit Solar Eclipse 12361		01-347/08:22:50
288	MGS	01-347/08:50:43		NOTE: Periapsis 12362 ----------		01-347/08:39:25
289	MGS	01-347/08:55:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/08:43:49
290	MGS	01-347/08:55:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/08:43:49
291	MGS	01-347/08:55:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/08:43:50
292	MGS	01-347/08:55:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/08:43:50
293	MGS	01-347/09:15:44	45	NOTE: Transmitter Off in 15 minutes		
294	MGS	01-347/09:17:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/09:05:50
295	MGS	01-347/09:17:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/09:05:50
296	MGS	01-347/09:28:45	45	Range Modulation Off		
297	MGS	01-347/09:30:44	45	Transmitter Off		
298	MGS	01-347/09:41:47		NOTE: Start EVP data return script		01-347/09:30:28
299	MGS	01-347/09:41:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/09:30:41
300	MGS	01-347/09:46:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/09:35:40
301	MGS	01-347/09:46:59		: 00:10:49, FALSE	RDSCII	01-347/09:35:40
302	MGS	01-347/09:46:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/09:35:40
303	MGS	01-347/09:46:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/09:35:40
304	MGS	01-347/09:46:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/09:35:40
305	MGS	01-347/09:46:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/09:35:40
306	MGS	01-347/09:46:59	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
307	MGS	01-347/09:46:59	45	NOTE: Carrier Only -- No Telemetry Modulation		
308	MGS	01-347/09:49:02		NOTE: Enter Planetary Atmosphere 12362		01-347/09:37:43
309	MGS	01-347/09:49:27		NOTE: Apoapsis 12362 -		01-347/09:38:08
310	MGS	01-347/09:51:47		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/09:40:28
311	MGS	01-347/09:51:47		NOTE: Enter Solar Eclipse 12362		01-347/09:40:28
312	MGS	01-347/09:53:48	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
313	MGS	01-347/09:55:49	45	Range Modulation On: SUP=3.0dB		
314	MGS	01-347/09:56:49	45	Begin Ranging Acquisition		
315	MGS	01-347/09:57:06		NOTE: Enter Earth Occultation 12362		01-347/09:45:48
316	MGS	01-347/09:57:06	45	NOTE: Loss Of X-Band Signal		
317	MGS	01-347/09:57:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/09:46:29
318	MGS	01-347/09:57:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/09:46:29
319	MGS	01-347/09:57:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/09:46:29
320	MGS	01-347/09:57:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/09:46:29
321	MGS	01-347/09:57:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/09:46:30

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
322	MGS	01-347/09:57:49		NOTE: End EVP script		01-347/09:46:31
323	MGS	01-347/09:57:53		NOTE: End fixed Sub-Reflector for Radio Science		01-347/09:46:35
324	MGS	01-347/10:07:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/09:55:43
325	MGS	01-347/10:10:46		: 01:44:46	RPAONX	01-347/09:59:27
326	MGS	01-347/10:10:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/09:59:27
327	MGS	01-347/10:12:01		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/10:00:42
328	MGS	01-347/10:12:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/10:00:42
329	MGS	01-347/10:12:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/10:00:42
330	MGS	01-347/10:12:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/10:00:42
331	MGS	01-347/10:12:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/10:00:42
332	MGS	01-347/10:12:31		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/10:01:12
333	MGS	01-347/10:12:40		NOTE: Exit Earth Occultation 12362		01-347/10:01:22
334	MGS	01-347/10:12:40	45	Acquisition Of X-Band Signal		
335	MGS	01-347/10:12:40	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
336	MGS	01-347/10:12:40	45	NOTE: Carrier Only -- No Telemetry Modulation		
337	MGS	01-347/10:16:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/10:04:50
338	MGS	01-347/10:16:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/10:04:50
339	MGS	01-347/10:16:14		Set eclipse egress script address: 01DC	SWSEES	01-347/10:04:55
340	MGS	01-347/10:21:05		NOTE: Exit Planetary Atmosphere 12362		01-347/10:09:46
341	MGS	01-347/10:23:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/10:11:52
342	MGS	01-347/10:23:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/10:11:52
343	MGS	01-347/10:23:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/10:11:52
344	MGS	01-347/10:23:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/10:11:52
345	MGS	01-347/10:23:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
346	MGS	01-347/10:23:12		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/10:11:53
347	MGS	01-347/10:23:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/10:11:53
348	MGS	01-347/10:23:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/10:11:53
349	MGS	01-347/10:23:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
350	MGS	01-347/10:23:16		NOTE: End fixed Sub-Reflector for Radio Science		01-347/10:11:58
351	MGS	01-347/10:31:51		NOTE: Exit Solar Eclipse 12362		01-347/10:20:33
352	MGS	01-347/10:48:17		NOTE: Periapsis 12363 ----------		01-347/10:36:58
353	MGS	01-347/10:52:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/10:41:31
354	MGS	01-347/10:52:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/10:41:31
355	MGS	01-347/10:52:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/10:41:32
356	MGS	01-347/10:52:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/10:41:32
357	MGS	01-347/11:05:00	65	Begin Pre-Cal		
358	MGS	01-347/11:05:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
359	MGS	01-347/11:05:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
360	MGS	01-347/11:05:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
361	MGS	01-347/11:05:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
362	MGS	01-347/11:05:00	65	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
363	MGS	01-347/11:05:00	65	Config: TGC: DEST=37		
364	MGS	01-347/11:05:00	65	Config: TGC: BAND=X, BR=42666.666667		
365	MGS	01-347/11:05:00	65	Config: FSS: CH=2, PRI_FL=10000		
366	MGS	01-347/11:05:00	65	Config: RSR		
367	MGS	01-347/11:05:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
368	MGS	01-347/11:05:00	65	Config: BVR		
369	MGS	01-347/11:05:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
370	MGS	01-347/11:05:00	65	Config: MDA: SMPL=0.1		
371	MGS	01-347/11:13:22	45	NOTE: Transmitter Off in 15 minutes		
372	MGS	01-347/11:14:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/11:03:32
373	MGS	01-347/11:14:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/11:03:32
374	MGS	01-347/11:25:07		NOTE: Start Block (SSRMGR)		01-347/11:13:48
375	MGS	01-347/11:25:07		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-347/11:13:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
376	MGS	01-347/11:25:08		SSR 1A Data Enable	CSD1AE	01-347/11:13:49
377	MGS	01-347/11:25:08		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-347/11:13:49
378	MGS	01-347/11:26:23	45	Range Modulation Off		
379	MGS	01-347/11:28:22	45	Transmitter Off		
380	MGS	01-347/11:39:31		NOTE: Start Block (MAP_PB_ODY)		01-347/11:28:12
381	MGS	01-347/11:39:32		: 00:18:59, 01:44:47, FALSE, FALSE, FALSE, 00:01:15, 00:09:30, 01:24:52, 00:09:09	AEMINI	01-347/11:28:13
382	MGS	01-347/11:39:32		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/11:28:13
383	MGS	01-347/11:39:32		NOTE: Start EVP data return script		01-347/11:28:13
384	MGS	01-347/11:39:33		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-347T12:07:58.000	AEMPBI	01-347/11:28:14
385	MGS	01-347/11:39:42		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/11:28:24
386	MGS	01-347/11:44:42		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/11:33:23
387	MGS	01-347/11:44:42		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9392000, DUR=00:19:34		01-347/11:33:23
388	MGS	01-347/11:44:42		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-347/11:33:23
389	MGS	01-347/11:44:42		: 00:10:49, FALSE	RDSCII	01-347/11:33:23
390	MGS	01-347/11:44:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/11:33:23
391	MGS	01-347/11:44:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/11:33:23
392	MGS	01-347/11:44:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/11:33:23
393	MGS	01-347/11:44:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/11:33:23
394	MGS	01-347/11:44:42	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
395	MGS	01-347/11:44:42	45	NOTE: Carrier Only -- No Telemetry Modulation		
396	MGS	01-347/11:46:43		NOTE: Enter Planetary Atmosphere 12363		01-347/11:35:25
397	MGS	01-347/11:47:10		NOTE: Apoapsis 12363 -		01-347/11:35:51
398	MGS	01-347/11:48:32		SSR 1B Data Disable	CSD1BX	01-347/11:37:13
399	MGS	01-347/11:48:32		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-347/11:37:13
400	MGS	01-347/11:48:33		NOTE: End Block (SSRMGR)		01-347/11:37:14
401	MGS	01-347/11:49:32		NOTE: Enter Solar Eclipse 12363		01-347/11:38:13
402	MGS	01-347/11:49:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/11:38:13
403	MGS	01-347/11:51:36	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
404	MGS	01-347/11:53:37	45	Range Modulation On: SUP=3.0dB		
405	MGS	01-347/11:54:37	45	Begin Ranging Acquisition		
406	MGS	01-347/11:54:45		NOTE: Enter Earth Occultation 12363		01-347/11:43:26
407	MGS	01-347/11:54:45	45	NOTE: Loss Of X-Band Signal		
408	MGS	01-347/11:55:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/11:44:12
409	MGS	01-347/11:55:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/11:44:12
410	MGS	01-347/11:55:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/11:44:12
411	MGS	01-347/11:55:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/11:44:12
412	MGS	01-347/11:55:32		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/11:44:13
413	MGS	01-347/11:55:32		NOTE: End EVP script		01-347/11:44:14
414	MGS	01-347/11:55:33		NOTE: End Block (MAP_RT)		01-347/11:44:15
415	MGS	01-347/11:55:36		NOTE: End fixed Sub-Reflector for Radio Science		01-347/11:44:18
416	MGS	01-347/12:08:31		: 01:44:47	RPAONX	01-347/11:57:12
417	MGS	01-347/12:08:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/11:57:12
418	MGS	01-347/12:10:00	45	NOTE: Transmitter Off in 15 minutes		
419	MGS	01-347/12:10:16		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/11:58:57
420	MGS	01-347/12:10:28		NOTE: Exit Earth Occultation 12363		01-347/11:59:10
421	MGS	01-347/12:10:28	45	Acquisition Of X-Band Signal		
422	MGS	01-347/12:10:28	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
423	MGS	01-347/12:11:18		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-347/11:59:59
424	MGS	01-347/12:13:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/12:02:32
425	MGS	01-347/12:13:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/12:02:32
426	MGS	01-347/12:13:55		Command the PSE with included data word: 3990	SWPSEL	01-347/12:02:36
427	MGS	01-347/12:13:56		Set eclipse egress script address: 0158	SWSEES	01-347/12:02:37
428	MGS	01-347/12:14:14	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
429	MGS	01-347/12:18:49		NOTE: Exit Planetary Atmosphere 12363		01-347/12:07:30

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
430	MGS	01-347/12:19:16		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:23:23	AEMPB	01-347/12:07:57
431	MGS	01-347/12:19:16		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-347/12:07:57
432	MGS	01-347/12:19:16		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-347/12:07:57
433	MGS	01-347/12:19:17		SSR 1B Data Enable	CSD1BE	01-347/12:07:58
434	MGS	01-347/12:19:17		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-347/12:07:58
435	MGS	01-347/12:19:17	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
436	MGS	01-347/12:23:00	45	Range Modulation Off		
437	MGS	01-347/12:25:00	45	Transmitter Off		
438	MGS	01-347/12:29:36		NOTE: Exit Solar Eclipse 12363		01-347/12:18:18
439	MGS	01-347/12:35:00	45	End Tracking		
440	MGS	01-347/12:35:00	65	Begin Tracking		
441	MGS	01-347/12:35:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
442	MGS	01-347/12:46:24		NOTE: Periapsis 12364 ----------		01-347/12:35:05
443	MGS	01-347/12:47:00	65	NOTE: Above Uplink Interlock Limit		
444	MGS	01-347/12:47:37	65	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
445	MGS	01-347/12:50:00	45	End Post-Cal		
446	MGS	01-347/12:54:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/12:43:16
447	MGS	01-347/12:54:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/12:43:16
448	MGS	01-347/12:54:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/12:43:17
449	MGS	01-347/12:54:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/12:43:17
450	MGS	01-347/13:16:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/13:05:17
451	MGS	01-347/13:16:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/13:05:17
452	MGS	01-347/13:29:55		SSR 1B Data Disable	CSD1BX	01-347/13:18:36
453	MGS	01-347/13:29:55		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-347/13:18:36
454	MGS	01-347/13:29:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-347/13:18:36
455	MGS	01-347/13:29:55	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
456	MGS	01-347/13:37:17		NOTE: Start Block (MAP_RT)		01-347/13:25:58
457	MGS	01-347/13:37:18		: 00:18:59, 01:44:46, FALSE, TRUE, FALSE, 00:01:15, 00:11:10, 01:21:31, 00:10:49	AEMINI	01-347/13:25:59
458	MGS	01-347/13:37:18		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/13:25:59
459	MGS	01-347/13:37:18		NOTE: Start EVP data return script		01-347/13:25:59
460	MGS	01-347/13:37:19		: SE_2A, RTM, 01:21:30, MRC, 2001-347T14:07:25.000	AEMRTI	01-347/13:26:00
461	MGS	01-347/13:44:28		NOTE: Enter Planetary Atmosphere 12364		01-347/13:33:09
462	MGS	01-347/13:45:25		NOTE: Apoapsis 12364 -		01-347/13:34:06
463	MGS	01-347/13:47:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/13:35:59
464	MGS	01-347/13:47:19		NOTE: Enter Solar Eclipse 12364		01-347/13:36:00
465	MGS	01-347/13:52:28		NOTE: Enter Earth Occultation 12364		01-347/13:41:09
466	MGS	01-347/13:52:28	65	NOTE: Loss Of X-Band Signal		
467	MGS	01-347/13:53:18		NOTE: End EVP script		01-347/13:41:59
468	MGS	01-347/13:53:18		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/13:41:59
469	MGS	01-347/13:53:19		NOTE: End Block (MAP_PB_ODY)		01-347/13:42:00
470	MGS	01-347/14:02:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/13:51:14
471	MGS	01-347/14:06:17		: 01:44:46	RPAONX	01-347/13:54:58
472	MGS	01-347/14:06:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/13:54:58
473	MGS	01-347/14:07:32		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/13:56:13
474	MGS	01-347/14:07:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/13:56:13
475	MGS	01-347/14:07:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/13:56:13
476	MGS	01-347/14:07:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/13:56:13
477	MGS	01-347/14:07:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/13:56:13
478	MGS	01-347/14:08:17		NOTE: Exit Earth Occultation 12364		01-347/13:56:58
479	MGS	01-347/14:08:17	65	Acquisition Of X-Band Signal		
480	MGS	01-347/14:08:17	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
481	MGS	01-347/14:08:17	65	NOTE: Carrier Only -- No Telemetry Modulation		
482	MGS	01-347/14:11:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/14:00:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
483	MGS	01-347/14:11:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/14:00:17
484	MGS	01-347/14:11:41		Set eclipse egress script address: 019A	SWSEES	01-347/14:00:22
485	MGS	01-347/14:16:36		NOTE: Exit Planetary Atmosphere 12364		01-347/14:05:17
486	MGS	01-347/14:18:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/14:07:23
487	MGS	01-347/14:18:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/14:07:23
488	MGS	01-347/14:18:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/14:07:23
489	MGS	01-347/14:18:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/14:07:23
490	MGS	01-347/14:18:42	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
491	MGS	01-347/14:18:43		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/14:07:24
492	MGS	01-347/14:18:43		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/14:07:24
493	MGS	01-347/14:18:43		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/14:07:24
494	MGS	01-347/14:18:43	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
495	MGS	01-347/14:18:48		NOTE: End fixed Sub-Reflector for Radio Science		01-347/14:07:29
496	MGS	01-347/14:27:24		NOTE: Exit Solar Eclipse 12364		01-347/14:16:04
497	MGS	01-347/14:44:35		NOTE: Periapsis 12365 ----------		01-347/14:33:16
498	MGS	01-347/14:48:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/14:37:03
499	MGS	01-347/14:48:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/14:37:03
500	MGS	01-347/14:48:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/14:37:04
501	MGS	01-347/14:48:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/14:37:04
502	MGS	01-347/15:10:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/14:59:04
503	MGS	01-347/15:10:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/14:59:04
504	MGS	01-347/15:35:06		NOTE: Start EVP data return script		01-347/15:23:46
505	MGS	01-347/15:35:14		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/15:23:55
506	MGS	01-347/15:40:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/15:28:54
507	MGS	01-347/15:40:14		: 00:10:49, FALSE	RDSCII	01-347/15:28:54
508	MGS	01-347/15:40:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/15:28:54
509	MGS	01-347/15:40:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/15:28:54
510	MGS	01-347/15:40:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/15:28:54
511	MGS	01-347/15:40:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/15:28:54
512	MGS	01-347/15:40:14	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
513	MGS	01-347/15:40:14	65	NOTE: Carrier Only -- No Telemetry Modulation		
514	MGS	01-347/15:42:16		NOTE: Enter Planetary Atmosphere 12365		01-347/15:30:57
515	MGS	01-347/15:43:36		NOTE: Apoapsis 12365 -		01-347/15:32:17
516	MGS	01-347/15:45:06		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/15:33:46
517	MGS	01-347/15:45:06		NOTE: Enter Solar Eclipse 12365		01-347/15:33:47
518	MGS	01-347/15:50:17		NOTE: Enter Earth Occultation 12365		01-347/15:38:57
519	MGS	01-347/15:50:17	65	NOTE: Loss Of X-Band Signal		
520	MGS	01-347/15:51:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/15:39:43
521	MGS	01-347/15:51:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/15:39:43
522	MGS	01-347/15:51:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/15:39:43
523	MGS	01-347/15:51:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/15:39:43
524	MGS	01-347/15:51:04		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/15:39:44
525	MGS	01-347/15:51:04		NOTE: End EVP script		01-347/15:39:45
526	MGS	01-347/15:51:08		NOTE: End fixed Sub-Reflector for Radio Science		01-347/15:39:49
527	MGS	01-347/16:00:20		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/15:49:01
528	MGS	01-347/16:04:05		: 01:44:46	RPAONX	01-347/15:52:45
529	MGS	01-347/16:04:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/15:52:45
530	MGS	01-347/16:05:20		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/15:54:00
531	MGS	01-347/16:05:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/15:54:00
532	MGS	01-347/16:05:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/15:54:00
533	MGS	01-347/16:05:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/15:54:00
534	MGS	01-347/16:05:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/15:54:00
535	MGS	01-347/16:05:50		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/15:54:30
536	MGS	01-347/16:06:05		NOTE: Exit Earth Occultation 12365		01-347/15:54:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
537	MGS	01-347/16:06:05	65	Acquisition Of X-Band Signal		
538	MGS	01-347/16:06:05	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
539	MGS	01-347/16:06:05	65	NOTE: Carrier Only -- No Telemetry Modulation		
540	MGS	01-347/16:09:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/15:58:04
541	MGS	01-347/16:09:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/15:58:04
542	MGS	01-347/16:09:29		Set eclipse egress script address: 01DC	SWSEES	01-347/15:58:09
543	MGS	01-347/16:14:25		NOTE: Exit Planetary Atmosphere 12365		01-347/16:03:05
544	MGS	01-347/16:16:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/16:05:10
545	MGS	01-347/16:16:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/16:05:10
546	MGS	01-347/16:16:30		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/16:05:10
547	MGS	01-347/16:16:30		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/16:05:10
548	MGS	01-347/16:16:30	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
549	MGS	01-347/16:16:31		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/16:05:11
550	MGS	01-347/16:16:31		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/16:05:11
551	MGS	01-347/16:16:31		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/16:05:11
552	MGS	01-347/16:16:31	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
553	MGS	01-347/16:16:35		NOTE: End fixed Sub-Reflector for Radio Science		01-347/16:05:16
554	MGS	01-347/16:25:11		NOTE: Exit Solar Eclipse 12365		01-347/16:13:52
555	MGS	01-347/16:42:31		NOTE: Periapsis 12366 ----------		01-347/16:31:12
556	MGS	01-347/16:46:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/16:34:51
557	MGS	01-347/16:46:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/16:34:51
558	MGS	01-347/16:46:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/16:34:52
559	MGS	01-347/16:46:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/16:34:52
560	MGS	01-347/17:08:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/16:56:52
561	MGS	01-347/17:08:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/16:56:52
562	MGS	01-347/17:18:16		NOTE: Start Block (SSRMGR)		01-347/17:06:56
563	MGS	01-347/17:18:16		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-347/17:06:56
564	MGS	01-347/17:18:17		SSR 1B Data Enable	CSD1BE	01-347/17:06:57
565	MGS	01-347/17:18:17		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-347/17:06:57
566	MGS	01-347/17:32:51		NOTE: Start Block (MAP_PB_ODY)		01-347/17:21:31
567	MGS	01-347/17:32:52		: 00:18:59, 01:44:47, FALSE, FALSE, FALSE, 00:01:15, 00:09:30, 01:24:52, 00:09:09	AEMINI	01-347/17:21:32
568	MGS	01-347/17:32:52		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/17:21:32
569	MGS	01-347/17:32:52		NOTE: Start EVP data return script		01-347/17:21:32
570	MGS	01-347/17:32:53		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-347T18:01:16.000	AEMPBI	01-347/17:21:33
571	MGS	01-347/17:33:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/17:21:42
572	MGS	01-347/17:38:01		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/17:26:41
573	MGS	01-347/17:38:01		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9472000, DUR=00:19:44		01-347/17:26:41
574	MGS	01-347/17:38:01		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-347/17:26:41
575	MGS	01-347/17:38:01		: 00:10:49, FALSE	RDSCII	01-347/17:26:41
576	MGS	01-347/17:38:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/17:26:41
577	MGS	01-347/17:38:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/17:26:41
578	MGS	01-347/17:38:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/17:26:41
579	MGS	01-347/17:38:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/17:26:41
580	MGS	01-347/17:38:01	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
581	MGS	01-347/17:38:01	65	NOTE: Carrier Only -- No Telemetry Modulation		
582	MGS	01-347/17:40:03		NOTE: Enter Planetary Atmosphere 12366		01-347/17:28:43
583	MGS	01-347/17:41:18		NOTE: Apoapsis 12366 -		01-347/17:29:58
584	MGS	01-347/17:41:52		SSR 1A Data Disable	CSD1AX	01-347/17:30:32
585	MGS	01-347/17:41:52		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-347/17:30:32
586	MGS	01-347/17:41:53		NOTE: End Block (SSRMGR)		01-347/17:30:33
587	MGS	01-347/17:42:51		NOTE: Enter Solar Eclipse 12366		01-347/17:31:32
588	MGS	01-347/17:42:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/17:31:32
589	MGS	01-347/17:48:04		NOTE: Enter Earth Occultation 12366		01-347/17:36:45
590	MGS	01-347/17:48:04	65	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
591	MGS	01-347/17:48:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/17:37:30
592	MGS	01-347/17:48:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/17:37:30
593	MGS	01-347/17:48:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/17:37:30
594	MGS	01-347/17:48:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/17:37:30
595	MGS	01-347/17:48:51		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/17:37:31
596	MGS	01-347/17:48:51		NOTE: End EVP script		01-347/17:37:32
597	MGS	01-347/17:48:52		NOTE: End Block (MAP_RT)		01-347/17:37:33
598	MGS	01-347/17:48:55		NOTE: End fixed Sub-Reflector for Radio Science		01-347/17:37:36
599	MGS	01-347/18:01:51		: 01:44:47	RPAONX	01-347/17:50:31
600	MGS	01-347/18:01:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/17:50:31
601	MGS	01-347/18:03:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/17:52:16
602	MGS	01-347/18:03:51		NOTE: Exit Earth Occultation 12366		01-347/17:52:31
603	MGS	01-347/18:03:51	65	Acquisition Of X-Band Signal		
604	MGS	01-347/18:03:51	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
605	MGS	01-347/18:07:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/17:55:52
606	MGS	01-347/18:07:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/17:55:52
607	MGS	01-347/18:07:16		Command the PSE with included data word: 3990	SWPSEL	01-347/17:55:56
608	MGS	01-347/18:07:17		Set eclipse egress script address: 0158	SWSEES	01-347/17:55:57
609	MGS	01-347/18:12:12		NOTE: Exit Planetary Atmosphere 12366		01-347/18:00:53
610	MGS	01-347/18:12:36		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:23:23	AEMPB	01-347/18:01:16
611	MGS	01-347/18:12:36		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-347/18:01:16
612	MGS	01-347/18:12:36		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-347/18:01:16
613	MGS	01-347/18:12:37		SSR 1A Data Enable	CSD1AE	01-347/18:01:17
614	MGS	01-347/18:12:37		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-347/18:01:17
615	MGS	01-347/18:12:37	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
616	MGS	01-347/18:22:57		NOTE: Exit Solar Eclipse 12366		01-347/18:11:37
617	MGS	01-347/18:39:59		NOTE: Periapsis 12367 ----------		01-347/18:28:39
618	MGS	01-347/18:47:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/18:36:36
619	MGS	01-347/18:47:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/18:36:36
620	MGS	01-347/18:47:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/18:36:37
621	MGS	01-347/18:47:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/18:36:37
622	MGS	01-347/19:09:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/18:58:37
623	MGS	01-347/19:09:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/18:58:37
624	MGS	01-347/19:23:15		SSR 1A Data Disable	CSD1AX	01-347/19:11:55
625	MGS	01-347/19:23:15		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-347/19:11:55
626	MGS	01-347/19:23:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-347/19:11:55
627	MGS	01-347/19:23:15	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
628	MGS	01-347/19:30:32		NOTE: Start Block (MAP_RT)		01-347/19:19:12
629	MGS	01-347/19:30:33		: 00:18:59, 01:44:46, FALSE, TRUE, FALSE, 00:01:15, 00:11:10, 01:21:31, 00:10:49	AEMINI	01-347/19:19:13
630	MGS	01-347/19:30:33		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/19:19:13
631	MGS	01-347/19:30:33		NOTE: Start EVP data return script		01-347/19:19:13
632	MGS	01-347/19:30:34		: SE_2A, RTM, 01:21:30, MRC, 2001-347T20:00:39.000	AEMRTI	01-347/19:19:14
633	MGS	01-347/19:37:44		NOTE: Enter Planetary Atmosphere 12367		01-347/19:26:24
634	MGS	01-347/19:38:38		NOTE: Apoapsis 12367 -		01-347/19:27:18
635	MGS	01-347/19:40:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/19:29:13
636	MGS	01-347/19:40:33		NOTE: Enter Solar Eclipse 12367		01-347/19:29:13
637	MGS	01-347/19:45:44		NOTE: Enter Earth Occultation 12367		01-347/19:34:24
638	MGS	01-347/19:45:44	65	NOTE: Loss Of X-Band Signal		
639	MGS	01-347/19:46:38		NOTE: End EVP script		01-347/19:35:18
640	MGS	01-347/19:46:38		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/19:35:18
641	MGS	01-347/19:46:39		NOTE: End Block (MAP_PB_ODY)		01-347/19:35:19
642	MGS	01-347/19:50:00	25	Begin Pre-Cal		
643	MGS	01-347/19:50:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
644	MGS	01-347/19:50:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
645	MGS	01-347/19:50:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
646	MGS	01-347/19:50:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
647	MGS	01-347/19:50:00	25	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
648	MGS	01-347/19:50:00	25	Config: TGC: DEST=37		
649	MGS	01-347/19:50:00	25	Config: TGC: BAND=X, BR=40000.000000		
650	MGS	01-347/19:50:00	25	Config: FSS: CH=2, PRI_FL=10000		
651	MGS	01-347/19:50:00	25	Config: RSR		
652	MGS	01-347/19:50:00	25	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
653	MGS	01-347/19:50:00	25	Config: BVR		
654	MGS	01-347/19:50:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
655	MGS	01-347/19:50:00	25	Config: MDA: SMPL=0.1		
656	MGS	01-347/19:55:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/19:44:27
657	MGS	01-347/19:59:32		: 01:44:46	RPAONX	01-347/19:48:12
658	MGS	01-347/19:59:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/19:48:12
659	MGS	01-347/20:00:47		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/19:49:27
660	MGS	01-347/20:00:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/19:49:27
661	MGS	01-347/20:00:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/19:49:27
662	MGS	01-347/20:00:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/19:49:27
663	MGS	01-347/20:00:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/19:49:27
664	MGS	01-347/20:01:36		NOTE: Exit Earth Occultation 12367		01-347/19:50:16
665	MGS	01-347/20:01:36	65	Acquisition Of X-Band Signal		
666	MGS	01-347/20:01:36	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
667	MGS	01-347/20:01:36	65	NOTE: Carrier Only -- No Telemetry Modulation		
668	MGS	01-347/20:04:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/19:53:37
669	MGS	01-347/20:04:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/19:53:37
670	MGS	01-347/20:05:02		Set eclipse egress script address: 019A	SWSEES	01-347/19:53:42
671	MGS	01-347/20:09:56		NOTE: Exit Planetary Atmosphere 12367		01-347/19:58:36
672	MGS	01-347/20:11:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/20:00:37
673	MGS	01-347/20:11:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/20:00:37
674	MGS	01-347/20:11:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/20:00:37
675	MGS	01-347/20:11:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/20:00:37
676	MGS	01-347/20:11:57	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
677	MGS	01-347/20:11:58		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/20:00:38
678	MGS	01-347/20:11:58		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/20:00:38
679	MGS	01-347/20:11:58		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/20:00:38
680	MGS	01-347/20:11:58	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
681	MGS	01-347/20:12:02		NOTE: End fixed Sub-Reflector for Radio Science		01-347/20:00:42
682	MGS	01-347/20:20:38		NOTE: Exit Solar Eclipse 12367		01-347/20:09:18
683	MGS	01-347/20:37:23		NOTE: Periapsis 12368 ----------		01-347/20:26:03
684	MGS	01-347/20:41:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/20:30:17
685	MGS	01-347/20:41:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/20:30:17
686	MGS	01-347/20:41:38		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/20:30:18
687	MGS	01-347/20:41:38		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/20:30:18
688	MGS	01-347/21:03:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/20:52:18
689	MGS	01-347/21:03:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/20:52:18
690	MGS	01-347/21:20:00	25	Begin Tracking		
691	MGS	01-347/21:20:00	25	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
692	MGS	01-347/21:28:14		NOTE: Start EVP data return script		01-347/21:16:54
693	MGS	01-347/21:28:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/21:17:08
694	MGS	01-347/21:33:28		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/21:22:08
695	MGS	01-347/21:33:28		: 00:10:49, FALSE	RDSCII	01-347/21:22:08
696	MGS	01-347/21:33:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/21:22:08
697	MGS	01-347/21:33:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/21:22:08
698	MGS	01-347/21:33:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/21:22:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
699	MGS	01-347/21:33:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/21:22:08
700	MGS	01-347/21:33:28	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
701	MGS	01-347/21:33:28	25	NOTE: Carrier Only -- No Telemetry Modulation		
702	MGS	01-347/21:33:28	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
703	MGS	01-347/21:33:28	65	NOTE: Carrier Only -- No Telemetry Modulation		
704	MGS	01-347/21:34:26	65	NOTE: Below Uplink Interlock Limit		
705	MGS	01-347/21:35:23		NOTE: Enter Planetary Atmosphere 12368		01-347/21:24:02
706	MGS	01-347/21:36:23		NOTE: Apoapsis 12368 -		01-347/21:25:03
707	MGS	01-347/21:38:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/21:26:54
708	MGS	01-347/21:38:15		NOTE: Enter Solar Eclipse 12368		01-347/21:26:54
709	MGS	01-347/21:40:00	65	End Tracking		
710	MGS	01-347/21:43:20		NOTE: Enter Earth Occultation 12368		01-347/21:32:00
711	MGS	01-347/21:43:20	25	NOTE: Loss Of X-Band Signal		
712	MGS	01-347/21:44:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/21:32:57
713	MGS	01-347/21:44:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/21:32:57
714	MGS	01-347/21:44:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/21:32:57
715	MGS	01-347/21:44:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/21:32:57
716	MGS	01-347/21:44:18		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/21:32:58
717	MGS	01-347/21:44:19		NOTE: End EVP script		01-347/21:32:58
718	MGS	01-347/21:44:23		NOTE: End fixed Sub-Reflector for Radio Science		01-347/21:33:02
719	MGS	01-347/21:53:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/21:42:08
720	MGS	01-347/21:55:00	65	End Post-Cal		
721	MGS	01-347/21:57:14		: 01:44:46	RPAONX	01-347/21:45:53
722	MGS	01-347/21:57:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/21:45:53
723	MGS	01-347/21:58:29		: 00:00:30, 00:11:10, FALSE	RDSCIE	01-347/21:47:08
724	MGS	01-347/21:58:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/21:47:08
725	MGS	01-347/21:58:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/21:47:08
726	MGS	01-347/21:58:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/21:47:08
727	MGS	01-347/21:58:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/21:47:08
728	MGS	01-347/21:58:59		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/21:47:38
729	MGS	01-347/21:59:20		NOTE: Exit Earth Occultation 12368		01-347/21:48:00
730	MGS	01-347/21:59:20	25	Acquisition Of X-Band Signal		
731	MGS	01-347/21:59:20	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
732	MGS	01-347/21:59:20	25	NOTE: Carrier Only -- No Telemetry Modulation		
733	MGS	01-347/22:02:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/21:51:18
734	MGS	01-347/22:02:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/21:51:18
735	MGS	01-347/22:02:44		Set eclipse egress script address: 01DC	SWSEES	01-347/21:51:23
736	MGS	01-347/22:07:37		NOTE: Exit Planetary Atmosphere 12368		01-347/21:56:17
737	MGS	01-347/22:09:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/21:58:18
738	MGS	01-347/22:09:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/21:58:18
739	MGS	01-347/22:09:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/21:58:18
740	MGS	01-347/22:09:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/21:58:18
741	MGS	01-347/22:09:39	25	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
742	MGS	01-347/22:09:40		: RTM, MRC, 01:21:30, S&E_2A, FALSE, 00:10:50	AEMRT	01-347/21:58:19
743	MGS	01-347/22:09:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-347/21:58:19
744	MGS	01-347/22:09:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-347/21:58:19
745	MGS	01-347/22:09:40	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
746	MGS	01-347/22:09:44		NOTE: End fixed Sub-Reflector for Radio Science		01-347/21:58:23
747	MGS	01-347/22:18:19		NOTE: Exit Solar Eclipse 12368		01-347/22:06:59
748	MGS	01-347/22:35:05		NOTE: Periapsis 12369 ----------		01-347/22:23:45
749	MGS	01-347/22:39:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-347/22:27:58
750	MGS	01-347/22:39:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-347/22:27:58
751	MGS	01-347/22:39:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-347/22:27:59
752	MGS	01-347/22:39:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-347/22:27:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
753	MGS	01-347/23:01:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-347/22:49:59
754	MGS	01-347/23:01:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-347/22:49:59
755	MGS	01-347/23:11:34		NOTE: Start Block (SSRMGR)		01-347/23:00:13
756	MGS	01-347/23:11:34		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-347/23:00:13
757	MGS	01-347/23:11:35		SSR 1A Data Enable	CSD1AE	01-347/23:00:14
758	MGS	01-347/23:11:35		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-347/23:00:14
759	MGS	01-347/23:26:00		NOTE: Start Block (MAP_PB_ODY)		01-347/23:14:39
760	MGS	01-347/23:26:01		: 00:18:59, 01:44:47, FALSE, FALSE, FALSE, 00:01:15, 00:09:30, 01:24:52, 00:09:09	AEMINI	01-347/23:14:40
761	MGS	01-347/23:26:01		Enable sending eclipse ingress script when array power disappears	SWEISE	01-347/23:14:40
762	MGS	01-347/23:26:01		NOTE: Start EVP data return script		01-347/23:14:40
763	MGS	01-347/23:26:02		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-347T23:54:24.000	AEMPBI	01-347/23:14:41
764	MGS	01-347/23:26:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-347/23:14:49
765	MGS	01-347/23:31:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-347/23:19:49
766	MGS	01-347/23:31:10		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9400000, DUR=00:19:35		01-347/23:19:49
767	MGS	01-347/23:31:10		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-347/23:19:49
768	MGS	01-347/23:31:10		: 00:10:49, FALSE	RDSCII	01-347/23:19:49
769	MGS	01-347/23:31:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-347/23:19:49
770	MGS	01-347/23:31:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-347/23:19:49
771	MGS	01-347/23:31:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-347/23:19:49
772	MGS	01-347/23:31:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-347/23:19:49
773	MGS	01-347/23:31:10	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
774	MGS	01-347/23:31:10	25	NOTE: Carrier Only -- No Telemetry Modulation		
775	MGS	01-347/23:33:08		NOTE: Enter Planetary Atmosphere 12369		01-347/23:21:48
776	MGS	01-347/23:34:15		NOTE: Apoapsis 12369 -		01-347/23:22:55
777	MGS	01-347/23:35:01		SSR 1B Data Disable	CSD1BX	01-347/23:23:40
778	MGS	01-347/23:35:01		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-347/23:23:40
779	MGS	01-347/23:35:02		NOTE: End Block (SSRMGR)		01-347/23:23:41
780	MGS	01-347/23:36:00		NOTE: Enter Solar Eclipse 12369		01-347/23:24:40
781	MGS	01-347/23:36:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-347/23:24:40
782	MGS	01-347/23:40:00	45	Begin Pre-Cal		
783	MGS	01-347/23:40:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
784	MGS	01-347/23:40:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
785	MGS	01-347/23:40:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
786	MGS	01-347/23:40:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
787	MGS	01-347/23:40:00	45	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
788	MGS	01-347/23:40:00	45	Config: TGC: DEST=37		
789	MGS	01-347/23:40:00	45	Config: TGC: BAND=X, BR=42666.666667		
790	MGS	01-347/23:40:00	45	Config: FSS: CH=2, PRI_FL=10000		
791	MGS	01-347/23:40:00	45	Config: RSR		
792	MGS	01-347/23:40:00	45	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
793	MGS	01-347/23:40:00	45	Config: BVR		
794	MGS	01-347/23:40:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
795	MGS	01-347/23:40:00	45	Config: MDA: SMPL=0.1		
796	MGS	01-347/23:41:04		NOTE: Enter Earth Occultation 12369		01-347/23:29:44
797	MGS	01-347/23:41:04	25	NOTE: Loss Of X-Band Signal		
798	MGS	01-347/23:41:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-347/23:30:38
799	MGS	01-347/23:41:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-347/23:30:38
800	MGS	01-347/23:41:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-347/23:30:38
801	MGS	01-347/23:41:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-347/23:30:38
802	MGS	01-347/23:42:00		Turn off the MOT Exciter and RPA beam	STRPAF	01-347/23:30:39
803	MGS	01-347/23:42:00		NOTE: End EVP script		01-347/23:30:39
804	MGS	01-347/23:42:01		NOTE: End Block (MAP_RT)		01-347/23:30:40
805	MGS	01-347/23:42:04		NOTE: End fixed Sub-Reflector for Radio Science		01-347/23:30:43
806	MGS	01-347/23:55:00		: 01:44:47	RPAONX	01-347/23:43:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
807	MGS	01-347/23:55:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-347/23:43:39
808	MGS	01-347/23:56:45		Disables autonomous command to send eclipse ingress script	SWEISX	01-347/23:45:24
809	MGS	01-347/23:57:06		NOTE: Exit Earth Occultation 12369		01-347/23:45:46
810	MGS	01-347/23:57:06	25	Acquisition Of X-Band Signal		
811	MGS	01-347/23:57:06	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
812	MGS	01-348/00:00:00		Light Time: OWLT = 11:20, RTLT = 22:41		
813	MGS	01-348/00:00:00	15	Begin Pre-Cal		
814	MGS	01-348/00:00:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
815	MGS	01-348/00:00:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
816	MGS	01-348/00:00:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
817	MGS	01-348/00:00:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
818	MGS	01-348/00:00:00	15	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
819	MGS	01-348/00:00:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
820	MGS	01-348/00:00:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
821	MGS	01-348/00:00:00	15	Config: TGC: DEST=37		
822	MGS	01-348/00:00:00	15	Config: TGC: BAND=X, BR=42666.666667		
823	MGS	01-348/00:00:00	15	Config: FSS: CH=2, PRI_FL=10000		
824	MGS	01-348/00:00:00	15	Config: RSR		
825	MGS	01-348/00:00:00	15	Config: TXL		
826	MGS	01-348/00:00:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
827	MGS	01-348/00:00:00	15	Config: BVR		
828	MGS	01-348/00:00:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
829	MGS	01-348/00:00:00	15	Config: MDA: SMPL=0.1		
830	MGS	01-348/00:00:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
831	MGS	01-348/00:00:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
832	MGS	01-348/00:00:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
833	MGS	01-348/00:00:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-347/23:48:59
834	MGS	01-348/00:00:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-347/23:48:59
835	MGS	01-348/00:00:24		Command the PSE with included data word: 3990	SWPSEL	01-347/23:49:03
836	MGS	01-348/00:00:25		Set eclipse egress script address: 0158	SWSEES	01-347/23:49:04
837	MGS	01-348/00:05:22		NOTE: Exit Planetary Atmosphere 12369		01-347/23:54:01
838	MGS	01-348/00:05:45		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:23:23	AEMPB	01-347/23:54:24
839	MGS	01-348/00:05:45		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-347/23:54:24
840	MGS	01-348/00:05:45		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-347/23:54:24
841	MGS	01-348/00:05:46		SSR 1B Data Enable	CSD1BE	01-347/23:54:25
842	MGS	01-348/00:05:46		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-347/23:54:25
843	MGS	01-348/00:05:46	25	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
844	MGS	01-348/00:16:06		NOTE: Exit Solar Eclipse 12369		01-348/00:04:45
845	MGS	01-348/00:32:59		NOTE: Periapsis 12370 ----------		01-348/00:21:39
846	MGS	01-348/00:41:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/00:29:44
847	MGS	01-348/00:41:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/00:29:44
848	MGS	01-348/00:41:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/00:29:45
849	MGS	01-348/00:41:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/00:29:45
850	MGS	01-348/01:00:00	15	Begin Tracking		
851	MGS	01-348/01:00:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
852	MGS	01-348/01:03:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/00:51:45
853	MGS	01-348/01:03:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/00:51:45
854	MGS	01-348/01:10:00	45	Begin Tracking		
855	MGS	01-348/01:10:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
856	MGS	01-348/01:16:24		SSR 1B Data Disable	CSD1BX	01-348/01:05:03
857	MGS	01-348/01:16:24		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-348/01:05:03
858	MGS	01-348/01:16:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-348/01:05:03
859	MGS	01-348/01:16:24	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
860	MGS	01-348/01:16:24	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
861	MGS	01-348/01:16:24	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
862	MGS	01-348/01:17:01	45	NOTE: Above Uplink Interlock Limit		
863	MGS	01-348/01:23:47		NOTE: Start Block (MAP_RT)		01-348/01:12:26
864	MGS	01-348/01:23:48		: 00:19:21, 01:44:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:55, 01:21:13, 00:10:36	AEMINI	01-348/01:12:27
865	MGS	01-348/01:23:48		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/01:12:27
866	MGS	01-348/01:23:48		NOTE: Start EVP data return script		01-348/01:12:27
867	MGS	01-348/01:23:49		: SE_2A, RTM, 01:21:12, MRC, 2001-348T01:54:00.000	AEMRTI	01-348/01:12:28
868	MGS	01-348/01:30:00	25	End Tracking		
869	MGS	01-348/01:30:56		NOTE: Enter Planetary Atmosphere 12370		01-348/01:19:35
870	MGS	01-348/01:31:58		NOTE: Apoapsis 12370 -		01-348/01:20:38
871	MGS	01-348/01:33:48		NOTE: Enter Solar Eclipse 12370		01-348/01:22:27
872	MGS	01-348/01:33:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/01:22:27
873	MGS	01-348/01:35:58	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
874	MGS	01-348/01:37:58	15	Range Modulation On: SUP=3.0dB		
875	MGS	01-348/01:38:51		NOTE: Enter Earth Occultation 12370		01-348/01:27:31
876	MGS	01-348/01:38:51	15	NOTE: Loss Of X-Band Signal		
877	MGS	01-348/01:38:51	45	NOTE: Loss Of X-Band Signal		
878	MGS	01-348/01:38:58	15	Begin Ranging Acquisition		
879	MGS	01-348/01:39:47		NOTE: End EVP script		01-348/01:28:26
880	MGS	01-348/01:39:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/01:28:26
881	MGS	01-348/01:39:48		NOTE: End Block (MAP_PB_ODY)		01-348/01:28:27
882	MGS	01-348/01:45:00	25	End Post-Cal		
883	MGS	01-348/01:49:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/01:38:03
884	MGS	01-348/01:53:09		: 01:44:00	RPAONX	01-348/01:41:48
885	MGS	01-348/01:53:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/01:41:48
886	MGS	01-348/01:54:24		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/01:43:03
887	MGS	01-348/01:54:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/01:43:03
888	MGS	01-348/01:54:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/01:43:03
889	MGS	01-348/01:54:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/01:43:03
890	MGS	01-348/01:54:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/01:43:03
891	MGS	01-348/01:54:54		NOTE: Exit Earth Occultation 12370		01-348/01:43:33
892	MGS	01-348/01:54:54	15	Acquisition Of X-Band Signal		
893	MGS	01-348/01:54:54	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
894	MGS	01-348/01:54:54	15	NOTE: Carrier Only -- No Telemetry Modulation		
895	MGS	01-348/01:54:54	45	Acquisition Of X-Band Signal		
896	MGS	01-348/01:54:54	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
897	MGS	01-348/01:54:54	45	NOTE: Carrier Only -- No Telemetry Modulation		
898	MGS	01-348/01:58:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/01:46:45
899	MGS	01-348/01:58:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/01:46:45
900	MGS	01-348/01:58:11		Set eclipse egress script address: 019A	SWSEES	01-348/01:46:50
901	MGS	01-348/02:03:10		NOTE: Exit Planetary Atmosphere 12370		01-348/01:51:49
902	MGS	01-348/02:05:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/01:53:58
903	MGS	01-348/02:05:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/01:53:58
904	MGS	01-348/02:05:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/01:53:58
905	MGS	01-348/02:05:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/01:53:58
906	MGS	01-348/02:05:19	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
907	MGS	01-348/02:05:19	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
908	MGS	01-348/02:05:20		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/01:53:59
909	MGS	01-348/02:05:20		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/01:53:59
910	MGS	01-348/02:05:20		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/01:53:59
911	MGS	01-348/02:05:20	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
912	MGS	01-348/02:05:20	45	D/L Change: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
913	MGS	01-348/02:05:24		NOTE: End fixed Sub-Reflector for Radio Science		01-348/01:54:03
914	MGS	01-348/02:13:53		NOTE: Exit Solar Eclipse 12370		01-348/02:02:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
915	MGS	01-348/02:30:45		NOTE: Periapsis 12371 ----------		01-348/02:19:24
916	MGS	01-348/02:34:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/02:23:31
917	MGS	01-348/02:34:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/02:23:31
918	MGS	01-348/02:34:53		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/02:23:32
919	MGS	01-348/02:34:53		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/02:23:32
920	MGS	01-348/02:55:09	15	NOTE: Transmitter Off in 15 minutes		
921	MGS	01-348/02:56:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/02:45:32
922	MGS	01-348/02:56:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/02:45:32
923	MGS	01-348/03:08:09	15	Range Modulation Off		
924	MGS	01-348/03:10:09	15	Transmitter Off		
925	MGS	01-348/03:21:32		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/03:10:11
926	MGS	01-348/03:21:34		NOTE: Start EVP data return script		01-348/03:10:13
927	MGS	01-348/03:26:32		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/03:15:11
928	MGS	01-348/03:26:32		: 00:10:36, FALSE	RDSCII	01-348/03:15:11
929	MGS	01-348/03:26:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/03:15:11
930	MGS	01-348/03:26:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/03:15:11
931	MGS	01-348/03:26:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/03:15:11
932	MGS	01-348/03:26:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/03:15:11
933	MGS	01-348/03:26:32	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
934	MGS	01-348/03:26:32	15	NOTE: Carrier Only -- No Telemetry Modulation		
935	MGS	01-348/03:26:32	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
936	MGS	01-348/03:26:32	45	NOTE: Carrier Only -- No Telemetry Modulation		
937	MGS	01-348/03:28:42		NOTE: Enter Planetary Atmosphere 12371		01-348/03:17:21
938	MGS	01-348/03:29:28		NOTE: Apoapsis 12371 -		01-348/03:18:07
939	MGS	01-348/03:31:34		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/03:20:13
940	MGS	01-348/03:31:34		NOTE: Enter Solar Eclipse 12371		01-348/03:20:13
941	MGS	01-348/03:33:46	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
942	MGS	01-348/03:35:47	15	Range Modulation On: SUP=3.0dB		
943	MGS	01-348/03:36:36		NOTE: Enter Earth Occultation 12371		01-348/03:25:15
944	MGS	01-348/03:36:36	15	NOTE: Loss Of X-Band Signal		
945	MGS	01-348/03:36:36	45	NOTE: Loss Of X-Band Signal		
946	MGS	01-348/03:36:47	15	Begin Ranging Acquisition		
947	MGS	01-348/03:37:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/03:25:47
948	MGS	01-348/03:37:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/03:25:47
949	MGS	01-348/03:37:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/03:25:47
950	MGS	01-348/03:37:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/03:25:47
951	MGS	01-348/03:37:09		NOTE: End EVP script		01-348/03:25:48
952	MGS	01-348/03:37:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/03:25:48
953	MGS	01-348/03:37:13		NOTE: End fixed Sub-Reflector for Radio Science		01-348/03:25:52
954	MGS	01-348/03:47:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/03:35:49
955	MGS	01-348/03:50:55		: 01:44:00	RPAONX	01-348/03:39:34
956	MGS	01-348/03:50:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/03:39:34
957	MGS	01-348/03:52:10		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/03:40:49
958	MGS	01-348/03:52:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/03:40:49
959	MGS	01-348/03:52:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/03:40:49
960	MGS	01-348/03:52:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/03:40:49
961	MGS	01-348/03:52:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/03:40:49
962	MGS	01-348/03:52:40		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/03:41:19
963	MGS	01-348/03:52:43		NOTE: Exit Earth Occultation 12371		01-348/03:41:22
964	MGS	01-348/03:52:43	15	Acquisition Of X-Band Signal		
965	MGS	01-348/03:52:43	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
966	MGS	01-348/03:52:43	15	NOTE: Carrier Only -- No Telemetry Modulation		
967	MGS	01-348/03:52:43	45	Acquisition Of X-Band Signal		
968	MGS	01-348/03:52:43	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
969	MGS	01-348/03:52:43	45	NOTE: Carrier Only -- No Telemetry Modulation		
970	MGS	01-348/03:55:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/03:44:32
971	MGS	01-348/03:55:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/03:44:32
972	MGS	01-348/03:55:58		Set eclipse egress script address: 01DC	SWSEES	01-348/03:44:37
973	MGS	01-348/04:00:58		NOTE: Exit Planetary Atmosphere 12371		01-348/03:49:36
974	MGS	01-348/04:03:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/03:51:44
975	MGS	01-348/04:03:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/03:51:44
976	MGS	01-348/04:03:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/03:51:44
977	MGS	01-348/04:03:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/03:51:44
978	MGS	01-348/04:03:05	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
979	MGS	01-348/04:03:05	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
980	MGS	01-348/04:03:06		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/03:51:45
981	MGS	01-348/04:03:06		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/03:51:45
982	MGS	01-348/04:03:06		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/03:51:45
983	MGS	01-348/04:03:06	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
984	MGS	01-348/04:03:06	45	D/L Change: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
985	MGS	01-348/04:03:10		NOTE: End fixed Sub-Reflector for Radio Science		01-348/03:51:49
986	MGS	01-348/04:11:40		NOTE: Exit Solar Eclipse 12371		01-348/04:00:19
987	MGS	01-348/04:28:27		NOTE: Periapsis 12372 ----------		01-348/04:17:05
988	MGS	01-348/04:32:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/04:21:18
989	MGS	01-348/04:32:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/04:21:18
990	MGS	01-348/04:32:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/04:21:19
991	MGS	01-348/04:32:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/04:21:19
992	MGS	01-348/04:50:00	15	NOTE: Transmitter Off in 15 minutes		
993	MGS	01-348/04:54:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/04:43:19
994	MGS	01-348/04:54:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/04:43:19
995	MGS	01-348/05:03:00	15	Range Modulation Off		
996	MGS	01-348/05:04:43		NOTE: Start Block (SSRMGR)		01-348/04:53:21
997	MGS	01-348/05:04:43		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-348/04:53:21
998	MGS	01-348/05:04:44		SSR 1B Data Enable	CSD1BE	01-348/04:53:22
999	MGS	01-348/05:04:44		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-348/04:53:22
1000	MGS	01-348/05:05:00	15	Transmitter Off		
1001	MGS	01-348/05:15:09	15	NOTE: Below Uplink Interlock Limit		
1002	MGS	01-348/05:19:18		NOTE: Start Block (MAP_PB_ODY)		01-348/05:07:56
1003	MGS	01-348/05:19:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/05:07:57
1004	MGS	01-348/05:19:19		: 00:19:21, 01:44:01, FALSE, FALSE, FALSE, 00:01:15, 00:09:15, 01:24:34, 00:08:56	AEMINI	01-348/05:07:57
1005	MGS	01-348/05:19:19		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/05:07:57
1006	MGS	01-348/05:19:19		NOTE: Start EVP data return script		01-348/05:07:57
1007	MGS	01-348/05:19:20		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-348T05:47:49.000	AEMPBI	01-348/05:07:58
1008	MGS	01-348/05:24:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/05:12:57
1009	MGS	01-348/05:24:19		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9400000, DUR=00:19:35		01-348/05:12:57
1010	MGS	01-348/05:24:19		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-348/05:12:57
1011	MGS	01-348/05:24:19		: 00:10:36, FALSE	RDSCII	01-348/05:12:57
1012	MGS	01-348/05:24:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/05:12:57
1013	MGS	01-348/05:24:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/05:12:57
1014	MGS	01-348/05:24:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/05:12:57
1015	MGS	01-348/05:24:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/05:12:57
1016	MGS	01-348/05:24:19	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1017	MGS	01-348/05:24:19	15	NOTE: Carrier Only -- No Telemetry Modulation		
1018	MGS	01-348/05:24:19	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1019	MGS	01-348/05:24:19	45	NOTE: Carrier Only -- No Telemetry Modulation		
1020	MGS	01-348/05:25:00	15	End Tracking		
1021	MGS	01-348/05:26:24		NOTE: Enter Planetary Atmosphere 12372		01-348/05:15:03
1022	MGS	01-348/05:27:01		NOTE: Apoapsis 12372 -		01-348/05:15:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1023	MGS	01-348/05:28:19		SSR 1A Data Disable	CSD1AX	01-348/05:16:57
1024	MGS	01-348/05:28:19		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-348/05:16:57
1025	MGS	01-348/05:28:20		NOTE: End Block (SSRMGR)		01-348/05:16:58
1026	MGS	01-348/05:29:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/05:17:57
1027	MGS	01-348/05:29:19		NOTE: Enter Solar Eclipse 12372		01-348/05:17:58
1028	MGS	01-348/05:34:18		NOTE: Enter Earth Occultation 12372		01-348/05:22:56
1029	MGS	01-348/05:34:18	45	NOTE: Loss Of X-Band Signal		
1030	MGS	01-348/05:34:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/05:23:33
1031	MGS	01-348/05:34:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/05:23:33
1032	MGS	01-348/05:34:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/05:23:33
1033	MGS	01-348/05:34:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/05:23:33
1034	MGS	01-348/05:34:55		NOTE: End EVP script		01-348/05:23:34
1035	MGS	01-348/05:34:56		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/05:23:34
1036	MGS	01-348/05:34:56		NOTE: End Block (MAP_RT)		01-348/05:23:35
1037	MGS	01-348/05:34:59		NOTE: End fixed Sub-Reflector for Radio Science		01-348/05:23:38
1038	MGS	01-348/05:40:00	15	End Post-Cal		
1039	MGS	01-348/05:48:40		: 01:44:01	RPAONX	01-348/05:37:18
1040	MGS	01-348/05:48:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/05:37:18
1041	MGS	01-348/05:50:25		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/05:39:03
1042	MGS	01-348/05:50:31		NOTE: Exit Earth Occultation 12372		01-348/05:39:10
1043	MGS	01-348/05:50:31	45	Acquisition Of X-Band Signal		
1044	MGS	01-348/05:50:31	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1045	MGS	01-348/05:53:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/05:42:19
1046	MGS	01-348/05:53:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/05:42:19
1047	MGS	01-348/05:53:45		Command the PSE with included data word: 3990	SWPSEL	01-348/05:42:23
1048	MGS	01-348/05:53:46		Set eclipse egress script address: 0158	SWSEES	01-348/05:42:24
1049	MGS	01-348/05:58:44		NOTE: Exit Planetary Atmosphere 12372		01-348/05:47:23
1050	MGS	01-348/05:59:10		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:22:52	AEMPB	01-348/05:47:48
1051	MGS	01-348/05:59:10		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-348/05:47:48
1052	MGS	01-348/05:59:10		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-348/05:47:48
1053	MGS	01-348/05:59:11		SSR 1A Data Enable	CSD1AE	01-348/05:47:49
1054	MGS	01-348/05:59:11		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-348/05:47:49
1055	MGS	01-348/05:59:11	45	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1056	MGS	01-348/06:09:24		NOTE: Exit Solar Eclipse 12372		01-348/05:58:03
1057	MGS	01-348/06:26:11		NOTE: Periapsis 12373 ----------		01-348/06:14:50
1058	MGS	01-348/06:34:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/06:23:02
1059	MGS	01-348/06:34:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/06:23:02
1060	MGS	01-348/06:34:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/06:23:03
1061	MGS	01-348/06:34:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/06:23:03
1062	MGS	01-348/06:56:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/06:45:03
1063	MGS	01-348/06:56:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/06:45:03
1064	MGS	01-348/07:09:49		SSR 1A Data Disable	CSD1AX	01-348/06:58:27
1065	MGS	01-348/07:09:49		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-348/06:58:27
1066	MGS	01-348/07:09:49		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-348/06:58:27
1067	MGS	01-348/07:09:49	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1068	MGS	01-348/07:17:01		NOTE: Start Block (MAP_RT)		01-348/07:05:39
1069	MGS	01-348/07:17:02		: 00:19:21, 01:44:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:55, 01:21:13, 00:10:36	AEMINI	01-348/07:05:40
1070	MGS	01-348/07:17:02		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/07:05:40
1071	MGS	01-348/07:17:02		NOTE: Start EVP data return script		01-348/07:05:40
1072	MGS	01-348/07:17:03		: SE_2A, RTM, 01:21:12, MRC, 2001-348T07:47:12.000	AEMRTI	01-348/07:05:41
1073	MGS	01-348/07:24:06		NOTE: Enter Planetary Atmosphere 12373		01-348/07:12:45
1074	MGS	01-348/07:24:55		NOTE: Apoapsis 12373 -		01-348/07:13:33
1075	MGS	01-348/07:27:02		NOTE: Enter Solar Eclipse 12373		01-348/07:15:40
1076	MGS	01-348/07:27:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/07:15:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1077	MGS	01-348/07:31:59		NOTE: Enter Earth Occultation 12373		01-348/07:20:38
1078	MGS	01-348/07:31:59	45	NOTE: Loss Of X-Band Signal		
1079	MGS	01-348/07:32:41		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/07:21:19
1080	MGS	01-348/07:32:41		NOTE: End EVP script		01-348/07:21:20
1081	MGS	01-348/07:32:42		NOTE: End Block (MAP_PB_ODY)		01-348/07:21:21
1082	MGS	01-348/07:42:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/07:31:16
1083	MGS	01-348/07:46:23		: 01:44:00	RPAONX	01-348/07:35:01
1084	MGS	01-348/07:46:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/07:35:01
1085	MGS	01-348/07:47:38		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/07:36:16
1086	MGS	01-348/07:47:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/07:36:16
1087	MGS	01-348/07:47:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/07:36:16
1088	MGS	01-348/07:47:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/07:36:16
1089	MGS	01-348/07:47:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/07:36:16
1090	MGS	01-348/07:48:15		NOTE: Exit Earth Occultation 12373		01-348/07:36:53
1091	MGS	01-348/07:48:15	45	Acquisition Of X-Band Signal		
1092	MGS	01-348/07:48:15	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1093	MGS	01-348/07:48:15	45	NOTE: Carrier Only -- No Telemetry Modulation		
1094	MGS	01-348/07:51:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/07:40:03
1095	MGS	01-348/07:51:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/07:40:03
1096	MGS	01-348/07:51:30		Set eclipse egress script address: 019A	SWSEES	01-348/07:40:08
1097	MGS	01-348/07:56:28		NOTE: Exit Planetary Atmosphere 12373		01-348/07:45:06
1098	MGS	01-348/07:58:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/07:47:11
1099	MGS	01-348/07:58:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/07:47:11
1100	MGS	01-348/07:58:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/07:47:11
1101	MGS	01-348/07:58:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/07:47:11
1102	MGS	01-348/07:58:33	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1103	MGS	01-348/07:58:34		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/07:47:12
1104	MGS	01-348/07:58:34		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/07:47:12
1105	MGS	01-348/07:58:34		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/07:47:12
1106	MGS	01-348/07:58:34	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1107	MGS	01-348/07:58:38		NOTE: End fixed Sub-Reflector for Radio Science		01-348/07:47:16
1108	MGS	01-348/08:00:00	34	Begin Pre-Cal		
1109	MGS	01-348/08:00:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1110	MGS	01-348/08:00:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1111	MGS	01-348/08:00:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1112	MGS	01-348/08:00:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1113	MGS	01-348/08:00:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
1114	MGS	01-348/08:00:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
1115	MGS	01-348/08:00:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
1116	MGS	01-348/08:00:00	34	Config: TGC: DEST=37		
1117	MGS	01-348/08:00:00	34	Config: TGC: BAND=X, BR=40000.000000		
1118	MGS	01-348/08:00:00	34	Config: FSS: CH=2, PRI_FL=10000		
1119	MGS	01-348/08:00:00	34	Config: RSR		
1120	MGS	01-348/08:00:00	34	Config: TXL		
1121	MGS	01-348/08:00:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
1122	MGS	01-348/08:00:00	34	Config: BVR		
1123	MGS	01-348/08:00:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
1124	MGS	01-348/08:00:00	34	Config: MDA: SMPL=0.1		
1125	MGS	01-348/08:07:07		NOTE: Exit Solar Eclipse 12373		01-348/07:55:45
1126	MGS	01-348/08:23:49		NOTE: Periapsis 12374 ----------		01-348/08:12:27
1127	MGS	01-348/08:28:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/08:16:44
1128	MGS	01-348/08:28:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/08:16:44
1129	MGS	01-348/08:28:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/08:16:45
1130	MGS	01-348/08:28:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/08:16:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1131	MGS	01-348/08:45:00	34	Begin Tracking		
1132	MGS	01-348/08:45:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1133	MGS	01-348/08:50:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/08:38:45
1134	MGS	01-348/08:50:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/08:38:45
1135	MGS	01-348/09:14:44		NOTE: Start EVP data return script		01-348/09:03:22
1136	MGS	01-348/09:14:46		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/09:03:24
1137	MGS	01-348/09:19:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/09:08:24
1138	MGS	01-348/09:19:46		: 00:10:36, FALSE	RDSCII	01-348/09:08:24
1139	MGS	01-348/09:19:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/09:08:24
1140	MGS	01-348/09:19:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/09:08:24
1141	MGS	01-348/09:19:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/09:08:24
1142	MGS	01-348/09:19:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/09:08:24
1143	MGS	01-348/09:19:46	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1144	MGS	01-348/09:19:46	34	NOTE: Carrier Only -- No Telemetry Modulation		
1145	MGS	01-348/09:19:46	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1146	MGS	01-348/09:19:46	45	NOTE: Carrier Only -- No Telemetry Modulation		
1147	MGS	01-348/09:21:49		NOTE: Enter Planetary Atmosphere 12374		01-348/09:10:27
1148	MGS	01-348/09:22:29		NOTE: Apoapsis 12374 -		01-348/09:11:07
1149	MGS	01-348/09:24:44		NOTE: Enter Solar Eclipse 12374		01-348/09:13:22
1150	MGS	01-348/09:24:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/09:13:22
1151	MGS	01-348/09:26:59	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
1152	MGS	01-348/09:29:42		NOTE: Enter Earth Occultation 12374		01-348/09:18:20
1153	MGS	01-348/09:29:42	34	NOTE: Loss Of X-Band Signal		
1154	MGS	01-348/09:29:42	45	NOTE: Loss Of X-Band Signal		
1155	MGS	01-348/09:30:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/09:19:00
1156	MGS	01-348/09:30:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/09:19:00
1157	MGS	01-348/09:30:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/09:19:00
1158	MGS	01-348/09:30:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/09:19:00
1159	MGS	01-348/09:30:23		NOTE: End EVP script		01-348/09:19:01
1160	MGS	01-348/09:30:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/09:19:01
1161	MGS	01-348/09:30:27		NOTE: End fixed Sub-Reflector for Radio Science		01-348/09:19:05
1162	MGS	01-348/09:40:20		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/09:28:58
1163	MGS	01-348/09:44:05		: 01:44:00	RPAONX	01-348/09:32:43
1164	MGS	01-348/09:44:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/09:32:43
1165	MGS	01-348/09:45:20		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/09:33:58
1166	MGS	01-348/09:45:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/09:33:58
1167	MGS	01-348/09:45:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/09:33:58
1168	MGS	01-348/09:45:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/09:33:58
1169	MGS	01-348/09:45:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/09:33:58
1170	MGS	01-348/09:45:50		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/09:34:28
1171	MGS	01-348/09:45:58		NOTE: Exit Earth Occultation 12374		01-348/09:34:36
1172	MGS	01-348/09:45:58	34	Acquisition Of X-Band Signal		
1173	MGS	01-348/09:45:58	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1174	MGS	01-348/09:45:58	34	NOTE: Carrier Only -- No Telemetry Modulation		
1175	MGS	01-348/09:45:58	45	Acquisition Of X-Band Signal		
1176	MGS	01-348/09:45:58	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1177	MGS	01-348/09:45:58	45	NOTE: Carrier Only -- No Telemetry Modulation		
1178	MGS	01-348/09:49:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/09:37:45
1179	MGS	01-348/09:49:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/09:37:45
1180	MGS	01-348/09:49:12		Set eclipse egress script address: 01DC	SWSEES	01-348/09:37:50
1181	MGS	01-348/09:54:10		NOTE: Exit Planetary Atmosphere 12374		01-348/09:42:48
1182	MGS	01-348/09:56:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/09:44:53
1183	MGS	01-348/09:56:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/09:44:53
1184	MGS	01-348/09:56:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/09:44:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1185	MGS	01-348/09:56:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/09:44:53
1186	MGS	01-348/09:56:15	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1187	MGS	01-348/09:56:15	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1188	MGS	01-348/09:56:16		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/09:44:54
1189	MGS	01-348/09:56:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/09:44:54
1190	MGS	01-348/09:56:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/09:44:54
1191	MGS	01-348/09:56:16	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1192	MGS	01-348/09:56:16	45	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1193	MGS	01-348/09:56:20		NOTE: End fixed Sub-Reflector for Radio Science		01-348/09:44:58
1194	MGS	01-348/10:04:49		NOTE: Exit Solar Eclipse 12374		01-348/09:53:27
1195	MGS	01-348/10:21:10		NOTE: Periapsis 12375 ----------		01-348/10:09:48
1196	MGS	01-348/10:25:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/10:14:26
1197	MGS	01-348/10:25:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/10:14:26
1198	MGS	01-348/10:25:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/10:14:27
1199	MGS	01-348/10:25:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/10:14:27
1200	MGS	01-348/10:45:52	34	NOTE: Transmitter Off in 15 minutes		
1201	MGS	01-348/10:47:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/10:36:27
1202	MGS	01-348/10:47:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/10:36:27
1203	MGS	01-348/10:58:01		NOTE: Start Block (SSRMGR)		01-348/10:46:39
1204	MGS	01-348/10:58:01		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-348/10:46:39
1205	MGS	01-348/10:58:02		SSR 1A Data Enable	CSD1AE	01-348/10:46:40
1206	MGS	01-348/10:58:02		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-348/10:46:40
1207	MGS	01-348/11:00:00	63	Begin Pre-Cal		
1208	MGS	01-348/11:00:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1209	MGS	01-348/11:00:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1210	MGS	01-348/11:00:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1211	MGS	01-348/11:00:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1212	MGS	01-348/11:00:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
1213	MGS	01-348/11:00:00	63	Config: TGC: DEST=37		
1214	MGS	01-348/11:00:00	63	Config: TGC: BAND=X, BR=42666.666667		
1215	MGS	01-348/11:00:00	63	Config: FSS: CH=2, PRI_FL=10000		
1216	MGS	01-348/11:00:00	63	Config: RSR		
1217	MGS	01-348/11:00:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
1218	MGS	01-348/11:00:00	63	Config: BVR		
1219	MGS	01-348/11:00:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
1220	MGS	01-348/11:00:00	63	Config: MDA: SMPL=0.1		
1221	MGS	01-348/11:00:52	34	Transmitter Off		
1222	MGS	01-348/11:12:26		NOTE: Start Block (MAP_PB_ODY)		01-348/11:01:04
1223	MGS	01-348/11:12:27		: 00:19:21, 01:44:01, FALSE, FALSE, FALSE, 00:01:15, 00:09:15, 01:24:34, 00:08:56	AEMINI	01-348/11:01:05
1224	MGS	01-348/11:12:27		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/11:01:05
1225	MGS	01-348/11:12:27		NOTE: Start EVP data return script		01-348/11:01:05
1226	MGS	01-348/11:12:28		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/11:01:06
1227	MGS	01-348/11:12:28		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-348T11:40:57.000	AEMPBI	01-348/11:01:06
1228	MGS	01-348/11:17:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/11:06:06
1229	MGS	01-348/11:17:29		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9328000, DUR=00:19:26		01-348/11:06:06
1230	MGS	01-348/11:17:29		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-348/11:06:06
1231	MGS	01-348/11:17:29		: 00:10:36, FALSE	RDSCII	01-348/11:06:06
1232	MGS	01-348/11:17:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/11:06:06
1233	MGS	01-348/11:17:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/11:06:06
1234	MGS	01-348/11:17:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/11:06:06
1235	MGS	01-348/11:17:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/11:06:06
1236	MGS	01-348/11:17:29	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1237	MGS	01-348/11:17:29	34	NOTE: Carrier Only -- No Telemetry Modulation		
1238	MGS	01-348/11:17:29	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1239	MGS	01-348/11:17:29	45	NOTE: Carrier Only -- No Telemetry Modulation		
1240	MGS	01-348/11:19:32		NOTE: Enter Planetary Atmosphere 12375		01-348/11:08:09
1241	MGS	01-348/11:19:56		NOTE: Apoapsis 12375 -		01-348/11:08:34
1242	MGS	01-348/11:21:28		SSR 1B Data Disable	CSD1BX	01-348/11:10:05
1243	MGS	01-348/11:21:28		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-348/11:10:05
1244	MGS	01-348/11:21:29		NOTE: End Block (SSRMGR)		01-348/11:10:06
1245	MGS	01-348/11:22:27		NOTE: Enter Solar Eclipse 12375		01-348/11:11:05
1246	MGS	01-348/11:22:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/11:11:05
1247	MGS	01-348/11:24:44	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
1248	MGS	01-348/11:27:21		NOTE: Enter Earth Occultation 12375		01-348/11:15:59
1249	MGS	01-348/11:27:21	34	NOTE: Loss Of X-Band Signal		
1250	MGS	01-348/11:27:21	45	NOTE: Loss Of X-Band Signal		
1251	MGS	01-348/11:28:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/11:16:42
1252	MGS	01-348/11:28:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/11:16:42
1253	MGS	01-348/11:28:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/11:16:42
1254	MGS	01-348/11:28:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/11:16:42
1255	MGS	01-348/11:28:05		NOTE: End EVP script		01-348/11:16:43
1256	MGS	01-348/11:28:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/11:16:43
1257	MGS	01-348/11:28:06		NOTE: End Block (MAP_RT)		01-348/11:16:44
1258	MGS	01-348/11:28:09		NOTE: End fixed Sub-Reflector for Radio Science		01-348/11:16:47
1259	MGS	01-348/11:30:00	65	Begin Pre-Cal		
1260	MGS	01-348/11:30:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1261	MGS	01-348/11:30:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1262	MGS	01-348/11:30:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1263	MGS	01-348/11:30:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1264	MGS	01-348/11:30:00	65	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
1265	MGS	01-348/11:30:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
1266	MGS	01-348/11:30:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
1267	MGS	01-348/11:30:00	65	Config: TGC: DEST=37		
1268	MGS	01-348/11:30:00	65	Config: TGC: BAND=X, BR=42666.666667		
1269	MGS	01-348/11:30:00	65	Config: FSS: CH=2, PRI_FL=10000		
1270	MGS	01-348/11:30:00	65	Config: RSR		
1271	MGS	01-348/11:30:00	65	Config: TXL		
1272	MGS	01-348/11:30:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
1273	MGS	01-348/11:30:00	65	Config: BVR		
1274	MGS	01-348/11:30:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
1275	MGS	01-348/11:30:00	65	Config: MDA: SMPL=0.1		
1276	MGS	01-348/11:30:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
1277	MGS	01-348/11:30:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
1278	MGS	01-348/11:30:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
1279	MGS	01-348/11:41:49		: 01:44:01	RPAONX	01-348/11:30:26
1280	MGS	01-348/11:41:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/11:30:26
1281	MGS	01-348/11:43:34		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/11:32:11
1282	MGS	01-348/11:43:44		NOTE: Exit Earth Occultation 12375		01-348/11:32:22
1283	MGS	01-348/11:43:44	34	Acquisition Of X-Band Signal		
1284	MGS	01-348/11:43:44	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1285	MGS	01-348/11:43:44	45	Acquisition Of X-Band Signal		
1286	MGS	01-348/11:43:44	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1287	MGS	01-348/11:46:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/11:35:27
1288	MGS	01-348/11:46:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/11:35:27
1289	MGS	01-348/11:46:54		Command the PSE with included data word: 3990	SWPSEL	01-348/11:35:31
1290	MGS	01-348/11:46:55		Set eclipse egress script address: 0158	SWSEES	01-348/11:35:32
1291	MGS	01-348/11:47:29	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1292	MGS	01-348/11:47:29	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1293	MGS	01-348/11:51:53		NOTE: Exit Planetary Atmosphere 12375		01-348/11:40:31
1294	MGS	01-348/11:52:19		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:22:52	AEMPB	01-348/11:40:56
1295	MGS	01-348/11:52:19		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-348/11:40:56
1296	MGS	01-348/11:52:19		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-348/11:40:56
1297	MGS	01-348/11:52:20		SSR 1B Data Enable	CSD1BE	01-348/11:40:57
1298	MGS	01-348/11:52:20		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-348/11:40:57
1299	MGS	01-348/11:52:20	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1300	MGS	01-348/11:52:20	45	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1301	MGS	01-348/12:02:32		NOTE: Exit Solar Eclipse 12375		01-348/11:51:10
1302	MGS	01-348/12:10:00	34	NOTE: Transmitter Off in 15 minutes		
1303	MGS	01-348/12:11:22		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-348/11:59:59
1304	MGS	01-348/12:19:01		NOTE: Periapsis 12376 ----------		01-348/12:07:38
1305	MGS	01-348/12:25:00	34	Transmitter Off		
1306	MGS	01-348/12:27:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/12:16:09
1307	MGS	01-348/12:27:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/12:16:09
1308	MGS	01-348/12:27:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/12:16:10
1309	MGS	01-348/12:27:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/12:16:10
1310	MGS	01-348/12:30:00	34	End Tracking		
1311	MGS	01-348/12:30:00	63	Begin Tracking		
1312	MGS	01-348/12:30:00	65	Begin Tracking		
1313	MGS	01-348/12:30:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1314	MGS	01-348/12:30:00	65	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1315	MGS	01-348/12:36:23	45	NOTE: Below Uplink Interlock Limit		
1316	MGS	01-348/12:43:31	65	NOTE: Transmitter Off in 15 minutes		
1317	MGS	01-348/12:44:03	63	NOTE: Above Uplink Interlock Limit		
1318	MGS	01-348/12:44:38	65	NOTE: Above Uplink Interlock Limit		
1319	MGS	01-348/12:45:00	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1320	MGS	01-348/12:45:00	45	End Tracking		
1321	MGS	01-348/12:45:00	34	End Post-Cal		
1322	MGS	01-348/12:47:00	65	Range Modulation On: SUP=3.0dB		
1323	MGS	01-348/12:47:44	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1324	MGS	01-348/12:47:44	65	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1325	MGS	01-348/12:48:00	65	Begin Ranging Acquisition		
1326	MGS	01-348/12:49:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/12:38:10
1327	MGS	01-348/12:49:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/12:38:10
1328	MGS	01-348/12:56:32	65	Range Modulation Off		
1329	MGS	01-348/12:58:31	65	Transmitter Off		
1330	MGS	01-348/13:00:00	45	End Post-Cal		
1331	MGS	01-348/13:02:58		SSR 1B Data Disable	CSD1BX	01-348/12:51:35
1332	MGS	01-348/13:02:58		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-348/12:51:35
1333	MGS	01-348/13:02:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-348/12:51:35
1334	MGS	01-348/13:02:58	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1335	MGS	01-348/13:02:58	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1336	MGS	01-348/13:07:44	63	Acquire D/L: X/16, 3-Way/65, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1337	MGS	01-348/13:07:44	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1338	MGS	01-348/13:10:12		NOTE: Start Block (MAP_RT)		01-348/12:58:49
1339	MGS	01-348/13:10:13		: 00:19:21, 01:44:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:55, 01:21:13, 00:10:36	AEMINI	01-348/12:58:50
1340	MGS	01-348/13:10:13		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/12:58:50
1341	MGS	01-348/13:10:13		NOTE: Start EVP data return script		01-348/12:58:50
1342	MGS	01-348/13:10:14		: SE_2A, RTM, 01:21:12, MRC, 2001-348T13:40:23.000	AEMRTI	01-348/12:58:51
1343	MGS	01-348/13:17:14		NOTE: Enter Planetary Atmosphere 12376		01-348/13:05:51
1344	MGS	01-348/13:17:57		NOTE: Apoapsis 12376 -		01-348/13:06:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1345	MGS	01-348/13:20:13		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/13:08:50
1346	MGS	01-348/13:20:13		NOTE: Enter Solar Eclipse 12376		01-348/13:08:50
1347	MGS	01-348/13:21:16	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1348	MGS	01-348/13:21:16	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1349	MGS	01-348/13:22:32	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1350	MGS	01-348/13:24:32	65	Range Modulation On: SUP=3.0dB		
1351	MGS	01-348/13:25:01		NOTE: Enter Earth Occultation 12376		01-348/13:13:39
1352	MGS	01-348/13:25:01	63	NOTE: Loss Of X-Band Signal		
1353	MGS	01-348/13:25:01	65	NOTE: Loss Of X-Band Signal		
1354	MGS	01-348/13:25:32	65	Begin Ranging Acquisition		
1355	MGS	01-348/13:25:50		NOTE: End EVP script		01-348/13:14:27
1356	MGS	01-348/13:25:50		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/13:14:27
1357	MGS	01-348/13:25:51		NOTE: End Block (MAP_PB_ODY)		01-348/13:14:28
1358	MGS	01-348/13:35:49		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/13:24:26
1359	MGS	01-348/13:39:34		: 01:44:00	RPAONX	01-348/13:28:11
1360	MGS	01-348/13:39:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/13:28:11
1361	MGS	01-348/13:40:49		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/13:29:26
1362	MGS	01-348/13:40:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/13:29:26
1363	MGS	01-348/13:40:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/13:29:26
1364	MGS	01-348/13:40:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/13:29:26
1365	MGS	01-348/13:40:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/13:29:26
1366	MGS	01-348/13:41:32		NOTE: Exit Earth Occultation 12376		01-348/13:30:09
1367	MGS	01-348/13:41:32	63	Acquisition Of X-Band Signal		
1368	MGS	01-348/13:41:32	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1369	MGS	01-348/13:41:32	63	NOTE: Carrier Only -- No Telemetry Modulation		
1370	MGS	01-348/13:41:32	65	Acquisition Of X-Band Signal		
1371	MGS	01-348/13:41:32	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1372	MGS	01-348/13:41:32	65	NOTE: Carrier Only -- No Telemetry Modulation		
1373	MGS	01-348/13:44:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/13:33:10
1374	MGS	01-348/13:44:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/13:33:10
1375	MGS	01-348/13:44:38		Set eclipse egress script address: 019A	SWSEES	01-348/13:33:15
1376	MGS	01-348/13:49:39		NOTE: Exit Planetary Atmosphere 12376		01-348/13:38:16
1377	MGS	01-348/13:51:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/13:40:21
1378	MGS	01-348/13:51:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/13:40:21
1379	MGS	01-348/13:51:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/13:40:21
1380	MGS	01-348/13:51:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/13:40:21
1381	MGS	01-348/13:51:44	63	Acquire D/L: X/16, 3-Way/65, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1382	MGS	01-348/13:51:44	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1383	MGS	01-348/13:51:45		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/13:40:22
1384	MGS	01-348/13:51:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/13:40:22
1385	MGS	01-348/13:51:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/13:40:22
1386	MGS	01-348/13:51:45	63	D/L Change: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1387	MGS	01-348/13:51:45	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1388	MGS	01-348/13:51:49		NOTE: End fixed Sub-Reflector for Radio Science		01-348/13:40:26
1389	MGS	01-348/14:00:18		NOTE: Exit Solar Eclipse 12376		01-348/13:48:56
1390	MGS	01-348/14:17:13		NOTE: Periapsis 12377 ----------		01-348/14:05:50
1391	MGS	01-348/14:21:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/14:09:54
1392	MGS	01-348/14:21:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/14:09:54
1393	MGS	01-348/14:21:18		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/14:09:55
1394	MGS	01-348/14:21:18		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/14:09:55
1395	MGS	01-348/14:41:16	65	NOTE: Transmitter Off in 15 minutes		
1396	MGS	01-348/14:43:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/14:31:55
1397	MGS	01-348/14:43:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/14:31:55
1398	MGS	01-348/14:54:17	65	Range Modulation Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1399	MGS	01-348/14:56:16	65	Transmitter Off		
1400	MGS	01-348/15:07:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/14:56:34
1401	MGS	01-348/15:08:00		NOTE: Start EVP data return script		01-348/14:56:37
1402	MGS	01-348/15:12:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/15:01:34
1403	MGS	01-348/15:12:57		: 00:10:36, FALSE	RDSCII	01-348/15:01:34
1404	MGS	01-348/15:12:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/15:01:34
1405	MGS	01-348/15:12:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/15:01:34
1406	MGS	01-348/15:12:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/15:01:34
1407	MGS	01-348/15:12:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/15:01:34
1408	MGS	01-348/15:12:57	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1409	MGS	01-348/15:12:57	63	NOTE: Carrier Only -- No Telemetry Modulation		
1410	MGS	01-348/15:12:57	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1411	MGS	01-348/15:12:57	65	NOTE: Carrier Only -- No Telemetry Modulation		
1412	MGS	01-348/15:15:00		NOTE: Enter Planetary Atmosphere 12377		01-348/15:03:37
1413	MGS	01-348/15:16:16		NOTE: Apoapsis 12377 -		01-348/15:04:53
1414	MGS	01-348/15:18:00		NOTE: Enter Solar Eclipse 12377		01-348/15:06:37
1415	MGS	01-348/15:18:00		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/15:06:37
1416	MGS	01-348/15:20:19	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1417	MGS	01-348/15:22:19	65	Range Modulation On: SUP=3.0dB		
1418	MGS	01-348/15:22:47		NOTE: Enter Earth Occultation 12377		01-348/15:11:24
1419	MGS	01-348/15:22:47	63	NOTE: Loss Of X-Band Signal		
1420	MGS	01-348/15:22:47	65	NOTE: Loss Of X-Band Signal		
1421	MGS	01-348/15:23:19	65	Begin Ranging Acquisition		
1422	MGS	01-348/15:23:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/15:12:10
1423	MGS	01-348/15:23:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/15:12:10
1424	MGS	01-348/15:23:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/15:12:10
1425	MGS	01-348/15:23:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/15:12:10
1426	MGS	01-348/15:23:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/15:12:11
1427	MGS	01-348/15:23:34		NOTE: End EVP script		01-348/15:12:11
1428	MGS	01-348/15:23:38		NOTE: End fixed Sub-Reflector for Radio Science		01-348/15:12:15
1429	MGS	01-348/15:33:36		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/15:22:13
1430	MGS	01-348/15:37:21		: 01:44:00	RPAONX	01-348/15:25:58
1431	MGS	01-348/15:37:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/15:25:58
1432	MGS	01-348/15:38:36		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/15:27:13
1433	MGS	01-348/15:38:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/15:27:13
1434	MGS	01-348/15:38:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/15:27:13
1435	MGS	01-348/15:38:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/15:27:13
1436	MGS	01-348/15:38:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/15:27:13
1437	MGS	01-348/15:39:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/15:27:43
1438	MGS	01-348/15:39:20		NOTE: Exit Earth Occultation 12377		01-348/15:27:57
1439	MGS	01-348/15:39:20	63	Acquisition Of X-Band Signal		
1440	MGS	01-348/15:39:20	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1441	MGS	01-348/15:39:20	63	NOTE: Carrier Only -- No Telemetry Modulation		
1442	MGS	01-348/15:39:20	65	Acquisition Of X-Band Signal		
1443	MGS	01-348/15:39:20	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1444	MGS	01-348/15:39:20	65	NOTE: Carrier Only -- No Telemetry Modulation		
1445	MGS	01-348/15:42:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/15:30:55
1446	MGS	01-348/15:42:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/15:30:55
1447	MGS	01-348/15:42:23		Set eclipse egress script address: 01DC	SWSEES	01-348/15:31:00
1448	MGS	01-348/15:47:26		NOTE: Exit Planetary Atmosphere 12377		01-348/15:36:03
1449	MGS	01-348/15:49:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/15:38:08
1450	MGS	01-348/15:49:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/15:38:08
1451	MGS	01-348/15:49:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/15:38:08
1452	MGS	01-348/15:49:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/15:38:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1453	MGS	01-348/15:49:31	63	Acquire D/L: X/16, 3-Way/65, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1454	MGS	01-348/15:49:31	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1455	MGS	01-348/15:49:32		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/15:38:09
1456	MGS	01-348/15:49:32		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/15:38:09
1457	MGS	01-348/15:49:32		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/15:38:09
1458	MGS	01-348/15:49:32	63	D/L Change: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1459	MGS	01-348/15:49:32	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1460	MGS	01-348/15:49:36		NOTE: End fixed Sub-Reflector for Radio Science		01-348/15:38:13
1461	MGS	01-348/15:58:06		NOTE: Exit Solar Eclipse 12377		01-348/15:46:43
1462	MGS	01-348/16:10:00	65	NOTE: Transmitter Off in 15 minutes		
1463	MGS	01-348/16:15:19		NOTE: Periapsis 12378 ----------		01-348/16:03:56
1464	MGS	01-348/16:19:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/16:07:42
1465	MGS	01-348/16:19:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/16:07:42
1466	MGS	01-348/16:19:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/16:07:43
1467	MGS	01-348/16:19:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/16:07:43
1468	MGS	01-348/16:23:00	65	Range Modulation Off		
1469	MGS	01-348/16:25:00	65	Transmitter Off		
1470	MGS	01-348/16:30:00	65	End Tracking		
1471	MGS	01-348/16:41:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/16:29:43
1472	MGS	01-348/16:41:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/16:29:43
1473	MGS	01-348/16:45:00	65	End Post-Cal		
1474	MGS	01-348/16:47:46	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1475	MGS	01-348/16:51:08		NOTE: Start Block (SSRMGR)		01-348/16:39:45
1476	MGS	01-348/16:51:08		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-348/16:39:45
1477	MGS	01-348/16:51:09		SSR 1B Data Enable	CSD1BE	01-348/16:39:46
1478	MGS	01-348/16:51:09		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-348/16:39:46
1479	MGS	01-348/17:05:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/16:54:21
1480	MGS	01-348/17:05:45		NOTE: Start Block (MAP_PB_ODY)		01-348/16:54:22
1481	MGS	01-348/17:05:46		: 00:19:21, 01:44:01, FALSE, FALSE, FALSE, 00:01:15, 00:09:15, 01:24:34, 00:08:56	AEMINI	01-348/16:54:23
1482	MGS	01-348/17:05:46		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/16:54:23
1483	MGS	01-348/17:05:46		NOTE: Start EVP data return script		01-348/16:54:23
1484	MGS	01-348/17:05:47		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-348T17:34:15.000	AEMPBI	01-348/16:54:24
1485	MGS	01-348/17:10:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/16:59:21
1486	MGS	01-348/17:10:44		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9400000, DUR=00:19:35		01-348/16:59:21
1487	MGS	01-348/17:10:44		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-348/16:59:21
1488	MGS	01-348/17:10:44		: 00:10:36, FALSE	RDSCII	01-348/16:59:21
1489	MGS	01-348/17:10:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/16:59:21
1490	MGS	01-348/17:10:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/16:59:21
1491	MGS	01-348/17:10:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/16:59:21
1492	MGS	01-348/17:10:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/16:59:21
1493	MGS	01-348/17:10:44	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1494	MGS	01-348/17:10:44	63	NOTE: Carrier Only -- No Telemetry Modulation		
1495	MGS	01-348/17:12:48		NOTE: Enter Planetary Atmosphere 12378		01-348/17:01:25
1496	MGS	01-348/17:14:13		NOTE: Apoapsis 12378 -		01-348/17:02:50
1497	MGS	01-348/17:14:46		SSR 1A Data Disable	CSD1AX	01-348/17:03:23
1498	MGS	01-348/17:14:46		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-348/17:03:23
1499	MGS	01-348/17:14:47		NOTE: End Block (SSRMGR)		01-348/17:03:24
1500	MGS	01-348/17:15:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/17:04:23
1501	MGS	01-348/17:15:46		NOTE: Enter Solar Eclipse 12378		01-348/17:04:23
1502	MGS	01-348/17:20:36		NOTE: Enter Earth Occultation 12378		01-348/17:09:13
1503	MGS	01-348/17:20:36	63	NOTE: Loss Of X-Band Signal		
1504	MGS	01-348/17:21:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/17:09:57
1505	MGS	01-348/17:21:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/17:09:57
1506	MGS	01-348/17:21:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/17:09:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1507	MGS	01-348/17:21:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/17:09:57
1508	MGS	01-348/17:21:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/17:09:58
1509	MGS	01-348/17:21:21		NOTE: End EVP script		01-348/17:09:58
1510	MGS	01-348/17:21:22		NOTE: End Block (MAP_RT)		01-348/17:09:59
1511	MGS	01-348/17:21:25		NOTE: End fixed Sub-Reflector for Radio Science		01-348/17:10:02
1512	MGS	01-348/17:35:07		: 01:44:01	RPAONX	01-348/17:23:44
1513	MGS	01-348/17:35:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/17:23:44
1514	MGS	01-348/17:36:52		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/17:25:29
1515	MGS	01-348/17:37:07		NOTE: Exit Earth Occultation 12378		01-348/17:25:43
1516	MGS	01-348/17:37:07	63	Acquisition Of X-Band Signal		
1517	MGS	01-348/17:37:07	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1518	MGS	01-348/17:40:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/17:28:43
1519	MGS	01-348/17:40:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/17:28:43
1520	MGS	01-348/17:40:10		Command the PSE with included data word: 3990	SWPSEL	01-348/17:28:47
1521	MGS	01-348/17:40:11		Set eclipse egress script address: 0158	SWSEES	01-348/17:28:48
1522	MGS	01-348/17:45:15		NOTE: Exit Planetary Atmosphere 12378		01-348/17:33:51
1523	MGS	01-348/17:45:37		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:22:52	AEMPB	01-348/17:34:14
1524	MGS	01-348/17:45:37		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-348/17:34:14
1525	MGS	01-348/17:45:37		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-348/17:34:14
1526	MGS	01-348/17:45:38		SSR 1A Data Enable	CSD1AE	01-348/17:34:15
1527	MGS	01-348/17:45:38		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-348/17:34:15
1528	MGS	01-348/17:45:38	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1529	MGS	01-348/17:55:53		NOTE: Exit Solar Eclipse 12378		01-348/17:44:29
1530	MGS	01-348/18:13:00		NOTE: Periapsis 12379 ----------		01-348/18:01:37
1531	MGS	01-348/18:20:00	15	Begin Pre-Cal		
1532	MGS	01-348/18:20:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1533	MGS	01-348/18:20:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1534	MGS	01-348/18:20:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1535	MGS	01-348/18:20:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1536	MGS	01-348/18:20:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
1537	MGS	01-348/18:20:00	15	Config: TGC: DEST=37		
1538	MGS	01-348/18:20:00	15	Config: TGC: BAND=X, BR=40000.000000		
1539	MGS	01-348/18:20:00	15	Config: FSS: CH=2, PRI_FL=10000		
1540	MGS	01-348/18:20:00	15	Config: RSR		
1541	MGS	01-348/18:20:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
1542	MGS	01-348/18:20:00	15	Config: BVR		
1543	MGS	01-348/18:20:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
1544	MGS	01-348/18:20:00	15	Config: MDA: SMPL=0.1		
1545	MGS	01-348/18:20:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/18:09:28
1546	MGS	01-348/18:20:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/18:09:28
1547	MGS	01-348/18:20:53		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/18:09:29
1548	MGS	01-348/18:20:53		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/18:09:29
1549	MGS	01-348/18:42:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/18:31:29
1550	MGS	01-348/18:42:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/18:31:29
1551	MGS	01-348/18:56:17		SSR 1A Data Disable	CSD1AX	01-348/18:44:53
1552	MGS	01-348/18:56:17		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-348/18:44:53
1553	MGS	01-348/18:56:17		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-348/18:44:53
1554	MGS	01-348/18:56:17	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1555	MGS	01-348/19:03:29		NOTE: Start Block (MAP_RT)		01-348/18:52:05
1556	MGS	01-348/19:03:30		: 00:19:21, 01:44:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:55, 01:21:13, 00:10:36	AEMINI	01-348/18:52:06
1557	MGS	01-348/19:03:30		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/18:52:06
1558	MGS	01-348/19:03:30		NOTE: Start EVP data return script		01-348/18:52:06
1559	MGS	01-348/19:03:31		: SE_2A, RTM, 01:21:12, MRC, 2001-348T19:33:39.000	AEMRTI	01-348/18:52:07
1560	MGS	01-348/19:10:33		NOTE: Enter Planetary Atmosphere 12379		01-348/18:59:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1561	MGS	01-348/19:11:40		NOTE: Apoapsis 12379 -		01-348/19:00:16
1562	MGS	01-348/19:13:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/19:02:06
1563	MGS	01-348/19:13:30		NOTE: Enter Solar Eclipse 12379		01-348/19:02:07
1564	MGS	01-348/19:18:21		NOTE: Enter Earth Occultation 12379		01-348/19:06:58
1565	MGS	01-348/19:18:21	63	NOTE: Loss Of X-Band Signal		
1566	MGS	01-348/19:19:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/19:07:45
1567	MGS	01-348/19:19:09		NOTE: End EVP script		01-348/19:07:45
1568	MGS	01-348/19:19:10		NOTE: End Block (MAP_PB_ODY)		01-348/19:07:46
1569	MGS	01-348/19:29:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/19:17:43
1570	MGS	01-348/19:32:51		: 01:44:00	RPAONX	01-348/19:21:27
1571	MGS	01-348/19:32:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/19:21:27
1572	MGS	01-348/19:34:06		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/19:22:42
1573	MGS	01-348/19:34:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/19:22:42
1574	MGS	01-348/19:34:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/19:22:42
1575	MGS	01-348/19:34:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/19:22:42
1576	MGS	01-348/19:34:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/19:22:42
1577	MGS	01-348/19:34:52		NOTE: Exit Earth Occultation 12379		01-348/19:23:28
1578	MGS	01-348/19:34:52	63	Acquisition Of X-Band Signal		
1579	MGS	01-348/19:34:52	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1580	MGS	01-348/19:34:52	63	NOTE: Carrier Only -- No Telemetry Modulation		
1581	MGS	01-348/19:37:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/19:26:29
1582	MGS	01-348/19:37:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/19:26:29
1583	MGS	01-348/19:37:58		Set eclipse egress script address: 019A	SWSEES	01-348/19:26:34
1584	MGS	01-348/19:43:00		NOTE: Exit Planetary Atmosphere 12379		01-348/19:31:37
1585	MGS	01-348/19:45:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/19:33:37
1586	MGS	01-348/19:45:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/19:33:37
1587	MGS	01-348/19:45:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/19:33:37
1588	MGS	01-348/19:45:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/19:33:37
1589	MGS	01-348/19:45:01	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1590	MGS	01-348/19:45:02		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/19:33:38
1591	MGS	01-348/19:45:02		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/19:33:38
1592	MGS	01-348/19:45:02		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/19:33:38
1593	MGS	01-348/19:45:02	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1594	MGS	01-348/19:45:06		NOTE: End fixed Sub-Reflector for Radio Science		01-348/19:33:43
1595	MGS	01-348/19:50:00	15	Begin Tracking		
1596	MGS	01-348/19:50:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1597	MGS	01-348/19:53:36		NOTE: Exit Solar Eclipse 12379		01-348/19:42:13
1598	MGS	01-348/20:04:23	15	NOTE: Above Uplink Interlock Limit		
1599	MGS	01-348/20:10:00	63	End Tracking		
1600	MGS	01-348/20:10:21		NOTE: Periapsis 12380 ----------		01-348/19:58:58
1601	MGS	01-348/20:14:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/20:03:11
1602	MGS	01-348/20:14:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/20:03:11
1603	MGS	01-348/20:14:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/20:03:12
1604	MGS	01-348/20:14:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/20:03:12
1605	MGS	01-348/20:25:00	63	End Post-Cal		
1606	MGS	01-348/20:36:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/20:25:12
1607	MGS	01-348/20:36:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/20:25:12
1608	MGS	01-348/21:01:10		NOTE: Start EVP data return script		01-348/20:49:46
1609	MGS	01-348/21:01:14		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/20:49:51
1610	MGS	01-348/21:06:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/20:54:50
1611	MGS	01-348/21:06:14		: 00:10:36, FALSE	RDSCII	01-348/20:54:50
1612	MGS	01-348/21:06:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/20:54:50
1613	MGS	01-348/21:06:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/20:54:50
1614	MGS	01-348/21:06:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/20:54:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1615	MGS	01-348/21:06:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/20:54:50
1616	MGS	01-348/21:06:14	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1617	MGS	01-348/21:06:14	15	NOTE: Carrier Only -- No Telemetry Modulation		
1618	MGS	01-348/21:08:11		NOTE: Enter Planetary Atmosphere 12380		01-348/20:56:47
1619	MGS	01-348/21:09:05		NOTE: Apoapsis 12380 -		01-348/20:57:42
1620	MGS	01-348/21:11:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/20:59:46
1621	MGS	01-348/21:11:11		NOTE: Enter Solar Eclipse 12380		01-348/20:59:47
1622	MGS	01-348/21:15:57		NOTE: Enter Earth Occultation 12380		01-348/21:04:33
1623	MGS	01-348/21:15:57	15	NOTE: Loss Of X-Band Signal		
1624	MGS	01-348/21:16:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/21:05:26
1625	MGS	01-348/21:16:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/21:05:26
1626	MGS	01-348/21:16:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/21:05:26
1627	MGS	01-348/21:16:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/21:05:26
1628	MGS	01-348/21:16:51		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/21:05:27
1629	MGS	01-348/21:16:51		NOTE: End EVP script		01-348/21:05:28
1630	MGS	01-348/21:16:55		NOTE: End fixed Sub-Reflector for Radio Science		01-348/21:05:32
1631	MGS	01-348/21:26:46		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/21:15:23
1632	MGS	01-348/21:30:31		: 01:44:00	RPAONX	01-348/21:19:07
1633	MGS	01-348/21:30:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/21:19:07
1634	MGS	01-348/21:31:46		: 00:00:30, 00:10:55, FALSE	RDSCIE	01-348/21:20:22
1635	MGS	01-348/21:31:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/21:20:22
1636	MGS	01-348/21:31:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/21:20:22
1637	MGS	01-348/21:31:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/21:20:22
1638	MGS	01-348/21:31:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/21:20:22
1639	MGS	01-348/21:32:16		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/21:20:52
1640	MGS	01-348/21:32:36		NOTE: Exit Earth Occultation 12380		01-348/21:21:12
1641	MGS	01-348/21:32:36	15	Acquisition Of X-Band Signal		
1642	MGS	01-348/21:32:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1643	MGS	01-348/21:32:36	15	NOTE: Carrier Only -- No Telemetry Modulation		
1644	MGS	01-348/21:35:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/21:24:12
1645	MGS	01-348/21:35:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/21:24:12
1646	MGS	01-348/21:35:41		Set eclipse egress script address: 01DC	SWSEES	01-348/21:24:17
1647	MGS	01-348/21:40:42		NOTE: Exit Planetary Atmosphere 12380		01-348/21:29:18
1648	MGS	01-348/21:42:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/21:31:17
1649	MGS	01-348/21:42:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/21:31:17
1650	MGS	01-348/21:42:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/21:31:17
1651	MGS	01-348/21:42:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/21:31:17
1652	MGS	01-348/21:42:41	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1653	MGS	01-348/21:42:42		: RTM, MRC, 01:21:12, S&E_2A, FALSE, 00:10:37	AEMRT	01-348/21:31:18
1654	MGS	01-348/21:42:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-348/21:31:18
1655	MGS	01-348/21:42:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-348/21:31:18
1656	MGS	01-348/21:42:42	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1657	MGS	01-348/21:42:47		NOTE: End fixed Sub-Reflector for Radio Science		01-348/21:31:23
1658	MGS	01-348/21:51:16		NOTE: Exit Solar Eclipse 12380		01-348/21:39:52
1659	MGS	01-348/22:07:51		NOTE: Periapsis 12381 ----------		01-348/21:56:27
1660	MGS	01-348/22:12:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-348/22:00:51
1661	MGS	01-348/22:12:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-348/22:00:51
1662	MGS	01-348/22:12:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-348/22:00:52
1663	MGS	01-348/22:12:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-348/22:00:52
1664	MGS	01-348/22:34:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-348/22:22:52
1665	MGS	01-348/22:34:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-348/22:22:52
1666	MGS	01-348/22:44:28		NOTE: Start Block (SSRMGR)		01-348/22:33:04
1667	MGS	01-348/22:44:28		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-348/22:33:04
1668	MGS	01-348/22:44:29		SSR 1A Data Enable	CSD1AE	01-348/22:33:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1669	MGS	01-348/22:44:29		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-348/22:33:05
1670	MGS	01-348/22:58:52		NOTE: Start Block (MAP_PB_ODY)		01-348/22:47:28
1671	MGS	01-348/22:58:53		: 00:19:21, 01:44:01, FALSE, FALSE, FALSE, 00:01:15, 00:09:15, 01:24:34, 00:08:56	AEMINI	01-348/22:47:29
1672	MGS	01-348/22:58:53		Enable sending eclipse ingress script when array power disappears	SWEISE	01-348/22:47:29
1673	MGS	01-348/22:58:53		NOTE: Start EVP data return script		01-348/22:47:29
1674	MGS	01-348/22:58:54		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-348T23:27:21.000	AEMPBI	01-348/22:47:30
1675	MGS	01-348/22:58:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-348/22:47:31
1676	MGS	01-348/23:03:54		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-348/22:52:30
1677	MGS	01-348/23:03:54		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9320000, DUR=00:19:25		01-348/22:52:30
1678	MGS	01-348/23:03:54		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-348/22:52:30
1679	MGS	01-348/23:03:54		: 00:10:36, FALSE	RDSCII	01-348/22:52:30
1680	MGS	01-348/23:03:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-348/22:52:30
1681	MGS	01-348/23:03:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-348/22:52:30
1682	MGS	01-348/23:03:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-348/22:52:30
1683	MGS	01-348/23:03:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-348/22:52:30
1684	MGS	01-348/23:03:54	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1685	MGS	01-348/23:03:54	15	NOTE: Carrier Only -- No Telemetry Modulation		
1686	MGS	01-348/23:05:52		NOTE: Enter Planetary Atmosphere 12381		01-348/22:54:28
1687	MGS	01-348/23:06:56		NOTE: Apoapsis 12381 -		01-348/22:55:32
1688	MGS	01-348/23:07:53		SSR 1B Data Disable	CSD1BX	01-348/22:56:29
1689	MGS	01-348/23:07:53		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-348/22:56:29
1690	MGS	01-348/23:07:54		NOTE: End Block (SSRMGR)		01-348/22:56:30
1691	MGS	01-348/23:08:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-348/22:57:29
1692	MGS	01-348/23:08:54		NOTE: Enter Solar Eclipse 12381		01-348/22:57:30
1693	MGS	01-348/23:13:36		NOTE: Enter Earth Occultation 12381		01-348/23:02:12
1694	MGS	01-348/23:13:36	15	NOTE: Loss Of X-Band Signal		
1695	MGS	01-348/23:14:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-348/23:03:06
1696	MGS	01-348/23:14:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-348/23:03:06
1697	MGS	01-348/23:14:30		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-348/23:03:06
1698	MGS	01-348/23:14:30		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-348/23:03:06
1699	MGS	01-348/23:14:31		Turn off the MOT Exciter and RPA beam	STRPAF	01-348/23:03:07
1700	MGS	01-348/23:14:32		NOTE: End EVP script		01-348/23:03:08
1701	MGS	01-348/23:14:33		NOTE: End Block (MAP_RT)		01-348/23:03:09
1702	MGS	01-348/23:14:36		NOTE: End fixed Sub-Reflector for Radio Science		01-348/23:03:12
1703	MGS	01-348/23:28:14		: 01:44:01	RPAONX	01-348/23:16:50
1704	MGS	01-348/23:28:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-348/23:16:50
1705	MGS	01-348/23:29:59		Disables autonomous command to send eclipse ingress script	SWEISX	01-348/23:18:35
1706	MGS	01-348/23:30:21		NOTE: Exit Earth Occultation 12381		01-348/23:18:57
1707	MGS	01-348/23:30:21	15	Acquisition Of X-Band Signal		
1708	MGS	01-348/23:30:21	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1709	MGS	01-348/23:33:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-348/23:21:52
1710	MGS	01-348/23:33:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-348/23:21:52
1711	MGS	01-348/23:33:20		Command the PSE with included data word: 3990	SWPSEL	01-348/23:21:56
1712	MGS	01-348/23:33:21		Set eclipse egress script address: 0158	SWSEES	01-348/23:21:57
1713	MGS	01-348/23:38:24		NOTE: Exit Planetary Atmosphere 12381		01-348/23:27:00
1714	MGS	01-348/23:38:44		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:22:52	AEMPB	01-348/23:27:20
1715	MGS	01-348/23:38:44		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-348/23:27:20
1716	MGS	01-348/23:38:44		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-348/23:27:20
1717	MGS	01-348/23:38:45		SSR 1B Data Enable	CSD1BE	01-348/23:27:21
1718	MGS	01-348/23:38:45		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-348/23:27:21
1719	MGS	01-348/23:38:45	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1720	MGS	01-348/23:48:59		NOTE: Exit Solar Eclipse 12381		01-348/23:37:35
1721	MGS	01-349/00:00:00		Light Time: OWLT = 11:24, RTLT = 22:48		
1722	MGS	01-349/00:05:42		NOTE: Periapsis 12382 ----------		01-348/23:54:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1723	MGS	01-349/00:10:00	45	Begin Pre-Cal		
1724	MGS	01-349/00:10:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1725	MGS	01-349/00:10:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1726	MGS	01-349/00:10:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1727	MGS	01-349/00:10:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1728	MGS	01-349/00:10:00	45	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
1729	MGS	01-349/00:10:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
1730	MGS	01-349/00:10:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
1731	MGS	01-349/00:10:00	45	Config: TGC: DEST=37		
1732	MGS	01-349/00:10:00	45	Config: TGC: BAND=X, BR=8000.000000		
1733	MGS	01-349/00:10:00	45	Config: FSS: CH=2, PRI_FL=10000		
1734	MGS	01-349/00:10:00	45	Config: RSR		
1735	MGS	01-349/00:10:00	45	Config: TXL		
1736	MGS	01-349/00:10:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
1737	MGS	01-349/00:10:00	45	Config: BVR		
1738	MGS	01-349/00:10:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
1739	MGS	01-349/00:10:00	45	Config: MDA: SMPL=0.1		
1740	MGS	01-349/00:10:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
1741	MGS	01-349/00:10:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
1742	MGS	01-349/00:10:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
1743	MGS	01-349/00:13:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/00:02:34
1744	MGS	01-349/00:13:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/00:02:34
1745	MGS	01-349/00:13:59		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/00:02:35
1746	MGS	01-349/00:13:59		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/00:02:35
1747	MGS	01-349/00:35:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/00:24:35
1748	MGS	01-349/00:35:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/00:24:35
1749	MGS	01-349/00:49:24		SSR 1B Data Disable	CSD1BX	01-349/00:37:59
1750	MGS	01-349/00:49:24		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-349/00:37:59
1751	MGS	01-349/00:49:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-349/00:37:59
1752	MGS	01-349/00:49:24	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1753	MGS	01-349/00:56:40		NOTE: Start Block (MAP_RT)		01-349/00:45:15
1754	MGS	01-349/00:56:41		: 00:19:41, 01:43:15, FALSE, TRUE, FALSE, 00:01:15, 00:10:44, 01:20:51, 00:10:24	AEMINI	01-349/00:45:16
1755	MGS	01-349/00:56:41		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/00:45:16
1756	MGS	01-349/00:56:41		NOTE: Start EVP data return script		01-349/00:45:16
1757	MGS	01-349/00:56:42		: SE_2A, RTM, 01:20:50, MRC, 2001-349T01:26:58.000	AEMRTI	01-349/00:45:17
1758	MGS	01-349/01:03:40		NOTE: Enter Planetary Atmosphere 12382		01-349/00:52:15
1759	MGS	01-349/01:04:46		NOTE: Apoapsis 12382 -		01-349/00:53:22
1760	MGS	01-349/01:06:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/00:55:16
1761	MGS	01-349/01:06:41		NOTE: Enter Solar Eclipse 12382		01-349/00:55:16
1762	MGS	01-349/01:10:00	45	Begin Tracking		
1763	MGS	01-349/01:10:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1764	MGS	01-349/01:11:23		NOTE: Enter Earth Occultation 12382		01-349/00:59:58
1765	MGS	01-349/01:11:23	15	NOTE: Loss Of X-Band Signal		
1766	MGS	01-349/01:11:23	45	NOTE: Loss Of X-Band Signal		
1767	MGS	01-349/01:12:16		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/01:00:51
1768	MGS	01-349/01:12:16		NOTE: End EVP script		01-349/01:00:52
1769	MGS	01-349/01:12:17		NOTE: End Block (MAP_PB_ODY)		01-349/01:00:53
1770	MGS	01-349/01:16:37	45	NOTE: Above Uplink Interlock Limit		
1771	MGS	01-349/01:20:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1772	MGS	01-349/01:22:00	45	Range Modulation On: SUP=3.0dB		
1773	MGS	01-349/01:22:37		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/01:11:12
1774	MGS	01-349/01:23:00	45	Begin Ranging Acquisition		
1775	MGS	01-349/01:26:22		: 01:43:15	RPAONX	01-349/01:14:57
1776	MGS	01-349/01:26:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/01:14:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1777	MGS	01-349/01:27:37		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/01:16:12
1778	MGS	01-349/01:27:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/01:16:12
1779	MGS	01-349/01:27:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/01:16:12
1780	MGS	01-349/01:27:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/01:16:12
1781	MGS	01-349/01:27:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/01:16:12
1782	MGS	01-349/01:28:08		NOTE: Exit Earth Occultation 12382		01-349/01:16:43
1783	MGS	01-349/01:28:08	15	Acquisition Of X-Band Signal		
1784	MGS	01-349/01:28:08	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1785	MGS	01-349/01:28:08	15	NOTE: Carrier Only -- No Telemetry Modulation		
1786	MGS	01-349/01:28:08	45	Acquisition Of X-Band Signal		
1787	MGS	01-349/01:28:08	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1788	MGS	01-349/01:28:08	45	NOTE: Carrier Only -- No Telemetry Modulation		
1789	MGS	01-349/01:30:00	15	End Tracking		
1790	MGS	01-349/01:31:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/01:19:35
1791	MGS	01-349/01:31:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/01:19:35
1792	MGS	01-349/01:31:05		Set eclipse egress script address: 019A	SWSEES	01-349/01:19:40
1793	MGS	01-349/01:36:10		NOTE: Exit Planetary Atmosphere 12382		01-349/01:24:46
1794	MGS	01-349/01:38:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/01:26:56
1795	MGS	01-349/01:38:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/01:26:56
1796	MGS	01-349/01:38:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/01:26:56
1797	MGS	01-349/01:38:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/01:26:56
1798	MGS	01-349/01:38:21	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1799	MGS	01-349/01:38:22		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/01:26:57
1800	MGS	01-349/01:38:22		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/01:26:57
1801	MGS	01-349/01:38:22		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/01:26:57
1802	MGS	01-349/01:38:22	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1803	MGS	01-349/01:38:26		NOTE: End fixed Sub-Reflector for Radio Science		01-349/01:27:01
1804	MGS	01-349/01:42:48	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1805	MGS	01-349/01:45:00	15	End Post-Cal		
1806	MGS	01-349/01:46:47		NOTE: Exit Solar Eclipse 12382		01-349/01:35:22
1807	MGS	01-349/02:03:33		NOTE: Periapsis 12383 ----------		01-349/01:52:09
1808	MGS	01-349/02:07:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/01:56:21
1809	MGS	01-349/02:07:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/01:56:21
1810	MGS	01-349/02:07:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/01:56:22
1811	MGS	01-349/02:07:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/01:56:22
1812	MGS	01-349/02:27:35	45	NOTE: Transmitter Off in 15 minutes		
1813	MGS	01-349/02:29:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/02:18:22
1814	MGS	01-349/02:29:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/02:18:22
1815	MGS	01-349/02:40:36	45	Range Modulation Off		
1816	MGS	01-349/02:42:35	45	Transmitter Off		
1817	MGS	01-349/02:54:12		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/02:42:47
1818	MGS	01-349/02:54:28		NOTE: Start EVP data return script		01-349/02:43:03
1819	MGS	01-349/02:59:12		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/02:47:47
1820	MGS	01-349/02:59:12		: 00:10:24, FALSE	RDSCII	01-349/02:47:47
1821	MGS	01-349/02:59:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/02:47:47
1822	MGS	01-349/02:59:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/02:47:47
1823	MGS	01-349/02:59:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/02:47:47
1824	MGS	01-349/02:59:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/02:47:47
1825	MGS	01-349/02:59:12	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1826	MGS	01-349/02:59:12	45	NOTE: Carrier Only -- No Telemetry Modulation		
1827	MGS	01-349/03:01:27		NOTE: Enter Planetary Atmosphere 12383		01-349/02:50:02
1828	MGS	01-349/03:02:25		NOTE: Apoapsis 12383 -		01-349/02:51:00
1829	MGS	01-349/03:04:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/02:53:03
1830	MGS	01-349/03:04:28		NOTE: Enter Solar Eclipse 12383		01-349/02:53:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1831	MGS	01-349/03:06:52	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1832	MGS	01-349/03:08:52	45	Range Modulation On: SUP=3.0dB		
1833	MGS	01-349/03:09:09		NOTE: Enter Earth Occultation 12383		01-349/02:57:45
1834	MGS	01-349/03:09:09	45	NOTE: Loss Of X-Band Signal		
1835	MGS	01-349/03:09:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/02:58:11
1836	MGS	01-349/03:09:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/02:58:11
1837	MGS	01-349/03:09:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/02:58:11
1838	MGS	01-349/03:09:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/02:58:11
1839	MGS	01-349/03:09:37		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/02:58:12
1840	MGS	01-349/03:09:37		NOTE: End EVP script		01-349/02:58:12
1841	MGS	01-349/03:09:41		NOTE: End fixed Sub-Reflector for Radio Science		01-349/02:58:16
1842	MGS	01-349/03:09:52	45	Begin Ranging Acquisition		
1843	MGS	01-349/03:20:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/03:08:59
1844	MGS	01-349/03:24:09		: 01:43:15	RPAONX	01-349/03:12:44
1845	MGS	01-349/03:24:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/03:12:44
1846	MGS	01-349/03:25:24		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/03:13:59
1847	MGS	01-349/03:25:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/03:13:59
1848	MGS	01-349/03:25:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/03:13:59
1849	MGS	01-349/03:25:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/03:13:59
1850	MGS	01-349/03:25:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/03:13:59
1851	MGS	01-349/03:25:54		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/03:14:29
1852	MGS	01-349/03:25:56		NOTE: Exit Earth Occultation 12383		01-349/03:14:31
1853	MGS	01-349/03:25:56	45	Acquisition Of X-Band Signal		
1854	MGS	01-349/03:25:56	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1855	MGS	01-349/03:25:56	45	NOTE: Carrier Only -- No Telemetry Modulation		
1856	MGS	01-349/03:28:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/03:17:22
1857	MGS	01-349/03:28:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/03:17:22
1858	MGS	01-349/03:28:52		Set eclipse egress script address: 01DC	SWSEES	01-349/03:17:27
1859	MGS	01-349/03:33:58		NOTE: Exit Planetary Atmosphere 12383		01-349/03:22:34
1860	MGS	01-349/03:36:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/03:24:43
1861	MGS	01-349/03:36:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/03:24:43
1862	MGS	01-349/03:36:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/03:24:43
1863	MGS	01-349/03:36:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/03:24:43
1864	MGS	01-349/03:36:08	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1865	MGS	01-349/03:36:09		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/03:24:44
1866	MGS	01-349/03:36:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/03:24:44
1867	MGS	01-349/03:36:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/03:24:44
1868	MGS	01-349/03:36:09	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1869	MGS	01-349/03:36:13		NOTE: End fixed Sub-Reflector for Radio Science		01-349/03:24:48
1870	MGS	01-349/03:44:34		NOTE: Exit Solar Eclipse 12383		01-349/03:33:10
1871	MGS	01-349/04:01:16		NOTE: Periapsis 12384 ----------		01-349/03:49:51
1872	MGS	01-349/04:05:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/03:54:08
1873	MGS	01-349/04:05:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/03:54:08
1874	MGS	01-349/04:05:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/03:54:09
1875	MGS	01-349/04:05:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/03:54:09
1876	MGS	01-349/04:25:18	45	NOTE: Transmitter Off in 15 minutes		
1877	MGS	01-349/04:27:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/04:16:09
1878	MGS	01-349/04:27:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/04:16:09
1879	MGS	01-349/04:37:37		NOTE: Start Block (SSRMGR)		01-349/04:26:12
1880	MGS	01-349/04:37:37		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-349/04:26:12
1881	MGS	01-349/04:37:38		SSR 1B Data Enable	CSD1BE	01-349/04:26:13
1882	MGS	01-349/04:37:38		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-349/04:26:13
1883	MGS	01-349/04:38:18	45	Range Modulation Off		
1884	MGS	01-349/04:40:18	45	Transmitter Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1885	MGS	01-349/04:51:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/04:40:34
1886	MGS	01-349/04:52:13		NOTE: Start Block (MAP_PB_ODY)		01-349/04:40:48
1887	MGS	01-349/04:52:14		: 00:19:41, 01:43:16, FALSE, FALSE, FALSE, 00:01:15, 00:09:04, 01:24:12, 00:08:44	AEMINI	01-349/04:40:49
1888	MGS	01-349/04:52:14		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/04:40:49
1889	MGS	01-349/04:52:14		NOTE: Start EVP data return script		01-349/04:40:49
1890	MGS	01-349/04:52:15		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-349T05:20:49.000	AEMPBI	01-349/04:40:50
1891	MGS	01-349/04:56:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/04:45:34
1892	MGS	01-349/04:56:59		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9288000, DUR=00:19:21		01-349/04:45:34
1893	MGS	01-349/04:56:59		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-349/04:45:34
1894	MGS	01-349/04:56:59		: 00:10:24, FALSE	RDSCII	01-349/04:45:34
1895	MGS	01-349/04:56:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/04:45:34
1896	MGS	01-349/04:56:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/04:45:34
1897	MGS	01-349/04:56:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/04:45:34
1898	MGS	01-349/04:56:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/04:45:34
1899	MGS	01-349/04:56:59	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1900	MGS	01-349/04:56:59	45	NOTE: Carrier Only -- No Telemetry Modulation		
1901	MGS	01-349/04:59:11		NOTE: Enter Planetary Atmosphere 12384		01-349/04:47:47
1902	MGS	01-349/04:59:53		NOTE: Apoapsis 12384 -		01-349/04:48:28
1903	MGS	01-349/05:01:13		SSR 1A Data Disable	CSD1AX	01-349/04:49:48
1904	MGS	01-349/05:01:13		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-349/04:49:48
1905	MGS	01-349/05:01:14		NOTE: End Block (SSRMGR)		01-349/04:49:49
1906	MGS	01-349/05:02:14		NOTE: Enter Solar Eclipse 12384		01-349/04:50:49
1907	MGS	01-349/05:02:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/04:50:49
1908	MGS	01-349/05:04:40	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1909	MGS	01-349/05:06:40	45	Range Modulation On: SUP=3.0dB		
1910	MGS	01-349/05:06:53		NOTE: Enter Earth Occultation 12384		01-349/04:55:28
1911	MGS	01-349/05:06:53	45	NOTE: Loss Of X-Band Signal		
1912	MGS	01-349/05:07:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/04:55:58
1913	MGS	01-349/05:07:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/04:55:58
1914	MGS	01-349/05:07:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/04:55:58
1915	MGS	01-349/05:07:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/04:55:58
1916	MGS	01-349/05:07:24		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/04:55:59
1917	MGS	01-349/05:07:24		NOTE: End EVP script		01-349/04:55:59
1918	MGS	01-349/05:07:25		NOTE: End Block (MAP_RT)		01-349/04:56:00
1919	MGS	01-349/05:07:28		NOTE: End fixed Sub-Reflector for Radio Science		01-349/04:56:03
1920	MGS	01-349/05:07:40	45	Begin Ranging Acquisition		
1921	MGS	01-349/05:21:55		: 01:43:16	RPAONX	01-349/05:10:30
1922	MGS	01-349/05:21:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/05:10:30
1923	MGS	01-349/05:23:40		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/05:12:15
1924	MGS	01-349/05:23:45		NOTE: Exit Earth Occultation 12384		01-349/05:12:20
1925	MGS	01-349/05:23:45	45	Acquisition Of X-Band Signal		
1926	MGS	01-349/05:23:45	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1927	MGS	01-349/05:26:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/05:15:09
1928	MGS	01-349/05:26:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/05:15:09
1929	MGS	01-349/05:26:38		Command the PSE with included data word: 3990	SWPSEL	01-349/05:15:13
1930	MGS	01-349/05:26:39		Set eclipse egress script address: 0158	SWSEES	01-349/05:15:14
1931	MGS	01-349/05:27:30	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1932	MGS	01-349/05:31:46		NOTE: Exit Planetary Atmosphere 12384		01-349/05:20:21
1933	MGS	01-349/05:32:14		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:22:18	AEMPB	01-349/05:20:49
1934	MGS	01-349/05:32:14		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-349/05:20:49
1935	MGS	01-349/05:32:14		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-349/05:20:49
1936	MGS	01-349/05:32:15		SSR 1A Data Enable	CSD1AE	01-349/05:20:50
1937	MGS	01-349/05:32:15		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-349/05:20:50
1938	MGS	01-349/05:32:15	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1939	MGS	01-349/05:42:20		NOTE: Exit Solar Eclipse 12384		01-349/05:30:55
1940	MGS	01-349/05:59:02		NOTE: Periapsis 12385 ----------		01-349/05:47:37
1941	MGS	01-349/06:07:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/05:55:54
1942	MGS	01-349/06:07:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/05:55:54
1943	MGS	01-349/06:07:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/05:55:55
1944	MGS	01-349/06:07:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/05:55:55
1945	MGS	01-349/06:22:59	45	NOTE: Transmitter Off in 15 minutes		
1946	MGS	01-349/06:29:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/06:17:55
1947	MGS	01-349/06:29:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/06:17:55
1948	MGS	01-349/06:36:00	45	Range Modulation Off		
1949	MGS	01-349/06:37:59	45	Transmitter Off		
1950	MGS	01-349/06:42:53		SSR 1A Data Disable	CSD1AX	01-349/06:31:28
1951	MGS	01-349/06:42:53		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-349/06:31:28
1952	MGS	01-349/06:42:53		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-349/06:31:28
1953	MGS	01-349/06:42:53	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1954	MGS	01-349/06:49:56		NOTE: Start Block (MAP_RT)		01-349/06:38:31
1955	MGS	01-349/06:49:57		: 00:19:41, 01:43:15, FALSE, TRUE, FALSE, 00:01:15, 00:10:44, 01:20:51, 00:10:24	AEMINI	01-349/06:38:32
1956	MGS	01-349/06:49:57		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/06:38:32
1957	MGS	01-349/06:49:57		NOTE: Start EVP data return script		01-349/06:38:32
1958	MGS	01-349/06:49:58		: SE_2A, RTM, 01:20:50, MRC, 2001-349T07:20:14.000	AEMRTI	01-349/06:38:33
1959	MGS	01-349/06:56:54		NOTE: Enter Planetary Atmosphere 12385		01-349/06:45:28
1960	MGS	01-349/06:57:39		NOTE: Apoapsis 12385 -		01-349/06:46:13
1961	MGS	01-349/06:59:57		NOTE: Enter Solar Eclipse 12385		01-349/06:48:32
1962	MGS	01-349/06:59:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/06:48:32
1963	MGS	01-349/07:00:49	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1964	MGS	01-349/07:02:25	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
1965	MGS	01-349/07:04:26	45	Range Modulation On: SUP=3.0dB		
1966	MGS	01-349/07:04:34		NOTE: Enter Earth Occultation 12385		01-349/06:53:09
1967	MGS	01-349/07:04:34	45	NOTE: Loss Of X-Band Signal		
1968	MGS	01-349/07:05:11		NOTE: End EVP script		01-349/06:53:46
1969	MGS	01-349/07:05:11		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/06:53:46
1970	MGS	01-349/07:05:12		NOTE: End Block (MAP_PB_ODY)		01-349/06:53:47
1971	MGS	01-349/07:05:26	45	Begin Ranging Acquisition		
1972	MGS	01-349/07:15:53		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/07:04:28
1973	MGS	01-349/07:19:39		: 01:43:15	RPAONX	01-349/07:08:13
1974	MGS	01-349/07:19:39		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/07:08:13
1975	MGS	01-349/07:20:54		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/07:09:28
1976	MGS	01-349/07:20:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/07:09:28
1977	MGS	01-349/07:20:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/07:09:28
1978	MGS	01-349/07:20:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/07:09:28
1979	MGS	01-349/07:20:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/07:09:28
1980	MGS	01-349/07:21:31		NOTE: Exit Earth Occultation 12385		01-349/07:10:05
1981	MGS	01-349/07:21:31	45	Acquisition Of X-Band Signal		
1982	MGS	01-349/07:21:31	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1983	MGS	01-349/07:21:31	45	NOTE: Carrier Only -- No Telemetry Modulation		
1984	MGS	01-349/07:24:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/07:12:55
1985	MGS	01-349/07:24:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/07:12:55
1986	MGS	01-349/07:24:26		Set eclipse egress script address: 019A	SWSEES	01-349/07:13:00
1987	MGS	01-349/07:29:31		NOTE: Exit Planetary Atmosphere 12385		01-349/07:18:06
1988	MGS	01-349/07:31:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/07:20:12
1989	MGS	01-349/07:31:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/07:20:12
1990	MGS	01-349/07:31:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/07:20:12
1991	MGS	01-349/07:31:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/07:20:12
1992	MGS	01-349/07:31:38	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1993	MGS	01-349/07:31:39		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/07:20:13
1994	MGS	01-349/07:31:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/07:20:13
1995	MGS	01-349/07:31:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/07:20:13
1996	MGS	01-349/07:31:39	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1997	MGS	01-349/07:31:43		NOTE: End fixed Sub-Reflector for Radio Science		01-349/07:20:17
1998	MGS	01-349/07:40:04		NOTE: Exit Solar Eclipse 12385		01-349/07:28:38
1999	MGS	01-349/07:56:46		NOTE: Periapsis 12386 ----------		01-349/07:45:20
2000	MGS	01-349/08:01:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/07:49:37
2001	MGS	01-349/08:01:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/07:49:37
2002	MGS	01-349/08:01:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/07:49:38
2003	MGS	01-349/08:01:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/07:49:38
2004	MGS	01-349/08:20:41	45	NOTE: Transmitter Off in 15 minutes		
2005	MGS	01-349/08:23:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/08:11:38
2006	MGS	01-349/08:23:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/08:11:38
2007	MGS	01-349/08:33:42	45	Range Modulation Off		
2008	MGS	01-349/08:35:41	45	Transmitter Off		
2009	MGS	01-349/08:47:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/08:36:03
2010	MGS	01-349/08:47:40		NOTE: Start EVP data return script		01-349/08:36:14
2011	MGS	01-349/08:52:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/08:41:03
2012	MGS	01-349/08:52:29		: 00:10:24, FALSE	RDSCII	01-349/08:41:03
2013	MGS	01-349/08:52:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/08:41:03
2014	MGS	01-349/08:52:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/08:41:03
2015	MGS	01-349/08:52:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/08:41:03
2016	MGS	01-349/08:52:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/08:41:03
2017	MGS	01-349/08:52:29	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2018	MGS	01-349/08:52:29	45	NOTE: Carrier Only -- No Telemetry Modulation		
2019	MGS	01-349/08:54:36		NOTE: Enter Planetary Atmosphere 12386		01-349/08:43:11
2020	MGS	01-349/08:55:29		NOTE: Apoapsis 12386 -		01-349/08:44:03
2021	MGS	01-349/08:57:40		NOTE: Enter Solar Eclipse 12386		01-349/08:46:14
2022	MGS	01-349/08:57:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/08:46:14
2023	MGS	01-349/09:00:08	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2024	MGS	01-349/09:02:08	45	Range Modulation On: SUP=3.0dB		
2025	MGS	01-349/09:02:17		NOTE: Enter Earth Occultation 12386		01-349/08:50:52
2026	MGS	01-349/09:02:17	45	NOTE: Loss Of X-Band Signal		
2027	MGS	01-349/09:02:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/08:51:27
2028	MGS	01-349/09:02:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/08:51:27
2029	MGS	01-349/09:02:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/08:51:27
2030	MGS	01-349/09:02:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/08:51:27
2031	MGS	01-349/09:02:54		NOTE: End EVP script		01-349/08:51:28
2032	MGS	01-349/09:02:54		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/08:51:28
2033	MGS	01-349/09:02:58		NOTE: End fixed Sub-Reflector for Radio Science		01-349/08:51:32
2034	MGS	01-349/09:03:08	45	Begin Ranging Acquisition		
2035	MGS	01-349/09:13:36		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/09:02:10
2036	MGS	01-349/09:17:21		: 01:43:15	RPAONX	01-349/09:05:55
2037	MGS	01-349/09:17:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/09:05:55
2038	MGS	01-349/09:18:36		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/09:07:10
2039	MGS	01-349/09:18:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/09:07:10
2040	MGS	01-349/09:18:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/09:07:10
2041	MGS	01-349/09:18:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/09:07:10
2042	MGS	01-349/09:18:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/09:07:10
2043	MGS	01-349/09:19:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/09:07:40
2044	MGS	01-349/09:19:13		NOTE: Exit Earth Occultation 12386		01-349/09:07:48
2045	MGS	01-349/09:19:13	45	Acquisition Of X-Band Signal		
2046	MGS	01-349/09:19:13	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2047	MGS	01-349/09:19:13	45	NOTE: Carrier Only -- No Telemetry Modulation		
2048	MGS	01-349/09:22:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/09:10:38
2049	MGS	01-349/09:22:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/09:10:38
2050	MGS	01-349/09:22:09		Set eclipse egress script address: 01DC	SWSEES	01-349/09:10:43
2051	MGS	01-349/09:27:14		NOTE: Exit Planetary Atmosphere 12386		01-349/09:15:49
2052	MGS	01-349/09:29:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/09:17:54
2053	MGS	01-349/09:29:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/09:17:54
2054	MGS	01-349/09:29:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/09:17:54
2055	MGS	01-349/09:29:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/09:17:54
2056	MGS	01-349/09:29:20	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2057	MGS	01-349/09:29:21		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/09:17:55
2058	MGS	01-349/09:29:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/09:17:55
2059	MGS	01-349/09:29:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/09:17:55
2060	MGS	01-349/09:29:21	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2061	MGS	01-349/09:29:25		NOTE: End fixed Sub-Reflector for Radio Science		01-349/09:17:59
2062	MGS	01-349/09:37:46		NOTE: Exit Solar Eclipse 12386		01-349/09:26:20
2063	MGS	01-349/09:54:15		NOTE: Periapsis 12387 ----------		01-349/09:42:50
2064	MGS	01-349/09:58:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/09:47:19
2065	MGS	01-349/09:58:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/09:47:19
2066	MGS	01-349/09:58:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/09:47:20
2067	MGS	01-349/09:58:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/09:47:20
2068	MGS	01-349/10:18:22	45	NOTE: Transmitter Off in 15 minutes		
2069	MGS	01-349/10:20:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/10:09:20
2070	MGS	01-349/10:20:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/10:09:20
2071	MGS	01-349/10:30:56		NOTE: Start Block (SSRMGR)		01-349/10:19:30
2072	MGS	01-349/10:30:56		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-349/10:19:30
2073	MGS	01-349/10:30:57		SSR 1A Data Enable	CSD1AE	01-349/10:19:31
2074	MGS	01-349/10:30:57		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-349/10:19:31
2075	MGS	01-349/10:31:23	45	Range Modulation Off		
2076	MGS	01-349/10:33:22	45	Transmitter Off		
2077	MGS	01-349/10:45:11		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/10:33:45
2078	MGS	01-349/10:45:21		NOTE: Start Block (MAP_PB_ODY)		01-349/10:33:55
2079	MGS	01-349/10:45:22		: 00:19:41, 01:43:16, FALSE, FALSE, FALSE, 00:01:15, 00:09:04, 01:24:12, 00:08:44	AEMINI	01-349/10:33:56
2080	MGS	01-349/10:45:22		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/10:33:56
2081	MGS	01-349/10:45:22		NOTE: Start EVP data return script		01-349/10:33:56
2082	MGS	01-349/10:45:23		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-349T11:13:57.000	AEMPBI	01-349/10:33:57
2083	MGS	01-349/10:50:11		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/10:38:45
2084	MGS	01-349/10:50:11		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9232000, DUR=00:19:14		01-349/10:38:45
2085	MGS	01-349/10:50:11		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-349/10:38:45
2086	MGS	01-349/10:50:11		: 00:10:24, FALSE	RDSCII	01-349/10:38:45
2087	MGS	01-349/10:50:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/10:38:45
2088	MGS	01-349/10:50:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/10:38:45
2089	MGS	01-349/10:50:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/10:38:45
2090	MGS	01-349/10:50:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/10:38:45
2091	MGS	01-349/10:50:11	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2092	MGS	01-349/10:50:11	45	NOTE: Carrier Only -- No Telemetry Modulation		
2093	MGS	01-349/10:52:19		NOTE: Enter Planetary Atmosphere 12387		01-349/10:40:54
2094	MGS	01-349/10:52:57		NOTE: Apoapsis 12387 -		01-349/10:41:31
2095	MGS	01-349/10:54:22		SSR 1B Data Disable	CSD1BX	01-349/10:42:56
2096	MGS	01-349/10:54:22		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-349/10:42:56
2097	MGS	01-349/10:54:23		NOTE: End Block (SSRMGR)		01-349/10:42:57
2098	MGS	01-349/10:55:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/10:43:56
2099	MGS	01-349/10:55:22		NOTE: Enter Solar Eclipse 12387		01-349/10:43:57
2100	MGS	01-349/10:57:51	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2101	MGS	01-349/10:59:51	45	Range Modulation On: SUP=3.0dB		
2102	MGS	01-349/10:59:59		NOTE: Enter Earth Occultation 12387		01-349/10:48:33
2103	MGS	01-349/10:59:59	45	NOTE: Loss Of X-Band Signal		
2104	MGS	01-349/11:00:00	63	Begin Pre-Cal		
2105	MGS	01-349/11:00:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2106	MGS	01-349/11:00:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2107	MGS	01-349/11:00:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2108	MGS	01-349/11:00:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2109	MGS	01-349/11:00:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
2110	MGS	01-349/11:00:00	63	Config: TGC: DEST=37		
2111	MGS	01-349/11:00:00	63	Config: TGC: BAND=X, BR=42666.666667		
2112	MGS	01-349/11:00:00	63	Config: FSS: CH=2, PRI_FL=10000		
2113	MGS	01-349/11:00:00	63	Config: RSR		
2114	MGS	01-349/11:00:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
2115	MGS	01-349/11:00:00	63	Config: BVR		
2116	MGS	01-349/11:00:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
2117	MGS	01-349/11:00:00	63	Config: MDA: SMPL=0.1		
2118	MGS	01-349/11:00:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/10:49:09
2119	MGS	01-349/11:00:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/10:49:09
2120	MGS	01-349/11:00:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/10:49:09
2121	MGS	01-349/11:00:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/10:49:09
2122	MGS	01-349/11:00:36		NOTE: End EVP script		01-349/10:49:10
2123	MGS	01-349/11:00:36		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/10:49:10
2124	MGS	01-349/11:00:37		NOTE: End Block (MAP_RT)		01-349/10:49:11
2125	MGS	01-349/11:00:40		NOTE: End fixed Sub-Reflector for Radio Science		01-349/10:49:14
2126	MGS	01-349/11:00:51	45	Begin Ranging Acquisition		
2127	MGS	01-349/11:15:03		: 01:43:16	RPAONX	01-349/11:03:37
2128	MGS	01-349/11:15:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/11:03:37
2129	MGS	01-349/11:16:48		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/11:05:22
2130	MGS	01-349/11:16:57		NOTE: Exit Earth Occultation 12387		01-349/11:05:31
2131	MGS	01-349/11:16:57	45	Acquisition Of X-Band Signal		
2132	MGS	01-349/11:16:57	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2133	MGS	01-349/11:19:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/11:08:20
2134	MGS	01-349/11:19:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/11:08:20
2135	MGS	01-349/11:19:50		Command the PSE with included data word: 3990	SWPSEL	01-349/11:08:24
2136	MGS	01-349/11:19:51		Set eclipse egress script address: 0158	SWSEES	01-349/11:08:25
2137	MGS	01-349/11:20:42	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2138	MGS	01-349/11:24:57		NOTE: Exit Planetary Atmosphere 12387		01-349/11:13:31
2139	MGS	01-349/11:25:22		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:22:18	AEMPB	01-349/11:13:56
2140	MGS	01-349/11:25:22		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-349/11:13:56
2141	MGS	01-349/11:25:22		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-349/11:13:56
2142	MGS	01-349/11:25:23		SSR 1B Data Enable	CSD1BE	01-349/11:13:57
2143	MGS	01-349/11:25:23		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-349/11:13:57
2144	MGS	01-349/11:25:23	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2145	MGS	01-349/11:30:00	65	Begin Pre-Cal		
2146	MGS	01-349/11:30:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2147	MGS	01-349/11:30:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2148	MGS	01-349/11:30:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2149	MGS	01-349/11:30:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2150	MGS	01-349/11:30:00	65	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
2151	MGS	01-349/11:30:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
2152	MGS	01-349/11:30:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
2153	MGS	01-349/11:30:00	65	Config: TGC: DEST=37		
2154	MGS	01-349/11:30:00	65	Config: TGC: BAND=X, BR=42666.666667		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2155	MGS	01-349/11:30:00	65	Config: FSS: CH=2, PRI_FL=10000		
2156	MGS	01-349/11:30:00	65	Config: RSR		
2157	MGS	01-349/11:30:00	65	Config: TXL		
2158	MGS	01-349/11:30:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
2159	MGS	01-349/11:30:00	65	Config: BVR		
2160	MGS	01-349/11:30:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
2161	MGS	01-349/11:30:00	65	Config: MDA: SMPL=0.1		
2162	MGS	01-349/11:30:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
2163	MGS	01-349/11:30:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
2164	MGS	01-349/11:30:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
2165	MGS	01-349/11:35:28		NOTE: Exit Solar Eclipse 12387		01-349/11:24:02
2166	MGS	01-349/11:51:43		NOTE: Periapsis 12388 ----------		01-349/11:40:17
2167	MGS	01-349/12:00:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/11:49:01
2168	MGS	01-349/12:00:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/11:49:01
2169	MGS	01-349/12:00:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/11:49:02
2170	MGS	01-349/12:00:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/11:49:02
2171	MGS	01-349/12:05:00	45	NOTE: Transmitter Off in 15 minutes		
2172	MGS	01-349/12:11:25		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-349/11:59:59
2173	MGS	01-349/12:18:00	45	Range Modulation Off		
2174	MGS	01-349/12:20:00	45	Transmitter Off		
2175	MGS	01-349/12:22:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/12:11:02
2176	MGS	01-349/12:22:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/12:11:02
2177	MGS	01-349/12:30:00	45	End Tracking		
2178	MGS	01-349/12:30:00	63	Begin Tracking		
2179	MGS	01-349/12:30:00	65	Begin Tracking		
2180	MGS	01-349/12:30:00	63	Acquire D/L: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2181	MGS	01-349/12:30:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2182	MGS	01-349/12:36:01		SSR 1B Data Disable	CSD1BX	01-349/12:24:35
2183	MGS	01-349/12:36:01		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-349/12:24:35
2184	MGS	01-349/12:36:01		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-349/12:24:35
2185	MGS	01-349/12:36:01	63	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2186	MGS	01-349/12:36:01	65	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2187	MGS	01-349/12:41:41	63	NOTE: Above Uplink Interlock Limit		
2188	MGS	01-349/12:42:16	65	NOTE: Above Uplink Interlock Limit		
2189	MGS	01-349/12:42:52	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2190	MGS	01-349/12:42:52	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2191	MGS	01-349/12:43:06		NOTE: Start Block (MAP_RT)		01-349/12:31:40
2192	MGS	01-349/12:43:07		: 00:19:41, 01:43:15, FALSE, TRUE, FALSE, 00:01:15, 00:10:44, 01:20:51, 00:10:24	AEMINI	01-349/12:31:41
2193	MGS	01-349/12:43:07		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/12:31:41
2194	MGS	01-349/12:43:07		NOTE: Start EVP data return script		01-349/12:31:41
2195	MGS	01-349/12:43:08		: SE_2A, RTM, 01:20:50, MRC, 2001-349T13:13:22.000	AEMRTI	01-349/12:31:42
2196	MGS	01-349/12:45:00	45	End Post-Cal		
2197	MGS	01-349/12:50:01		NOTE: Enter Planetary Atmosphere 12388		01-349/12:38:35
2198	MGS	01-349/12:50:32		NOTE: Apoapsis 12388 -		01-349/12:39:06
2199	MGS	01-349/12:53:07		NOTE: Enter Solar Eclipse 12388		01-349/12:41:41
2200	MGS	01-349/12:53:07		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/12:41:41
2201	MGS	01-349/12:55:37	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2202	MGS	01-349/12:57:38	65	Range Modulation On: SUP=3.0dB		
2203	MGS	01-349/12:57:38		NOTE: Enter Earth Occultation 12388		01-349/12:46:12
2204	MGS	01-349/12:57:38	63	NOTE: Loss Of X-Band Signal		
2205	MGS	01-349/12:57:38	65	NOTE: Loss Of X-Band Signal		
2206	MGS	01-349/12:58:19		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/12:46:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2207	MGS	01-349/12:58:20		NOTE: End EVP script		01-349/12:46:54
2208	MGS	01-349/12:58:21		NOTE: End Block (MAP_PB_ODY)		01-349/12:46:55
2209	MGS	01-349/12:58:38	65	Begin Ranging Acquisition		
2210	MGS	01-349/13:09:03		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/12:57:37
2211	MGS	01-349/13:12:48		: 01:43:15	RPAONX	01-349/13:01:22
2212	MGS	01-349/13:12:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/13:01:22
2213	MGS	01-349/13:14:03		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/13:02:37
2214	MGS	01-349/13:14:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/13:02:37
2215	MGS	01-349/13:14:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/13:02:37
2216	MGS	01-349/13:14:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/13:02:37
2217	MGS	01-349/13:14:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/13:02:37
2218	MGS	01-349/13:14:45		NOTE: Exit Earth Occultation 12388		01-349/13:03:18
2219	MGS	01-349/13:14:45	63	Acquisition Of X-Band Signal		
2220	MGS	01-349/13:14:45	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2221	MGS	01-349/13:14:45	63	NOTE: Carrier Only -- No Telemetry Modulation		
2222	MGS	01-349/13:14:45	65	Acquisition Of X-Band Signal		
2223	MGS	01-349/13:14:45	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2224	MGS	01-349/13:14:45	65	NOTE: Carrier Only -- No Telemetry Modulation		
2225	MGS	01-349/13:17:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/13:06:02
2226	MGS	01-349/13:17:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/13:06:02
2227	MGS	01-349/13:17:33		Set eclipse egress script address: 019A	SWSEES	01-349/13:06:07
2228	MGS	01-349/13:22:41		NOTE: Exit Planetary Atmosphere 12388		01-349/13:11:15
2229	MGS	01-349/13:24:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/13:13:21
2230	MGS	01-349/13:24:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/13:13:21
2231	MGS	01-349/13:24:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/13:13:21
2232	MGS	01-349/13:24:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/13:13:21
2233	MGS	01-349/13:24:47	63	Acquire D/L: X/16, 3-Way/65, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2234	MGS	01-349/13:24:47	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2235	MGS	01-349/13:24:48		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/13:13:22
2236	MGS	01-349/13:24:48		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/13:13:22
2237	MGS	01-349/13:24:48		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/13:13:22
2238	MGS	01-349/13:24:48	63	D/L Change: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2239	MGS	01-349/13:24:48	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2240	MGS	01-349/13:24:52		NOTE: End fixed Sub-Reflector for Radio Science		01-349/13:13:26
2241	MGS	01-349/13:33:13		NOTE: Exit Solar Eclipse 12388		01-349/13:21:47
2242	MGS	01-349/13:49:46		NOTE: Periapsis 12389 ----------		01-349/13:38:20
2243	MGS	01-349/13:54:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/13:42:46
2244	MGS	01-349/13:54:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/13:42:46
2245	MGS	01-349/13:54:13		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/13:42:47
2246	MGS	01-349/13:54:13		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/13:42:47
2247	MGS	01-349/14:13:43	65	NOTE: Transmitter Off in 15 minutes		
2248	MGS	01-349/14:16:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/14:04:47
2249	MGS	01-349/14:16:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/14:04:47
2250	MGS	01-349/14:26:44	65	Range Modulation Off		
2251	MGS	01-349/14:28:43	65	Transmitter Off		
2252	MGS	01-349/14:40:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/14:29:12
2253	MGS	01-349/14:40:54		NOTE: Start EVP data return script		01-349/14:29:27
2254	MGS	01-349/14:45:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/14:34:12
2255	MGS	01-349/14:45:39		: 00:10:24, FALSE	RDSCII	01-349/14:34:12
2256	MGS	01-349/14:45:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/14:34:12
2257	MGS	01-349/14:45:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/14:34:12
2258	MGS	01-349/14:45:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/14:34:12
2259	MGS	01-349/14:45:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/14:34:12
2260	MGS	01-349/14:45:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2261	MGS	01-349/14:45:39	63	NOTE: Carrier Only -- No Telemetry Modulation		
2262	MGS	01-349/14:45:39	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2263	MGS	01-349/14:45:39	65	NOTE: Carrier Only -- No Telemetry Modulation		
2264	MGS	01-349/14:47:45		NOTE: Enter Planetary Atmosphere 12389		01-349/14:36:19
2265	MGS	01-349/14:48:45		NOTE: Apoapsis 12389 -		01-349/14:37:18
2266	MGS	01-349/14:50:54		NOTE: Enter Solar Eclipse 12389		01-349/14:39:27
2267	MGS	01-349/14:50:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/14:39:27
2268	MGS	01-349/14:53:25	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2269	MGS	01-349/14:55:21		NOTE: Enter Earth Occultation 12389		01-349/14:43:54
2270	MGS	01-349/14:55:21	63	NOTE: Loss Of X-Band Signal		
2271	MGS	01-349/14:55:21	65	NOTE: Loss Of X-Band Signal		
2272	MGS	01-349/14:55:25	65	Range Modulation On: SUP=3.0dB		
2273	MGS	01-349/14:56:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/14:44:36
2274	MGS	01-349/14:56:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/14:44:36
2275	MGS	01-349/14:56:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/14:44:36
2276	MGS	01-349/14:56:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/14:44:36
2277	MGS	01-349/14:56:03		NOTE: End EVP script		01-349/14:44:37
2278	MGS	01-349/14:56:04		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/14:44:37
2279	MGS	01-349/14:56:07		NOTE: End fixed Sub-Reflector for Radio Science		01-349/14:44:41
2280	MGS	01-349/14:56:25	65	Begin Ranging Acquisition		
2281	MGS	01-349/15:06:49		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/14:55:23
2282	MGS	01-349/15:10:35		: 01:43:15	RPAONX	01-349/14:59:08
2283	MGS	01-349/15:10:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/14:59:08
2284	MGS	01-349/15:11:50		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/15:00:23
2285	MGS	01-349/15:11:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/15:00:23
2286	MGS	01-349/15:11:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/15:00:23
2287	MGS	01-349/15:11:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/15:00:23
2288	MGS	01-349/15:11:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/15:00:23
2289	MGS	01-349/15:12:20		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/15:00:53
2290	MGS	01-349/15:12:33		NOTE: Exit Earth Occultation 12389		01-349/15:01:06
2291	MGS	01-349/15:12:33	63	Acquisition Of X-Band Signal		
2292	MGS	01-349/15:12:33	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2293	MGS	01-349/15:12:33	63	NOTE: Carrier Only -- No Telemetry Modulation		
2294	MGS	01-349/15:12:33	65	Acquisition Of X-Band Signal		
2295	MGS	01-349/15:12:33	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2296	MGS	01-349/15:12:33	65	NOTE: Carrier Only -- No Telemetry Modulation		
2297	MGS	01-349/15:15:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/15:03:47
2298	MGS	01-349/15:15:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/15:03:47
2299	MGS	01-349/15:15:19		Set eclipse egress script address: 01DC	SWSEES	01-349/15:03:52
2300	MGS	01-349/15:20:27		NOTE: Exit Planetary Atmosphere 12389		01-349/15:09:01
2301	MGS	01-349/15:22:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/15:11:07
2302	MGS	01-349/15:22:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/15:11:07
2303	MGS	01-349/15:22:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/15:11:07
2304	MGS	01-349/15:22:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/15:11:07
2305	MGS	01-349/15:22:34	63	Acquire D/L: X/16, 3-Way/65, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2306	MGS	01-349/15:22:34	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2307	MGS	01-349/15:22:35		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/15:11:08
2308	MGS	01-349/15:22:35		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/15:11:08
2309	MGS	01-349/15:22:35		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/15:11:08
2310	MGS	01-349/15:22:35	63	D/L Change: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2311	MGS	01-349/15:22:35	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2312	MGS	01-349/15:22:38		NOTE: End fixed Sub-Reflector for Radio Science		01-349/15:11:12
2313	MGS	01-349/15:31:00		NOTE: Exit Solar Eclipse 12389		01-349/15:19:34
2314	MGS	01-349/15:47:59		NOTE: Periapsis 12390 ----------		01-349/15:36:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2315	MGS	01-349/15:50:00	54	Begin Pre-Cal		
2316	MGS	01-349/15:50:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2317	MGS	01-349/15:50:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2318	MGS	01-349/15:50:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2319	MGS	01-349/15:50:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2320	MGS	01-349/15:50:00	54	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
2321	MGS	01-349/15:50:00	54	Config: TGC: DEST=37		
2322	MGS	01-349/15:50:00	54	Config: TGC: BAND=X, BR=42666.666667		
2323	MGS	01-349/15:50:00	54	Config: FSS: CH=2, PRI_FL=10000		
2324	MGS	01-349/15:50:00	54	Config: RSR		
2325	MGS	01-349/15:50:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
2326	MGS	01-349/15:50:00	54	Config: BVR		
2327	MGS	01-349/15:50:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
2328	MGS	01-349/15:50:00	54	Config: MDA: SMPL=0.1		
2329	MGS	01-349/15:51:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/15:40:32
2330	MGS	01-349/15:51:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/15:40:32
2331	MGS	01-349/15:52:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/15:40:33
2332	MGS	01-349/15:52:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/15:40:33
2333	MGS	01-349/16:05:00	65	NOTE: Transmitter Off in 15 minutes		
2334	MGS	01-349/16:14:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/16:02:33
2335	MGS	01-349/16:14:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/16:02:33
2336	MGS	01-349/16:18:00	65	Range Modulation Off		
2337	MGS	01-349/16:20:00	65	Transmitter Off		
2338	MGS	01-349/16:24:05		NOTE: Start Block (SSRMGR)		01-349/16:12:38
2339	MGS	01-349/16:24:05		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-349/16:12:38
2340	MGS	01-349/16:24:06		SSR 1B Data Enable	CSD1BE	01-349/16:12:39
2341	MGS	01-349/16:24:06		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-349/16:12:39
2342	MGS	01-349/16:25:00	65	End Tracking		
2343	MGS	01-349/16:38:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/16:26:58
2344	MGS	01-349/16:38:40		NOTE: Start Block (MAP_PB_ODY)		01-349/16:27:13
2345	MGS	01-349/16:38:41		: 00:19:41, 01:43:16, FALSE, FALSE, FALSE, 00:01:15, 00:09:04, 01:24:12, 00:08:44	AEMINI	01-349/16:27:14
2346	MGS	01-349/16:38:41		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/16:27:14
2347	MGS	01-349/16:38:41		NOTE: Start EVP data return script		01-349/16:27:14
2348	MGS	01-349/16:38:42		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-349T17:07:15.000	AEMPBI	01-349/16:27:15
2349	MGS	01-349/16:40:00	65	End Post-Cal		
2350	MGS	01-349/16:42:53	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2351	MGS	01-349/16:43:25		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/16:31:58
2352	MGS	01-349/16:43:25		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9272000, DUR=00:19:19		01-349/16:31:58
2353	MGS	01-349/16:43:25		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-349/16:31:58
2354	MGS	01-349/16:43:25		: 00:10:24, FALSE	RDSCII	01-349/16:31:58
2355	MGS	01-349/16:43:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/16:31:58
2356	MGS	01-349/16:43:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/16:31:58
2357	MGS	01-349/16:43:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/16:31:58
2358	MGS	01-349/16:43:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/16:31:58
2359	MGS	01-349/16:43:25	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2360	MGS	01-349/16:43:25	63	NOTE: Carrier Only -- No Telemetry Modulation		
2361	MGS	01-349/16:45:33		NOTE: Enter Planetary Atmosphere 12390		01-349/16:34:06
2362	MGS	01-349/16:46:59		NOTE: Apoapsis 12390 -		01-349/16:35:32
2363	MGS	01-349/16:47:41		SSR 1A Data Disable	CSD1AX	01-349/16:36:14
2364	MGS	01-349/16:47:41		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-349/16:36:14
2365	MGS	01-349/16:47:42		NOTE: End Block (SSRMGR)		01-349/16:36:15
2366	MGS	01-349/16:48:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/16:37:14
2367	MGS	01-349/16:48:41		NOTE: Enter Solar Eclipse 12390		01-349/16:37:14
2368	MGS	01-349/16:53:09		NOTE: Enter Earth Occultation 12390		01-349/16:41:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2369	MGS	01-349/16:53:09	63	NOTE: Loss Of X-Band Signal		
2370	MGS	01-349/16:53:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/16:42:22
2371	MGS	01-349/16:53:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/16:42:22
2372	MGS	01-349/16:53:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/16:42:22
2373	MGS	01-349/16:53:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/16:42:22
2374	MGS	01-349/16:53:50		NOTE: End EVP script		01-349/16:42:23
2375	MGS	01-349/16:53:50		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/16:42:23
2376	MGS	01-349/16:53:51		NOTE: End Block (MAP_RT)		01-349/16:42:24
2377	MGS	01-349/16:53:54		NOTE: End fixed Sub-Reflector for Radio Science		01-349/16:42:27
2378	MGS	01-349/17:08:22		: 01:43:16	RPAONX	01-349/16:56:55
2379	MGS	01-349/17:08:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/16:56:55
2380	MGS	01-349/17:10:07		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/16:58:40
2381	MGS	01-349/17:10:21		NOTE: Exit Earth Occultation 12390		01-349/16:58:54
2382	MGS	01-349/17:10:21	63	Acquisition Of X-Band Signal		
2383	MGS	01-349/17:10:21	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2384	MGS	01-349/17:13:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/17:01:33
2385	MGS	01-349/17:13:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/17:01:33
2386	MGS	01-349/17:13:04		Command the PSE with included data word: 3990	SWPSEL	01-349/17:01:37
2387	MGS	01-349/17:13:05		Set eclipse egress script address: 0158	SWSEES	01-349/17:01:38
2388	MGS	01-349/17:18:16		NOTE: Exit Planetary Atmosphere 12390		01-349/17:06:49
2389	MGS	01-349/17:18:41		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:22:18	AEMPB	01-349/17:07:14
2390	MGS	01-349/17:18:41		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-349/17:07:14
2391	MGS	01-349/17:18:41		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-349/17:07:14
2392	MGS	01-349/17:18:42		SSR 1A Data Enable	CSD1AE	01-349/17:07:15
2393	MGS	01-349/17:18:42		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-349/17:07:15
2394	MGS	01-349/17:18:42	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2395	MGS	01-349/17:20:00	54	Begin Tracking		
2396	MGS	01-349/17:20:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2397	MGS	01-349/17:28:48		NOTE: Exit Solar Eclipse 12390		01-349/17:17:21
2398	MGS	01-349/17:40:00	63	End Tracking		
2399	MGS	01-349/17:45:58		NOTE: Periapsis 12391 ----------		01-349/17:34:31
2400	MGS	01-349/17:53:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/17:42:20
2401	MGS	01-349/17:53:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/17:42:20
2402	MGS	01-349/17:53:48		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/17:42:21
2403	MGS	01-349/17:53:48		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/17:42:21
2404	MGS	01-349/17:55:00	63	End Post-Cal		
2405	MGS	01-349/18:15:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/18:04:21
2406	MGS	01-349/18:15:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/18:04:21
2407	MGS	01-349/18:29:20		SSR 1A Data Disable	CSD1AX	01-349/18:17:53
2408	MGS	01-349/18:29:20		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-349/18:17:53
2409	MGS	01-349/18:29:20		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-349/18:17:53
2410	MGS	01-349/18:29:20	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2411	MGS	01-349/18:36:26		NOTE: Start Block (MAP_RT)		01-349/18:24:59
2412	MGS	01-349/18:36:27		: 00:19:41, 01:43:15, FALSE, TRUE, FALSE, 00:01:15, 00:10:44, 01:20:51, 00:10:24	AEMINI	01-349/18:25:00
2413	MGS	01-349/18:36:27		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/18:25:00
2414	MGS	01-349/18:36:27		NOTE: Start EVP data return script		01-349/18:25:00
2415	MGS	01-349/18:36:28		: SE_2A, RTM, 01:20:50, MRC, 2001-349T19:06:41.000	AEMRTI	01-349/18:25:01
2416	MGS	01-349/18:43:20		NOTE: Enter Planetary Atmosphere 12391		01-349/18:31:53
2417	MGS	01-349/18:44:45		NOTE: Apoapsis 12391 -		01-349/18:33:18
2418	MGS	01-349/18:46:27		NOTE: Enter Solar Eclipse 12391		01-349/18:35:00
2419	MGS	01-349/18:46:27		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/18:35:00
2420	MGS	01-349/18:50:57		NOTE: Enter Earth Occultation 12391		01-349/18:39:30
2421	MGS	01-349/18:50:57	54	NOTE: Loss Of X-Band Signal		
2422	MGS	01-349/18:51:38		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/18:40:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2423	MGS	01-349/18:51:38		NOTE: End EVP script		01-349/18:40:11
2424	MGS	01-349/18:51:39		NOTE: End Block (MAP_PB_ODY)		01-349/18:40:12
2425	MGS	01-349/19:02:23		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/18:50:56
2426	MGS	01-349/19:06:08		: 01:43:15	RPAONX	01-349/18:54:41
2427	MGS	01-349/19:06:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/18:54:41
2428	MGS	01-349/19:07:23		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/18:55:56
2429	MGS	01-349/19:07:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/18:55:56
2430	MGS	01-349/19:07:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/18:55:56
2431	MGS	01-349/19:07:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/18:55:56
2432	MGS	01-349/19:07:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/18:55:56
2433	MGS	01-349/19:08:07		NOTE: Exit Earth Occultation 12391		01-349/18:56:40
2434	MGS	01-349/19:08:07	54	Acquisition Of X-Band Signal		
2435	MGS	01-349/19:08:07	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2436	MGS	01-349/19:08:07	54	NOTE: Carrier Only -- No Telemetry Modulation		
2437	MGS	01-349/19:10:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/18:59:21
2438	MGS	01-349/19:10:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/18:59:21
2439	MGS	01-349/19:10:53		Set eclipse egress script address: 019A	SWSEES	01-349/18:59:26
2440	MGS	01-349/19:16:03		NOTE: Exit Planetary Atmosphere 12391		01-349/19:04:36
2441	MGS	01-349/19:18:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/19:06:40
2442	MGS	01-349/19:18:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/19:06:40
2443	MGS	01-349/19:18:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/19:06:40
2444	MGS	01-349/19:18:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/19:06:40
2445	MGS	01-349/19:18:07	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2446	MGS	01-349/19:18:08		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/19:06:41
2447	MGS	01-349/19:18:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/19:06:41
2448	MGS	01-349/19:18:08		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/19:06:41
2449	MGS	01-349/19:18:08	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2450	MGS	01-349/19:18:12		NOTE: End fixed Sub-Reflector for Radio Science		01-349/19:06:45
2451	MGS	01-349/19:26:34		NOTE: Exit Solar Eclipse 12391		01-349/19:15:07
2452	MGS	01-349/19:43:29		NOTE: Periapsis 12392 ----------		01-349/19:32:02
2453	MGS	01-349/19:47:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/19:36:05
2454	MGS	01-349/19:47:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/19:36:05
2455	MGS	01-349/19:47:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/19:36:06
2456	MGS	01-349/19:47:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/19:36:06
2457	MGS	01-349/19:50:00	15	Begin Pre-Cal		
2458	MGS	01-349/19:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2459	MGS	01-349/19:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2460	MGS	01-349/19:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2461	MGS	01-349/19:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2462	MGS	01-349/19:50:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
2463	MGS	01-349/19:50:00	15	Config: TGC: DEST=37		
2464	MGS	01-349/19:50:00	15	Config: TGC: BAND=X, BR=40000.000000		
2465	MGS	01-349/19:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
2466	MGS	01-349/19:50:00	15	Config: RSR		
2467	MGS	01-349/19:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
2468	MGS	01-349/19:50:00	15	Config: BVR		
2469	MGS	01-349/19:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
2470	MGS	01-349/19:50:00	15	Config: MDA: SMPL=0.1		
2471	MGS	01-349/20:09:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/19:58:06
2472	MGS	01-349/20:09:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/19:58:06
2473	MGS	01-349/20:33:58		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/20:22:31
2474	MGS	01-349/20:34:09		NOTE: Start EVP data return script		01-349/20:22:42
2475	MGS	01-349/20:38:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/20:27:31
2476	MGS	01-349/20:38:59		: 00:10:24, FALSE	RDSCII	01-349/20:27:31

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2477	MGS	01-349/20:38:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/20:27:31
2478	MGS	01-349/20:38:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/20:27:31
2479	MGS	01-349/20:38:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/20:27:31
2480	MGS	01-349/20:38:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/20:27:31
2481	MGS	01-349/20:38:59	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2482	MGS	01-349/20:38:59	54	NOTE: Carrier Only -- No Telemetry Modulation		
2483	MGS	01-349/20:41:02		NOTE: Enter Planetary Atmosphere 12392		01-349/20:29:35
2484	MGS	01-349/20:42:06		NOTE: Apoapsis 12392 -		01-349/20:30:38
2485	MGS	01-349/20:44:09		NOTE: Enter Solar Eclipse 12392		01-349/20:32:42
2486	MGS	01-349/20:44:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/20:32:42
2487	MGS	01-349/20:48:38		NOTE: Enter Earth Occultation 12392		01-349/20:37:11
2488	MGS	01-349/20:48:38	54	NOTE: Loss Of X-Band Signal		
2489	MGS	01-349/20:49:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/20:37:55
2490	MGS	01-349/20:49:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/20:37:55
2491	MGS	01-349/20:49:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/20:37:55
2492	MGS	01-349/20:49:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/20:37:55
2493	MGS	01-349/20:49:23		NOTE: End EVP script		01-349/20:37:56
2494	MGS	01-349/20:49:24		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/20:37:56
2495	MGS	01-349/20:49:27		NOTE: End fixed Sub-Reflector for Radio Science		01-349/20:38:00
2496	MGS	01-349/21:00:05		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/20:48:38
2497	MGS	01-349/21:03:51		: 01:43:15	RPAONX	01-349/20:52:23
2498	MGS	01-349/21:03:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/20:52:23
2499	MGS	01-349/21:05:06		: 00:00:30, 00:10:44, FALSE	RDSCIE	01-349/20:53:38
2500	MGS	01-349/21:05:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/20:53:38
2501	MGS	01-349/21:05:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/20:53:38
2502	MGS	01-349/21:05:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/20:53:38
2503	MGS	01-349/21:05:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/20:53:38
2504	MGS	01-349/21:05:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/20:54:08
2505	MGS	01-349/21:05:52		NOTE: Exit Earth Occultation 12392		01-349/20:54:25
2506	MGS	01-349/21:05:52	54	Acquisition Of X-Band Signal		
2507	MGS	01-349/21:05:52	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2508	MGS	01-349/21:05:52	54	NOTE: Carrier Only -- No Telemetry Modulation		
2509	MGS	01-349/21:08:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/20:57:06
2510	MGS	01-349/21:08:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/20:57:06
2511	MGS	01-349/21:08:39		Set eclipse egress script address: 01DC	SWSEES	01-349/20:57:11
2512	MGS	01-349/21:13:47		NOTE: Exit Planetary Atmosphere 12392		01-349/21:02:20
2513	MGS	01-349/21:15:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/21:04:22
2514	MGS	01-349/21:15:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/21:04:22
2515	MGS	01-349/21:15:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/21:04:22
2516	MGS	01-349/21:15:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/21:04:22
2517	MGS	01-349/21:15:50	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2518	MGS	01-349/21:15:51		: RTM, MRC, 01:20:50, S&E_2A, FALSE, 00:10:25	AEMRT	01-349/21:04:23
2519	MGS	01-349/21:15:51		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-349/21:04:23
2520	MGS	01-349/21:15:51		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-349/21:04:23
2521	MGS	01-349/21:15:51	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2522	MGS	01-349/21:15:54		NOTE: End fixed Sub-Reflector for Radio Science		01-349/21:04:27
2523	MGS	01-349/21:20:00	15	Begin Tracking		
2524	MGS	01-349/21:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2525	MGS	01-349/21:24:16		NOTE: Exit Solar Eclipse 12392		01-349/21:12:48
2526	MGS	01-349/21:33:12	54	NOTE: Below Uplink Interlock Limit		
2527	MGS	01-349/21:40:00	54	End Tracking		
2528	MGS	01-349/21:40:52		NOTE: Periapsis 12393 ----------		01-349/21:29:24
2529	MGS	01-349/21:45:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/21:33:47
2530	MGS	01-349/21:45:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/21:33:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2531	MGS	01-349/21:45:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/21:33:48
2532	MGS	01-349/21:45:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/21:33:48
2533	MGS	01-349/21:55:00	54	End Post-Cal		
2534	MGS	01-349/22:07:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/21:55:48
2535	MGS	01-349/22:07:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/21:55:48
2536	MGS	01-349/22:17:25		NOTE: Start Block (SSRMGR)		01-349/22:05:57
2537	MGS	01-349/22:17:25		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-349/22:05:57
2538	MGS	01-349/22:17:26		SSR 1A Data Enable	CSD1AE	01-349/22:05:58
2539	MGS	01-349/22:17:26		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-349/22:05:58
2540	MGS	01-349/22:31:40		NOTE: Begin fixed Sub-Reflector for Radio Science		01-349/22:20:13
2541	MGS	01-349/22:31:49		NOTE: Start Block (MAP_PB_ODY)		01-349/22:20:21
2542	MGS	01-349/22:31:50		: 00:19:41, 01:43:16, FALSE, FALSE, FALSE, 00:01:15, 00:09:04, 01:24:12, 00:08:44	AEMINI	01-349/22:20:22
2543	MGS	01-349/22:31:50		Enable sending eclipse ingress script when array power disappears	SWEISE	01-349/22:20:22
2544	MGS	01-349/22:31:50		NOTE: Start EVP data return script		01-349/22:20:22
2545	MGS	01-349/22:31:51		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-349T23:00:23.000	AEMPBI	01-349/22:20:23
2546	MGS	01-349/22:36:41		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-349/22:25:13
2547	MGS	01-349/22:36:41		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9240000, DUR=00:19:15		01-349/22:25:13
2548	MGS	01-349/22:36:41		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-349/22:25:13
2549	MGS	01-349/22:36:41		: 00:10:24, FALSE	RDSCII	01-349/22:25:13
2550	MGS	01-349/22:36:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-349/22:25:13
2551	MGS	01-349/22:36:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-349/22:25:13
2552	MGS	01-349/22:36:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-349/22:25:13
2553	MGS	01-349/22:36:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-349/22:25:13
2554	MGS	01-349/22:36:41	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2555	MGS	01-349/22:36:41	15	NOTE: Carrier Only -- No Telemetry Modulation		
2556	MGS	01-349/22:38:41		NOTE: Enter Planetary Atmosphere 12393		01-349/22:27:13
2557	MGS	01-349/22:39:49		NOTE: Apoapsis 12393 -		01-349/22:28:22
2558	MGS	01-349/22:40:50		SSR 1B Data Disable	CSD1BX	01-349/22:29:22
2559	MGS	01-349/22:40:50		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-349/22:29:22
2560	MGS	01-349/22:40:51		NOTE: End Block (SSRMGR)		01-349/22:29:23
2561	MGS	01-349/22:41:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-349/22:30:22
2562	MGS	01-349/22:41:50		NOTE: Enter Solar Eclipse 12393		01-349/22:30:22
2563	MGS	01-349/22:46:14		NOTE: Enter Earth Occultation 12393		01-349/22:34:47
2564	MGS	01-349/22:46:14	15	NOTE: Loss Of X-Band Signal		
2565	MGS	01-349/22:47:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-349/22:35:37
2566	MGS	01-349/22:47:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-349/22:35:37
2567	MGS	01-349/22:47:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-349/22:35:37
2568	MGS	01-349/22:47:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-349/22:35:37
2569	MGS	01-349/22:47:05		NOTE: End EVP script		01-349/22:35:38
2570	MGS	01-349/22:47:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-349/22:35:38
2571	MGS	01-349/22:47:06		NOTE: End Block (MAP_RT)		01-349/22:35:39
2572	MGS	01-349/22:47:09		NOTE: End fixed Sub-Reflector for Radio Science		01-349/22:35:42
2573	MGS	01-349/23:01:31		: 01:43:16	RPAONX	01-349/22:50:03
2574	MGS	01-349/23:01:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-349/22:50:03
2575	MGS	01-349/23:03:16		Disables autonomous command to send eclipse ingress script	SWEISX	01-349/22:51:48
2576	MGS	01-349/23:03:36		NOTE: Exit Earth Occultation 12393		01-349/22:52:08
2577	MGS	01-349/23:03:36	15	Acquisition Of X-Band Signal		
2578	MGS	01-349/23:03:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2579	MGS	01-349/23:06:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-349/22:54:48
2580	MGS	01-349/23:06:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-349/22:54:48
2581	MGS	01-349/23:06:20		Command the PSE with included data word: 3990	SWPSEL	01-349/22:54:52
2582	MGS	01-349/23:06:21		Set eclipse egress script address: 0158	SWSEES	01-349/22:54:53
2583	MGS	01-349/23:11:28		NOTE: Exit Planetary Atmosphere 12393		01-349/23:00:01
2584	MGS	01-349/23:11:50		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:22:18	AEMPB	01-349/23:00:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2585	MGS	01-349/23:11:50		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-349/23:00:22
2586	MGS	01-349/23:11:50		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-349/23:00:22
2587	MGS	01-349/23:11:51		SSR 1B Data Enable	CSD1BE	01-349/23:00:23
2588	MGS	01-349/23:11:51		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-349/23:00:23
2589	MGS	01-349/23:11:51	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2590	MGS	01-349/23:21:57		NOTE: Exit Solar Eclipse 12393		01-349/23:10:29
2591	MGS	01-349/23:38:33		NOTE: Periapsis 12394 ----------		01-349/23:27:05
2592	MGS	01-349/23:46:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-349/23:35:28
2593	MGS	01-349/23:46:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-349/23:35:28
2594	MGS	01-349/23:46:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-349/23:35:29
2595	MGS	01-349/23:46:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-349/23:35:29
2596	MGS	01-350/00:00:00		Light Time: OWLT = 11:27, RTLT = 22:55		
2597	MGS	01-350/00:08:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-349/23:57:29
2598	MGS	01-350/00:08:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-349/23:57:29
2599	MGS	01-350/00:22:29		SSR 1B Data Disable	CSD1BX	01-350/00:11:01
2600	MGS	01-350/00:22:29		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-350/00:11:01
2601	MGS	01-350/00:22:29		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-350/00:11:01
2602	MGS	01-350/00:22:29	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2603	MGS	01-350/00:29:34		NOTE: Start Block (MAP_RT)		01-350/00:18:06
2604	MGS	01-350/00:29:35		: 00:20:01, 01:42:35, FALSE, TRUE, FALSE, 00:01:15, 00:10:33, 01:20:32, 00:10:14	AEMINI	01-350/00:18:07
2605	MGS	01-350/00:29:35		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/00:18:07
2606	MGS	01-350/00:29:35		NOTE: Start EVP data return script		01-350/00:18:07
2607	MGS	01-350/00:29:36		: SE_2A, RTM, 01:20:31, MRC, 2001-350T00:59:58.000	AEMRTI	01-350/00:18:08
2608	MGS	01-350/00:36:26		NOTE: Enter Planetary Atmosphere 12394		01-350/00:24:58
2609	MGS	01-350/00:37:43		NOTE: Apoapsis 12394 -		01-350/00:26:15
2610	MGS	01-350/00:39:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/00:28:07
2611	MGS	01-350/00:39:35		NOTE: Enter Solar Eclipse 12394		01-350/00:28:08
2612	MGS	01-350/00:40:00	45	Begin Pre-Cal		
2613	MGS	01-350/00:40:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2614	MGS	01-350/00:40:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2615	MGS	01-350/00:40:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2616	MGS	01-350/00:40:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2617	MGS	01-350/00:40:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
2618	MGS	01-350/00:40:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
2619	MGS	01-350/00:40:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
2620	MGS	01-350/00:40:00	45	Config: TGC: DEST=37		
2621	MGS	01-350/00:40:00	45	Config: TGC: BAND=X, BR=40000.000000		
2622	MGS	01-350/00:40:00	45	Config: FSS: CH=2, PRI_FL=10000		
2623	MGS	01-350/00:40:00	45	Config: RSR		
2624	MGS	01-350/00:40:00	45	Config: TXL		
2625	MGS	01-350/00:40:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
2626	MGS	01-350/00:40:00	45	Config: BVR		
2627	MGS	01-350/00:40:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
2628	MGS	01-350/00:40:00	45	Config: MDA: SMPL=0.1		
2629	MGS	01-350/00:43:58		NOTE: Enter Earth Occultation 12394		01-350/00:32:30
2630	MGS	01-350/00:43:58	15	NOTE: Loss Of X-Band Signal		
2631	MGS	01-350/00:44:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/00:33:19
2632	MGS	01-350/00:44:47		NOTE: End EVP script		01-350/00:33:19
2633	MGS	01-350/00:44:48		NOTE: End Block (MAP_PB_ODY)		01-350/00:33:20
2634	MGS	01-350/00:55:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/00:44:24
2635	MGS	01-350/00:59:36		: 01:42:35	RPAONX	01-350/00:48:08
2636	MGS	01-350/00:59:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/00:48:08
2637	MGS	01-350/01:00:00	43	Begin Pre-Cal		
2638	MGS	01-350/01:00:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2639	MGS	01-350/01:00:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2640	MGS	01-350/01:00:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2641	MGS	01-350/01:00:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2642	MGS	01-350/01:00:00	43	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
2643	MGS	01-350/01:00:00	43	Config: TGC: DEST=37		
2644	MGS	01-350/01:00:00	43	Config: TGC: BAND=X, BR=40000.000000		
2645	MGS	01-350/01:00:00	43	Config: FSS: CH=2, PRI_FL=10000		
2646	MGS	01-350/01:00:00	43	Config: RSR		
2647	MGS	01-350/01:00:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
2648	MGS	01-350/01:00:00	43	Config: BVR		
2649	MGS	01-350/01:00:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
2650	MGS	01-350/01:00:00	43	Config: MDA: SMPL=0.1		
2651	MGS	01-350/01:00:51		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/00:49:23
2652	MGS	01-350/01:00:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/00:49:23
2653	MGS	01-350/01:00:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/00:49:23
2654	MGS	01-350/01:00:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/00:49:23
2655	MGS	01-350/01:00:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/00:49:23
2656	MGS	01-350/01:01:21		NOTE: Exit Earth Occultation 12394		01-350/00:49:53
2657	MGS	01-350/01:01:21	15	Acquisition Of X-Band Signal		
2658	MGS	01-350/01:01:21	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2659	MGS	01-350/01:01:21	15	NOTE: Carrier Only -- No Telemetry Modulation		
2660	MGS	01-350/01:03:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/00:52:29
2661	MGS	01-350/01:03:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/00:52:29
2662	MGS	01-350/01:04:02		Set eclipse egress script address: 019A	SWSEES	01-350/00:52:34
2663	MGS	01-350/01:09:13		NOTE: Exit Planetary Atmosphere 12394		01-350/00:57:45
2664	MGS	01-350/01:11:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/00:59:56
2665	MGS	01-350/01:11:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/00:59:56
2666	MGS	01-350/01:11:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/00:59:56
2667	MGS	01-350/01:11:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/00:59:56
2668	MGS	01-350/01:11:24	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2669	MGS	01-350/01:11:25		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/00:59:57
2670	MGS	01-350/01:11:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/00:59:57
2671	MGS	01-350/01:11:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/00:59:57
2672	MGS	01-350/01:11:25	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2673	MGS	01-350/01:11:29		NOTE: End fixed Sub-Reflector for Radio Science		01-350/01:00:02
2674	MGS	01-350/01:19:42		NOTE: Exit Solar Eclipse 12394		01-350/01:08:14
2675	MGS	01-350/01:25:00	45	Begin Tracking		
2676	MGS	01-350/01:25:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2677	MGS	01-350/01:35:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2678	MGS	01-350/01:36:27		NOTE: Periapsis 12395 ----------		01-350/01:24:59
2679	MGS	01-350/01:40:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/01:29:13
2680	MGS	01-350/01:40:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/01:29:13
2681	MGS	01-350/01:40:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/01:29:14
2682	MGS	01-350/01:40:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/01:29:14
2683	MGS	01-350/01:57:56	15	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2684	MGS	01-350/01:57:56	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2685	MGS	01-350/02:00:04	45	NOTE: Transmitter Off in 15 minutes		
2686	MGS	01-350/02:02:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/01:51:14
2687	MGS	01-350/02:02:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/01:51:14
2688	MGS	01-350/02:15:04	45	Transmitter Off		
2689	MGS	01-350/02:26:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/02:15:29
2690	MGS	01-350/02:27:22		NOTE: Start EVP data return script		01-350/02:15:54
2691	MGS	01-350/02:30:00	43	Begin Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2692	MGS	01-350/02:30:00	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2693	MGS	01-350/02:31:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/02:20:28
2694	MGS	01-350/02:31:56		: 00:10:14, FALSE	RDSCII	01-350/02:20:28
2695	MGS	01-350/02:31:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/02:20:28
2696	MGS	01-350/02:31:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/02:20:28
2697	MGS	01-350/02:31:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/02:20:28
2698	MGS	01-350/02:31:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/02:20:28
2699	MGS	01-350/02:31:56	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2700	MGS	01-350/02:31:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
2701	MGS	01-350/02:31:56	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2702	MGS	01-350/02:31:56	43	NOTE: Carrier Only -- No Telemetry Modulation		
2703	MGS	01-350/02:31:56	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2704	MGS	01-350/02:31:56	45	NOTE: Carrier Only -- No Telemetry Modulation		
2705	MGS	01-350/02:34:14		NOTE: Enter Planetary Atmosphere 12395		01-350/02:22:46
2706	MGS	01-350/02:35:27		NOTE: Apoapsis 12395 -		01-350/02:23:59
2707	MGS	01-350/02:37:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/02:25:54
2708	MGS	01-350/02:37:23		NOTE: Enter Solar Eclipse 12395		01-350/02:25:55
2709	MGS	01-350/02:39:58	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2710	MGS	01-350/02:41:45		NOTE: Enter Earth Occultation 12395		01-350/02:30:17
2711	MGS	01-350/02:41:45	15	NOTE: Loss Of X-Band Signal		
2712	MGS	01-350/02:41:45	43	NOTE: Loss Of X-Band Signal		
2713	MGS	01-350/02:41:45	45	NOTE: Loss Of X-Band Signal		
2714	MGS	01-350/02:42:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/02:30:42
2715	MGS	01-350/02:42:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/02:30:42
2716	MGS	01-350/02:42:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/02:30:42
2717	MGS	01-350/02:42:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/02:30:42
2718	MGS	01-350/02:42:11		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/02:30:43
2719	MGS	01-350/02:42:12		NOTE: End EVP script		01-350/02:30:44
2720	MGS	01-350/02:42:16		NOTE: End fixed Sub-Reflector for Radio Science		01-350/02:30:48
2721	MGS	01-350/02:50:00	15	End Tracking		
2722	MGS	01-350/02:53:39		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/02:42:11
2723	MGS	01-350/02:57:23		: 01:42:35	RPAONX	01-350/02:45:55
2724	MGS	01-350/02:57:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/02:45:55
2725	MGS	01-350/02:58:38		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/02:47:10
2726	MGS	01-350/02:58:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/02:47:10
2727	MGS	01-350/02:58:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/02:47:10
2728	MGS	01-350/02:58:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/02:47:10
2729	MGS	01-350/02:58:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/02:47:10
2730	MGS	01-350/02:59:08		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/02:47:40
2731	MGS	01-350/02:59:09		NOTE: Exit Earth Occultation 12395		01-350/02:47:41
2732	MGS	01-350/02:59:09	43	Acquisition Of X-Band Signal		
2733	MGS	01-350/02:59:09	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2734	MGS	01-350/02:59:09	43	NOTE: Carrier Only -- No Telemetry Modulation		
2735	MGS	01-350/02:59:09	45	Acquisition Of X-Band Signal		
2736	MGS	01-350/02:59:09	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2737	MGS	01-350/02:59:09	45	NOTE: Carrier Only -- No Telemetry Modulation		
2738	MGS	01-350/03:01:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/02:50:14
2739	MGS	01-350/03:01:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/02:50:14
2740	MGS	01-350/03:01:47		Set eclipse egress script address: 01DC	SWSEES	01-350/02:50:19
2741	MGS	01-350/03:05:00	15	End Post-Cal		
2742	MGS	01-350/03:07:00		NOTE: Exit Planetary Atmosphere 12395		01-350/02:55:32
2743	MGS	01-350/03:09:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/02:57:43
2744	MGS	01-350/03:09:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/02:57:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2745	MGS	01-350/03:09:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/02:57:43
2746	MGS	01-350/03:09:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/02:57:43
2747	MGS	01-350/03:09:11	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2748	MGS	01-350/03:09:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2749	MGS	01-350/03:09:12		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/02:57:44
2750	MGS	01-350/03:09:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/02:57:44
2751	MGS	01-350/03:09:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/02:57:44
2752	MGS	01-350/03:09:12	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2753	MGS	01-350/03:09:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2754	MGS	01-350/03:09:17		NOTE: End fixed Sub-Reflector for Radio Science		01-350/02:57:49
2755	MGS	01-350/03:17:30		NOTE: Exit Solar Eclipse 12395		01-350/03:06:02
2756	MGS	01-350/03:34:14		NOTE: Periapsis 12396 ----------		01-350/03:22:46
2757	MGS	01-350/03:38:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/03:27:01
2758	MGS	01-350/03:38:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/03:27:01
2759	MGS	01-350/03:38:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/03:27:02
2760	MGS	01-350/03:38:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/03:27:02
2761	MGS	01-350/03:57:48	45	NOTE: Transmitter Off in 15 minutes		
2762	MGS	01-350/04:00:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/03:49:02
2763	MGS	01-350/04:00:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/03:49:02
2764	MGS	01-350/04:10:34		NOTE: Start Block (SSRMGR)		01-350/03:59:05
2765	MGS	01-350/04:10:34		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-350/03:59:05
2766	MGS	01-350/04:10:35		SSR 1B Data Enable	CSD1BE	01-350/03:59:06
2767	MGS	01-350/04:10:35		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-350/03:59:06
2768	MGS	01-350/04:12:48	45	Transmitter Off		
2769	MGS	01-350/04:24:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/04:13:16
2770	MGS	01-350/04:25:09		NOTE: Start Block (MAP_PB_ODY)		01-350/04:13:40
2771	MGS	01-350/04:25:10		: 00:20:01, 01:42:36, FALSE, FALSE, FALSE, 00:01:15, 00:08:53, 01:23:53, 00:08:34	AEMINI	01-350/04:13:41
2772	MGS	01-350/04:25:10		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/04:13:41
2773	MGS	01-350/04:25:10		NOTE: Start EVP data return script		01-350/04:13:41
2774	MGS	01-350/04:25:11		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-350T04:53:51.000	AEMPBI	01-350/04:13:42
2775	MGS	01-350/04:29:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/04:18:15
2776	MGS	01-350/04:29:44		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9192000, DUR=00:19:09		01-350/04:18:15
2777	MGS	01-350/04:29:44		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-350/04:18:15
2778	MGS	01-350/04:29:44		: 00:10:14, FALSE	RDSCII	01-350/04:18:15
2779	MGS	01-350/04:29:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/04:18:15
2780	MGS	01-350/04:29:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/04:18:15
2781	MGS	01-350/04:29:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/04:18:15
2782	MGS	01-350/04:29:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/04:18:15
2783	MGS	01-350/04:29:44	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2784	MGS	01-350/04:29:44	43	NOTE: Carrier Only -- No Telemetry Modulation		
2785	MGS	01-350/04:29:44	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2786	MGS	01-350/04:29:44	45	NOTE: Carrier Only -- No Telemetry Modulation		
2787	MGS	01-350/04:32:00		NOTE: Enter Planetary Atmosphere 12396		01-350/04:20:31
2788	MGS	01-350/04:32:58		NOTE: Apoapsis 12396 -		01-350/04:21:30
2789	MGS	01-350/04:34:10		SSR 1A Data Disable	CSD1AX	01-350/04:22:41
2790	MGS	01-350/04:34:10		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-350/04:22:41
2791	MGS	01-350/04:34:11		NOTE: End Block (SSRMGR)		01-350/04:22:42
2792	MGS	01-350/04:35:10		NOTE: Enter Solar Eclipse 12396		01-350/04:23:41
2793	MGS	01-350/04:35:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/04:23:41
2794	MGS	01-350/04:37:46	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2795	MGS	01-350/04:39:30		NOTE: Enter Earth Occultation 12396		01-350/04:28:02
2796	MGS	01-350/04:39:30	43	NOTE: Loss Of X-Band Signal		
2797	MGS	01-350/04:39:30	45	NOTE: Loss Of X-Band Signal		
2798	MGS	01-350/04:39:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/04:28:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2799	MGS	01-350/04:39:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/04:28:29
2800	MGS	01-350/04:39:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/04:28:29
2801	MGS	01-350/04:39:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/04:28:29
2802	MGS	01-350/04:39:59		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/04:28:30
2803	MGS	01-350/04:39:59		NOTE: End EVP script		01-350/04:28:31
2804	MGS	01-350/04:40:00		NOTE: End Block (MAP_RT)		01-350/04:28:32
2805	MGS	01-350/04:40:03		NOTE: End fixed Sub-Reflector for Radio Science		01-350/04:28:35
2806	MGS	01-350/04:55:11		: 01:42:36	RPAONX	01-350/04:43:42
2807	MGS	01-350/04:55:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/04:43:42
2808	MGS	01-350/04:56:56		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/04:45:27
2809	MGS	01-350/04:56:58		NOTE: Exit Earth Occultation 12396		01-350/04:45:29
2810	MGS	01-350/04:56:58	43	Acquisition Of X-Band Signal		
2811	MGS	01-350/04:56:58	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2812	MGS	01-350/04:56:58	45	Acquisition Of X-Band Signal		
2813	MGS	01-350/04:56:58	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2814	MGS	01-350/04:59:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/04:48:02
2815	MGS	01-350/04:59:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/04:48:02
2816	MGS	01-350/04:59:35		Command the PSE with included data word: 3990	SWPSEL	01-350/04:48:06
2817	MGS	01-350/04:59:36		Set eclipse egress script address: 0158	SWSEES	01-350/04:48:07
2818	MGS	01-350/05:00:43	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2819	MGS	01-350/05:00:43	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2820	MGS	01-350/05:04:48		NOTE: Exit Planetary Atmosphere 12396		01-350/04:53:20
2821	MGS	01-350/05:05:19		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:21:49	AEMPB	01-350/04:53:50
2822	MGS	01-350/05:05:19		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-350/04:53:50
2823	MGS	01-350/05:05:19		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-350/04:53:50
2824	MGS	01-350/05:05:20		SSR 1A Data Enable	CSD1AE	01-350/04:53:51
2825	MGS	01-350/05:05:20		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-350/04:53:51
2826	MGS	01-350/05:05:20	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2827	MGS	01-350/05:05:20	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2828	MGS	01-350/05:15:17		NOTE: Exit Solar Eclipse 12396		01-350/05:03:48
2829	MGS	01-350/05:31:56		NOTE: Periapsis 12397 ----------		01-350/05:20:27
2830	MGS	01-350/05:40:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/05:28:47
2831	MGS	01-350/05:40:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/05:28:47
2832	MGS	01-350/05:40:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/05:28:48
2833	MGS	01-350/05:40:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/05:28:48
2834	MGS	01-350/05:55:30	45	NOTE: Transmitter Off in 15 minutes		
2835	MGS	01-350/06:02:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/05:50:48
2836	MGS	01-350/06:02:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/05:50:48
2837	MGS	01-350/06:10:30	45	Transmitter Off		
2838	MGS	01-350/06:15:58		SSR 1A Data Disable	CSD1AX	01-350/06:04:29
2839	MGS	01-350/06:15:58		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-350/06:04:29
2840	MGS	01-350/06:15:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-350/06:04:29
2841	MGS	01-350/06:15:58	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2842	MGS	01-350/06:15:58	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2843	MGS	01-350/06:22:53		NOTE: Start Block (MAP_RT)		01-350/06:11:24
2844	MGS	01-350/06:22:54		: 00:20:01, 01:42:35, FALSE, TRUE, FALSE, 00:01:15, 00:10:33, 01:20:32, 00:10:14	AEMINI	01-350/06:11:25
2845	MGS	01-350/06:22:54		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/06:11:25
2846	MGS	01-350/06:22:54		NOTE: Start EVP data return script		01-350/06:11:25
2847	MGS	01-350/06:22:55		: SE_2A, RTM, 01:20:31, MRC, 2001-350T06:53:16.000	AEMRTI	01-350/06:11:26
2848	MGS	01-350/06:29:43		NOTE: Enter Planetary Atmosphere 12397		01-350/06:18:14
2849	MGS	01-350/06:30:29		NOTE: Apoapsis 12397 -		01-350/06:19:00
2850	MGS	01-350/06:32:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/06:21:25
2851	MGS	01-350/06:32:54		NOTE: Enter Solar Eclipse 12397		01-350/06:21:26
2852	MGS	01-350/06:33:27	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2853	MGS	01-350/06:33:27	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2854	MGS	01-350/06:35:33	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
2855	MGS	01-350/06:37:12		NOTE: Enter Earth Occultation 12397		01-350/06:25:44
2856	MGS	01-350/06:37:12	43	NOTE: Loss Of X-Band Signal		
2857	MGS	01-350/06:37:12	45	NOTE: Loss Of X-Band Signal		
2858	MGS	01-350/06:37:47		NOTE: End EVP script		01-350/06:26:18
2859	MGS	01-350/06:37:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/06:26:18
2860	MGS	01-350/06:37:48		NOTE: End Block (MAP_PB_ODY)		01-350/06:26:19
2861	MGS	01-350/06:49:11		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/06:37:42
2862	MGS	01-350/06:50:00	45	NOTE: Transmitter Off in 15 minutes		
2863	MGS	01-350/06:52:55		: 01:42:35	RPAONX	01-350/06:41:26
2864	MGS	01-350/06:52:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/06:41:26
2865	MGS	01-350/06:54:10		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/06:42:41
2866	MGS	01-350/06:54:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/06:42:41
2867	MGS	01-350/06:54:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/06:42:41
2868	MGS	01-350/06:54:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/06:42:41
2869	MGS	01-350/06:54:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/06:42:41
2870	MGS	01-350/06:54:46		NOTE: Exit Earth Occultation 12397		01-350/06:43:17
2871	MGS	01-350/06:54:46	43	Acquisition Of X-Band Signal		
2872	MGS	01-350/06:54:46	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2873	MGS	01-350/06:54:46	43	NOTE: Carrier Only -- No Telemetry Modulation		
2874	MGS	01-350/06:54:46	45	Acquisition Of X-Band Signal		
2875	MGS	01-350/06:54:46	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2876	MGS	01-350/06:54:46	45	NOTE: Carrier Only -- No Telemetry Modulation		
2877	MGS	01-350/06:57:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/06:45:48
2878	MGS	01-350/06:57:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/06:45:48
2879	MGS	01-350/06:57:22		Set eclipse egress script address: 019A	SWSEES	01-350/06:45:53
2880	MGS	01-350/07:02:35		NOTE: Exit Planetary Atmosphere 12397		01-350/06:51:06
2881	MGS	01-350/07:04:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/06:53:14
2882	MGS	01-350/07:04:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/06:53:14
2883	MGS	01-350/07:04:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/06:53:14
2884	MGS	01-350/07:04:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/06:53:14
2885	MGS	01-350/07:04:43	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2886	MGS	01-350/07:04:43	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2887	MGS	01-350/07:04:44		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/06:53:15
2888	MGS	01-350/07:04:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/06:53:15
2889	MGS	01-350/07:04:44		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/06:53:15
2890	MGS	01-350/07:04:44	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2891	MGS	01-350/07:04:44	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2892	MGS	01-350/07:04:49		NOTE: End fixed Sub-Reflector for Radio Science		01-350/06:53:20
2893	MGS	01-350/07:05:00	45	Transmitter Off		
2894	MGS	01-350/07:10:00	45	End Tracking		
2895	MGS	01-350/07:13:02		NOTE: Exit Solar Eclipse 12397		01-350/07:01:33
2896	MGS	01-350/07:25:00	45	End Post-Cal		
2897	MGS	01-350/07:27:57	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2898	MGS	01-350/07:29:40		NOTE: Periapsis 12398 ----------		01-350/07:18:11
2899	MGS	01-350/07:34:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/07:22:31
2900	MGS	01-350/07:34:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/07:22:31
2901	MGS	01-350/07:34:01		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/07:22:32
2902	MGS	01-350/07:34:01		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/07:22:32
2903	MGS	01-350/07:56:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/07:44:32
2904	MGS	01-350/07:56:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/07:44:32
2905	MGS	01-350/08:20:16		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/08:08:47
2906	MGS	01-350/08:20:36		NOTE: Start EVP data return script		01-350/08:09:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2907	MGS	01-350/08:25:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/08:13:46
2908	MGS	01-350/08:25:15		: 00:10:14, FALSE	RDSCII	01-350/08:13:46
2909	MGS	01-350/08:25:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/08:13:46
2910	MGS	01-350/08:25:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/08:13:46
2911	MGS	01-350/08:25:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/08:13:46
2912	MGS	01-350/08:25:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/08:13:46
2913	MGS	01-350/08:25:15	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2914	MGS	01-350/08:25:15	43	NOTE: Carrier Only -- No Telemetry Modulation		
2915	MGS	01-350/08:27:25		NOTE: Enter Planetary Atmosphere 12398		01-350/08:15:56
2916	MGS	01-350/08:28:21		NOTE: Apoapsis 12398 -		01-350/08:16:52
2917	MGS	01-350/08:30:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/08:19:07
2918	MGS	01-350/08:30:37		NOTE: Enter Solar Eclipse 12398		01-350/08:19:08
2919	MGS	01-350/08:34:54		NOTE: Enter Earth Occultation 12398		01-350/08:23:25
2920	MGS	01-350/08:34:54	43	NOTE: Loss Of X-Band Signal		
2921	MGS	01-350/08:35:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/08:24:00
2922	MGS	01-350/08:35:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/08:24:00
2923	MGS	01-350/08:35:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/08:24:00
2924	MGS	01-350/08:35:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/08:24:00
2925	MGS	01-350/08:35:30		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/08:24:01
2926	MGS	01-350/08:35:31		NOTE: End EVP script		01-350/08:24:02
2927	MGS	01-350/08:35:35		NOTE: End fixed Sub-Reflector for Radio Science		01-350/08:24:06
2928	MGS	01-350/08:46:53		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/08:35:24
2929	MGS	01-350/08:50:37		: 01:42:35	RPAONX	01-350/08:39:08
2930	MGS	01-350/08:50:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/08:39:08
2931	MGS	01-350/08:51:52		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/08:40:23
2932	MGS	01-350/08:51:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/08:40:23
2933	MGS	01-350/08:51:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/08:40:23
2934	MGS	01-350/08:51:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/08:40:23
2935	MGS	01-350/08:51:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/08:40:23
2936	MGS	01-350/08:52:22		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/08:40:53
2937	MGS	01-350/08:52:30		NOTE: Exit Earth Occultation 12398		01-350/08:41:01
2938	MGS	01-350/08:52:30	43	Acquisition Of X-Band Signal		
2939	MGS	01-350/08:52:30	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2940	MGS	01-350/08:52:30	43	NOTE: Carrier Only -- No Telemetry Modulation		
2941	MGS	01-350/08:55:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/08:43:32
2942	MGS	01-350/08:55:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/08:43:32
2943	MGS	01-350/08:55:06		Set eclipse egress script address: 01DC	SWSEES	01-350/08:43:37
2944	MGS	01-350/09:00:19		NOTE: Exit Planetary Atmosphere 12398		01-350/08:48:50
2945	MGS	01-350/09:02:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/08:50:56
2946	MGS	01-350/09:02:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/08:50:56
2947	MGS	01-350/09:02:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/08:50:56
2948	MGS	01-350/09:02:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/08:50:56
2949	MGS	01-350/09:02:25	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2950	MGS	01-350/09:02:26		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/08:50:57
2951	MGS	01-350/09:02:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/08:50:57
2952	MGS	01-350/09:02:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/08:50:57
2953	MGS	01-350/09:02:26	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2954	MGS	01-350/09:02:31		NOTE: End fixed Sub-Reflector for Radio Science		01-350/08:51:02
2955	MGS	01-350/09:10:44		NOTE: Exit Solar Eclipse 12398		01-350/08:59:15
2956	MGS	01-350/09:27:20		NOTE: Periapsis 12399 ----------		01-350/09:15:51
2957	MGS	01-350/09:31:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/09:20:14
2958	MGS	01-350/09:31:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/09:20:14
2959	MGS	01-350/09:31:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/09:20:15
2960	MGS	01-350/09:31:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/09:20:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2961	MGS	01-350/09:53:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/09:42:15
2962	MGS	01-350/09:53:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/09:42:15
2963	MGS	01-350/10:03:50		NOTE: Start Block (SSRMGR)		01-350/09:52:20
2964	MGS	01-350/10:03:50		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-350/09:52:20
2965	MGS	01-350/10:03:51		SSR 1A Data Enable	CSD1AE	01-350/09:52:21
2966	MGS	01-350/10:03:51		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-350/09:52:21
2967	MGS	01-350/10:17:58		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/10:06:29
2968	MGS	01-350/10:18:19		NOTE: Start Block (MAP_PB_ODY)		01-350/10:06:49
2969	MGS	01-350/10:18:20		: 00:20:01, 01:42:36, FALSE, FALSE, FALSE, 00:01:15, 00:08:53, 01:23:53, 00:08:34	AEMINI	01-350/10:06:50
2970	MGS	01-350/10:18:20		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/10:06:50
2971	MGS	01-350/10:18:20		NOTE: Start EVP data return script		01-350/10:06:50
2972	MGS	01-350/10:18:21		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-350T10:46:59.000	AEMPBI	01-350/10:06:51
2973	MGS	01-350/10:22:58		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/10:11:28
2974	MGS	01-350/10:22:58		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9176000, DUR=00:19:07		01-350/10:11:28
2975	MGS	01-350/10:22:58		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-350/10:11:28
2976	MGS	01-350/10:22:58		: 00:10:14, FALSE	RDSCII	01-350/10:11:28
2977	MGS	01-350/10:22:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/10:11:28
2978	MGS	01-350/10:22:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/10:11:28
2979	MGS	01-350/10:22:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/10:11:28
2980	MGS	01-350/10:22:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/10:11:28
2981	MGS	01-350/10:22:58	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2982	MGS	01-350/10:22:58	43	NOTE: Carrier Only -- No Telemetry Modulation		
2983	MGS	01-350/10:25:08		NOTE: Enter Planetary Atmosphere 12399		01-350/10:13:38
2984	MGS	01-350/10:26:01		NOTE: Apoapsis 12399 -		01-350/10:14:31
2985	MGS	01-350/10:27:19		SSR 1B Data Disable	CSD1BX	01-350/10:15:49
2986	MGS	01-350/10:27:19		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-350/10:15:49
2987	MGS	01-350/10:27:20		NOTE: End Block (SSRMGR)		01-350/10:15:50
2988	MGS	01-350/10:28:19		NOTE: Enter Solar Eclipse 12399		01-350/10:16:50
2989	MGS	01-350/10:28:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/10:16:50
2990	MGS	01-350/10:32:37		NOTE: Enter Earth Occultation 12399		01-350/10:21:08
2991	MGS	01-350/10:32:37	43	NOTE: Loss Of X-Band Signal		
2992	MGS	01-350/10:33:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/10:21:42
2993	MGS	01-350/10:33:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/10:21:42
2994	MGS	01-350/10:33:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/10:21:42
2995	MGS	01-350/10:33:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/10:21:42
2996	MGS	01-350/10:33:13		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/10:21:43
2997	MGS	01-350/10:33:13		NOTE: End EVP script		01-350/10:21:44
2998	MGS	01-350/10:33:14		NOTE: End Block (MAP_RT)		01-350/10:21:45
2999	MGS	01-350/10:33:17		NOTE: End fixed Sub-Reflector for Radio Science		01-350/10:21:48
3000	MGS	01-350/10:48:21		: 01:42:36	RPAONX	01-350/10:36:51
3001	MGS	01-350/10:48:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/10:36:51
3002	MGS	01-350/10:50:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/10:38:36
3003	MGS	01-350/10:50:13		NOTE: Exit Earth Occultation 12399		01-350/10:38:43
3004	MGS	01-350/10:50:13	43	Acquisition Of X-Band Signal		
3005	MGS	01-350/10:50:13	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3006	MGS	01-350/10:52:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/10:41:15
3007	MGS	01-350/10:52:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/10:41:15
3008	MGS	01-350/10:52:49		Command the PSE with included data word: 3990	SWPSEL	01-350/10:41:19
3009	MGS	01-350/10:52:50		Set eclipse egress script address: 0158	SWSEES	01-350/10:41:20
3010	MGS	01-350/10:55:00	63	Begin Pre-Cal		
3011	MGS	01-350/10:55:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3012	MGS	01-350/10:55:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3013	MGS	01-350/10:55:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3014	MGS	01-350/10:55:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3015	MGS	01-350/10:55:00	63	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
3016	MGS	01-350/10:55:00	63	Config: TGC: DEST=37		
3017	MGS	01-350/10:55:00	63	Config: TGC: BAND=X, BR=8000.000000		
3018	MGS	01-350/10:55:00	63	Config: FSS: CH=2, PRI_FL=10000		
3019	MGS	01-350/10:55:00	63	Config: RSR		
3020	MGS	01-350/10:55:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
3021	MGS	01-350/10:55:00	63	Config: BVR		
3022	MGS	01-350/10:55:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
3023	MGS	01-350/10:55:00	63	Config: MDA: SMPL=0.1		
3024	MGS	01-350/10:58:02		NOTE: Exit Planetary Atmosphere 12399		01-350/10:46:32
3025	MGS	01-350/10:58:29		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:21:49	AEMPB	01-350/10:46:59
3026	MGS	01-350/10:58:29		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-350/10:46:59
3027	MGS	01-350/10:58:29		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-350/10:46:59
3028	MGS	01-350/10:58:30		SSR 1B Data Enable	CSD1BE	01-350/10:47:00
3029	MGS	01-350/10:58:30		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-350/10:47:00
3030	MGS	01-350/10:58:30	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3031	MGS	01-350/11:08:26		NOTE: Exit Solar Eclipse 12399		01-350/10:56:57
3032	MGS	01-350/11:24:42		NOTE: Periapsis 12400 ----------		01-350/11:13:13
3033	MGS	01-350/11:33:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/11:21:56
3034	MGS	01-350/11:33:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/11:21:56
3035	MGS	01-350/11:33:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/11:21:57
3036	MGS	01-350/11:33:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/11:21:57
3037	MGS	01-350/11:55:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/11:43:57
3038	MGS	01-350/11:55:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/11:43:57
3039	MGS	01-350/12:09:08		SSR 1B Data Disable	CSD1BX	01-350/11:57:38
3040	MGS	01-350/12:09:08		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-350/11:57:38
3041	MGS	01-350/12:09:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-350/11:57:38
3042	MGS	01-350/12:09:08	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3043	MGS	01-350/12:11:29		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-350/11:59:59
3044	MGS	01-350/12:16:02		NOTE: Start Block (MAP_RT)		01-350/12:04:32
3045	MGS	01-350/12:16:03		: 00:20:01, 01:42:35, FALSE, TRUE, FALSE, 00:01:15, 00:10:33, 01:20:32, 00:10:14	AEMINI	01-350/12:04:33
3046	MGS	01-350/12:16:03		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/12:04:33
3047	MGS	01-350/12:16:03		NOTE: Start EVP data return script		01-350/12:04:33
3048	MGS	01-350/12:16:04		: SE_2A, RTM, 01:20:31, MRC, 2001-350T12:46:24.000	AEMRTI	01-350/12:04:34
3049	MGS	01-350/12:22:50		NOTE: Enter Planetary Atmosphere 12400		01-350/12:11:20
3050	MGS	01-350/12:23:27		NOTE: Apoapsis 12400 -		01-350/12:11:57
3051	MGS	01-350/12:25:00	63	Begin Tracking		
3052	MGS	01-350/12:25:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3053	MGS	01-350/12:26:03		NOTE: Enter Solar Eclipse 12400		01-350/12:14:33
3054	MGS	01-350/12:26:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/12:14:33
3055	MGS	01-350/12:30:17		NOTE: Enter Earth Occultation 12400		01-350/12:18:47
3056	MGS	01-350/12:30:17	43	NOTE: Loss Of X-Band Signal		
3057	MGS	01-350/12:30:17	63	NOTE: Loss Of X-Band Signal		
3058	MGS	01-350/12:30:57		NOTE: End EVP script		01-350/12:19:27
3059	MGS	01-350/12:30:57		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/12:19:27
3060	MGS	01-350/12:30:58		NOTE: End Block (MAP_PB_ODY)		01-350/12:19:28
3061	MGS	01-350/12:33:51	43	NOTE: Below Uplink Interlock Limit		
3062	MGS	01-350/12:39:19	63	NOTE: Above Uplink Interlock Limit		
3063	MGS	01-350/12:42:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/12:30:49
3064	MGS	01-350/12:45:00	43	End Tracking		
3065	MGS	01-350/12:46:04		: 01:42:35	RPAONX	01-350/12:34:34
3066	MGS	01-350/12:46:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/12:34:34
3067	MGS	01-350/12:47:19		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/12:35:49
3068	MGS	01-350/12:47:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/12:35:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3069	MGS	01-350/12:47:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/12:35:49
3070	MGS	01-350/12:47:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/12:35:49
3071	MGS	01-350/12:47:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/12:35:49
3072	MGS	01-350/12:47:58		NOTE: Exit Earth Occultation 12400		01-350/12:36:28
3073	MGS	01-350/12:47:58	63	Acquisition Of X-Band Signal		
3074	MGS	01-350/12:47:58	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3075	MGS	01-350/12:47:58	63	NOTE: Carrier Only -- No Telemetry Modulation		
3076	MGS	01-350/12:50:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/12:38:57
3077	MGS	01-350/12:50:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/12:38:57
3078	MGS	01-350/12:50:32		Set eclipse egress script address: 019A	SWSEES	01-350/12:39:02
3079	MGS	01-350/12:55:44		NOTE: Exit Planetary Atmosphere 12400		01-350/12:44:15
3080	MGS	01-350/12:57:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/12:46:22
3081	MGS	01-350/12:57:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/12:46:22
3082	MGS	01-350/12:57:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/12:46:22
3083	MGS	01-350/12:57:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/12:46:22
3084	MGS	01-350/12:57:52	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3085	MGS	01-350/12:57:53		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/12:46:23
3086	MGS	01-350/12:57:53		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/12:46:23
3087	MGS	01-350/12:57:53		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/12:46:23
3088	MGS	01-350/12:57:53	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3089	MGS	01-350/12:57:57		NOTE: End fixed Sub-Reflector for Radio Science		01-350/12:46:27
3090	MGS	01-350/13:00:00	43	End Post-Cal		
3091	MGS	01-350/13:06:09		NOTE: Exit Solar Eclipse 12400		01-350/12:54:40
3092	MGS	01-350/13:22:28		NOTE: Periapsis 12401 ----------		01-350/13:10:59
3093	MGS	01-350/13:27:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/13:15:39
3094	MGS	01-350/13:27:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/13:15:39
3095	MGS	01-350/13:27:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/13:15:40
3096	MGS	01-350/13:27:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/13:15:40
3097	MGS	01-350/13:49:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/13:37:40
3098	MGS	01-350/13:49:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/13:37:40
3099	MGS	01-350/14:13:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/14:01:54
3100	MGS	01-350/14:13:48		NOTE: Start EVP data return script		01-350/14:02:18
3101	MGS	01-350/14:18:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/14:06:54
3102	MGS	01-350/14:18:24		: 00:10:14, FALSE	RDSCII	01-350/14:06:54
3103	MGS	01-350/14:18:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/14:06:54
3104	MGS	01-350/14:18:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/14:06:54
3105	MGS	01-350/14:18:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/14:06:54
3106	MGS	01-350/14:18:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/14:06:54
3107	MGS	01-350/14:18:24	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3108	MGS	01-350/14:18:24	63	NOTE: Carrier Only -- No Telemetry Modulation		
3109	MGS	01-350/14:20:32		NOTE: Enter Planetary Atmosphere 12401		01-350/14:09:02
3110	MGS	01-350/14:21:23		NOTE: Apoapsis 12401 -		01-350/14:09:53
3111	MGS	01-350/14:23:48		NOTE: Enter Solar Eclipse 12401		01-350/14:12:18
3112	MGS	01-350/14:23:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/14:12:18
3113	MGS	01-350/14:27:57		NOTE: Enter Earth Occultation 12401		01-350/14:16:27
3114	MGS	01-350/14:27:57	63	NOTE: Loss Of X-Band Signal		
3115	MGS	01-350/14:28:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/14:17:08
3116	MGS	01-350/14:28:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/14:17:08
3117	MGS	01-350/14:28:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/14:17:08
3118	MGS	01-350/14:28:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/14:17:08
3119	MGS	01-350/14:28:39		NOTE: End EVP script		01-350/14:17:09
3120	MGS	01-350/14:28:39		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/14:17:09
3121	MGS	01-350/14:28:43		NOTE: End fixed Sub-Reflector for Radio Science		01-350/14:17:13
3122	MGS	01-350/14:40:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/14:28:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3123	MGS	01-350/14:43:49		: 01:42:35	RPAONX	01-350/14:32:19
3124	MGS	01-350/14:43:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/14:32:19
3125	MGS	01-350/14:45:04		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/14:33:34
3126	MGS	01-350/14:45:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/14:33:34
3127	MGS	01-350/14:45:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/14:33:34
3128	MGS	01-350/14:45:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/14:33:34
3129	MGS	01-350/14:45:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/14:33:34
3130	MGS	01-350/14:45:34		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/14:34:04
3131	MGS	01-350/14:45:46		NOTE: Exit Earth Occultation 12401		01-350/14:34:16
3132	MGS	01-350/14:45:46	63	Acquisition Of X-Band Signal		
3133	MGS	01-350/14:45:46	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3134	MGS	01-350/14:45:46	63	NOTE: Carrier Only -- No Telemetry Modulation		
3135	MGS	01-350/14:48:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/14:36:40
3136	MGS	01-350/14:48:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/14:36:40
3137	MGS	01-350/14:48:15		Set eclipse egress script address: 01DC	SWSEES	01-350/14:36:45
3138	MGS	01-350/14:53:29		NOTE: Exit Planetary Atmosphere 12401		01-350/14:41:59
3139	MGS	01-350/14:55:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/14:44:07
3140	MGS	01-350/14:55:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/14:44:07
3141	MGS	01-350/14:55:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/14:44:07
3142	MGS	01-350/14:55:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/14:44:07
3143	MGS	01-350/14:55:37	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3144	MGS	01-350/14:55:38		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/14:44:08
3145	MGS	01-350/14:55:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/14:44:08
3146	MGS	01-350/14:55:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/14:44:08
3147	MGS	01-350/14:55:38	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3148	MGS	01-350/14:55:42		NOTE: End fixed Sub-Reflector for Radio Science		01-350/14:44:12
3149	MGS	01-350/15:03:55		NOTE: Exit Solar Eclipse 12401		01-350/14:52:25
3150	MGS	01-350/15:20:40		NOTE: Periapsis 12402 ----------		01-350/15:09:10
3151	MGS	01-350/15:24:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/15:13:24
3152	MGS	01-350/15:24:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/15:13:24
3153	MGS	01-350/15:24:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/15:13:25
3154	MGS	01-350/15:24:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/15:13:25
3155	MGS	01-350/15:46:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/15:35:25
3156	MGS	01-350/15:46:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/15:35:25
3157	MGS	01-350/15:57:01		NOTE: Start Block (SSRMGR)		01-350/15:45:31
3158	MGS	01-350/15:57:01		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-350/15:45:31
3159	MGS	01-350/15:57:02		SSR 1B Data Enable	CSD1BE	01-350/15:45:32
3160	MGS	01-350/15:57:02		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-350/15:45:32
3161	MGS	01-350/16:11:09		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/15:59:39
3162	MGS	01-350/16:11:33		NOTE: Start Block (MAP_PB_ODY)		01-350/16:00:03
3163	MGS	01-350/16:11:34		: 00:20:01, 01:42:36, FALSE, FALSE, FALSE, 00:01:15, 00:08:53, 01:23:53, 00:08:34	AEMINI	01-350/16:00:04
3164	MGS	01-350/16:11:34		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/16:00:04
3165	MGS	01-350/16:11:34		NOTE: Start EVP data return script		01-350/16:00:04
3166	MGS	01-350/16:11:35		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-350T16:40:14.000	AEMPBI	01-350/16:00:05
3167	MGS	01-350/16:16:09		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/16:04:39
3168	MGS	01-350/16:16:09		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9176000, DUR=00:19:07		01-350/16:04:39
3169	MGS	01-350/16:16:09		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-350/16:04:39
3170	MGS	01-350/16:16:09		: 00:10:14, FALSE	RDSCII	01-350/16:04:39
3171	MGS	01-350/16:16:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/16:04:39
3172	MGS	01-350/16:16:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/16:04:39
3173	MGS	01-350/16:16:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/16:04:39
3174	MGS	01-350/16:16:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/16:04:39
3175	MGS	01-350/16:16:09	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3176	MGS	01-350/16:16:09	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3177	MGS	01-350/16:18:17		NOTE: Enter Planetary Atmosphere 12402		01-350/16:06:47
3178	MGS	01-350/16:19:42		NOTE: Apoapsis 12402 -		01-350/16:08:12
3179	MGS	01-350/16:20:34		SSR 1A Data Disable	CSD1AX	01-350/16:09:04
3180	MGS	01-350/16:20:34		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-350/16:09:04
3181	MGS	01-350/16:20:35		NOTE: End Block (SSRMGR)		01-350/16:09:05
3182	MGS	01-350/16:21:34		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/16:10:04
3183	MGS	01-350/16:21:35		NOTE: Enter Solar Eclipse 12402		01-350/16:10:05
3184	MGS	01-350/16:25:42		NOTE: Enter Earth Occultation 12402		01-350/16:14:12
3185	MGS	01-350/16:25:42	63	NOTE: Loss Of X-Band Signal		
3186	MGS	01-350/16:26:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/16:14:53
3187	MGS	01-350/16:26:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/16:14:53
3188	MGS	01-350/16:26:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/16:14:53
3189	MGS	01-350/16:26:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/16:14:53
3190	MGS	01-350/16:26:24		NOTE: End EVP script		01-350/16:14:54
3191	MGS	01-350/16:26:24		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/16:14:54
3192	MGS	01-350/16:26:25		NOTE: End Block (MAP_RT)		01-350/16:14:55
3193	MGS	01-350/16:26:28		NOTE: End fixed Sub-Reflector for Radio Science		01-350/16:14:58
3194	MGS	01-350/16:41:36		: 01:42:36	RPAONX	01-350/16:30:05
3195	MGS	01-350/16:41:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/16:30:05
3196	MGS	01-350/16:43:21		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/16:31:50
3197	MGS	01-350/16:43:33		NOTE: Exit Earth Occultation 12402		01-350/16:32:03
3198	MGS	01-350/16:43:33	63	Acquisition Of X-Band Signal		
3199	MGS	01-350/16:43:33	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3200	MGS	01-350/16:45:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/16:34:25
3201	MGS	01-350/16:45:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/16:34:25
3202	MGS	01-350/16:46:00		Command the PSE with included data word: 3990	SWPSEL	01-350/16:34:29
3203	MGS	01-350/16:46:01		Set eclipse egress script address: 0158	SWSEES	01-350/16:34:30
3204	MGS	01-350/16:51:17		NOTE: Exit Planetary Atmosphere 12402		01-350/16:39:46
3205	MGS	01-350/16:51:44		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:21:49	AEMPB	01-350/16:40:13
3206	MGS	01-350/16:51:44		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-350/16:40:13
3207	MGS	01-350/16:51:44		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-350/16:40:13
3208	MGS	01-350/16:51:45		SSR 1A Data Enable	CSD1AE	01-350/16:40:14
3209	MGS	01-350/16:51:45		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-350/16:40:14
3210	MGS	01-350/16:51:45	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3211	MGS	01-350/17:01:43		NOTE: Exit Solar Eclipse 12402		01-350/16:50:12
3212	MGS	01-350/17:18:48		NOTE: Periapsis 12403 ----------		01-350/17:07:18
3213	MGS	01-350/17:26:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/17:15:11
3214	MGS	01-350/17:26:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/17:15:11
3215	MGS	01-350/17:26:43		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/17:15:12
3216	MGS	01-350/17:26:43		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/17:15:12
3217	MGS	01-350/17:48:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/17:37:12
3218	MGS	01-350/17:48:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/17:37:12
3219	MGS	01-350/18:02:23		SSR 1A Data Disable	CSD1AX	01-350/17:50:52
3220	MGS	01-350/18:02:23		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-350/17:50:52
3221	MGS	01-350/18:02:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-350/17:50:52
3222	MGS	01-350/18:02:23	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3223	MGS	01-350/18:09:21		NOTE: Start Block (MAP_RT)		01-350/17:57:50
3224	MGS	01-350/18:09:22		: 00:20:01, 01:42:35, FALSE, TRUE, FALSE, 00:01:15, 00:10:33, 01:20:32, 00:10:14	AEMINI	01-350/17:57:51
3225	MGS	01-350/18:09:22		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/17:57:51
3226	MGS	01-350/18:09:22		NOTE: Start EVP data return script		01-350/17:57:51
3227	MGS	01-350/18:09:23		: SE_2A, RTM, 01:20:31, MRC, 2001-350T18:39:42.000	AEMRTI	01-350/17:57:52
3228	MGS	01-350/18:16:06		NOTE: Enter Planetary Atmosphere 12403		01-350/18:04:35
3229	MGS	01-350/18:17:45		NOTE: Apoapsis 12403 -		01-350/18:06:14
3230	MGS	01-350/18:19:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/18:07:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3231	MGS	01-350/18:19:22		NOTE: Enter Solar Eclipse 12403		01-350/18:07:51
3232	MGS	01-350/18:23:32		NOTE: Enter Earth Occultation 12403		01-350/18:12:01
3233	MGS	01-350/18:23:32	63	NOTE: Loss Of X-Band Signal		
3234	MGS	01-350/18:24:12		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/18:12:41
3235	MGS	01-350/18:24:12		NOTE: End EVP script		01-350/18:12:42
3236	MGS	01-350/18:24:13		NOTE: End Block (MAP_PB_ODY)		01-350/18:12:43
3237	MGS	01-350/18:35:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/18:24:07
3238	MGS	01-350/18:39:23		: 01:42:35	RPAONX	01-350/18:27:52
3239	MGS	01-350/18:39:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/18:27:52
3240	MGS	01-350/18:40:38		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/18:29:07
3241	MGS	01-350/18:40:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/18:29:07
3242	MGS	01-350/18:40:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/18:29:07
3243	MGS	01-350/18:40:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/18:29:07
3244	MGS	01-350/18:40:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/18:29:07
3245	MGS	01-350/18:41:21		NOTE: Exit Earth Occultation 12403		01-350/18:29:50
3246	MGS	01-350/18:41:21	63	Acquisition Of X-Band Signal		
3247	MGS	01-350/18:41:21	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3248	MGS	01-350/18:41:21	63	NOTE: Carrier Only -- No Telemetry Modulation		
3249	MGS	01-350/18:43:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/18:32:12
3250	MGS	01-350/18:43:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/18:32:12
3251	MGS	01-350/18:43:48		Set eclipse egress script address: 019A	SWSEES	01-350/18:32:17
3252	MGS	01-350/18:49:05		NOTE: Exit Planetary Atmosphere 12403		01-350/18:37:35
3253	MGS	01-350/18:51:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/18:39:40
3254	MGS	01-350/18:51:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/18:39:40
3255	MGS	01-350/18:51:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/18:39:40
3256	MGS	01-350/18:51:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/18:39:40
3257	MGS	01-350/18:51:11	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3258	MGS	01-350/18:51:12		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/18:39:41
3259	MGS	01-350/18:51:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/18:39:41
3260	MGS	01-350/18:51:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/18:39:41
3261	MGS	01-350/18:51:12	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3262	MGS	01-350/18:51:16		NOTE: End fixed Sub-Reflector for Radio Science		01-350/18:39:45
3263	MGS	01-350/18:59:30		NOTE: Exit Solar Eclipse 12403		01-350/18:47:59
3264	MGS	01-350/19:16:34		NOTE: Periapsis 12404 ----------		01-350/19:05:03
3265	MGS	01-350/19:20:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/19:08:58
3266	MGS	01-350/19:20:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/19:08:58
3267	MGS	01-350/19:20:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/19:08:59
3268	MGS	01-350/19:20:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/19:08:59
3269	MGS	01-350/19:42:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/19:30:59
3270	MGS	01-350/19:42:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/19:30:59
3271	MGS	01-350/19:50:00	15	Begin Pre-Cal		
3272	MGS	01-350/19:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3273	MGS	01-350/19:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3274	MGS	01-350/19:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3275	MGS	01-350/19:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
3276	MGS	01-350/19:50:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
3277	MGS	01-350/19:50:00	15	Config: TGC: DEST=37		
3278	MGS	01-350/19:50:00	15	Config: TGC: BAND=X, BR=40000.000000		
3279	MGS	01-350/19:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
3280	MGS	01-350/19:50:00	15	Config: RSR		
3281	MGS	01-350/19:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
3282	MGS	01-350/19:50:00	15	Config: BVR		
3283	MGS	01-350/19:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
3284	MGS	01-350/19:50:00	15	Config: MDA: SMPL=0.1		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3285	MGS	01-350/20:06:43		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/19:55:12
3286	MGS	01-350/20:07:06		NOTE: Start EVP data return script		01-350/19:55:35
3287	MGS	01-350/20:11:43		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/20:00:12
3288	MGS	01-350/20:11:43		: 00:10:14, FALSE	RDSCII	01-350/20:00:12
3289	MGS	01-350/20:11:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/20:00:12
3290	MGS	01-350/20:11:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/20:00:12
3291	MGS	01-350/20:11:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/20:00:12
3292	MGS	01-350/20:11:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/20:00:12
3293	MGS	01-350/20:11:43	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3294	MGS	01-350/20:11:43	63	NOTE: Carrier Only -- No Telemetry Modulation		
3295	MGS	01-350/20:13:52		NOTE: Enter Planetary Atmosphere 12404		01-350/20:02:21
3296	MGS	01-350/20:15:15		NOTE: Apoapsis 12404 -		01-350/20:03:44
3297	MGS	01-350/20:17:06		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/20:05:35
3298	MGS	01-350/20:17:06		NOTE: Enter Solar Eclipse 12404		01-350/20:05:35
3299	MGS	01-350/20:21:17		NOTE: Enter Earth Occultation 12404		01-350/20:09:47
3300	MGS	01-350/20:21:17	63	NOTE: Loss Of X-Band Signal		
3301	MGS	01-350/20:21:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/20:10:26
3302	MGS	01-350/20:21:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/20:10:26
3303	MGS	01-350/20:21:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/20:10:26
3304	MGS	01-350/20:21:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/20:10:26
3305	MGS	01-350/20:21:58		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/20:10:27
3306	MGS	01-350/20:21:58		NOTE: End EVP script		01-350/20:10:27
3307	MGS	01-350/20:22:02		NOTE: End fixed Sub-Reflector for Radio Science		01-350/20:10:31
3308	MGS	01-350/20:33:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/20:21:51
3309	MGS	01-350/20:37:07		: 01:42:35	RPAONX	01-350/20:25:36
3310	MGS	01-350/20:37:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/20:25:36
3311	MGS	01-350/20:38:22		: 00:00:30, 00:10:33, FALSE	RDSCIE	01-350/20:26:51
3312	MGS	01-350/20:38:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/20:26:51
3313	MGS	01-350/20:38:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/20:26:51
3314	MGS	01-350/20:38:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/20:26:51
3315	MGS	01-350/20:38:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/20:26:51
3316	MGS	01-350/20:38:52		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/20:27:21
3317	MGS	01-350/20:39:06		NOTE: Exit Earth Occultation 12404		01-350/20:27:35
3318	MGS	01-350/20:39:06	63	Acquisition Of X-Band Signal		
3319	MGS	01-350/20:39:06	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3320	MGS	01-350/20:39:06	63	NOTE: Carrier Only -- No Telemetry Modulation		
3321	MGS	01-350/20:41:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/20:29:59
3322	MGS	01-350/20:41:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/20:29:59
3323	MGS	01-350/20:41:35		Set eclipse egress script address: 01DC	SWSEES	01-350/20:30:04
3324	MGS	01-350/20:46:52		NOTE: Exit Planetary Atmosphere 12404		01-350/20:35:21
3325	MGS	01-350/20:48:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/20:37:24
3326	MGS	01-350/20:48:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/20:37:24
3327	MGS	01-350/20:48:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/20:37:24
3328	MGS	01-350/20:48:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/20:37:24
3329	MGS	01-350/20:48:55	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3330	MGS	01-350/20:48:56		: RTM, MRC, 01:20:31, S&E_2A, FALSE, 00:10:15	AEMRT	01-350/20:37:25
3331	MGS	01-350/20:48:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-350/20:37:25
3332	MGS	01-350/20:48:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-350/20:37:25
3333	MGS	01-350/20:48:56	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3334	MGS	01-350/20:49:00		NOTE: End fixed Sub-Reflector for Radio Science		01-350/20:37:29
3335	MGS	01-350/20:57:14		NOTE: Exit Solar Eclipse 12404		01-350/20:45:43
3336	MGS	01-350/21:13:56		NOTE: Periapsis 12405 ----------		01-350/21:02:25
3337	MGS	01-350/21:18:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/21:06:42
3338	MGS	01-350/21:18:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/21:06:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3339	MGS	01-350/21:18:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/21:06:43
3340	MGS	01-350/21:18:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/21:06:43
3341	MGS	01-350/21:20:00	15	Begin Tracking		
3342	MGS	01-350/21:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3343	MGS	01-350/21:34:51	63	NOTE: Below Uplink Interlock Limit		
3344	MGS	01-350/21:40:00	63	End Tracking		
3345	MGS	01-350/21:40:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/21:28:43
3346	MGS	01-350/21:40:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/21:28:43
3347	MGS	01-350/21:50:17		NOTE: Start Block (SSRMGR)		01-350/21:38:46
3348	MGS	01-350/21:50:17		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-350/21:38:46
3349	MGS	01-350/21:50:18		SSR 1A Data Enable	CSD1AE	01-350/21:38:47
3350	MGS	01-350/21:50:18		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-350/21:38:47
3351	MGS	01-350/21:55:00	63	End Post-Cal		
3352	MGS	01-350/22:04:28		NOTE: Begin fixed Sub-Reflector for Radio Science		01-350/21:52:56
3353	MGS	01-350/22:04:45		NOTE: Start Block (MAP_PB_ODY)		01-350/21:53:14
3354	MGS	01-350/22:04:46		: 00:20:01, 01:42:36, FALSE, FALSE, FALSE, 00:01:15, 00:08:53, 01:23:53, 00:08:34	AEMINI	01-350/21:53:15
3355	MGS	01-350/22:04:46		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/21:53:15
3356	MGS	01-350/22:04:46		NOTE: Start EVP data return script		01-350/21:53:15
3357	MGS	01-350/22:04:47		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-350T22:33:25.000	AEMPBI	01-350/21:53:16
3358	MGS	01-350/22:09:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-350/21:57:56
3359	MGS	01-350/22:09:27		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9192000, DUR=00:19:09		01-350/21:57:56
3360	MGS	01-350/22:09:27		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-350/21:57:56
3361	MGS	01-350/22:09:27		: 00:10:14, FALSE	RDSCII	01-350/21:57:56
3362	MGS	01-350/22:09:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-350/21:57:56
3363	MGS	01-350/22:09:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-350/21:57:56
3364	MGS	01-350/22:09:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-350/21:57:56
3365	MGS	01-350/22:09:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-350/21:57:56
3366	MGS	01-350/22:09:27	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3367	MGS	01-350/22:09:27	15	NOTE: Carrier Only -- No Telemetry Modulation		
3368	MGS	01-350/22:11:30		NOTE: Enter Planetary Atmosphere 12405		01-350/21:59:59
3369	MGS	01-350/22:12:37		NOTE: Apoapsis 12405 -		01-350/22:01:06
3370	MGS	01-350/22:13:46		SSR 1B Data Disable	CSD1BX	01-350/22:02:15
3371	MGS	01-350/22:13:46		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-350/22:02:15
3372	MGS	01-350/22:13:47		NOTE: End Block (SSRMGR)		01-350/22:02:16
3373	MGS	01-350/22:14:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-350/22:03:15
3374	MGS	01-350/22:14:47		NOTE: Enter Solar Eclipse 12405		01-350/22:03:16
3375	MGS	01-350/22:18:54		NOTE: Enter Earth Occultation 12405		01-350/22:07:23
3376	MGS	01-350/22:18:54	15	NOTE: Loss Of X-Band Signal		
3377	MGS	01-350/22:19:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-350/22:08:10
3378	MGS	01-350/22:19:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-350/22:08:10
3379	MGS	01-350/22:19:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-350/22:08:10
3380	MGS	01-350/22:19:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-350/22:08:10
3381	MGS	01-350/22:19:42		Turn off the MOT Exciter and RPA beam	STRPAF	01-350/22:08:11
3382	MGS	01-350/22:19:43		NOTE: End EVP script		01-350/22:08:11
3383	MGS	01-350/22:19:44		NOTE: End Block (MAP_RT)		01-350/22:08:12
3384	MGS	01-350/22:19:47		NOTE: End fixed Sub-Reflector for Radio Science		01-350/22:08:15
3385	MGS	01-350/22:34:47		: 01:42:36	RPAONX	01-350/22:23:16
3386	MGS	01-350/22:34:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-350/22:23:16
3387	MGS	01-350/22:36:32		Disables autonomous command to send eclipse ingress script	SWEISX	01-350/22:25:01
3388	MGS	01-350/22:36:50		NOTE: Exit Earth Occultation 12405		01-350/22:25:19
3389	MGS	01-350/22:36:50	15	Acquisition Of X-Band Signal		
3390	MGS	01-350/22:36:50	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3391	MGS	01-350/22:39:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-350/22:27:43
3392	MGS	01-350/22:39:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-350/22:27:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3393	MGS	01-350/22:39:18		Command the PSE with included data word: 3990	SWPSEL	01-350/22:27:47
3394	MGS	01-350/22:39:19		Set eclipse egress script address: 0158	SWSEES	01-350/22:27:48
3395	MGS	01-350/22:44:33		NOTE: Exit Planetary Atmosphere 12405		01-350/22:33:02
3396	MGS	01-350/22:44:55		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:21:49	AEMPB	01-350/22:33:24
3397	MGS	01-350/22:44:55		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-350/22:33:24
3398	MGS	01-350/22:44:55		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-350/22:33:24
3399	MGS	01-350/22:44:56		SSR 1B Data Enable	CSD1BE	01-350/22:33:25
3400	MGS	01-350/22:44:56		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-350/22:33:25
3401	MGS	01-350/22:44:56	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3402	MGS	01-350/22:54:54		NOTE: Exit Solar Eclipse 12405		01-350/22:43:23
3403	MGS	01-350/23:11:23		NOTE: Periapsis 12406 ----------		01-350/22:59:52
3404	MGS	01-350/23:19:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-350/23:08:22
3405	MGS	01-350/23:19:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-350/23:08:22
3406	MGS	01-350/23:19:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-350/23:08:23
3407	MGS	01-350/23:19:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-350/23:08:23
3408	MGS	01-350/23:41:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-350/23:30:23
3409	MGS	01-350/23:41:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-350/23:30:23
3410	MGS	01-350/23:45:00	43	Begin Pre-Cal		
3411	MGS	01-350/23:45:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3412	MGS	01-350/23:45:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3413	MGS	01-350/23:45:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3414	MGS	01-350/23:45:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
3415	MGS	01-350/23:45:00	43	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
3416	MGS	01-350/23:45:00	43	Config: TGC: DEST=37		
3417	MGS	01-350/23:45:00	43	Config: TGC: BAND=X, BR=40000.000000		
3418	MGS	01-350/23:45:00	43	Config: FSS: CH=2, PRI_FL=10000		
3419	MGS	01-350/23:45:00	43	Config: RSR		
3420	MGS	01-350/23:45:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
3421	MGS	01-350/23:45:00	43	Config: BVR		
3422	MGS	01-350/23:45:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
3423	MGS	01-350/23:45:00	43	Config: MDA: SMPL=0.1		
3424	MGS	01-350/23:55:35		SSR 1B Data Disable	CSD1BX	01-350/23:44:03
3425	MGS	01-350/23:55:35		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-350/23:44:03
3426	MGS	01-350/23:55:35		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-350/23:44:03
3427	MGS	01-350/23:55:35	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3428	MGS	01-351/00:00:00		Light Time: OWLT = 11:31, RTLT = 23:02		
3429	MGS	01-351/00:02:28		NOTE: Start Block (MAP_RT)		01-350/23:50:56
3430	MGS	01-351/00:02:29		: 00:20:18, 01:42:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:23, 01:20:17, 00:10:04	AEMINI	01-350/23:50:57
3431	MGS	01-351/00:02:29		Enable sending eclipse ingress script when array power disappears	SWEISE	01-350/23:50:57
3432	MGS	01-351/00:02:29		NOTE: Start EVP data return script		01-350/23:50:57
3433	MGS	01-351/00:02:30		: SE_2A, RTM, 01:20:16, MRC, 2001-351T00:32:55.000	AEMRTI	01-350/23:50:58
3434	MGS	01-351/00:09:10		NOTE: Enter Planetary Atmosphere 12406		01-350/23:57:39
3435	MGS	01-351/00:10:00	45	Begin Pre-Cal		
3436	MGS	01-351/00:10:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3437	MGS	01-351/00:10:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3438	MGS	01-351/00:10:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3439	MGS	01-351/00:10:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
3440	MGS	01-351/00:10:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
3441	MGS	01-351/00:10:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
3442	MGS	01-351/00:10:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
3443	MGS	01-351/00:10:00	45	Config: TGC: DEST=37		
3444	MGS	01-351/00:10:00	45	Config: TGC: BAND=X, BR=40000.000000		
3445	MGS	01-351/00:10:00	45	Config: FSS: CH=2, PRI_FL=10000		
3446	MGS	01-351/00:10:00	45	Config: RSR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3447	MGS	01-351/00:10:00	45	Config: TXL		
3448	MGS	01-351/00:10:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
3449	MGS	01-351/00:10:00	45	Config: BVR		
3450	MGS	01-351/00:10:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
3451	MGS	01-351/00:10:00	45	Config: MDA: SMPL=0.1		
3452	MGS	01-351/00:10:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
3453	MGS	01-351/00:10:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
3454	MGS	01-351/00:10:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
3455	MGS	01-351/00:10:23		NOTE: Apoapsis 12406 -		01-350/23:58:52
3456	MGS	01-351/00:12:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/00:00:57
3457	MGS	01-351/00:12:29		NOTE: Enter Solar Eclipse 12406		01-351/00:00:58
3458	MGS	01-351/00:16:32		NOTE: Enter Earth Occultation 12406		01-351/00:05:01
3459	MGS	01-351/00:16:32	15	NOTE: Loss Of X-Band Signal		
3460	MGS	01-351/00:17:24		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/00:05:52
3461	MGS	01-351/00:17:24		NOTE: End EVP script		01-351/00:05:53
3462	MGS	01-351/00:17:25		NOTE: End Block (MAP_PB_ODY)		01-351/00:05:54
3463	MGS	01-351/00:29:02		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/00:17:31
3464	MGS	01-351/00:32:47		: 01:42:00	RPAONX	01-351/00:21:15
3465	MGS	01-351/00:32:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/00:21:15
3466	MGS	01-351/00:34:02		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/00:22:30
3467	MGS	01-351/00:34:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/00:22:30
3468	MGS	01-351/00:34:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/00:22:30
3469	MGS	01-351/00:34:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/00:22:30
3470	MGS	01-351/00:34:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/00:22:30
3471	MGS	01-351/00:34:34		NOTE: Exit Earth Occultation 12406		01-351/00:23:03
3472	MGS	01-351/00:34:34	15	Acquisition Of X-Band Signal		
3473	MGS	01-351/00:34:34	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3474	MGS	01-351/00:34:34	15	NOTE: Carrier Only -- No Telemetry Modulation		
3475	MGS	01-351/00:36:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/00:25:23
3476	MGS	01-351/00:36:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/00:25:23
3477	MGS	01-351/00:37:00		Set eclipse egress script address: 019A	SWSEES	01-351/00:25:28
3478	MGS	01-351/00:42:15		NOTE: Exit Planetary Atmosphere 12406		01-351/00:30:43
3479	MGS	01-351/00:44:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/00:32:53
3480	MGS	01-351/00:44:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/00:32:53
3481	MGS	01-351/00:44:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/00:32:53
3482	MGS	01-351/00:44:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/00:32:53
3483	MGS	01-351/00:44:25	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3484	MGS	01-351/00:44:26		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/00:32:54
3485	MGS	01-351/00:44:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/00:32:54
3486	MGS	01-351/00:44:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/00:32:54
3487	MGS	01-351/00:44:26	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3488	MGS	01-351/00:44:30		NOTE: End fixed Sub-Reflector for Radio Science		01-351/00:32:59
3489	MGS	01-351/00:52:36		NOTE: Exit Solar Eclipse 12406		01-351/00:41:05
3490	MGS	01-351/01:09:09		NOTE: Periapsis 12407 ----------		01-351/00:57:37
3491	MGS	01-351/01:10:00	45	Begin Tracking		
3492	MGS	01-351/01:10:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3493	MGS	01-351/01:13:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/01:02:04
3494	MGS	01-351/01:13:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/01:02:04
3495	MGS	01-351/01:13:37		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/01:02:05
3496	MGS	01-351/01:13:37		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/01:02:05
3497	MGS	01-351/01:15:00	43	Begin Tracking		
3498	MGS	01-351/01:15:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3499	MGS	01-351/01:15:48	45	NOTE: Above Uplink Interlock Limit		
3500	MGS	01-351/01:20:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3501	MGS	01-351/01:22:00	45	Range Modulation On: SUP=3.0dB		
3502	MGS	01-351/01:23:00	45	Begin Ranging Acquisition		
3503	MGS	01-351/01:32:30	45	NOTE: Transmitter Off in 15 minutes		
3504	MGS	01-351/01:35:00	15	End Tracking		
3505	MGS	01-351/01:35:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/01:24:05
3506	MGS	01-351/01:35:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/01:24:05
3507	MGS	01-351/01:43:03	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3508	MGS	01-351/01:43:03	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3509	MGS	01-351/01:45:30	45	Range Modulation Off		
3510	MGS	01-351/01:47:30	45	Transmitter Off		
3511	MGS	01-351/01:50:00	15	End Post-Cal		
3512	MGS	01-351/01:59:42		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/01:48:11
3513	MGS	01-351/02:00:15		NOTE: Start EVP data return script		01-351/01:48:43
3514	MGS	01-351/02:04:42		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/01:53:10
3515	MGS	01-351/02:04:42		: 00:10:04, FALSE	RDSCII	01-351/01:53:10
3516	MGS	01-351/02:04:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/01:53:10
3517	MGS	01-351/02:04:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/01:53:10
3518	MGS	01-351/02:04:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/01:53:10
3519	MGS	01-351/02:04:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/01:53:10
3520	MGS	01-351/02:04:42	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3521	MGS	01-351/02:04:42	43	NOTE: Carrier Only -- No Telemetry Modulation		
3522	MGS	01-351/02:04:42	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3523	MGS	01-351/02:04:42	45	NOTE: Carrier Only -- No Telemetry Modulation		
3524	MGS	01-351/02:06:57		NOTE: Enter Planetary Atmosphere 12407		01-351/01:55:26
3525	MGS	01-351/02:08:14		NOTE: Apoapsis 12407 -		01-351/01:56:43
3526	MGS	01-351/02:10:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/01:58:43
3527	MGS	01-351/02:10:16		NOTE: Enter Solar Eclipse 12407		01-351/01:58:44
3528	MGS	01-351/02:13:02	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
3529	MGS	01-351/02:14:18		NOTE: Enter Earth Occultation 12407		01-351/02:02:46
3530	MGS	01-351/02:14:18	43	NOTE: Loss Of X-Band Signal		
3531	MGS	01-351/02:14:18	45	NOTE: Loss Of X-Band Signal		
3532	MGS	01-351/02:14:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/02:03:14
3533	MGS	01-351/02:14:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/02:03:14
3534	MGS	01-351/02:14:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/02:03:14
3535	MGS	01-351/02:14:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/02:03:14
3536	MGS	01-351/02:14:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/02:03:15
3537	MGS	01-351/02:14:47		NOTE: End EVP script		01-351/02:03:16
3538	MGS	01-351/02:14:51		NOTE: End fixed Sub-Reflector for Radio Science		01-351/02:03:20
3539	MGS	01-351/02:15:03	45	Range Modulation On: SUP=3.0dB		
3540	MGS	01-351/02:16:03	45	Begin Ranging Acquisition		
3541	MGS	01-351/02:26:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/02:15:17
3542	MGS	01-351/02:30:33		: 01:42:00	RPAONX	01-351/02:19:01
3543	MGS	01-351/02:30:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/02:19:01
3544	MGS	01-351/02:31:48		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/02:20:16
3545	MGS	01-351/02:31:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/02:20:16
3546	MGS	01-351/02:31:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/02:20:16
3547	MGS	01-351/02:31:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/02:20:16
3548	MGS	01-351/02:31:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/02:20:16
3549	MGS	01-351/02:32:18		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/02:20:46
3550	MGS	01-351/02:32:21		NOTE: Exit Earth Occultation 12407		01-351/02:20:49
3551	MGS	01-351/02:32:21	43	Acquisition Of X-Band Signal		
3552	MGS	01-351/02:32:21	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3553	MGS	01-351/02:32:21	43	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3554	MGS	01-351/02:32:21	45	Acquisition Of X-Band Signal		
3555	MGS	01-351/02:32:21	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3556	MGS	01-351/02:32:21	45	NOTE: Carrier Only -- No Telemetry Modulation		
3557	MGS	01-351/02:34:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/02:23:05
3558	MGS	01-351/02:34:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/02:23:05
3559	MGS	01-351/02:34:42		Set eclipse egress script address: 01DC	SWSEES	01-351/02:23:10
3560	MGS	01-351/02:40:01		NOTE: Exit Planetary Atmosphere 12407		01-351/02:28:29
3561	MGS	01-351/02:42:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/02:30:39
3562	MGS	01-351/02:42:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/02:30:39
3563	MGS	01-351/02:42:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/02:30:39
3564	MGS	01-351/02:42:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/02:30:39
3565	MGS	01-351/02:42:11	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3566	MGS	01-351/02:42:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3567	MGS	01-351/02:42:12		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/02:30:40
3568	MGS	01-351/02:42:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/02:30:40
3569	MGS	01-351/02:42:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/02:30:40
3570	MGS	01-351/02:42:12	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3571	MGS	01-351/02:42:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3572	MGS	01-351/02:42:16		NOTE: End fixed Sub-Reflector for Radio Science		01-351/02:30:45
3573	MGS	01-351/02:50:23		NOTE: Exit Solar Eclipse 12407		01-351/02:38:52
3574	MGS	01-351/03:07:02		NOTE: Periapsis 12408 ----------		01-351/02:55:30
3575	MGS	01-351/03:11:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/02:59:50
3576	MGS	01-351/03:11:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/02:59:50
3577	MGS	01-351/03:11:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/02:59:51
3578	MGS	01-351/03:11:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/02:59:51
3579	MGS	01-351/03:30:16	45	NOTE: Transmitter Off in 15 minutes		
3580	MGS	01-351/03:33:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/03:21:51
3581	MGS	01-351/03:33:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/03:21:51
3582	MGS	01-351/03:43:17	45	Range Modulation Off		
3583	MGS	01-351/03:43:30		NOTE: Start Block (SSRMGR)		01-351/03:31:58
3584	MGS	01-351/03:43:30		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-351/03:31:58
3585	MGS	01-351/03:43:31		SSR 1B Data Enable	CSD1BE	01-351/03:31:59
3586	MGS	01-351/03:43:31		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-351/03:31:59
3587	MGS	01-351/03:45:16	45	Transmitter Off		
3588	MGS	01-351/03:57:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/03:45:57
3589	MGS	01-351/03:58:02		NOTE: Start Block (MAP_PB_ODY)		01-351/03:46:30
3590	MGS	01-351/03:58:03		: 00:20:18, 01:42:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:43, 01:23:38, 00:08:24	AEMINI	01-351/03:46:31
3591	MGS	01-351/03:58:03		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/03:46:31
3592	MGS	01-351/03:58:03		NOTE: Start EVP data return script		01-351/03:46:31
3593	MGS	01-351/03:58:04		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-351T04:26:47.000	AEMPBI	01-351/03:46:32
3594	MGS	01-351/04:02:28		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/03:50:56
3595	MGS	01-351/04:02:28		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9096000, DUR=00:18:57		01-351/03:50:56
3596	MGS	01-351/04:02:28		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-351/03:50:56
3597	MGS	01-351/04:02:28		: 00:10:04, FALSE	RDSCII	01-351/03:50:56
3598	MGS	01-351/04:02:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/03:50:56
3599	MGS	01-351/04:02:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/03:50:56
3600	MGS	01-351/04:02:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/03:50:56
3601	MGS	01-351/04:02:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/03:50:56
3602	MGS	01-351/04:02:28	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3603	MGS	01-351/04:02:28	43	NOTE: Carrier Only -- No Telemetry Modulation		
3604	MGS	01-351/04:02:28	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3605	MGS	01-351/04:02:28	45	NOTE: Carrier Only -- No Telemetry Modulation		
3606	MGS	01-351/04:04:45		NOTE: Enter Planetary Atmosphere 12408		01-351/03:53:13
3607	MGS	01-351/04:05:55		NOTE: Apoapsis 12408 -		01-351/03:54:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3608	MGS	01-351/04:07:02		SSR 1A Data Disable	CSD1AX	01-351/03:55:30
3609	MGS	01-351/04:07:02		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-351/03:55:30
3610	MGS	01-351/04:07:03		NOTE: End Block (SSRMGR)		01-351/03:55:31
3611	MGS	01-351/04:08:03		NOTE: Enter Solar Eclipse 12408		01-351/03:56:31
3612	MGS	01-351/04:08:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/03:56:31
3613	MGS	01-351/04:10:50	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
3614	MGS	01-351/04:12:05		NOTE: Enter Earth Occultation 12408		01-351/04:00:33
3615	MGS	01-351/04:12:05	43	NOTE: Loss Of X-Band Signal		
3616	MGS	01-351/04:12:05	45	NOTE: Loss Of X-Band Signal		
3617	MGS	01-351/04:12:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/04:01:00
3618	MGS	01-351/04:12:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/04:01:00
3619	MGS	01-351/04:12:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/04:01:00
3620	MGS	01-351/04:12:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/04:01:00
3621	MGS	01-351/04:12:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/04:01:01
3622	MGS	01-351/04:12:34		NOTE: End EVP script		01-351/04:01:02
3623	MGS	01-351/04:12:35		NOTE: End Block (MAP_RT)		01-351/04:01:03
3624	MGS	01-351/04:12:38		NOTE: End fixed Sub-Reflector for Radio Science		01-351/04:01:06
3625	MGS	01-351/04:12:50	45	Range Modulation On: SUP=3.0dB		
3626	MGS	01-351/04:13:50	45	Begin Ranging Acquisition		
3627	MGS	01-351/04:28:21		: 01:42:01	RPAONX	01-351/04:16:49
3628	MGS	01-351/04:28:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/04:16:49
3629	MGS	01-351/04:30:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/04:18:34
3630	MGS	01-351/04:30:09		NOTE: Exit Earth Occultation 12408		01-351/04:18:37
3631	MGS	01-351/04:30:09	43	Acquisition Of X-Band Signal		
3632	MGS	01-351/04:30:09	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3633	MGS	01-351/04:30:09	45	Acquisition Of X-Band Signal		
3634	MGS	01-351/04:30:09	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3635	MGS	01-351/04:32:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/04:20:51
3636	MGS	01-351/04:32:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/04:20:51
3637	MGS	01-351/04:32:27		Command the PSE with included data word: 3990	SWPSEL	01-351/04:20:55
3638	MGS	01-351/04:32:28		Set eclipse egress script address: 0158	SWSEES	01-351/04:20:56
3639	MGS	01-351/04:33:54	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3640	MGS	01-351/04:33:54	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3641	MGS	01-351/04:37:49		NOTE: Exit Planetary Atmosphere 12408		01-351/04:26:17
3642	MGS	01-351/04:38:19		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:21:24	AEMPB	01-351/04:26:47
3643	MGS	01-351/04:38:19		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-351/04:26:47
3644	MGS	01-351/04:38:19		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-351/04:26:47
3645	MGS	01-351/04:38:20		SSR 1A Data Enable	CSD1AE	01-351/04:26:48
3646	MGS	01-351/04:38:20		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-351/04:26:48
3647	MGS	01-351/04:38:20	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3648	MGS	01-351/04:38:20	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3649	MGS	01-351/04:48:11		NOTE: Exit Solar Eclipse 12408		01-351/04:36:39
3650	MGS	01-351/05:04:45		NOTE: Periapsis 12409 ----------		01-351/04:53:13
3651	MGS	01-351/05:13:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/05:01:38
3652	MGS	01-351/05:13:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/05:01:38
3653	MGS	01-351/05:13:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/05:01:39
3654	MGS	01-351/05:13:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/05:01:39
3655	MGS	01-351/05:28:00	45	NOTE: Transmitter Off in 15 minutes		
3656	MGS	01-351/05:35:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/05:23:39
3657	MGS	01-351/05:35:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/05:23:39
3658	MGS	01-351/05:41:00	45	Range Modulation Off		
3659	MGS	01-351/05:43:00	45	Transmitter Off		
3660	MGS	01-351/05:48:58		SSR 1A Data Disable	CSD1AX	01-351/05:37:26
3661	MGS	01-351/05:48:58		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-351/05:37:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3662	MGS	01-351/05:48:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-351/05:37:26
3663	MGS	01-351/05:48:58	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3664	MGS	01-351/05:48:58	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3665	MGS	01-351/05:55:48		NOTE: Start Block (MAP_RT)		01-351/05:44:15
3666	MGS	01-351/05:55:49		: 00:20:18, 01:42:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:23, 01:20:17, 00:10:04	AEMINI	01-351/05:44:16
3667	MGS	01-351/05:55:49		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/05:44:16
3668	MGS	01-351/05:55:49		NOTE: Start EVP data return script		01-351/05:44:16
3669	MGS	01-351/05:55:50		: SE_2A, RTM, 01:20:16, MRC, 2001-351T06:26:14.000	AEMRTI	01-351/05:44:17
3670	MGS	01-351/06:02:30		NOTE: Enter Planetary Atmosphere 12409		01-351/05:50:57
3671	MGS	01-351/06:03:24		NOTE: Apoapsis 12409 -		01-351/05:51:51
3672	MGS	01-351/06:05:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/05:54:16
3673	MGS	01-351/06:05:49		NOTE: Enter Solar Eclipse 12409		01-351/05:54:17
3674	MGS	01-351/06:06:04	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3675	MGS	01-351/06:06:04	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3676	MGS	01-351/06:08:38	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
3677	MGS	01-351/06:09:49		NOTE: Enter Earth Occultation 12409		01-351/05:58:17
3678	MGS	01-351/06:09:49	43	NOTE: Loss Of X-Band Signal		
3679	MGS	01-351/06:09:49	45	NOTE: Loss Of X-Band Signal		
3680	MGS	01-351/06:10:22		NOTE: End EVP script		01-351/05:58:50
3681	MGS	01-351/06:10:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/05:58:50
3682	MGS	01-351/06:10:23		NOTE: End Block (MAP_PB_ODY)		01-351/05:58:51
3683	MGS	01-351/06:10:38	45	Range Modulation On: SUP=3.0dB		
3684	MGS	01-351/06:11:38	45	Begin Ranging Acquisition		
3685	MGS	01-351/06:22:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/06:10:50
3686	MGS	01-351/06:26:07		: 01:42:00	RPAONX	01-351/06:14:34
3687	MGS	01-351/06:26:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/06:14:34
3688	MGS	01-351/06:27:22		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/06:15:49
3689	MGS	01-351/06:27:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/06:15:49
3690	MGS	01-351/06:27:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/06:15:49
3691	MGS	01-351/06:27:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/06:15:49
3692	MGS	01-351/06:27:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/06:15:49
3693	MGS	01-351/06:27:57		NOTE: Exit Earth Occultation 12409		01-351/06:16:25
3694	MGS	01-351/06:27:57	43	Acquisition Of X-Band Signal		
3695	MGS	01-351/06:27:57	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3696	MGS	01-351/06:27:57	43	NOTE: Carrier Only -- No Telemetry Modulation		
3697	MGS	01-351/06:27:57	45	Acquisition Of X-Band Signal		
3698	MGS	01-351/06:27:57	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3699	MGS	01-351/06:27:57	45	NOTE: Carrier Only -- No Telemetry Modulation		
3700	MGS	01-351/06:30:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/06:18:39
3701	MGS	01-351/06:30:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/06:18:39
3702	MGS	01-351/06:30:17		Set eclipse egress script address: 019A	SWSEES	01-351/06:18:44
3703	MGS	01-351/06:35:36		NOTE: Exit Planetary Atmosphere 12409		01-351/06:24:04
3704	MGS	01-351/06:37:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/06:26:12
3705	MGS	01-351/06:37:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/06:26:12
3706	MGS	01-351/06:37:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/06:26:12
3707	MGS	01-351/06:37:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/06:26:12
3708	MGS	01-351/06:37:45	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3709	MGS	01-351/06:37:45	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3710	MGS	01-351/06:37:46		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/06:26:13
3711	MGS	01-351/06:37:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/06:26:13
3712	MGS	01-351/06:37:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/06:26:13
3713	MGS	01-351/06:37:46	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3714	MGS	01-351/06:37:46	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3715	MGS	01-351/06:37:50		NOTE: End fixed Sub-Reflector for Radio Science		01-351/06:26:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3716	MGS	01-351/06:45:57		NOTE: Exit Solar Eclipse 12409		01-351/06:34:25
3717	MGS	01-351/07:02:31		NOTE: Periapsis 12410 ----------		01-351/06:50:58
3718	MGS	01-351/07:06:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/06:55:23
3719	MGS	01-351/07:06:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/06:55:23
3720	MGS	01-351/07:06:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/06:55:24
3721	MGS	01-351/07:06:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/06:55:24
3722	MGS	01-351/07:25:41	45	NOTE: Transmitter Off in 15 minutes		
3723	MGS	01-351/07:28:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/07:17:24
3724	MGS	01-351/07:28:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/07:17:24
3725	MGS	01-351/07:38:42	45	Range Modulation Off		
3726	MGS	01-351/07:40:41	45	Transmitter Off		
3727	MGS	01-351/07:53:02		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/07:41:30
3728	MGS	01-351/07:53:33		NOTE: Start EVP data return script		01-351/07:42:00
3729	MGS	01-351/07:58:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/07:46:29
3730	MGS	01-351/07:58:02		: 00:10:04, FALSE	RDSCII	01-351/07:46:29
3731	MGS	01-351/07:58:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/07:46:29
3732	MGS	01-351/07:58:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/07:46:29
3733	MGS	01-351/07:58:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/07:46:29
3734	MGS	01-351/07:58:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/07:46:29
3735	MGS	01-351/07:58:02	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3736	MGS	01-351/07:58:02	43	NOTE: Carrier Only -- No Telemetry Modulation		
3737	MGS	01-351/07:58:02	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3738	MGS	01-351/07:58:02	45	NOTE: Carrier Only -- No Telemetry Modulation		
3739	MGS	01-351/08:00:12		NOTE: Enter Planetary Atmosphere 12410		01-351/07:48:39
3740	MGS	01-351/08:01:05		NOTE: Apoapsis 12410 -		01-351/07:49:32
3741	MGS	01-351/08:03:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/07:52:00
3742	MGS	01-351/08:03:33		NOTE: Enter Solar Eclipse 12410		01-351/07:52:00
3743	MGS	01-351/08:06:23	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
3744	MGS	01-351/08:07:31		NOTE: Enter Earth Occultation 12410		01-351/07:55:59
3745	MGS	01-351/08:07:31	43	NOTE: Loss Of X-Band Signal		
3746	MGS	01-351/08:07:31	45	NOTE: Loss Of X-Band Signal		
3747	MGS	01-351/08:08:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/07:56:33
3748	MGS	01-351/08:08:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/07:56:33
3749	MGS	01-351/08:08:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/07:56:33
3750	MGS	01-351/08:08:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/07:56:33
3751	MGS	01-351/08:08:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/07:56:34
3752	MGS	01-351/08:08:07		NOTE: End EVP script		01-351/07:56:35
3753	MGS	01-351/08:08:11		NOTE: End fixed Sub-Reflector for Radio Science		01-351/07:56:39
3754	MGS	01-351/08:08:24	45	Range Modulation On: SUP=3.0dB		
3755	MGS	01-351/08:09:24	45	Begin Ranging Acquisition		
3756	MGS	01-351/08:20:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/08:08:34
3757	MGS	01-351/08:23:51		: 01:42:00	RPAONX	01-351/08:12:18
3758	MGS	01-351/08:23:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/08:12:18
3759	MGS	01-351/08:25:06		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/08:13:33
3760	MGS	01-351/08:25:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/08:13:33
3761	MGS	01-351/08:25:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/08:13:33
3762	MGS	01-351/08:25:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/08:13:33
3763	MGS	01-351/08:25:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/08:13:33
3764	MGS	01-351/08:25:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/08:14:03
3765	MGS	01-351/08:25:43		NOTE: Exit Earth Occultation 12410		01-351/08:14:11
3766	MGS	01-351/08:25:43	43	Acquisition Of X-Band Signal		
3767	MGS	01-351/08:25:43	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3768	MGS	01-351/08:25:43	43	NOTE: Carrier Only -- No Telemetry Modulation		
3769	MGS	01-351/08:25:43	45	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3770	MGS	01-351/08:25:43	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3771	MGS	01-351/08:25:43	45	NOTE: Carrier Only -- No Telemetry Modulation		
3772	MGS	01-351/08:27:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/08:16:24
3773	MGS	01-351/08:27:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/08:16:24
3774	MGS	01-351/08:28:02		Set eclipse egress script address: 01DC	SWSEES	01-351/08:16:29
3775	MGS	01-351/08:33:22		NOTE: Exit Planetary Atmosphere 12410		01-351/08:21:49
3776	MGS	01-351/08:35:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/08:23:56
3777	MGS	01-351/08:35:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/08:23:56
3778	MGS	01-351/08:35:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/08:23:56
3779	MGS	01-351/08:35:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/08:23:56
3780	MGS	01-351/08:35:29	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3781	MGS	01-351/08:35:29	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3782	MGS	01-351/08:35:30		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/08:23:57
3783	MGS	01-351/08:35:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/08:23:57
3784	MGS	01-351/08:35:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/08:23:57
3785	MGS	01-351/08:35:30	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3786	MGS	01-351/08:35:30	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3787	MGS	01-351/08:35:34		NOTE: End fixed Sub-Reflector for Radio Science		01-351/08:24:02
3788	MGS	01-351/08:43:41		NOTE: Exit Solar Eclipse 12410		01-351/08:32:08
3789	MGS	01-351/09:00:15		NOTE: Periapsis 12411 ----------		01-351/08:48:42
3790	MGS	01-351/09:04:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/08:53:07
3791	MGS	01-351/09:04:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/08:53:07
3792	MGS	01-351/09:04:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/08:53:08
3793	MGS	01-351/09:04:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/08:53:08
3794	MGS	01-351/09:23:23	45	NOTE: Transmitter Off in 15 minutes		
3795	MGS	01-351/09:26:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/09:15:08
3796	MGS	01-351/09:26:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/09:15:08
3797	MGS	01-351/09:36:23	45	Range Modulation Off		
3798	MGS	01-351/09:36:43		NOTE: Start Block (SSRMGR)		01-351/09:25:10
3799	MGS	01-351/09:36:43		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-351/09:25:10
3800	MGS	01-351/09:36:44		SSR 1A Data Enable	CSD1AE	01-351/09:25:11
3801	MGS	01-351/09:36:44		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-351/09:25:11
3802	MGS	01-351/09:38:23	45	Transmitter Off		
3803	MGS	01-351/09:50:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/09:39:14
3804	MGS	01-351/09:51:14		NOTE: Start Block (MAP_PB_ODY)		01-351/09:39:41
3805	MGS	01-351/09:51:15		: 00:20:18, 01:42:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:43, 01:23:38, 00:08:24	AEMINI	01-351/09:39:42
3806	MGS	01-351/09:51:15		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/09:39:42
3807	MGS	01-351/09:51:15		NOTE: Start EVP data return script		01-351/09:39:42
3808	MGS	01-351/09:51:16		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-351T10:19:59.000	AEMPBI	01-351/09:39:43
3809	MGS	01-351/09:55:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/09:44:13
3810	MGS	01-351/09:55:46		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9136000, DUR=00:19:02		01-351/09:44:13
3811	MGS	01-351/09:55:46		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-351/09:44:13
3812	MGS	01-351/09:55:46		: 00:10:04, FALSE	RDSCII	01-351/09:44:13
3813	MGS	01-351/09:55:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/09:44:13
3814	MGS	01-351/09:55:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/09:44:13
3815	MGS	01-351/09:55:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/09:44:13
3816	MGS	01-351/09:55:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/09:44:13
3817	MGS	01-351/09:55:46	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3818	MGS	01-351/09:55:46	43	NOTE: Carrier Only -- No Telemetry Modulation		
3819	MGS	01-351/09:55:46	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3820	MGS	01-351/09:55:46	45	NOTE: Carrier Only -- No Telemetry Modulation		
3821	MGS	01-351/09:57:54		NOTE: Enter Planetary Atmosphere 12411		01-351/09:46:22
3822	MGS	01-351/09:58:58		NOTE: Apoapsis 12411 -		01-351/09:47:25
3823	MGS	01-351/10:00:15		SSR 1B Data Disable	CSD1BX	01-351/09:48:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3824	MGS	01-351/10:00:15		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-351/09:48:42
3825	MGS	01-351/10:00:16		NOTE: End Block (SSRMGR)		01-351/09:48:43
3826	MGS	01-351/10:01:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/09:49:42
3827	MGS	01-351/10:01:15		NOTE: Enter Solar Eclipse 12411		01-351/09:49:42
3828	MGS	01-351/10:04:06	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
3829	MGS	01-351/10:05:14		NOTE: Enter Earth Occultation 12411		01-351/09:53:41
3830	MGS	01-351/10:05:14	43	NOTE: Loss Of X-Band Signal		
3831	MGS	01-351/10:05:14	45	NOTE: Loss Of X-Band Signal		
3832	MGS	01-351/10:05:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/09:54:17
3833	MGS	01-351/10:05:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/09:54:17
3834	MGS	01-351/10:05:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/09:54:17
3835	MGS	01-351/10:05:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/09:54:17
3836	MGS	01-351/10:05:51		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/09:54:18
3837	MGS	01-351/10:05:52		NOTE: End EVP script		01-351/09:54:19
3838	MGS	01-351/10:05:53		NOTE: End Block (MAP_RT)		01-351/09:54:20
3839	MGS	01-351/10:05:56		NOTE: End fixed Sub-Reflector for Radio Science		01-351/09:54:23
3840	MGS	01-351/10:06:06	45	Range Modulation On: SUP=3.0dB		
3841	MGS	01-351/10:07:06	45	Begin Ranging Acquisition		
3842	MGS	01-351/10:21:33		: 01:42:01	RPAONX	01-351/10:10:00
3843	MGS	01-351/10:21:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/10:10:00
3844	MGS	01-351/10:23:18		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/10:11:45
3845	MGS	01-351/10:23:26		NOTE: Exit Earth Occultation 12411		01-351/10:11:53
3846	MGS	01-351/10:23:26	43	Acquisition Of X-Band Signal		
3847	MGS	01-351/10:23:26	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3848	MGS	01-351/10:23:26	45	Acquisition Of X-Band Signal		
3849	MGS	01-351/10:23:26	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3850	MGS	01-351/10:25:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/10:14:08
3851	MGS	01-351/10:25:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/10:14:08
3852	MGS	01-351/10:25:45		Command the PSE with included data word: 3990	SWPSEL	01-351/10:14:12
3853	MGS	01-351/10:25:46		Set eclipse egress script address: 0158	SWSEES	01-351/10:14:13
3854	MGS	01-351/10:27:12	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3855	MGS	01-351/10:27:12	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3856	MGS	01-351/10:31:05		NOTE: Exit Planetary Atmosphere 12411		01-351/10:19:32
3857	MGS	01-351/10:31:31		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:21:24	AEMPB	01-351/10:19:58
3858	MGS	01-351/10:31:31		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-351/10:19:58
3859	MGS	01-351/10:31:31		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-351/10:19:58
3860	MGS	01-351/10:31:32		SSR 1B Data Enable	CSD1BE	01-351/10:19:59
3861	MGS	01-351/10:31:32		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-351/10:19:59
3862	MGS	01-351/10:31:32	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3863	MGS	01-351/10:31:32	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3864	MGS	01-351/10:41:23		NOTE: Exit Solar Eclipse 12411		01-351/10:29:50
3865	MGS	01-351/10:55:00	63	Begin Pre-Cal		
3866	MGS	01-351/10:55:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3867	MGS	01-351/10:55:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
3868	MGS	01-351/10:55:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3869	MGS	01-351/10:55:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
3870	MGS	01-351/10:55:00	63	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=OFF, MI=0.0		
3871	MGS	01-351/10:55:00	63	Config: TGC: DEST=37		
3872	MGS	01-351/10:55:00	63	Config: TGC: BAND=X, BR=8000.000000		
3873	MGS	01-351/10:55:00	63	Config: FSS: CH=2, PRI_FL=10000		
3874	MGS	01-351/10:55:00	63	Config: RSR		
3875	MGS	01-351/10:55:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
3876	MGS	01-351/10:55:00	63	Config: BVR		
3877	MGS	01-351/10:55:00	63	Config: Doppler Extractor: BIAS=+1MHZ		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3878	MGS	01-351/10:55:00	63	Config: MDA: SMPL=0.1		
3879	MGS	01-351/10:57:48		NOTE: Periapsis 12412 ----------		01-351/10:46:14
3880	MGS	01-351/11:06:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/10:54:49
3881	MGS	01-351/11:06:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/10:54:49
3882	MGS	01-351/11:06:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/10:54:50
3883	MGS	01-351/11:06:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/10:54:50
3884	MGS	01-351/11:21:04	45	NOTE: Transmitter Off in 15 minutes		
3885	MGS	01-351/11:28:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/11:16:50
3886	MGS	01-351/11:28:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/11:16:50
3887	MGS	01-351/11:34:05	45	Range Modulation Off		
3888	MGS	01-351/11:36:04	45	Transmitter Off		
3889	MGS	01-351/11:42:10		SSR 1B Data Disable	CSD1BX	01-351/11:30:37
3890	MGS	01-351/11:42:10		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-351/11:30:37
3891	MGS	01-351/11:42:10		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-351/11:30:37
3892	MGS	01-351/11:42:10	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3893	MGS	01-351/11:42:10	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3894	MGS	01-351/11:48:56		NOTE: Start Block (MAP_RT)		01-351/11:37:23
3895	MGS	01-351/11:48:57		: 00:20:18, 01:42:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:23, 01:20:17, 00:10:04	AEMINI	01-351/11:37:24
3896	MGS	01-351/11:48:57		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/11:37:24
3897	MGS	01-351/11:48:57		NOTE: Start EVP data return script		01-351/11:37:24
3898	MGS	01-351/11:48:58		: SE_2A, RTM, 01:20:16, MRC, 2001-351T12:19:22.000	AEMRTI	01-351/11:37:25
3899	MGS	01-351/11:55:38		NOTE: Enter Planetary Atmosphere 12412		01-351/11:44:04
3900	MGS	01-351/11:56:27		NOTE: Apoapsis 12412 -		01-351/11:44:54
3901	MGS	01-351/11:58:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/11:47:24
3902	MGS	01-351/11:58:58		NOTE: Enter Solar Eclipse 12412		01-351/11:47:24
3903	MGS	01-351/11:59:11	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3904	MGS	01-351/11:59:11	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3905	MGS	01-351/12:02:56		NOTE: Enter Earth Occultation 12412		01-351/11:51:22
3906	MGS	01-351/12:02:56	43	NOTE: Loss Of X-Band Signal		
3907	MGS	01-351/12:02:56	45	NOTE: Loss Of X-Band Signal		
3908	MGS	01-351/12:03:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/11:52:01
3909	MGS	01-351/12:03:34		NOTE: End EVP script		01-351/11:52:01
3910	MGS	01-351/12:03:35		NOTE: End Block (MAP_PB_ODY)		01-351/11:52:02
3911	MGS	01-351/12:11:32		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-351/11:59:59
3912	MGS	01-351/12:15:00	45	End Tracking		
3913	MGS	01-351/12:15:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/12:03:57
3914	MGS	01-351/12:19:15		: 01:42:00	RPAONX	01-351/12:07:42
3915	MGS	01-351/12:19:15		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/12:07:42
3916	MGS	01-351/12:20:30		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/12:08:57
3917	MGS	01-351/12:20:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/12:08:57
3918	MGS	01-351/12:20:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/12:08:57
3919	MGS	01-351/12:20:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/12:08:57
3920	MGS	01-351/12:20:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/12:08:57
3921	MGS	01-351/12:21:10		NOTE: Exit Earth Occultation 12412		01-351/12:09:36
3922	MGS	01-351/12:21:10	43	Acquisition Of X-Band Signal		
3923	MGS	01-351/12:21:10	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3924	MGS	01-351/12:21:10	43	NOTE: Carrier Only -- No Telemetry Modulation		
3925	MGS	01-351/12:23:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/12:11:50
3926	MGS	01-351/12:23:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/12:11:50
3927	MGS	01-351/12:23:28		Set eclipse egress script address: 019A	SWSEES	01-351/12:11:55
3928	MGS	01-351/12:25:00	63	Begin Tracking		
3929	MGS	01-351/12:25:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3930	MGS	01-351/12:25:00	63	NOTE: Carrier Only -- No Telemetry Modulation		
3931	MGS	01-351/12:28:48		NOTE: Exit Planetary Atmosphere 12412		01-351/12:17:14

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3932	MGS	01-351/12:30:00	45	End Post-Cal		
3933	MGS	01-351/12:30:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/12:19:20
3934	MGS	01-351/12:30:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/12:19:20
3935	MGS	01-351/12:30:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/12:19:20
3936	MGS	01-351/12:30:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/12:19:20
3937	MGS	01-351/12:30:53	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3938	MGS	01-351/12:30:53	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3939	MGS	01-351/12:30:54		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/12:19:21
3940	MGS	01-351/12:30:54		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/12:19:21
3941	MGS	01-351/12:30:54		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/12:19:21
3942	MGS	01-351/12:30:54	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3943	MGS	01-351/12:30:54	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3944	MGS	01-351/12:30:59		NOTE: End fixed Sub-Reflector for Radio Science		01-351/12:19:25
3945	MGS	01-351/12:31:50	43	NOTE: Below Uplink Interlock Limit		
3946	MGS	01-351/12:36:57	63	NOTE: Above Uplink Interlock Limit		
3947	MGS	01-351/12:39:05		NOTE: Exit Solar Eclipse 12412		01-351/12:27:32
3948	MGS	01-351/12:40:00	43	End Tracking		
3949	MGS	01-351/12:55:00	43	End Post-Cal		
3950	MGS	01-351/12:55:10		NOTE: Periapsis 12413 ----------		01-351/12:43:36
3951	MGS	01-351/13:00:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/12:48:31
3952	MGS	01-351/13:00:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/12:48:31
3953	MGS	01-351/13:00:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/12:48:32
3954	MGS	01-351/13:00:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/12:48:32
3955	MGS	01-351/13:22:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/13:10:32
3956	MGS	01-351/13:22:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/13:10:32
3957	MGS	01-351/13:46:11		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/13:34:37
3958	MGS	01-351/13:46:42		NOTE: Start EVP data return script		01-351/13:35:08
3959	MGS	01-351/13:51:11		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/13:39:37
3960	MGS	01-351/13:51:11		: 00:10:04, FALSE	RDSCII	01-351/13:39:37
3961	MGS	01-351/13:51:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/13:39:37
3962	MGS	01-351/13:51:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/13:39:37
3963	MGS	01-351/13:51:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/13:39:37
3964	MGS	01-351/13:51:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/13:39:37
3965	MGS	01-351/13:51:11	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3966	MGS	01-351/13:51:11	63	NOTE: Carrier Only -- No Telemetry Modulation		
3967	MGS	01-351/13:53:20		NOTE: Enter Planetary Atmosphere 12413		01-351/13:41:46
3968	MGS	01-351/13:53:56		NOTE: Apoapsis 12413 -		01-351/13:42:22
3969	MGS	01-351/13:56:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/13:45:08
3970	MGS	01-351/13:56:42		NOTE: Enter Solar Eclipse 12413		01-351/13:45:09
3971	MGS	01-351/14:00:35		NOTE: Enter Earth Occultation 12413		01-351/13:49:02
3972	MGS	01-351/14:00:35	63	NOTE: Loss Of X-Band Signal		
3973	MGS	01-351/14:01:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/13:49:41
3974	MGS	01-351/14:01:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/13:49:41
3975	MGS	01-351/14:01:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/13:49:41
3976	MGS	01-351/14:01:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/13:49:41
3977	MGS	01-351/14:01:16		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/13:49:42
3978	MGS	01-351/14:01:16		NOTE: End EVP script		01-351/13:49:42
3979	MGS	01-351/14:01:20		NOTE: End fixed Sub-Reflector for Radio Science		01-351/13:49:46
3980	MGS	01-351/14:13:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/14:01:41
3981	MGS	01-351/14:17:00		: 01:42:00	RPAONX	01-351/14:05:26
3982	MGS	01-351/14:17:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/14:05:26
3983	MGS	01-351/14:18:15		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/14:06:41
3984	MGS	01-351/14:18:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/14:06:41
3985	MGS	01-351/14:18:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/14:06:41

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3986	MGS	01-351/14:18:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/14:06:41
3987	MGS	01-351/14:18:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/14:06:41
3988	MGS	01-351/14:18:45		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/14:07:11
3989	MGS	01-351/14:18:56		NOTE: Exit Earth Occultation 12413		01-351/14:07:23
3990	MGS	01-351/14:18:56	63	Acquisition Of X-Band Signal		
3991	MGS	01-351/14:18:56	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3992	MGS	01-351/14:18:56	63	NOTE: Carrier Only -- No Telemetry Modulation		
3993	MGS	01-351/14:21:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/14:09:32
3994	MGS	01-351/14:21:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/14:09:32
3995	MGS	01-351/14:21:11		Set eclipse egress script address: 01DC	SWSEES	01-351/14:09:37
3996	MGS	01-351/14:26:31		NOTE: Exit Planetary Atmosphere 12413		01-351/14:14:58
3997	MGS	01-351/14:28:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/14:17:04
3998	MGS	01-351/14:28:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/14:17:04
3999	MGS	01-351/14:28:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/14:17:04
4000	MGS	01-351/14:28:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/14:17:04
4001	MGS	01-351/14:28:38	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4002	MGS	01-351/14:28:39		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/14:17:05
4003	MGS	01-351/14:28:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/14:17:05
4004	MGS	01-351/14:28:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/14:17:05
4005	MGS	01-351/14:28:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4006	MGS	01-351/14:28:43		NOTE: End fixed Sub-Reflector for Radio Science		01-351/14:17:09
4007	MGS	01-351/14:36:50		NOTE: Exit Solar Eclipse 12413		01-351/14:25:16
4008	MGS	01-351/14:53:09		NOTE: Periapsis 12414 ----------		01-351/14:41:35
4009	MGS	01-351/14:57:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/14:46:15
4010	MGS	01-351/14:57:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/14:46:15
4011	MGS	01-351/14:57:50		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/14:46:16
4012	MGS	01-351/14:57:50		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/14:46:16
4013	MGS	01-351/15:19:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/15:08:16
4014	MGS	01-351/15:19:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/15:08:16
4015	MGS	01-351/15:29:59		NOTE: Start Block (SSRMGR)		01-351/15:18:25
4016	MGS	01-351/15:29:59		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-351/15:18:25
4017	MGS	01-351/15:30:00		SSR 1B Data Enable	CSD1BE	01-351/15:18:26
4018	MGS	01-351/15:30:00		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-351/15:18:26
4019	MGS	01-351/15:43:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/15:32:21
4020	MGS	01-351/15:44:27		NOTE: Start Block (MAP_PB_ODY)		01-351/15:32:53
4021	MGS	01-351/15:44:28		: 00:20:18, 01:42:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:43, 01:23:38, 00:08:24	AEMINI	01-351/15:32:54
4022	MGS	01-351/15:44:28		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/15:32:54
4023	MGS	01-351/15:44:28		NOTE: Start EVP data return script		01-351/15:32:54
4024	MGS	01-351/15:44:29		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-351T16:13:11.000	AEMPBI	01-351/15:32:55
4025	MGS	01-351/15:48:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/15:37:21
4026	MGS	01-351/15:48:55		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9080000, DUR=00:18:55		01-351/15:37:21
4027	MGS	01-351/15:48:55		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-351/15:37:21
4028	MGS	01-351/15:48:55		: 00:10:04, FALSE	RDSCII	01-351/15:37:21
4029	MGS	01-351/15:48:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/15:37:21
4030	MGS	01-351/15:48:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/15:37:21
4031	MGS	01-351/15:48:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/15:37:21
4032	MGS	01-351/15:48:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/15:37:21
4033	MGS	01-351/15:48:55	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4034	MGS	01-351/15:48:55	63	NOTE: Carrier Only -- No Telemetry Modulation		
4035	MGS	01-351/15:51:03		NOTE: Enter Planetary Atmosphere 12414		01-351/15:39:30
4036	MGS	01-351/15:52:04		NOTE: Apoapsis 12414 -		01-351/15:40:31
4037	MGS	01-351/15:53:28		SSR 1A Data Disable	CSD1AX	01-351/15:41:54
4038	MGS	01-351/15:53:28		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-351/15:41:54
4039	MGS	01-351/15:53:29		NOTE: End Block (SSRMGR)		01-351/15:41:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4040	MGS	01-351/15:54:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/15:42:54
4041	MGS	01-351/15:54:28		NOTE: Enter Solar Eclipse 12414		01-351/15:42:54
4042	MGS	01-351/15:58:18		NOTE: Enter Earth Occultation 12414		01-351/15:46:44
4043	MGS	01-351/15:58:18	63	NOTE: Loss Of X-Band Signal		
4044	MGS	01-351/15:58:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/15:47:25
4045	MGS	01-351/15:58:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/15:47:25
4046	MGS	01-351/15:58:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/15:47:25
4047	MGS	01-351/15:58:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/15:47:25
4048	MGS	01-351/15:59:00		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/15:47:26
4049	MGS	01-351/15:59:00		NOTE: End EVP script		01-351/15:47:26
4050	MGS	01-351/15:59:01		NOTE: End Block (MAP_RT)		01-351/15:47:27
4051	MGS	01-351/15:59:04		NOTE: End fixed Sub-Reflector for Radio Science		01-351/15:47:30
4052	MGS	01-351/16:14:46		: 01:42:01	RPAONX	01-351/16:03:12
4053	MGS	01-351/16:14:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/16:03:12
4054	MGS	01-351/16:16:31		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/16:04:57
4055	MGS	01-351/16:16:44		NOTE: Exit Earth Occultation 12414		01-351/16:05:10
4056	MGS	01-351/16:16:44	63	Acquisition Of X-Band Signal		
4057	MGS	01-351/16:16:44	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4058	MGS	01-351/16:18:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/16:07:16
4059	MGS	01-351/16:18:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/16:07:16
4060	MGS	01-351/16:18:54		Command the PSE with included data word: 3990	SWPSEL	01-351/16:07:20
4061	MGS	01-351/16:18:55		Set eclipse egress script address: 0158	SWSEES	01-351/16:07:21
4062	MGS	01-351/16:24:17		NOTE: Exit Planetary Atmosphere 12414		01-351/16:12:44
4063	MGS	01-351/16:24:44		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:21:24	AEMPB	01-351/16:13:10
4064	MGS	01-351/16:24:44		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-351/16:13:10
4065	MGS	01-351/16:24:44		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-351/16:13:10
4066	MGS	01-351/16:24:45		SSR 1A Data Enable	CSD1AE	01-351/16:13:11
4067	MGS	01-351/16:24:45		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-351/16:13:11
4068	MGS	01-351/16:24:45	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4069	MGS	01-351/16:34:36		NOTE: Exit Solar Eclipse 12414		01-351/16:23:03
4070	MGS	01-351/16:51:22		NOTE: Periapsis 12415 ----------		01-351/16:39:48
4071	MGS	01-351/16:59:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/16:48:01
4072	MGS	01-351/16:59:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/16:48:01
4073	MGS	01-351/16:59:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/16:48:02
4074	MGS	01-351/16:59:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/16:48:02
4075	MGS	01-351/17:21:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/17:10:02
4076	MGS	01-351/17:21:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/17:10:02
4077	MGS	01-351/17:35:23		SSR 1A Data Disable	CSD1AX	01-351/17:23:49
4078	MGS	01-351/17:35:23		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-351/17:23:49
4079	MGS	01-351/17:35:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-351/17:23:49
4080	MGS	01-351/17:35:23	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4081	MGS	01-351/17:42:14		NOTE: Start Block (MAP_RT)		01-351/17:30:40
4082	MGS	01-351/17:42:15		: 00:20:18, 01:42:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:23, 01:20:17, 00:10:04	AEMINI	01-351/17:30:41
4083	MGS	01-351/17:42:15		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/17:30:41
4084	MGS	01-351/17:42:15		NOTE: Start EVP data return script		01-351/17:30:41
4085	MGS	01-351/17:42:16		: SE_2A, RTM, 01:20:16, MRC, 2001-351T18:12:39.000	AEMRTI	01-351/17:30:42
4086	MGS	01-351/17:48:51		NOTE: Enter Planetary Atmosphere 12415		01-351/17:37:17
4087	MGS	01-351/17:50:22		NOTE: Apoapsis 12415 -		01-351/17:38:48
4088	MGS	01-351/17:52:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/17:40:41
4089	MGS	01-351/17:52:16		NOTE: Enter Solar Eclipse 12415		01-351/17:40:42
4090	MGS	01-351/17:56:05		NOTE: Enter Earth Occultation 12415		01-351/17:44:31
4091	MGS	01-351/17:56:05	63	NOTE: Loss Of X-Band Signal		
4092	MGS	01-351/17:56:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/17:45:13
4093	MGS	01-351/17:56:48		NOTE: End EVP script		01-351/17:45:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4094	MGS	01-351/17:56:49		NOTE: End Block (MAP_PB_ODY)		01-351/17:45:14
4095	MGS	01-351/18:08:49		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/17:57:15
4096	MGS	01-351/18:12:33		: 01:42:00	RPAONX	01-351/18:00:59
4097	MGS	01-351/18:12:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/18:00:59
4098	MGS	01-351/18:13:48		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/18:02:14
4099	MGS	01-351/18:13:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/18:02:14
4100	MGS	01-351/18:13:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/18:02:14
4101	MGS	01-351/18:13:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/18:02:14
4102	MGS	01-351/18:13:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/18:02:14
4103	MGS	01-351/18:14:32		NOTE: Exit Earth Occultation 12415		01-351/18:02:58
4104	MGS	01-351/18:14:32	63	Acquisition Of X-Band Signal		
4105	MGS	01-351/18:14:32	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4106	MGS	01-351/18:14:32	63	NOTE: Carrier Only -- No Telemetry Modulation		
4107	MGS	01-351/18:15:00	15	Begin Pre-Cal		
4108	MGS	01-351/18:15:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4109	MGS	01-351/18:15:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
4110	MGS	01-351/18:15:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
4111	MGS	01-351/18:15:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
4112	MGS	01-351/18:15:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
4113	MGS	01-351/18:15:00	15	Config: TGC: DEST=37		
4114	MGS	01-351/18:15:00	15	Config: TGC: BAND=X, BR=0.000000		
4115	MGS	01-351/18:15:00	15	Config: FSS: CH=2, PRI_FL=10000		
4116	MGS	01-351/18:15:00	15	Config: RSR		
4117	MGS	01-351/18:15:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
4118	MGS	01-351/18:15:00	15	Config: BVR		
4119	MGS	01-351/18:15:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
4120	MGS	01-351/18:15:00	15	Config: MDA: SMPL=0.1		
4121	MGS	01-351/18:16:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/18:05:02
4122	MGS	01-351/18:16:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/18:05:02
4123	MGS	01-351/18:16:41		Set eclipse egress script address: 019A	SWSEES	01-351/18:05:07
4124	MGS	01-351/18:22:05		NOTE: Exit Planetary Atmosphere 12415		01-351/18:10:31
4125	MGS	01-351/18:24:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/18:12:37
4126	MGS	01-351/18:24:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/18:12:37
4127	MGS	01-351/18:24:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/18:12:37
4128	MGS	01-351/18:24:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/18:12:37
4129	MGS	01-351/18:24:11	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4130	MGS	01-351/18:24:12		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/18:12:38
4131	MGS	01-351/18:24:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/18:12:38
4132	MGS	01-351/18:24:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/18:12:38
4133	MGS	01-351/18:24:12	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4134	MGS	01-351/18:24:17		NOTE: End fixed Sub-Reflector for Radio Science		01-351/18:12:43
4135	MGS	01-351/18:32:24		NOTE: Exit Solar Eclipse 12415		01-351/18:20:50
4136	MGS	01-351/18:49:24		NOTE: Periapsis 12416 ----------		01-351/18:37:50
4137	MGS	01-351/18:53:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/18:41:49
4138	MGS	01-351/18:53:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/18:41:49
4139	MGS	01-351/18:53:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/18:41:50
4140	MGS	01-351/18:53:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/18:41:50
4141	MGS	01-351/19:15:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/19:03:50
4142	MGS	01-351/19:15:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/19:03:50
4143	MGS	01-351/19:39:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/19:27:55
4144	MGS	01-351/19:40:02		NOTE: Start EVP data return script		01-351/19:28:27
4145	MGS	01-351/19:44:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/19:32:54
4146	MGS	01-351/19:44:29		: 00:10:04, FALSE	RDSCII	01-351/19:32:54
4147	MGS	01-351/19:44:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/19:32:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4148	MGS	01-351/19:44:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/19:32:54
4149	MGS	01-351/19:44:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/19:32:54
4150	MGS	01-351/19:44:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/19:32:54
4151	MGS	01-351/19:44:29	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4152	MGS	01-351/19:44:29	63	NOTE: Carrier Only -- No Telemetry Modulation		
4153	MGS	01-351/19:45:00	15	Begin Tracking		
4154	MGS	01-351/19:45:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4155	MGS	01-351/19:45:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
4156	MGS	01-351/19:46:38		NOTE: Enter Planetary Atmosphere 12416		01-351/19:35:04
4157	MGS	01-351/19:48:11		NOTE: Apoapsis 12416 -		01-351/19:36:37
4158	MGS	01-351/19:50:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/19:38:27
4159	MGS	01-351/19:50:02		NOTE: Enter Solar Eclipse 12416		01-351/19:38:27
4160	MGS	01-351/19:53:54		NOTE: Enter Earth Occultation 12416		01-351/19:42:19
4161	MGS	01-351/19:53:54	15	NOTE: Loss Of X-Band Signal		
4162	MGS	01-351/19:53:54	63	NOTE: Loss Of X-Band Signal		
4163	MGS	01-351/19:54:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/19:42:58
4164	MGS	01-351/19:54:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/19:42:58
4165	MGS	01-351/19:54:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/19:42:58
4166	MGS	01-351/19:54:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/19:42:58
4167	MGS	01-351/19:54:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/19:42:59
4168	MGS	01-351/19:54:34		NOTE: End EVP script		01-351/19:43:00
4169	MGS	01-351/19:54:38		NOTE: End fixed Sub-Reflector for Radio Science		01-351/19:43:04
4170	MGS	01-351/19:57:53	15	NOTE: Above Uplink Interlock Limit		
4171	MGS	01-351/20:05:00	63	End Tracking		
4172	MGS	01-351/20:06:35		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/19:55:01
4173	MGS	01-351/20:10:20		: 01:42:00	RPAONX	01-351/19:58:45
4174	MGS	01-351/20:10:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/19:58:45
4175	MGS	01-351/20:11:35		: 00:00:30, 00:10:23, FALSE	RDSCIE	01-351/20:00:00
4176	MGS	01-351/20:11:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/20:00:00
4177	MGS	01-351/20:11:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/20:00:00
4178	MGS	01-351/20:11:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/20:00:00
4179	MGS	01-351/20:11:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/20:00:00
4180	MGS	01-351/20:12:05		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/20:00:30
4181	MGS	01-351/20:12:19		NOTE: Exit Earth Occultation 12416		01-351/20:00:44
4182	MGS	01-351/20:12:19	15	Acquisition Of X-Band Signal		
4183	MGS	01-351/20:12:19	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4184	MGS	01-351/20:12:19	15	NOTE: Carrier Only -- No Telemetry Modulation		
4185	MGS	01-351/20:14:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/20:02:50
4186	MGS	01-351/20:14:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/20:02:50
4187	MGS	01-351/20:14:30		Set eclipse egress script address: 01DC	SWSEES	01-351/20:02:55
4188	MGS	01-351/20:19:54		NOTE: Exit Planetary Atmosphere 12416		01-351/20:08:19
4189	MGS	01-351/20:20:00	63	End Post-Cal		
4190	MGS	01-351/20:21:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/20:10:23
4191	MGS	01-351/20:21:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/20:10:23
4192	MGS	01-351/20:21:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/20:10:23
4193	MGS	01-351/20:21:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/20:10:23
4194	MGS	01-351/20:21:58	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4195	MGS	01-351/20:21:59		: RTM, MRC, 01:20:16, S&E_2A, FALSE, 00:10:05	AEMRT	01-351/20:10:24
4196	MGS	01-351/20:21:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-351/20:10:24
4197	MGS	01-351/20:21:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-351/20:10:24
4198	MGS	01-351/20:21:59	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4199	MGS	01-351/20:22:03		NOTE: End fixed Sub-Reflector for Radio Science		01-351/20:10:29
4200	MGS	01-351/20:30:10		NOTE: Exit Solar Eclipse 12416		01-351/20:18:36
4201	MGS	01-351/20:46:58		NOTE: Periapsis 12417 ----------		01-351/20:35:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4202	MGS	01-351/20:51:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/20:39:35
4203	MGS	01-351/20:51:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/20:39:35
4204	MGS	01-351/20:51:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/20:39:36
4205	MGS	01-351/20:51:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/20:39:36
4206	MGS	01-351/21:13:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/21:01:36
4207	MGS	01-351/21:13:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/21:01:36
4208	MGS	01-351/21:23:13		NOTE: Start Block (SSRMGR)		01-351/21:11:38
4209	MGS	01-351/21:23:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-351/21:11:38
4210	MGS	01-351/21:23:14		SSR 1A Data Enable	CSD1AE	01-351/21:11:39
4211	MGS	01-351/21:23:14		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-351/21:11:39
4212	MGS	01-351/21:37:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/21:25:41
4213	MGS	01-351/21:37:44		NOTE: Start Block (MAP_PB_ODY)		01-351/21:26:09
4214	MGS	01-351/21:37:45		: 00:20:18, 01:42:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:43, 01:23:38, 00:08:24	AEMINI	01-351/21:26:10
4215	MGS	01-351/21:37:45		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/21:26:10
4216	MGS	01-351/21:37:45		NOTE: Start EVP data return script		01-351/21:26:10
4217	MGS	01-351/21:37:46		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-351T22:06:26.000	AEMPBI	01-351/21:26:11
4218	MGS	01-351/21:42:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-351/21:30:40
4219	MGS	01-351/21:42:15		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9128000, DUR=00:19:01		01-351/21:30:40
4220	MGS	01-351/21:42:15		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-351/21:30:40
4221	MGS	01-351/21:42:15		: 00:10:04, FALSE	RDSCII	01-351/21:30:40
4222	MGS	01-351/21:42:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/21:30:40
4223	MGS	01-351/21:42:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/21:30:40
4224	MGS	01-351/21:42:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/21:30:40
4225	MGS	01-351/21:42:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/21:30:40
4226	MGS	01-351/21:42:15	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4227	MGS	01-351/21:42:15	15	NOTE: Carrier Only -- No Telemetry Modulation		
4228	MGS	01-351/21:44:21		NOTE: Enter Planetary Atmosphere 12417		01-351/21:32:47
4229	MGS	01-351/21:45:33		NOTE: Apoapsis 12417 -		01-351/21:33:59
4230	MGS	01-351/21:46:44		SSR 1B Data Disable	CSD1BX	01-351/21:35:09
4231	MGS	01-351/21:46:44		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-351/21:35:09
4232	MGS	01-351/21:46:45		NOTE: End Block (SSRMGR)		01-351/21:35:10
4233	MGS	01-351/21:47:45		NOTE: Enter Solar Eclipse 12417		01-351/21:36:10
4234	MGS	01-351/21:47:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/21:36:10
4235	MGS	01-351/21:51:36		NOTE: Enter Earth Occultation 12417		01-351/21:40:01
4236	MGS	01-351/21:51:36	15	NOTE: Loss Of X-Band Signal		
4237	MGS	01-351/21:52:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-351/21:40:44
4238	MGS	01-351/21:52:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-351/21:40:44
4239	MGS	01-351/21:52:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-351/21:40:44
4240	MGS	01-351/21:52:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-351/21:40:44
4241	MGS	01-351/21:52:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/21:40:45
4242	MGS	01-351/21:52:20		NOTE: End EVP script		01-351/21:40:46
4243	MGS	01-351/21:52:21		NOTE: End Block (MAP_RT)		01-351/21:40:47
4244	MGS	01-351/21:52:24		NOTE: End fixed Sub-Reflector for Radio Science		01-351/21:40:50
4245	MGS	01-351/22:08:03		: 01:42:01	RPAONX	01-351/21:56:28
4246	MGS	01-351/22:08:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/21:56:28
4247	MGS	01-351/22:09:48		Disables autonomous command to send eclipse ingress script	SWEISX	01-351/21:58:13
4248	MGS	01-351/22:10:04		NOTE: Exit Earth Occultation 12417		01-351/21:58:29
4249	MGS	01-351/22:10:04	15	Acquisition Of X-Band Signal		
4250	MGS	01-351/22:10:04	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4251	MGS	01-351/22:12:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/22:00:36
4252	MGS	01-351/22:12:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/22:00:36
4253	MGS	01-351/22:12:15		Command the PSE with included data word: 3990	SWPSEL	01-351/22:00:40
4254	MGS	01-351/22:12:16		Set eclipse egress script address: 0158	SWSEES	01-351/22:00:41
4255	MGS	01-351/22:17:38		NOTE: Exit Planetary Atmosphere 12417		01-351/22:06:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4256	MGS	01-351/22:18:01		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:21:24	AEMPB	01-351/22:06:26
4257	MGS	01-351/22:18:01		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-351/22:06:26
4258	MGS	01-351/22:18:01		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-351/22:06:26
4259	MGS	01-351/22:18:02		SSR 1B Data Enable	CSD1BE	01-351/22:06:27
4260	MGS	01-351/22:18:02		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-351/22:06:27
4261	MGS	01-351/22:18:02	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4262	MGS	01-351/22:27:53		NOTE: Exit Solar Eclipse 12417		01-351/22:16:18
4263	MGS	01-351/22:44:21		NOTE: Periapsis 12418 ----------		01-351/22:32:46
4264	MGS	01-351/22:52:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-351/22:41:17
4265	MGS	01-351/22:52:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-351/22:41:17
4266	MGS	01-351/22:52:53		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-351/22:41:18
4267	MGS	01-351/22:52:53		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-351/22:41:18
4268	MGS	01-351/23:14:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-351/23:03:18
4269	MGS	01-351/23:14:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-351/23:03:18
4270	MGS	01-351/23:28:40		SSR 1B Data Disable	CSD1BX	01-351/23:17:05
4271	MGS	01-351/23:28:40		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-351/23:17:05
4272	MGS	01-351/23:28:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-351/23:17:05
4273	MGS	01-351/23:28:40	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4274	MGS	01-351/23:35:24		NOTE: Start Block (MAP_RT)		01-351/23:23:49
4275	MGS	01-351/23:35:25		: 00:20:34, 01:41:30, FALSE, TRUE, FALSE, 00:01:15, 00:10:14, 01:20:05, 00:09:55	AEMINI	01-351/23:23:50
4276	MGS	01-351/23:35:25		Enable sending eclipse ingress script when array power disappears	SWEISE	01-351/23:23:50
4277	MGS	01-351/23:35:25		NOTE: Start EVP data return script		01-351/23:23:50
4278	MGS	01-351/23:35:26		: SE_2A, RTM, 01:20:04, MRC, 2001-352T00:05:55.000	AEMRTI	01-351/23:23:51
4279	MGS	01-351/23:42:00		NOTE: Enter Planetary Atmosphere 12418		01-351/23:30:25
4280	MGS	01-351/23:43:11		NOTE: Apoapsis 12418 -		01-351/23:31:36
4281	MGS	01-351/23:45:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-351/23:33:50
4282	MGS	01-351/23:45:25		NOTE: Enter Solar Eclipse 12418		01-351/23:33:50
4283	MGS	01-351/23:49:13		NOTE: Enter Earth Occultation 12418		01-351/23:37:38
4284	MGS	01-351/23:49:13	15	NOTE: Loss Of X-Band Signal		
4285	MGS	01-351/23:50:04		NOTE: End EVP script		01-351/23:38:29
4286	MGS	01-351/23:50:04		Turn off the MOT Exciter and RPA beam	STRPAF	01-351/23:38:29
4287	MGS	01-351/23:50:05		NOTE: End Block (MAP_PB_ODY)		01-351/23:38:30
4288	MGS	01-352/00:00:00		Light Time: OWLT = 11:35, RTLT = 23:10		
4289	MGS	01-352/00:02:14		NOTE: Begin fixed Sub-Reflector for Radio Science		01-351/23:50:39
4290	MGS	01-352/00:05:59		: 01:41:30	RPAONX	01-351/23:54:24
4291	MGS	01-352/00:05:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-351/23:54:24
4292	MGS	01-352/00:07:14		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-351/23:55:39
4293	MGS	01-352/00:07:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-351/23:55:39
4294	MGS	01-352/00:07:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-351/23:55:39
4295	MGS	01-352/00:07:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-351/23:55:39
4296	MGS	01-352/00:07:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-351/23:55:39
4297	MGS	01-352/00:07:47		NOTE: Exit Earth Occultation 12418		01-351/23:56:12
4298	MGS	01-352/00:07:47	15	Acquisition Of X-Band Signal		
4299	MGS	01-352/00:07:47	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4300	MGS	01-352/00:07:47	15	NOTE: Carrier Only -- No Telemetry Modulation		
4301	MGS	01-352/00:09:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-351/23:58:18
4302	MGS	01-352/00:09:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-351/23:58:18
4303	MGS	01-352/00:09:58		Set eclipse egress script address: 019A	SWSEES	01-351/23:58:23
4304	MGS	01-352/00:10:00	34	Begin Pre-Cal		
4305	MGS	01-352/00:10:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4306	MGS	01-352/00:10:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
4307	MGS	01-352/00:10:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
4308	MGS	01-352/00:10:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
4309	MGS	01-352/00:10:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4310	MGS	01-352/00:10:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
4311	MGS	01-352/00:10:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
4312	MGS	01-352/00:10:00	34	Config: TGC: DEST=37		
4313	MGS	01-352/00:10:00	34	Config: TGC: BAND=X, BR=40000.000000		
4314	MGS	01-352/00:10:00	34	Config: FSS: CH=2, PRI_FL=10000		
4315	MGS	01-352/00:10:00	34	Config: RSR		
4316	MGS	01-352/00:10:00	34	Config: TXL		
4317	MGS	01-352/00:10:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
4318	MGS	01-352/00:10:00	34	Config: BVR		
4319	MGS	01-352/00:10:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
4320	MGS	01-352/00:10:00	34	Config: MDA: SMPL=0.1		
4321	MGS	01-352/00:10:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
4322	MGS	01-352/00:10:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
4323	MGS	01-352/00:10:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
4324	MGS	01-352/00:15:19		NOTE: Exit Planetary Atmosphere 12418		01-352/00:03:44
4325	MGS	01-352/00:17:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/00:05:53
4326	MGS	01-352/00:17:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/00:05:53
4327	MGS	01-352/00:17:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/00:05:53
4328	MGS	01-352/00:17:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/00:05:53
4329	MGS	01-352/00:17:28	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4330	MGS	01-352/00:17:29		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/00:05:54
4331	MGS	01-352/00:17:29		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/00:05:54
4332	MGS	01-352/00:17:29		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/00:05:54
4333	MGS	01-352/00:17:29	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4334	MGS	01-352/00:17:33		NOTE: End fixed Sub-Reflector for Radio Science		01-352/00:05:58
4335	MGS	01-352/00:25:33		NOTE: Exit Solar Eclipse 12418		01-352/00:13:58
4336	MGS	01-352/00:41:58		NOTE: Periapsis 12419 ----------		01-352/00:30:23
4337	MGS	01-352/00:46:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/00:34:57
4338	MGS	01-352/00:46:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/00:34:57
4339	MGS	01-352/00:46:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/00:34:58
4340	MGS	01-352/00:46:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/00:34:58
4341	MGS	01-352/01:08:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/00:56:58
4342	MGS	01-352/01:08:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/00:56:58
4343	MGS	01-352/01:10:00	34	Begin Tracking		
4344	MGS	01-352/01:10:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4345	MGS	01-352/01:15:23	34	NOTE: Above Uplink Interlock Limit		
4346	MGS	01-352/01:32:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/01:20:58
4347	MGS	01-352/01:33:10		NOTE: Start EVP data return script		01-352/01:21:35
4348	MGS	01-352/01:37:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/01:25:58
4349	MGS	01-352/01:37:33		: 00:09:55, FALSE	RDSCII	01-352/01:25:58
4350	MGS	01-352/01:37:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/01:25:58
4351	MGS	01-352/01:37:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/01:25:58
4352	MGS	01-352/01:37:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/01:25:58
4353	MGS	01-352/01:37:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/01:25:58
4354	MGS	01-352/01:37:33	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4355	MGS	01-352/01:37:33	15	NOTE: Carrier Only -- No Telemetry Modulation		
4356	MGS	01-352/01:37:33	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4357	MGS	01-352/01:37:33	34	NOTE: Carrier Only -- No Telemetry Modulation		
4358	MGS	01-352/01:39:44		NOTE: Enter Planetary Atmosphere 12419		01-352/01:28:09
4359	MGS	01-352/01:41:06		NOTE: Apoapsis 12419 -		01-352/01:29:31
4360	MGS	01-352/01:43:10		NOTE: Enter Solar Eclipse 12419		01-352/01:31:35
4361	MGS	01-352/01:43:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/01:31:35
4362	MGS	01-352/01:46:07	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4363	MGS	01-352/01:46:56		NOTE: Enter Earth Occultation 12419		01-352/01:35:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4364	MGS	01-352/01:46:56	15	NOTE: Loss Of X-Band Signal		
4365	MGS	01-352/01:46:56	34	NOTE: Loss Of X-Band Signal		
4366	MGS	01-352/01:47:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/01:35:53
4367	MGS	01-352/01:47:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/01:35:53
4368	MGS	01-352/01:47:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/01:35:53
4369	MGS	01-352/01:47:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/01:35:53
4370	MGS	01-352/01:47:29		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/01:35:54
4371	MGS	01-352/01:47:30		NOTE: End EVP script		01-352/01:35:54
4372	MGS	01-352/01:47:34		NOTE: End fixed Sub-Reflector for Radio Science		01-352/01:35:58
4373	MGS	01-352/01:48:07	34	Range Modulation On: SUP=3.0dB		
4374	MGS	01-352/01:49:07	34	Begin Ranging Acquisition		
4375	MGS	01-352/02:00:00		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/01:48:24
4376	MGS	01-352/02:03:45		: 01:41:30	RPAONX	01-352/01:52:09
4377	MGS	01-352/02:03:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/01:52:09
4378	MGS	01-352/02:05:00		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/01:53:24
4379	MGS	01-352/02:05:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/01:53:24
4380	MGS	01-352/02:05:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/01:53:24
4381	MGS	01-352/02:05:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/01:53:24
4382	MGS	01-352/02:05:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/01:53:24
4383	MGS	01-352/02:05:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/01:53:54
4384	MGS	01-352/02:05:32		NOTE: Exit Earth Occultation 12419		01-352/01:53:57
4385	MGS	01-352/02:05:32	15	Acquisition Of X-Band Signal		
4386	MGS	01-352/02:05:32	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4387	MGS	01-352/02:05:32	15	NOTE: Carrier Only -- No Telemetry Modulation		
4388	MGS	01-352/02:05:32	34	Acquisition Of X-Band Signal		
4389	MGS	01-352/02:05:32	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4390	MGS	01-352/02:05:32	34	NOTE: Carrier Only -- No Telemetry Modulation		
4391	MGS	01-352/02:07:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/01:55:58
4392	MGS	01-352/02:07:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/01:55:58
4393	MGS	01-352/02:07:39		Set eclipse egress script address: 01DC	SWSEES	01-352/01:56:03
4394	MGS	01-352/02:13:03		NOTE: Exit Planetary Atmosphere 12419		01-352/02:01:28
4395	MGS	01-352/02:15:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/02:03:38
4396	MGS	01-352/02:15:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/02:03:38
4397	MGS	01-352/02:15:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/02:03:38
4398	MGS	01-352/02:15:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/02:03:38
4399	MGS	01-352/02:15:14	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4400	MGS	01-352/02:15:14	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4401	MGS	01-352/02:15:15		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/02:03:39
4402	MGS	01-352/02:15:15		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/02:03:39
4403	MGS	01-352/02:15:15		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/02:03:39
4404	MGS	01-352/02:15:15	15	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4405	MGS	01-352/02:15:15	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4406	MGS	01-352/02:15:19		NOTE: End fixed Sub-Reflector for Radio Science		01-352/02:03:43
4407	MGS	01-352/02:23:19		NOTE: Exit Solar Eclipse 12419		01-352/02:11:43
4408	MGS	01-352/02:39:52		NOTE: Periapsis 12420 ----------		01-352/02:28:17
4409	MGS	01-352/02:44:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/02:32:42
4410	MGS	01-352/02:44:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/02:32:42
4411	MGS	01-352/02:44:19		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/02:32:43
4412	MGS	01-352/02:44:19		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/02:32:43
4413	MGS	01-352/03:02:47	34	NOTE: Transmitter Off in 15 minutes		
4414	MGS	01-352/03:06:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/02:54:43
4415	MGS	01-352/03:06:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/02:54:43
4416	MGS	01-352/03:15:47	34	Range Modulation Off		
4417	MGS	01-352/03:16:28		NOTE: Start Block (SSRMGR)		01-352/03:04:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4418	MGS	01-352/03:16:28		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-352/03:04:52
4419	MGS	01-352/03:16:29		SSR 1B Data Enable	CSD1BE	01-352/03:04:53
4420	MGS	01-352/03:16:29		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-352/03:04:53
4421	MGS	01-352/03:17:47	34	Transmitter Off		
4422	MGS	01-352/03:30:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/03:18:43
4423	MGS	01-352/03:30:57		NOTE: Start Block (MAP_PB_ODY)		01-352/03:19:21
4424	MGS	01-352/03:30:58		: 00:20:34, 01:41:31, FALSE, FALSE, FALSE, 00:01:15, 00:08:34, 01:23:26, 00:08:15	AEMINI	01-352/03:19:22
4425	MGS	01-352/03:30:58		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/03:19:22
4426	MGS	01-352/03:30:58		NOTE: Start EVP data return script		01-352/03:19:22
4427	MGS	01-352/03:30:59		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-352T03:59:46.000	AEMPBI	01-352/03:19:23
4428	MGS	01-352/03:35:00	45	Begin Pre-Cal		
4429	MGS	01-352/03:35:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4430	MGS	01-352/03:35:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
4431	MGS	01-352/03:35:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
4432	MGS	01-352/03:35:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
4433	MGS	01-352/03:35:00	45	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
4434	MGS	01-352/03:35:00	45	Config: TGC: DEST=37		
4435	MGS	01-352/03:35:00	45	Config: TGC: BAND=X, BR=42666.666667		
4436	MGS	01-352/03:35:00	45	Config: FSS: CH=2, PRI_FL=10000		
4437	MGS	01-352/03:35:00	45	Config: RSR		
4438	MGS	01-352/03:35:00	45	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
4439	MGS	01-352/03:35:00	45	Config: BVR		
4440	MGS	01-352/03:35:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
4441	MGS	01-352/03:35:00	45	Config: MDA: SMPL=0.1		
4442	MGS	01-352/03:35:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/03:23:43
4443	MGS	01-352/03:35:19		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=9040000, DUR=00:18:50		01-352/03:23:43
4444	MGS	01-352/03:35:19		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-352/03:23:43
4445	MGS	01-352/03:35:19		: 00:09:55, FALSE	RDSCII	01-352/03:23:43
4446	MGS	01-352/03:35:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/03:23:43
4447	MGS	01-352/03:35:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/03:23:43
4448	MGS	01-352/03:35:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/03:23:43
4449	MGS	01-352/03:35:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/03:23:43
4450	MGS	01-352/03:35:19	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4451	MGS	01-352/03:35:19	15	NOTE: Carrier Only -- No Telemetry Modulation		
4452	MGS	01-352/03:35:19	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4453	MGS	01-352/03:35:19	34	NOTE: Carrier Only -- No Telemetry Modulation		
4454	MGS	01-352/03:37:32		NOTE: Enter Planetary Atmosphere 12420		01-352/03:25:56
4455	MGS	01-352/03:38:52		NOTE: Apoapsis 12420 -		01-352/03:27:17
4456	MGS	01-352/03:39:58		SSR 1A Data Disable	CSD1AX	01-352/03:28:22
4457	MGS	01-352/03:39:58		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-352/03:28:22
4458	MGS	01-352/03:39:59		NOTE: End Block (SSRMGR)		01-352/03:28:23
4459	MGS	01-352/03:40:58		NOTE: Enter Solar Eclipse 12420		01-352/03:29:22
4460	MGS	01-352/03:40:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/03:29:22
4461	MGS	01-352/03:43:54	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4462	MGS	01-352/03:44:43		NOTE: Enter Earth Occultation 12420		01-352/03:33:07
4463	MGS	01-352/03:44:43	15	NOTE: Loss Of X-Band Signal		
4464	MGS	01-352/03:44:43	34	NOTE: Loss Of X-Band Signal		
4465	MGS	01-352/03:45:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/03:33:38
4466	MGS	01-352/03:45:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/03:33:38
4467	MGS	01-352/03:45:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/03:33:38
4468	MGS	01-352/03:45:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/03:33:38
4469	MGS	01-352/03:45:15		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/03:33:39
4470	MGS	01-352/03:45:15		NOTE: End EVP script		01-352/03:33:39
4471	MGS	01-352/03:45:16		NOTE: End Block (MAP_RT)		01-352/03:33:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4472	MGS	01-352/03:45:19		NOTE: End fixed Sub-Reflector for Radio Science		01-352/03:33:43
4473	MGS	01-352/03:45:54	34	Range Modulation On: SUP=3.0dB		
4474	MGS	01-352/03:46:54	34	Begin Ranging Acquisition		
4475	MGS	01-352/04:01:32		: 01:41:31	RPAONX	01-352/03:49:56
4476	MGS	01-352/04:01:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/03:49:56
4477	MGS	01-352/04:03:17		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/03:51:41
4478	MGS	01-352/04:03:20		NOTE: Exit Earth Occultation 12420		01-352/03:51:44
4479	MGS	01-352/04:03:20	15	Acquisition Of X-Band Signal		
4480	MGS	01-352/04:03:20	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4481	MGS	01-352/04:03:20	34	Acquisition Of X-Band Signal		
4482	MGS	01-352/04:03:20	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4483	MGS	01-352/04:05:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/03:53:43
4484	MGS	01-352/04:05:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/03:53:43
4485	MGS	01-352/04:05:23		Command the PSE with included data word: 3990	SWPSEL	01-352/03:53:47
4486	MGS	01-352/04:05:24		Set eclipse egress script address: 0158	SWSEES	01-352/03:53:48
4487	MGS	01-352/04:07:05	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4488	MGS	01-352/04:07:05	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4489	MGS	01-352/04:10:51		NOTE: Exit Planetary Atmosphere 12420		01-352/03:59:15
4490	MGS	01-352/04:11:21		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:21:03	AEMPB	01-352/03:59:45
4491	MGS	01-352/04:11:21		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-352/03:59:45
4492	MGS	01-352/04:11:21		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-352/03:59:45
4493	MGS	01-352/04:11:22		SSR 1A Data Enable	CSD1AE	01-352/03:59:46
4494	MGS	01-352/04:11:22		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-352/03:59:46
4495	MGS	01-352/04:11:22	15	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4496	MGS	01-352/04:11:22	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4497	MGS	01-352/04:21:07		NOTE: Exit Solar Eclipse 12420		01-352/04:09:31
4498	MGS	01-352/04:37:41		NOTE: Periapsis 12421 ----------		01-352/04:26:05
4499	MGS	01-352/04:46:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/04:34:30
4500	MGS	01-352/04:46:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/04:34:30
4501	MGS	01-352/04:46:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/04:34:31
4502	MGS	01-352/04:46:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/04:34:31
4503	MGS	01-352/05:00:32	34	NOTE: Transmitter Off in 15 minutes		
4504	MGS	01-352/05:05:00	45	Begin Tracking		
4505	MGS	01-352/05:05:00	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4506	MGS	01-352/05:08:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/04:56:31
4507	MGS	01-352/05:08:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/04:56:31
4508	MGS	01-352/05:13:33	34	Range Modulation Off		
4509	MGS	01-352/05:14:09	15	NOTE: Below Uplink Interlock Limit		
4510	MGS	01-352/05:15:32	34	Transmitter Off		
4511	MGS	01-352/05:22:00		SSR 1A Data Disable	CSD1AX	01-352/05:10:24
4512	MGS	01-352/05:22:00		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-352/05:10:24
4513	MGS	01-352/05:22:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-352/05:10:24
4514	MGS	01-352/05:22:00	15	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4515	MGS	01-352/05:22:00	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4516	MGS	01-352/05:22:00	45	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4517	MGS	01-352/05:25:00	15	End Tracking		
4518	MGS	01-352/05:28:44		NOTE: Start Block (MAP_RT)		01-352/05:17:08
4519	MGS	01-352/05:28:45		: 00:20:34, 01:41:30, FALSE, TRUE, FALSE, 00:01:15, 00:10:14, 01:20:05, 00:09:55	AEMINI	01-352/05:17:09
4520	MGS	01-352/05:28:45		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/05:17:09
4521	MGS	01-352/05:28:45		NOTE: Start EVP data return script		01-352/05:17:09
4522	MGS	01-352/05:28:46		: SE_2A, RTM, 01:20:04, MRC, 2001-352T05:59:13.000	AEMRTI	01-352/05:17:10
4523	MGS	01-352/05:35:19		NOTE: Enter Planetary Atmosphere 12421		01-352/05:23:43
4524	MGS	01-352/05:36:26		NOTE: Apoapsis 12421 -		01-352/05:24:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4525	MGS	01-352/05:38:44	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4526	MGS	01-352/05:38:44	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4527	MGS	01-352/05:38:45		NOTE: Enter Solar Eclipse 12421		01-352/05:27:09
4528	MGS	01-352/05:38:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/05:27:09
4529	MGS	01-352/05:40:00	15	End Post-Cal		
4530	MGS	01-352/05:41:42	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4531	MGS	01-352/05:42:29		NOTE: Enter Earth Occultation 12421		01-352/05:30:53
4532	MGS	01-352/05:42:29	34	NOTE: Loss Of X-Band Signal		
4533	MGS	01-352/05:42:29	45	NOTE: Loss Of X-Band Signal		
4534	MGS	01-352/05:43:03		NOTE: End EVP script		01-352/05:31:27
4535	MGS	01-352/05:43:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/05:31:27
4536	MGS	01-352/05:43:04		NOTE: End Block (MAP_PB_ODY)		01-352/05:31:28
4537	MGS	01-352/05:43:43	34	Range Modulation On: SUP=3.0dB		
4538	MGS	01-352/05:44:43	34	Begin Ranging Acquisition		
4539	MGS	01-352/05:55:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/05:43:58
4540	MGS	01-352/05:59:19		: 01:41:30	RPAONX	01-352/05:47:43
4541	MGS	01-352/05:59:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/05:47:43
4542	MGS	01-352/06:00:34		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/05:48:58
4543	MGS	01-352/06:00:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/05:48:58
4544	MGS	01-352/06:00:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/05:48:58
4545	MGS	01-352/06:00:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/05:48:58
4546	MGS	01-352/06:00:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/05:48:58
4547	MGS	01-352/06:01:09		NOTE: Exit Earth Occultation 12421		01-352/05:49:33
4548	MGS	01-352/06:01:09	34	Acquisition Of X-Band Signal		
4549	MGS	01-352/06:01:09	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4550	MGS	01-352/06:01:09	34	NOTE: Carrier Only -- No Telemetry Modulation		
4551	MGS	01-352/06:01:09	45	Acquisition Of X-Band Signal		
4552	MGS	01-352/06:01:09	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4553	MGS	01-352/06:01:09	45	NOTE: Carrier Only -- No Telemetry Modulation		
4554	MGS	01-352/06:03:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/05:51:31
4555	MGS	01-352/06:03:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/05:51:31
4556	MGS	01-352/06:03:12		Set eclipse egress script address: 019A	SWSEES	01-352/05:51:36
4557	MGS	01-352/06:08:39		NOTE: Exit Planetary Atmosphere 12421		01-352/05:57:03
4558	MGS	01-352/06:10:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/05:59:12
4559	MGS	01-352/06:10:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/05:59:12
4560	MGS	01-352/06:10:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/05:59:12
4561	MGS	01-352/06:10:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/05:59:12
4562	MGS	01-352/06:10:48	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4563	MGS	01-352/06:10:48	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4564	MGS	01-352/06:10:49		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/05:59:13
4565	MGS	01-352/06:10:49		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/05:59:13
4566	MGS	01-352/06:10:49		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/05:59:13
4567	MGS	01-352/06:10:49	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4568	MGS	01-352/06:10:49	45	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4569	MGS	01-352/06:10:53		NOTE: End fixed Sub-Reflector for Radio Science		01-352/05:59:17
4570	MGS	01-352/06:18:54		NOTE: Exit Solar Eclipse 12421		01-352/06:07:18
4571	MGS	01-352/06:35:23		NOTE: Periapsis 12422 ----------		01-352/06:23:47
4572	MGS	01-352/06:39:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/06:28:17
4573	MGS	01-352/06:39:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/06:28:17
4574	MGS	01-352/06:39:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/06:28:18
4575	MGS	01-352/06:39:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/06:28:18
4576	MGS	01-352/06:58:15	34	NOTE: Transmitter Off in 15 minutes		
4577	MGS	01-352/07:01:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/06:50:18
4578	MGS	01-352/07:01:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/06:50:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4579	MGS	01-352/07:11:15	34	Range Modulation Off		
4580	MGS	01-352/07:13:15	34	Transmitter Off		
4581	MGS	01-352/07:25:53		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/07:14:17
4582	MGS	01-352/07:26:30		NOTE: Start EVP data return script		01-352/07:14:54
4583	MGS	01-352/07:30:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/07:19:17
4584	MGS	01-352/07:30:53		: 00:09:55, FALSE	RDSCII	01-352/07:19:17
4585	MGS	01-352/07:30:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/07:19:17
4586	MGS	01-352/07:30:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/07:19:17
4587	MGS	01-352/07:30:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/07:19:17
4588	MGS	01-352/07:30:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/07:19:17
4589	MGS	01-352/07:30:53	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4590	MGS	01-352/07:30:53	34	NOTE: Carrier Only -- No Telemetry Modulation		
4591	MGS	01-352/07:30:53	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4592	MGS	01-352/07:30:53	45	NOTE: Carrier Only -- No Telemetry Modulation		
4593	MGS	01-352/07:33:02		NOTE: Enter Planetary Atmosphere 12422		01-352/07:21:26
4594	MGS	01-352/07:33:55		NOTE: Apoapsis 12422 -		01-352/07:22:19
4595	MGS	01-352/07:36:30		NOTE: Enter Solar Eclipse 12422		01-352/07:24:54
4596	MGS	01-352/07:36:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/07:24:54
4597	MGS	01-352/07:39:29	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4598	MGS	01-352/07:40:12		NOTE: Enter Earth Occultation 12422		01-352/07:28:36
4599	MGS	01-352/07:40:12	34	NOTE: Loss Of X-Band Signal		
4600	MGS	01-352/07:40:12	45	NOTE: Loss Of X-Band Signal		
4601	MGS	01-352/07:40:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/07:29:12
4602	MGS	01-352/07:40:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/07:29:12
4603	MGS	01-352/07:40:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/07:29:12
4604	MGS	01-352/07:40:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/07:29:12
4605	MGS	01-352/07:40:49		NOTE: End EVP script		01-352/07:29:13
4606	MGS	01-352/07:40:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/07:29:13
4607	MGS	01-352/07:40:53		NOTE: End fixed Sub-Reflector for Radio Science		01-352/07:29:17
4608	MGS	01-352/07:41:30	34	Range Modulation On: SUP=3.0dB		
4609	MGS	01-352/07:42:30	34	Begin Ranging Acquisition		
4610	MGS	01-352/07:53:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/07:41:43
4611	MGS	01-352/07:57:04		: 01:41:30	RPAONX	01-352/07:45:28
4612	MGS	01-352/07:57:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/07:45:28
4613	MGS	01-352/07:58:19		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/07:46:43
4614	MGS	01-352/07:58:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/07:46:43
4615	MGS	01-352/07:58:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/07:46:43
4616	MGS	01-352/07:58:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/07:46:43
4617	MGS	01-352/07:58:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/07:46:43
4618	MGS	01-352/07:58:49		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/07:47:13
4619	MGS	01-352/07:58:57		NOTE: Exit Earth Occultation 12422		01-352/07:47:20
4620	MGS	01-352/07:58:57	34	Acquisition Of X-Band Signal		
4621	MGS	01-352/07:58:57	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4622	MGS	01-352/07:58:57	34	NOTE: Carrier Only -- No Telemetry Modulation		
4623	MGS	01-352/07:58:57	45	Acquisition Of X-Band Signal		
4624	MGS	01-352/07:58:57	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4625	MGS	01-352/07:58:57	45	NOTE: Carrier Only -- No Telemetry Modulation		
4626	MGS	01-352/08:00:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/07:49:18
4627	MGS	01-352/08:00:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/07:49:18
4628	MGS	01-352/08:00:59		Set eclipse egress script address: 01DC	SWSEES	01-352/07:49:23
4629	MGS	01-352/08:06:26		NOTE: Exit Planetary Atmosphere 12422		01-352/07:54:49
4630	MGS	01-352/08:08:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/07:56:57
4631	MGS	01-352/08:08:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/07:56:57
4632	MGS	01-352/08:08:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/07:56:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4633	MGS	01-352/08:08:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/07:56:57
4634	MGS	01-352/08:08:33	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4635	MGS	01-352/08:08:33	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4636	MGS	01-352/08:08:34		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/07:56:58
4637	MGS	01-352/08:08:34		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/07:56:58
4638	MGS	01-352/08:08:34		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/07:56:58
4639	MGS	01-352/08:08:34	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4640	MGS	01-352/08:08:34	45	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4641	MGS	01-352/08:08:38		NOTE: End fixed Sub-Reflector for Radio Science		01-352/07:57:02
4642	MGS	01-352/08:16:39		NOTE: Exit Solar Eclipse 12422		01-352/08:05:02
4643	MGS	01-352/08:33:08		NOTE: Periapsis 12423 ----------		01-352/08:21:32
4644	MGS	01-352/08:37:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/08:26:01
4645	MGS	01-352/08:37:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/08:26:01
4646	MGS	01-352/08:37:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/08:26:02
4647	MGS	01-352/08:37:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/08:26:02
4648	MGS	01-352/08:55:56	34	NOTE: Transmitter Off in 15 minutes		
4649	MGS	01-352/08:59:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/08:48:02
4650	MGS	01-352/08:59:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/08:48:02
4651	MGS	01-352/09:08:56	34	Range Modulation Off		
4652	MGS	01-352/09:09:39		NOTE: Start Block (SSRMGR)		01-352/08:58:02
4653	MGS	01-352/09:09:39		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-352/08:58:02
4654	MGS	01-352/09:09:40		SSR 1A Data Enable	CSD1AE	01-352/08:58:03
4655	MGS	01-352/09:09:40		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-352/08:58:03
4656	MGS	01-352/09:10:56	34	Transmitter Off		
4657	MGS	01-352/09:23:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/09:12:02
4658	MGS	01-352/09:24:12		NOTE: Start Block (MAP_PB_ODY)		01-352/09:12:35
4659	MGS	01-352/09:24:13		: 00:20:34, 01:41:31, FALSE, FALSE, FALSE, 00:01:15, 00:08:34, 01:23:26, 00:08:15	AEMINI	01-352/09:12:36
4660	MGS	01-352/09:24:13		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/09:12:36
4661	MGS	01-352/09:24:13		NOTE: Start EVP data return script		01-352/09:12:36
4662	MGS	01-352/09:24:14		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-352T09:53:00.000	AEMPBI	01-352/09:12:37
4663	MGS	01-352/09:28:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/09:17:02
4664	MGS	01-352/09:28:39		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9112000, DUR=00:18:59		01-352/09:17:02
4665	MGS	01-352/09:28:39		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-352/09:17:02
4666	MGS	01-352/09:28:39		: 00:09:55, FALSE	RDSCII	01-352/09:17:02
4667	MGS	01-352/09:28:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/09:17:02
4668	MGS	01-352/09:28:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/09:17:02
4669	MGS	01-352/09:28:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/09:17:02
4670	MGS	01-352/09:28:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/09:17:02
4671	MGS	01-352/09:28:39	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4672	MGS	01-352/09:28:39	34	NOTE: Carrier Only -- No Telemetry Modulation		
4673	MGS	01-352/09:28:39	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4674	MGS	01-352/09:28:39	45	NOTE: Carrier Only -- No Telemetry Modulation		
4675	MGS	01-352/09:30:44		NOTE: Enter Planetary Atmosphere 12423		01-352/09:19:08
4676	MGS	01-352/09:31:46		NOTE: Apoapsis 12423 -		01-352/09:20:10
4677	MGS	01-352/09:33:13		SSR 1B Data Disable	CSD1BX	01-352/09:21:36
4678	MGS	01-352/09:33:13		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-352/09:21:36
4679	MGS	01-352/09:33:14		NOTE: End Block (SSRMGR)		01-352/09:21:37
4680	MGS	01-352/09:34:13		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/09:22:36
4681	MGS	01-352/09:34:13		NOTE: Enter Solar Eclipse 12423		01-352/09:22:37
4682	MGS	01-352/09:37:14	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4683	MGS	01-352/09:37:54		NOTE: Enter Earth Occultation 12423		01-352/09:26:17
4684	MGS	01-352/09:37:54	34	NOTE: Loss Of X-Band Signal		
4685	MGS	01-352/09:37:54	45	NOTE: Loss Of X-Band Signal		
4686	MGS	01-352/09:38:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/09:26:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4687	MGS	01-352/09:38:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/09:26:57
4688	MGS	01-352/09:38:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/09:26:57
4689	MGS	01-352/09:38:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/09:26:57
4690	MGS	01-352/09:38:34		NOTE: End EVP script		01-352/09:26:58
4691	MGS	01-352/09:38:35		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/09:26:58
4692	MGS	01-352/09:38:35		NOTE: End Block (MAP_RT)		01-352/09:26:59
4693	MGS	01-352/09:38:38		NOTE: End fixed Sub-Reflector for Radio Science		01-352/09:27:02
4694	MGS	01-352/09:39:14	34	Range Modulation On: SUP=3.0dB		
4695	MGS	01-352/09:40:14	34	Begin Ranging Acquisition		
4696	MGS	01-352/09:54:47		: 01:41:31	RPAONX	01-352/09:43:10
4697	MGS	01-352/09:54:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/09:43:10
4698	MGS	01-352/09:56:32		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/09:44:55
4699	MGS	01-352/09:56:41		NOTE: Exit Earth Occultation 12423		01-352/09:45:05
4700	MGS	01-352/09:56:41	34	Acquisition Of X-Band Signal		
4701	MGS	01-352/09:56:41	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4702	MGS	01-352/09:56:41	45	Acquisition Of X-Band Signal		
4703	MGS	01-352/09:56:41	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4704	MGS	01-352/09:58:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/09:47:02
4705	MGS	01-352/09:58:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/09:47:02
4706	MGS	01-352/09:58:43		Command the PSE with included data word: 3990	SWPSEL	01-352/09:47:06
4707	MGS	01-352/09:58:44		Set eclipse egress script address: 0158	SWSEES	01-352/09:47:07
4708	MGS	01-352/10:00:26	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4709	MGS	01-352/10:00:26	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4710	MGS	01-352/10:04:10		NOTE: Exit Planetary Atmosphere 12423		01-352/09:52:34
4711	MGS	01-352/10:04:36		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:21:03	AEMPB	01-352/09:52:59
4712	MGS	01-352/10:04:36		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-352/09:52:59
4713	MGS	01-352/10:04:36		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-352/09:52:59
4714	MGS	01-352/10:04:37		SSR 1B Data Enable	CSD1BE	01-352/09:53:00
4715	MGS	01-352/10:04:37		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-352/09:53:00
4716	MGS	01-352/10:04:37	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4717	MGS	01-352/10:04:37	45	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4718	MGS	01-352/10:14:22		NOTE: Exit Solar Eclipse 12423		01-352/10:02:45
4719	MGS	01-352/10:30:50		NOTE: Periapsis 12424 ----------		01-352/10:19:13
4720	MGS	01-352/10:39:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/10:27:44
4721	MGS	01-352/10:39:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/10:27:44
4722	MGS	01-352/10:39:22		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/10:27:45
4723	MGS	01-352/10:39:22		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/10:27:45
4724	MGS	01-352/10:50:00	63	Begin Pre-Cal		
4725	MGS	01-352/10:50:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4726	MGS	01-352/10:50:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
4727	MGS	01-352/10:50:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
4728	MGS	01-352/10:50:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
4729	MGS	01-352/10:50:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
4730	MGS	01-352/10:50:00	63	Config: TGC: DEST=37		
4731	MGS	01-352/10:50:00	63	Config: TGC: BAND=X, BR=40000.000000		
4732	MGS	01-352/10:50:00	63	Config: FSS: CH=2, PRI_FL=10000		
4733	MGS	01-352/10:50:00	63	Config: RSR		
4734	MGS	01-352/10:50:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
4735	MGS	01-352/10:50:00	63	Config: BVR		
4736	MGS	01-352/10:50:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
4737	MGS	01-352/10:50:00	63	Config: MDA: SMPL=0.1		
4738	MGS	01-352/10:53:38	34	NOTE: Transmitter Off in 15 minutes		
4739	MGS	01-352/11:01:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/10:49:45
4740	MGS	01-352/11:01:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/10:49:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4741	MGS	01-352/11:06:39	34	Range Modulation Off		
4742	MGS	01-352/11:08:38	34	Transmitter Off		
4743	MGS	01-352/11:15:15		SSR 1B Data Disable	CSD1BX	01-352/11:03:38
4744	MGS	01-352/11:15:15		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-352/11:03:38
4745	MGS	01-352/11:15:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-352/11:03:38
4746	MGS	01-352/11:15:15	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4747	MGS	01-352/11:15:15	45	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4748	MGS	01-352/11:21:54		NOTE: Start Block (MAP_RT)		01-352/11:10:17
4749	MGS	01-352/11:21:55		: 00:20:34, 01:41:30, FALSE, TRUE, FALSE, 00:01:15, 00:10:14, 01:20:05, 00:09:55	AEMINI	01-352/11:10:18
4750	MGS	01-352/11:21:55		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/11:10:18
4751	MGS	01-352/11:21:55		NOTE: Start EVP data return script		01-352/11:10:18
4752	MGS	01-352/11:21:56		: SE_2A, RTM, 01:20:04, MRC, 2001-352T11:52:23.000	AEMRTI	01-352/11:10:19
4753	MGS	01-352/11:28:27		NOTE: Enter Planetary Atmosphere 12424		01-352/11:16:50
4754	MGS	01-352/11:29:29		NOTE: Apoapsis 12424 -		01-352/11:17:53
4755	MGS	01-352/11:31:51	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4756	MGS	01-352/11:31:51	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4757	MGS	01-352/11:31:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/11:20:18
4758	MGS	01-352/11:31:55		NOTE: Enter Solar Eclipse 12424		01-352/11:20:18
4759	MGS	01-352/11:34:55	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
4760	MGS	01-352/11:35:36		NOTE: Enter Earth Occultation 12424		01-352/11:24:00
4761	MGS	01-352/11:35:36	34	NOTE: Loss Of X-Band Signal		
4762	MGS	01-352/11:35:36	45	NOTE: Loss Of X-Band Signal		
4763	MGS	01-352/11:36:18		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/11:24:41
4764	MGS	01-352/11:36:18		NOTE: End EVP script		01-352/11:24:42
4765	MGS	01-352/11:36:19		NOTE: End Block (MAP_PB_ODY)		01-352/11:24:43
4766	MGS	01-352/11:36:56	34	Range Modulation On: SUP=3.0dB		
4767	MGS	01-352/11:37:56	34	Begin Ranging Acquisition		
4768	MGS	01-352/11:48:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/11:37:07
4769	MGS	01-352/11:50:00	34	NOTE: Transmitter Off in 15 minutes		
4770	MGS	01-352/11:52:29		: 01:41:30	RPAONX	01-352/11:40:52
4771	MGS	01-352/11:52:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/11:40:52
4772	MGS	01-352/11:53:44		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/11:42:07
4773	MGS	01-352/11:53:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/11:42:07
4774	MGS	01-352/11:53:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/11:42:07
4775	MGS	01-352/11:53:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/11:42:07
4776	MGS	01-352/11:53:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/11:42:07
4777	MGS	01-352/11:54:24		NOTE: Exit Earth Occultation 12424		01-352/11:42:47
4778	MGS	01-352/11:54:24	34	Acquisition Of X-Band Signal		
4779	MGS	01-352/11:54:24	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4780	MGS	01-352/11:54:24	34	NOTE: Carrier Only -- No Telemetry Modulation		
4781	MGS	01-352/11:54:24	45	Acquisition Of X-Band Signal		
4782	MGS	01-352/11:54:24	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4783	MGS	01-352/11:54:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
4784	MGS	01-352/11:56:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/11:44:45
4785	MGS	01-352/11:56:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/11:44:45
4786	MGS	01-352/11:56:27		Set eclipse egress script address: 019A	SWSEES	01-352/11:44:50
4787	MGS	01-352/12:01:53		NOTE: Exit Planetary Atmosphere 12424		01-352/11:50:16
4788	MGS	01-352/12:03:00	34	Range Modulation Off		
4789	MGS	01-352/12:03:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/11:52:21
4790	MGS	01-352/12:03:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/11:52:21
4791	MGS	01-352/12:03:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/11:52:21
4792	MGS	01-352/12:03:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/11:52:21
4793	MGS	01-352/12:03:58	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4794	MGS	01-352/12:03:58	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4795	MGS	01-352/12:03:59		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/11:52:22
4796	MGS	01-352/12:03:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/11:52:22
4797	MGS	01-352/12:03:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/11:52:22
4798	MGS	01-352/12:03:59	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4799	MGS	01-352/12:03:59	45	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4800	MGS	01-352/12:04:03		NOTE: End fixed Sub-Reflector for Radio Science		01-352/11:52:26
4801	MGS	01-352/12:05:00	34	Transmitter Off		
4802	MGS	01-352/12:10:00	34	End Tracking		
4803	MGS	01-352/12:11:36		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-352/11:59:59
4804	MGS	01-352/12:12:04		NOTE: Exit Solar Eclipse 12424		01-352/12:00:27
4805	MGS	01-352/12:20:00	63	Begin Tracking		
4806	MGS	01-352/12:20:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4807	MGS	01-352/12:25:00	34	End Post-Cal		
4808	MGS	01-352/12:28:13		NOTE: Periapsis 12425 ----------		01-352/12:16:36
4809	MGS	01-352/12:28:13	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4810	MGS	01-352/12:28:13	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4811	MGS	01-352/12:28:20	45	NOTE: Below Uplink Interlock Limit		
4812	MGS	01-352/12:33:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/12:21:26
4813	MGS	01-352/12:33:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/12:21:26
4814	MGS	01-352/12:33:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/12:21:27
4815	MGS	01-352/12:33:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/12:21:27
4816	MGS	01-352/12:34:34	63	NOTE: Above Uplink Interlock Limit		
4817	MGS	01-352/12:40:00	45	End Tracking		
4818	MGS	01-352/12:55:00	45	End Post-Cal		
4819	MGS	01-352/12:55:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/12:43:27
4820	MGS	01-352/12:55:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/12:43:27
4821	MGS	01-352/13:19:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/13:07:26
4822	MGS	01-352/13:19:38		NOTE: Start EVP data return script		01-352/13:08:01
4823	MGS	01-352/13:24:03		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/13:12:26
4824	MGS	01-352/13:24:03		: 00:09:55, FALSE	RDSCII	01-352/13:12:26
4825	MGS	01-352/13:24:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/13:12:26
4826	MGS	01-352/13:24:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/13:12:26
4827	MGS	01-352/13:24:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/13:12:26
4828	MGS	01-352/13:24:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/13:12:26
4829	MGS	01-352/13:24:03	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4830	MGS	01-352/13:24:03	63	NOTE: Carrier Only -- No Telemetry Modulation		
4831	MGS	01-352/13:26:10		NOTE: Enter Planetary Atmosphere 12425		01-352/13:14:33
4832	MGS	01-352/13:26:55		NOTE: Apoapsis 12425 -		01-352/13:15:18
4833	MGS	01-352/13:29:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/13:18:01
4834	MGS	01-352/13:29:39		NOTE: Enter Solar Eclipse 12425		01-352/13:18:01
4835	MGS	01-352/13:33:17		NOTE: Enter Earth Occultation 12425		01-352/13:21:40
4836	MGS	01-352/13:33:17	63	NOTE: Loss Of X-Band Signal		
4837	MGS	01-352/13:33:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/13:22:21
4838	MGS	01-352/13:33:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/13:22:21
4839	MGS	01-352/13:33:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/13:22:21
4840	MGS	01-352/13:33:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/13:22:21
4841	MGS	01-352/13:33:59		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/13:22:22
4842	MGS	01-352/13:34:00		NOTE: End EVP script		01-352/13:22:22
4843	MGS	01-352/13:34:04		NOTE: End fixed Sub-Reflector for Radio Science		01-352/13:22:26
4844	MGS	01-352/13:46:28		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/13:34:50
4845	MGS	01-352/13:50:12		: 01:41:30	RPAONX	01-352/13:38:35
4846	MGS	01-352/13:50:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/13:38:35
4847	MGS	01-352/13:51:27		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/13:39:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4848	MGS	01-352/13:51:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/13:39:50
4849	MGS	01-352/13:51:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/13:39:50
4850	MGS	01-352/13:51:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/13:39:50
4851	MGS	01-352/13:51:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/13:39:50
4852	MGS	01-352/13:51:57		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/13:40:20
4853	MGS	01-352/13:52:09		NOTE: Exit Earth Occultation 12425		01-352/13:40:32
4854	MGS	01-352/13:52:09	63	Acquisition Of X-Band Signal		
4855	MGS	01-352/13:52:09	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4856	MGS	01-352/13:52:09	63	NOTE: Carrier Only -- No Telemetry Modulation		
4857	MGS	01-352/13:54:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/13:42:27
4858	MGS	01-352/13:54:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/13:42:27
4859	MGS	01-352/13:54:09		Set eclipse egress script address: 01DC	SWSEES	01-352/13:42:32
4860	MGS	01-352/13:59:35		NOTE: Exit Planetary Atmosphere 12425		01-352/13:47:58
4861	MGS	01-352/14:01:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/13:50:04
4862	MGS	01-352/14:01:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/13:50:04
4863	MGS	01-352/14:01:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/13:50:04
4864	MGS	01-352/14:01:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/13:50:04
4865	MGS	01-352/14:01:41	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4866	MGS	01-352/14:01:42		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/13:50:05
4867	MGS	01-352/14:01:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/13:50:05
4868	MGS	01-352/14:01:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/13:50:05
4869	MGS	01-352/14:01:42	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4870	MGS	01-352/14:01:47		NOTE: End fixed Sub-Reflector for Radio Science		01-352/13:50:09
4871	MGS	01-352/14:09:47		NOTE: Exit Solar Eclipse 12425		01-352/13:58:10
4872	MGS	01-352/14:25:54		NOTE: Periapsis 12426 ----------		01-352/14:14:17
4873	MGS	01-352/14:30:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/14:19:09
4874	MGS	01-352/14:30:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/14:19:09
4875	MGS	01-352/14:30:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/14:19:10
4876	MGS	01-352/14:30:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/14:19:10
4877	MGS	01-352/14:52:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/14:41:10
4878	MGS	01-352/14:52:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/14:41:10
4879	MGS	01-352/15:02:57		NOTE: Start Block (SSRMGR)		01-352/14:51:20
4880	MGS	01-352/15:02:57		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-352/14:51:20
4881	MGS	01-352/15:02:58		SSR 1B Data Enable	CSD1BE	01-352/14:51:21
4882	MGS	01-352/15:02:58		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-352/14:51:21
4883	MGS	01-352/15:16:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/15:05:09
4884	MGS	01-352/15:17:23		NOTE: Start Block (MAP_PB_ODY)		01-352/15:05:45
4885	MGS	01-352/15:17:24		: 00:20:34, 01:41:31, FALSE, FALSE, FALSE, 00:01:15, 00:08:34, 01:23:26, 00:08:15	AEMINI	01-352/15:05:46
4886	MGS	01-352/15:17:24		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/15:05:46
4887	MGS	01-352/15:17:24		NOTE: Start EVP data return script		01-352/15:05:46
4888	MGS	01-352/15:17:25		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-352T15:46:10.000	AEMPBI	01-352/15:05:47
4889	MGS	01-352/15:21:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/15:10:09
4890	MGS	01-352/15:21:47		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=9024000, DUR=00:18:48		01-352/15:10:09
4891	MGS	01-352/15:21:47		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-352/15:10:09
4892	MGS	01-352/15:21:47		: 00:09:55, FALSE	RDSCII	01-352/15:10:09
4893	MGS	01-352/15:21:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/15:10:09
4894	MGS	01-352/15:21:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/15:10:09
4895	MGS	01-352/15:21:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/15:10:09
4896	MGS	01-352/15:21:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/15:10:09
4897	MGS	01-352/15:21:47	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4898	MGS	01-352/15:21:47	63	NOTE: Carrier Only -- No Telemetry Modulation		
4899	MGS	01-352/15:23:52		NOTE: Enter Planetary Atmosphere 12426		01-352/15:12:15
4900	MGS	01-352/15:24:45		NOTE: Apoapsis 12426 -		01-352/15:13:08
4901	MGS	01-352/15:26:24		SSR 1A Data Disable	CSD1AX	01-352/15:14:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4902	MGS	01-352/15:26:24		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-352/15:14:46
4903	MGS	01-352/15:26:25		NOTE: End Block (SSRMGR)		01-352/15:14:47
4904	MGS	01-352/15:27:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/15:15:46
4905	MGS	01-352/15:27:24		NOTE: Enter Solar Eclipse 12426		01-352/15:15:47
4906	MGS	01-352/15:30:58		NOTE: Enter Earth Occultation 12426		01-352/15:19:20
4907	MGS	01-352/15:30:58	63	NOTE: Loss Of X-Band Signal		
4908	MGS	01-352/15:31:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/15:20:04
4909	MGS	01-352/15:31:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/15:20:04
4910	MGS	01-352/15:31:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/15:20:04
4911	MGS	01-352/15:31:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/15:20:04
4912	MGS	01-352/15:31:43		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/15:20:05
4913	MGS	01-352/15:31:43		NOTE: End EVP script		01-352/15:20:05
4914	MGS	01-352/15:31:44		NOTE: End Block (MAP_RT)		01-352/15:20:06
4915	MGS	01-352/15:31:47		NOTE: End fixed Sub-Reflector for Radio Science		01-352/15:20:09
4916	MGS	01-352/15:47:58		: 01:41:31	RPAONX	01-352/15:36:20
4917	MGS	01-352/15:47:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/15:36:20
4918	MGS	01-352/15:49:43		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/15:38:05
4919	MGS	01-352/15:49:56		NOTE: Exit Earth Occultation 12426		01-352/15:38:19
4920	MGS	01-352/15:49:56	63	Acquisition Of X-Band Signal		
4921	MGS	01-352/15:49:56	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4922	MGS	01-352/15:51:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/15:40:10
4923	MGS	01-352/15:51:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/15:40:10
4924	MGS	01-352/15:51:52		Command the PSE with included data word: 3990	SWPSEL	01-352/15:40:14
4925	MGS	01-352/15:51:53		Set eclipse egress script address: 0158	SWSEES	01-352/15:40:15
4926	MGS	01-352/15:57:20		NOTE: Exit Planetary Atmosphere 12426		01-352/15:45:43
4927	MGS	01-352/15:57:47		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:21:03	AEMPB	01-352/15:46:09
4928	MGS	01-352/15:57:47		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-352/15:46:09
4929	MGS	01-352/15:57:47		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-352/15:46:09
4930	MGS	01-352/15:57:48		SSR 1A Data Enable	CSD1AE	01-352/15:46:10
4931	MGS	01-352/15:57:48		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-352/15:46:10
4932	MGS	01-352/15:57:48	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4933	MGS	01-352/16:07:33		NOTE: Exit Solar Eclipse 12426		01-352/15:55:55
4934	MGS	01-352/16:24:04		NOTE: Periapsis 12427 ----------		01-352/16:12:26
4935	MGS	01-352/16:32:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/16:20:54
4936	MGS	01-352/16:32:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/16:20:54
4937	MGS	01-352/16:32:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/16:20:55
4938	MGS	01-352/16:32:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/16:20:55
4939	MGS	01-352/16:54:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/16:42:55
4940	MGS	01-352/16:54:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/16:42:55
4941	MGS	01-352/17:08:26		SSR 1A Data Disable	CSD1AX	01-352/16:56:48
4942	MGS	01-352/17:08:26		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-352/16:56:48
4943	MGS	01-352/17:08:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-352/16:56:48
4944	MGS	01-352/17:08:26	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4945	MGS	01-352/17:15:10		NOTE: Start Block (MAP_RT)		01-352/17:03:32
4946	MGS	01-352/17:15:11		: 00:20:34, 01:41:30, FALSE, TRUE, FALSE, 00:01:15, 00:10:14, 01:20:05, 00:09:55	AEMINI	01-352/17:03:33
4947	MGS	01-352/17:15:11		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/17:03:33
4948	MGS	01-352/17:15:11		NOTE: Start EVP data return script		01-352/17:03:33
4949	MGS	01-352/17:15:12		: SE_2A, RTM, 01:20:04, MRC, 2001-352T17:45:38.000	AEMRTI	01-352/17:03:34
4950	MGS	01-352/17:21:37		NOTE: Enter Planetary Atmosphere 12427		01-352/17:10:00
4951	MGS	01-352/17:23:04		NOTE: Apoapsis 12427 -		01-352/17:11:27
4952	MGS	01-352/17:25:11		NOTE: Enter Solar Eclipse 12427		01-352/17:13:33
4953	MGS	01-352/17:25:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/17:13:33
4954	MGS	01-352/17:28:42		NOTE: Enter Earth Occultation 12427		01-352/17:17:05
4955	MGS	01-352/17:28:42	63	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
4956	MGS	01-352/17:29:29		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/17:17:51
4957	MGS	01-352/17:29:29		NOTE: End EVP script		01-352/17:17:52
4958	MGS	01-352/17:29:30		NOTE: End Block (MAP_PB_ODY)		01-352/17:17:53
4959	MGS	01-352/17:42:00		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/17:30:22
4960	MGS	01-352/17:45:45		: 01:41:30	RPAONX	01-352/17:34:07
4961	MGS	01-352/17:45:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/17:34:07
4962	MGS	01-352/17:47:00		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/17:35:22
4963	MGS	01-352/17:47:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/17:35:22
4964	MGS	01-352/17:47:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/17:35:22
4965	MGS	01-352/17:47:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/17:35:22
4966	MGS	01-352/17:47:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/17:35:22
4967	MGS	01-352/17:47:44		NOTE: Exit Earth Occultation 12427		01-352/17:36:06
4968	MGS	01-352/17:47:44	63	Acquisition Of X-Band Signal		
4969	MGS	01-352/17:47:44	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
4970	MGS	01-352/17:47:44	63	NOTE: Carrier Only -- No Telemetry Modulation		
4971	MGS	01-352/17:49:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/17:37:55
4972	MGS	01-352/17:49:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/17:37:55
4973	MGS	01-352/17:49:38		Set eclipse egress script address: 019A	SWSEES	01-352/17:38:00
4974	MGS	01-352/17:55:07		NOTE: Exit Planetary Atmosphere 12427		01-352/17:43:30
4975	MGS	01-352/17:57:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/17:45:36
4976	MGS	01-352/17:57:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/17:45:36
4977	MGS	01-352/17:57:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/17:45:36
4978	MGS	01-352/17:57:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/17:45:36
4979	MGS	01-352/17:57:14	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4980	MGS	01-352/17:57:15		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/17:45:37
4981	MGS	01-352/17:57:15		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/17:45:37
4982	MGS	01-352/17:57:15		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/17:45:37
4983	MGS	01-352/17:57:15	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
4984	MGS	01-352/17:57:19		NOTE: End fixed Sub-Reflector for Radio Science		01-352/17:45:41
4985	MGS	01-352/18:05:20		NOTE: Exit Solar Eclipse 12427		01-352/17:53:42
4986	MGS	01-352/18:22:14		NOTE: Periapsis 12428 ----------		01-352/18:10:36
4987	MGS	01-352/18:25:00	15	Begin Pre-Cal		
4988	MGS	01-352/18:25:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4989	MGS	01-352/18:25:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
4990	MGS	01-352/18:25:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
4991	MGS	01-352/18:25:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
4992	MGS	01-352/18:25:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
4993	MGS	01-352/18:25:00	15	Config: TGC: DEST=37		
4994	MGS	01-352/18:25:00	15	Config: TGC: BAND=X, BR=0.000000		
4995	MGS	01-352/18:25:00	15	Config: FSS: CH=2, PRI_FL=10000		
4996	MGS	01-352/18:25:00	15	Config: RSR		
4997	MGS	01-352/18:25:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
4998	MGS	01-352/18:25:00	15	Config: BVR		
4999	MGS	01-352/18:25:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
5000	MGS	01-352/18:25:00	15	Config: MDA: SMPL=0.1		
5001	MGS	01-352/18:26:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/18:14:41
5002	MGS	01-352/18:26:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/18:14:41
5003	MGS	01-352/18:26:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/18:14:42
5004	MGS	01-352/18:26:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/18:14:42
5005	MGS	01-352/18:48:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/18:36:42
5006	MGS	01-352/18:48:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/18:36:42
5007	MGS	01-352/19:12:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/19:00:41
5008	MGS	01-352/19:12:58		NOTE: Start EVP data return script		01-352/19:01:20
5009	MGS	01-352/19:17:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/19:05:41

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5010	MGS	01-352/19:17:19		: 00:09:55, FALSE	RDSCII	01-352/19:05:41
5011	MGS	01-352/19:17:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/19:05:41
5012	MGS	01-352/19:17:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/19:05:41
5013	MGS	01-352/19:17:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/19:05:41
5014	MGS	01-352/19:17:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/19:05:41
5015	MGS	01-352/19:17:19	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5016	MGS	01-352/19:17:19	63	NOTE: Carrier Only -- No Telemetry Modulation		
5017	MGS	01-352/19:19:26		NOTE: Enter Planetary Atmosphere 12428		01-352/19:07:48
5018	MGS	01-352/19:21:11		NOTE: Apoapsis 12428 -		01-352/19:09:33
5019	MGS	01-352/19:22:58		NOTE: Enter Solar Eclipse 12428		01-352/19:11:20
5020	MGS	01-352/19:22:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/19:11:20
5021	MGS	01-352/19:26:31		NOTE: Enter Earth Occultation 12428		01-352/19:14:53
5022	MGS	01-352/19:26:31	63	NOTE: Loss Of X-Band Signal		
5023	MGS	01-352/19:27:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/19:15:36
5024	MGS	01-352/19:27:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/19:15:36
5025	MGS	01-352/19:27:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/19:15:36
5026	MGS	01-352/19:27:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/19:15:36
5027	MGS	01-352/19:27:15		NOTE: End EVP script		01-352/19:15:37
5028	MGS	01-352/19:27:15		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/19:15:37
5029	MGS	01-352/19:27:19		NOTE: End fixed Sub-Reflector for Radio Science		01-352/19:15:41
5030	MGS	01-352/19:39:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/19:28:09
5031	MGS	01-352/19:43:32		: 01:41:30	RPAONX	01-352/19:31:54
5032	MGS	01-352/19:43:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/19:31:54
5033	MGS	01-352/19:44:47		: 00:00:30, 00:10:14, FALSE	RDSCIE	01-352/19:33:09
5034	MGS	01-352/19:44:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/19:33:09
5035	MGS	01-352/19:44:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/19:33:09
5036	MGS	01-352/19:44:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/19:33:09
5037	MGS	01-352/19:44:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/19:33:09
5038	MGS	01-352/19:45:17		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/19:33:39
5039	MGS	01-352/19:45:32		NOTE: Exit Earth Occultation 12428		01-352/19:33:54
5040	MGS	01-352/19:45:32	63	Acquisition Of X-Band Signal		
5041	MGS	01-352/19:45:32	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5042	MGS	01-352/19:45:32	63	NOTE: Carrier Only -- No Telemetry Modulation		
5043	MGS	01-352/19:47:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/19:35:42
5044	MGS	01-352/19:47:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/19:35:42
5045	MGS	01-352/19:47:25		Set eclipse egress script address: 01DC	SWSEES	01-352/19:35:47
5046	MGS	01-352/19:52:56		NOTE: Exit Planetary Atmosphere 12428		01-352/19:41:18
5047	MGS	01-352/19:55:00	15	Begin Tracking		
5048	MGS	01-352/19:55:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5049	MGS	01-352/19:55:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
5050	MGS	01-352/19:55:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/19:43:23
5051	MGS	01-352/19:55:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/19:43:23
5052	MGS	01-352/19:55:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/19:43:23
5053	MGS	01-352/19:55:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/19:43:23
5054	MGS	01-352/19:55:01	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5055	MGS	01-352/19:55:01	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5056	MGS	01-352/19:55:02		: RTM, MRC, 01:20:04, S&E_2A, FALSE, 00:09:56	AEMRT	01-352/19:43:24
5057	MGS	01-352/19:55:02		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/19:43:24
5058	MGS	01-352/19:55:02		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/19:43:24
5059	MGS	01-352/19:55:02	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5060	MGS	01-352/19:55:02	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5061	MGS	01-352/19:55:06		NOTE: End fixed Sub-Reflector for Radio Science		01-352/19:43:28
5062	MGS	01-352/19:55:42	15	NOTE: Above Uplink Interlock Limit		
5063	MGS	01-352/20:03:08		NOTE: Exit Solar Eclipse 12428		01-352/19:51:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5064	MGS	01-352/20:15:00	63	End Tracking		
5065	MGS	01-352/20:20:05		NOTE: Periapsis 12429 ----------		01-352/20:08:27
5066	MGS	01-352/20:24:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/20:12:28
5067	MGS	01-352/20:24:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/20:12:28
5068	MGS	01-352/20:24:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/20:12:29
5069	MGS	01-352/20:24:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/20:12:29
5070	MGS	01-352/20:30:00	63	End Post-Cal		
5071	MGS	01-352/20:46:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/20:34:29
5072	MGS	01-352/20:46:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/20:34:29
5073	MGS	01-352/20:56:06		NOTE: Start Block (SSRMGR)		01-352/20:44:28
5074	MGS	01-352/20:56:06		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-352/20:44:28
5075	MGS	01-352/20:56:07		SSR 1A Data Enable	CSD1AE	01-352/20:44:29
5076	MGS	01-352/20:56:07		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-352/20:44:29
5077	MGS	01-352/21:10:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/20:58:28
5078	MGS	01-352/21:10:41		NOTE: Start Block (MAP_PB_ODY)		01-352/20:59:03
5079	MGS	01-352/21:10:42		: 00:20:34, 01:41:31, FALSE, FALSE, FALSE, 00:01:15, 00:08:34, 01:23:26, 00:08:15	AEMINI	01-352/20:59:04
5080	MGS	01-352/21:10:42		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/20:59:04
5081	MGS	01-352/21:10:42		NOTE: Start EVP data return script		01-352/20:59:04
5082	MGS	01-352/21:10:43		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-352T21:39:28.000	AEMPBI	01-352/20:59:05
5083	MGS	01-352/21:15:06		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-352/21:03:28
5084	MGS	01-352/21:15:06		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9112000, DUR=00:18:59		01-352/21:03:28
5085	MGS	01-352/21:15:06		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-352/21:03:28
5086	MGS	01-352/21:15:06		: 00:09:55, FALSE	RDSCII	01-352/21:03:28
5087	MGS	01-352/21:15:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/21:03:28
5088	MGS	01-352/21:15:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/21:03:28
5089	MGS	01-352/21:15:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/21:03:28
5090	MGS	01-352/21:15:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/21:03:28
5091	MGS	01-352/21:15:06	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5092	MGS	01-352/21:15:06	15	NOTE: Carrier Only -- No Telemetry Modulation		
5093	MGS	01-352/21:17:12		NOTE: Enter Planetary Atmosphere 12429		01-352/21:05:34
5094	MGS	01-352/21:18:47		NOTE: Apoapsis 12429 -		01-352/21:07:09
5095	MGS	01-352/21:19:42		SSR 1B Data Disable	CSD1BX	01-352/21:08:04
5096	MGS	01-352/21:19:42		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-352/21:08:04
5097	MGS	01-352/21:19:43		NOTE: End Block (SSRMGR)		01-352/21:08:05
5098	MGS	01-352/21:20:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/21:09:04
5099	MGS	01-352/21:20:43		NOTE: Enter Solar Eclipse 12429		01-352/21:09:05
5100	MGS	01-352/21:24:18		NOTE: Enter Earth Occultation 12429		01-352/21:12:40
5101	MGS	01-352/21:24:18	15	NOTE: Loss Of X-Band Signal		
5102	MGS	01-352/21:25:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/21:13:23
5103	MGS	01-352/21:25:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/21:13:23
5104	MGS	01-352/21:25:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/21:13:23
5105	MGS	01-352/21:25:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/21:13:23
5106	MGS	01-352/21:25:02		NOTE: End EVP script		01-352/21:13:24
5107	MGS	01-352/21:25:02		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/21:13:24
5108	MGS	01-352/21:25:03		NOTE: End Block (MAP_RT)		01-352/21:13:25
5109	MGS	01-352/21:25:06		NOTE: End fixed Sub-Reflector for Radio Science		01-352/21:13:28
5110	MGS	01-352/21:41:16		: 01:41:31	RPAONX	01-352/21:29:38
5111	MGS	01-352/21:41:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/21:29:38
5112	MGS	01-352/21:43:02		Disables autonomous command to send eclipse ingress script	SWEISX	01-352/21:31:23
5113	MGS	01-352/21:43:18		NOTE: Exit Earth Occultation 12429		01-352/21:31:39
5114	MGS	01-352/21:43:18	15	Acquisition Of X-Band Signal		
5115	MGS	01-352/21:43:18	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5116	MGS	01-352/21:45:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/21:33:29
5117	MGS	01-352/21:45:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/21:33:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5118	MGS	01-352/21:45:12		Command the PSE with included data word: 3990	SWPSEL	01-352/21:33:33
5119	MGS	01-352/21:45:13		Set eclipse egress script address: 0158	SWSEES	01-352/21:33:34
5120	MGS	01-352/21:50:43		NOTE: Exit Planetary Atmosphere 12429		01-352/21:39:05
5121	MGS	01-352/21:51:06		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:21:03	AEMPB	01-352/21:39:27
5122	MGS	01-352/21:51:06		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-352/21:39:27
5123	MGS	01-352/21:51:06		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-352/21:39:27
5124	MGS	01-352/21:51:07		SSR 1B Data Enable	CSD1BE	01-352/21:39:28
5125	MGS	01-352/21:51:07		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-352/21:39:28
5126	MGS	01-352/21:51:07	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5127	MGS	01-352/22:00:52		NOTE: Exit Solar Eclipse 12429		01-352/21:49:14
5128	MGS	01-352/22:17:30		NOTE: Periapsis 12430 ----------		01-352/22:05:51
5129	MGS	01-352/22:25:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-352/22:14:13
5130	MGS	01-352/22:25:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-352/22:14:13
5131	MGS	01-352/22:25:53		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-352/22:14:14
5132	MGS	01-352/22:25:53		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-352/22:14:14
5133	MGS	01-352/22:47:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-352/22:36:14
5134	MGS	01-352/22:47:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-352/22:36:14
5135	MGS	01-352/23:01:45		SSR 1B Data Disable	CSD1BX	01-352/22:50:06
5136	MGS	01-352/23:01:45		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-352/22:50:06
5137	MGS	01-352/23:01:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-352/22:50:06
5138	MGS	01-352/23:01:45	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5139	MGS	01-352/23:08:23		NOTE: Start Block (MAP_RT)		01-352/22:56:44
5140	MGS	01-352/23:08:24		: 00:20:50, 01:41:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:05, 01:19:53, 00:09:46	AEMINI	01-352/22:56:45
5141	MGS	01-352/23:08:24		Enable sending eclipse ingress script when array power disappears	SWEISE	01-352/22:56:45
5142	MGS	01-352/23:08:24		NOTE: Start EVP data return script		01-352/22:56:45
5143	MGS	01-352/23:08:25		: SE_2A, RTM, 01:19:52, MRC, 2001-352T23:38:57.000	AEMRTI	01-352/22:56:46
5144	MGS	01-352/23:14:52		NOTE: Enter Planetary Atmosphere 12430		01-352/23:03:13
5145	MGS	01-352/23:16:07		NOTE: Apoapsis 12430 -		01-352/23:04:28
5146	MGS	01-352/23:18:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-352/23:06:45
5147	MGS	01-352/23:18:24		NOTE: Enter Solar Eclipse 12430		01-352/23:06:45
5148	MGS	01-352/23:21:57		NOTE: Enter Earth Occultation 12430		01-352/23:10:18
5149	MGS	01-352/23:21:57	15	NOTE: Loss Of X-Band Signal		
5150	MGS	01-352/23:22:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-352/23:11:09
5151	MGS	01-352/23:22:48		NOTE: End EVP script		01-352/23:11:10
5152	MGS	01-352/23:22:49		NOTE: End Block (MAP_PB_ODY)		01-352/23:11:11
5153	MGS	01-352/23:35:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-352/23:23:50
5154	MGS	01-352/23:39:14		: 01:41:00	RPAONX	01-352/23:27:35
5155	MGS	01-352/23:39:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-352/23:27:35
5156	MGS	01-352/23:40:29		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-352/23:28:50
5157	MGS	01-352/23:40:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-352/23:28:50
5158	MGS	01-352/23:40:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-352/23:28:50
5159	MGS	01-352/23:40:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-352/23:28:50
5160	MGS	01-352/23:40:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-352/23:28:50
5161	MGS	01-352/23:41:01		NOTE: Exit Earth Occultation 12430		01-352/23:29:23
5162	MGS	01-352/23:41:01	15	Acquisition Of X-Band Signal		
5163	MGS	01-352/23:41:01	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5164	MGS	01-352/23:41:01	15	NOTE: Carrier Only -- No Telemetry Modulation		
5165	MGS	01-352/23:42:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-352/23:31:14
5166	MGS	01-352/23:42:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-352/23:31:14
5167	MGS	01-352/23:42:58		Set eclipse egress script address: 019A	SWSEES	01-352/23:31:19
5168	MGS	01-352/23:48:25		NOTE: Exit Planetary Atmosphere 12430		01-352/23:36:47
5169	MGS	01-352/23:50:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-352/23:38:55
5170	MGS	01-352/23:50:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-352/23:38:55
5171	MGS	01-352/23:50:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-352/23:38:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5172	MGS	01-352/23:50:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-352/23:38:55
5173	MGS	01-352/23:50:34	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5174	MGS	01-352/23:50:35		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-352/23:38:56
5175	MGS	01-352/23:50:35		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-352/23:38:56
5176	MGS	01-352/23:50:35		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-352/23:38:56
5177	MGS	01-352/23:50:35	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5178	MGS	01-352/23:50:39		NOTE: End fixed Sub-Reflector for Radio Science		01-352/23:39:00
5179	MGS	01-352/23:58:33		NOTE: Exit Solar Eclipse 12430		01-352/23:46:54
5180	MGS	01-353/00:00:00		Light Time: OWLT = 11:38, RTLT = 23:17		
5181	MGS	01-353/00:14:55		NOTE: Periapsis 12431 ----------		01-353/00:03:16
5182	MGS	01-353/00:19:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/00:07:53
5183	MGS	01-353/00:19:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/00:07:53
5184	MGS	01-353/00:19:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/00:07:54
5185	MGS	01-353/00:19:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/00:07:54
5186	MGS	01-353/00:41:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/00:29:54
5187	MGS	01-353/00:41:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/00:29:54
5188	MGS	01-353/01:05:27		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/00:53:48
5189	MGS	01-353/01:06:05		NOTE: Start EVP data return script		01-353/00:54:26
5190	MGS	01-353/01:10:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/00:58:48
5191	MGS	01-353/01:10:27		: 00:09:46, FALSE	RDSCII	01-353/00:58:48
5192	MGS	01-353/01:10:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/00:58:48
5193	MGS	01-353/01:10:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/00:58:48
5194	MGS	01-353/01:10:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/00:58:48
5195	MGS	01-353/01:10:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/00:58:48
5196	MGS	01-353/01:10:27	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5197	MGS	01-353/01:10:27	15	NOTE: Carrier Only -- No Telemetry Modulation		
5198	MGS	01-353/01:12:31		NOTE: Enter Planetary Atmosphere 12431		01-353/01:00:53
5199	MGS	01-353/01:13:50		NOTE: Apoapsis 12431 -		01-353/01:02:11
5200	MGS	01-353/01:16:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/01:04:26
5201	MGS	01-353/01:16:06		NOTE: Enter Solar Eclipse 12431		01-353/01:04:27
5202	MGS	01-353/01:19:34		NOTE: Enter Earth Occultation 12431		01-353/01:07:56
5203	MGS	01-353/01:19:34	15	NOTE: Loss Of X-Band Signal		
5204	MGS	01-353/01:20:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/01:08:34
5205	MGS	01-353/01:20:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/01:08:34
5206	MGS	01-353/01:20:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/01:08:34
5207	MGS	01-353/01:20:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/01:08:34
5208	MGS	01-353/01:20:14		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/01:08:35
5209	MGS	01-353/01:20:14		NOTE: End EVP script		01-353/01:08:35
5210	MGS	01-353/01:20:18		NOTE: End fixed Sub-Reflector for Radio Science		01-353/01:08:39
5211	MGS	01-353/01:33:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/01:21:31
5212	MGS	01-353/01:36:55		: 01:41:00	RPAONX	01-353/01:25:16
5213	MGS	01-353/01:36:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/01:25:16
5214	MGS	01-353/01:38:10		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/01:26:31
5215	MGS	01-353/01:38:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/01:26:31
5216	MGS	01-353/01:38:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/01:26:31
5217	MGS	01-353/01:38:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/01:26:31
5218	MGS	01-353/01:38:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/01:26:31
5219	MGS	01-353/01:38:40		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/01:27:01
5220	MGS	01-353/01:38:45		NOTE: Exit Earth Occultation 12431		01-353/01:27:06
5221	MGS	01-353/01:38:45	15	Acquisition Of X-Band Signal		
5222	MGS	01-353/01:38:45	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5223	MGS	01-353/01:38:45	15	NOTE: Carrier Only -- No Telemetry Modulation		
5224	MGS	01-353/01:40:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/01:28:54
5225	MGS	01-353/01:40:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/01:28:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5226	MGS	01-353/01:40:38		Set eclipse egress script address: 01DC	SWSEES	01-353/01:28:59
5227	MGS	01-353/01:46:07		NOTE: Exit Planetary Atmosphere 12431		01-353/01:34:28
5228	MGS	01-353/01:48:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/01:36:36
5229	MGS	01-353/01:48:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/01:36:36
5230	MGS	01-353/01:48:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/01:36:36
5231	MGS	01-353/01:48:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/01:36:36
5232	MGS	01-353/01:48:15	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5233	MGS	01-353/01:48:16		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/01:36:37
5234	MGS	01-353/01:48:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/01:36:37
5235	MGS	01-353/01:48:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/01:36:37
5236	MGS	01-353/01:48:16	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5237	MGS	01-353/01:48:20		NOTE: End fixed Sub-Reflector for Radio Science		01-353/01:36:41
5238	MGS	01-353/01:56:15		NOTE: Exit Solar Eclipse 12431		01-353/01:44:36
5239	MGS	01-353/02:12:37		NOTE: Periapsis 12432 ----------		01-353/02:00:58
5240	MGS	01-353/02:17:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/02:05:34
5241	MGS	01-353/02:17:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/02:05:34
5242	MGS	01-353/02:17:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/02:05:35
5243	MGS	01-353/02:17:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/02:05:35
5244	MGS	01-353/02:39:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/02:27:35
5245	MGS	01-353/02:39:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/02:27:35
5246	MGS	01-353/02:49:24		NOTE: Start Block (SSRMGR)		01-353/02:37:45
5247	MGS	01-353/02:49:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-353/02:37:45
5248	MGS	01-353/02:49:25		SSR 1B Data Enable	CSD1BE	01-353/02:37:46
5249	MGS	01-353/02:49:25		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-353/02:37:46
5250	MGS	01-353/03:03:09		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/02:51:29
5251	MGS	01-353/03:03:51		NOTE: Start Block (MAP_PB_ODY)		01-353/02:52:12
5252	MGS	01-353/03:03:52		: 00:20:50, 01:41:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:25, 01:23:14, 00:08:06	AEMINI	01-353/02:52:13
5253	MGS	01-353/03:03:52		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/02:52:13
5254	MGS	01-353/03:03:52		NOTE: Start EVP data return script		01-353/02:52:13
5255	MGS	01-353/03:03:53		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-353T03:32:43.000	AEMPBI	01-353/02:52:14
5256	MGS	01-353/03:08:08		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/02:56:29
5257	MGS	01-353/03:08:08		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8984000, DUR=00:18:43		01-353/02:56:29
5258	MGS	01-353/03:08:08		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-353/02:56:29
5259	MGS	01-353/03:08:08		: 00:09:46, FALSE	RDSCII	01-353/02:56:29
5260	MGS	01-353/03:08:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/02:56:29
5261	MGS	01-353/03:08:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/02:56:29
5262	MGS	01-353/03:08:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/02:56:29
5263	MGS	01-353/03:08:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/02:56:29
5264	MGS	01-353/03:08:08	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5265	MGS	01-353/03:08:08	15	NOTE: Carrier Only -- No Telemetry Modulation		
5266	MGS	01-353/03:10:18		NOTE: Enter Planetary Atmosphere 12432		01-353/02:58:39
5267	MGS	01-353/03:11:42		NOTE: Apoapsis 12432 -		01-353/03:00:03
5268	MGS	01-353/03:12:51		SSR 1A Data Disable	CSD1AX	01-353/03:01:12
5269	MGS	01-353/03:12:51		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-353/03:01:12
5270	MGS	01-353/03:12:52		NOTE: End Block (SSRMGR)		01-353/03:01:13
5271	MGS	01-353/03:13:52		NOTE: Enter Solar Eclipse 12432		01-353/03:02:13
5272	MGS	01-353/03:13:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/03:02:13
5273	MGS	01-353/03:17:20		NOTE: Enter Earth Occultation 12432		01-353/03:05:41
5274	MGS	01-353/03:17:20	15	NOTE: Loss Of X-Band Signal		
5275	MGS	01-353/03:17:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/03:06:15
5276	MGS	01-353/03:17:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/03:06:15
5277	MGS	01-353/03:17:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/03:06:15
5278	MGS	01-353/03:17:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/03:06:15
5279	MGS	01-353/03:17:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/03:06:16

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5280	MGS	01-353/03:17:56		NOTE: End EVP script		01-353/03:06:16
5281	MGS	01-353/03:17:57		NOTE: End Block (MAP_RT)		01-353/03:06:17
5282	MGS	01-353/03:18:00		NOTE: End fixed Sub-Reflector for Radio Science		01-353/03:06:20
5283	MGS	01-353/03:34:42		: 01:41:01	RPAONX	01-353/03:23:03
5284	MGS	01-353/03:34:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/03:23:03
5285	MGS	01-353/03:36:27		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/03:24:48
5286	MGS	01-353/03:36:31		NOTE: Exit Earth Occultation 12432		01-353/03:24:52
5287	MGS	01-353/03:36:31	15	Acquisition Of X-Band Signal		
5288	MGS	01-353/03:36:31	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5289	MGS	01-353/03:38:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/03:26:35
5290	MGS	01-353/03:38:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/03:26:35
5291	MGS	01-353/03:38:18		Command the PSE with included data word: 3990	SWPSEL	01-353/03:26:39
5292	MGS	01-353/03:38:19		Set eclipse egress script address: 0158	SWSEES	01-353/03:26:40
5293	MGS	01-353/03:43:52		NOTE: Exit Planetary Atmosphere 12432		01-353/03:32:13
5294	MGS	01-353/03:44:22		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:20:42	AEMPB	01-353/03:32:43
5295	MGS	01-353/03:44:22		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-353/03:32:43
5296	MGS	01-353/03:44:22		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-353/03:32:43
5297	MGS	01-353/03:44:23		SSR 1A Data Enable	CSD1AE	01-353/03:32:44
5298	MGS	01-353/03:44:23		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-353/03:32:44
5299	MGS	01-353/03:44:23	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5300	MGS	01-353/03:54:01		NOTE: Exit Solar Eclipse 12432		01-353/03:42:22
5301	MGS	01-353/04:05:00	34	Begin Pre-Cal		
5302	MGS	01-353/04:05:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
5303	MGS	01-353/04:05:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
5304	MGS	01-353/04:05:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
5305	MGS	01-353/04:05:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
5306	MGS	01-353/04:05:00	34	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
5307	MGS	01-353/04:05:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
5308	MGS	01-353/04:05:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
5309	MGS	01-353/04:05:00	34	Config: TGC: DEST=37		
5310	MGS	01-353/04:05:00	34	Config: TGC: BAND=X, BR=8000.000000		
5311	MGS	01-353/04:05:00	34	Config: FSS: CH=2, PRI_FL=10000		
5312	MGS	01-353/04:05:00	34	Config: RSR		
5313	MGS	01-353/04:05:00	34	Config: TXL		
5314	MGS	01-353/04:05:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
5315	MGS	01-353/04:05:00	34	Config: BVR		
5316	MGS	01-353/04:05:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
5317	MGS	01-353/04:05:00	34	Config: MDA: SMPL=0.1		
5318	MGS	01-353/04:05:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
5319	MGS	01-353/04:05:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
5320	MGS	01-353/04:05:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
5321	MGS	01-353/04:10:31		NOTE: Periapsis 12433 ----------		01-353/03:58:52
5322	MGS	01-353/04:19:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/04:07:21
5323	MGS	01-353/04:19:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/04:07:21
5324	MGS	01-353/04:19:01		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/04:07:22
5325	MGS	01-353/04:19:01		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/04:07:22
5326	MGS	01-353/04:41:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/04:29:22
5327	MGS	01-353/04:41:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/04:29:22
5328	MGS	01-353/04:55:02		SSR 1A Data Disable	CSD1AX	01-353/04:43:22
5329	MGS	01-353/04:55:02		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-353/04:43:22
5330	MGS	01-353/04:55:02		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-353/04:43:22
5331	MGS	01-353/04:55:02	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5332	MGS	01-353/05:01:39		NOTE: Start Block (MAP_RT)		01-353/04:49:59
5333	MGS	01-353/05:01:40		: 00:20:50, 01:41:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:05, 01:19:53, 00:09:46	AEMINI	01-353/04:50:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5334	MGS	01-353/05:01:40		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/04:50:00
5335	MGS	01-353/05:01:40		NOTE: Start EVP data return script		01-353/04:50:00
5336	MGS	01-353/05:01:41		: SE_2A, RTM, 01:19:52, MRC, 2001-353T05:32:12.000	AEMRTI	01-353/04:50:01
5337	MGS	01-353/05:05:00	34	Begin Tracking		
5338	MGS	01-353/05:05:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5339	MGS	01-353/05:08:06		NOTE: Enter Planetary Atmosphere 12433		01-353/04:56:26
5340	MGS	01-353/05:09:25		NOTE: Apoapsis 12433 -		01-353/04:57:45
5341	MGS	01-353/05:11:39		NOTE: Enter Solar Eclipse 12433		01-353/05:00:00
5342	MGS	01-353/05:11:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/05:00:00
5343	MGS	01-353/05:13:54	15	NOTE: Below Uplink Interlock Limit		
5344	MGS	01-353/05:15:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
5345	MGS	01-353/05:15:07		NOTE: Enter Earth Occultation 12433		01-353/05:03:27
5346	MGS	01-353/05:15:07	15	NOTE: Loss Of X-Band Signal		
5347	MGS	01-353/05:15:07	34	NOTE: Loss Of X-Band Signal		
5348	MGS	01-353/05:15:43		NOTE: End EVP script		01-353/05:04:04
5349	MGS	01-353/05:15:44		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/05:04:04
5350	MGS	01-353/05:15:44		NOTE: End Block (MAP_PB_ODY)		01-353/05:04:05
5351	MGS	01-353/05:17:00	34	Range Modulation On: SUP=3.0dB		
5352	MGS	01-353/05:18:00	34	Begin Ranging Acquisition		
5353	MGS	01-353/05:25:00	15	End Tracking		
5354	MGS	01-353/05:28:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/05:17:05
5355	MGS	01-353/05:32:30		: 01:41:00	RPAONX	01-353/05:20:50
5356	MGS	01-353/05:32:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/05:20:50
5357	MGS	01-353/05:33:45		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/05:22:05
5358	MGS	01-353/05:33:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/05:22:05
5359	MGS	01-353/05:33:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/05:22:05
5360	MGS	01-353/05:33:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/05:22:05
5361	MGS	01-353/05:33:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/05:22:05
5362	MGS	01-353/05:34:19		NOTE: Exit Earth Occultation 12433		01-353/05:22:40
5363	MGS	01-353/05:34:19	34	Acquisition Of X-Band Signal		
5364	MGS	01-353/05:34:19	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5365	MGS	01-353/05:34:19	34	NOTE: Carrier Only -- No Telemetry Modulation		
5366	MGS	01-353/05:36:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/05:24:22
5367	MGS	01-353/05:36:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/05:24:22
5368	MGS	01-353/05:36:07		Set eclipse egress script address: 019A	SWSEES	01-353/05:24:27
5369	MGS	01-353/05:40:00	15	End Post-Cal		
5370	MGS	01-353/05:41:40		NOTE: Exit Planetary Atmosphere 12433		01-353/05:30:01
5371	MGS	01-353/05:43:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/05:32:10
5372	MGS	01-353/05:43:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/05:32:10
5373	MGS	01-353/05:43:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/05:32:10
5374	MGS	01-353/05:43:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/05:32:10
5375	MGS	01-353/05:43:50	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5376	MGS	01-353/05:43:51		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/05:32:11
5377	MGS	01-353/05:43:51		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/05:32:11
5378	MGS	01-353/05:43:51		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/05:32:11
5379	MGS	01-353/05:43:51	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5380	MGS	01-353/05:43:55		NOTE: End fixed Sub-Reflector for Radio Science		01-353/05:32:15
5381	MGS	01-353/05:51:49		NOTE: Exit Solar Eclipse 12433		01-353/05:40:10
5382	MGS	01-353/06:08:15		NOTE: Periapsis 12434 ----------		01-353/05:56:36
5383	MGS	01-353/06:12:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/06:01:08
5384	MGS	01-353/06:12:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/06:01:08
5385	MGS	01-353/06:12:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/06:01:09
5386	MGS	01-353/06:12:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/06:01:09
5387	MGS	01-353/06:30:47	34	NOTE: Transmitter Off in 15 minutes		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5388	MGS	01-353/06:34:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/06:23:09
5389	MGS	01-353/06:34:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/06:23:09
5390	MGS	01-353/06:43:48	34	Range Modulation Off		
5391	MGS	01-353/06:45:47	34	Transmitter Off		
5392	MGS	01-353/06:58:43		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/06:47:03
5393	MGS	01-353/06:59:26		NOTE: Start EVP data return script		01-353/06:47:46
5394	MGS	01-353/07:03:43		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/06:52:03
5395	MGS	01-353/07:03:43		: 00:09:46, FALSE	RDSCII	01-353/06:52:03
5396	MGS	01-353/07:03:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/06:52:03
5397	MGS	01-353/07:03:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/06:52:03
5398	MGS	01-353/07:03:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/06:52:03
5399	MGS	01-353/07:03:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/06:52:03
5400	MGS	01-353/07:03:43	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5401	MGS	01-353/07:03:43	34	NOTE: Carrier Only -- No Telemetry Modulation		
5402	MGS	01-353/07:05:51		NOTE: Enter Planetary Atmosphere 12434		01-353/06:54:11
5403	MGS	01-353/07:06:53		NOTE: Apoapsis 12434 -		01-353/06:55:13
5404	MGS	01-353/07:09:26		NOTE: Enter Solar Eclipse 12434		01-353/06:57:46
5405	MGS	01-353/07:09:26		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/06:57:46
5406	MGS	01-353/07:12:33	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
5407	MGS	01-353/07:12:51		NOTE: Enter Earth Occultation 12434		01-353/07:01:12
5408	MGS	01-353/07:12:51	34	NOTE: Loss Of X-Band Signal		
5409	MGS	01-353/07:13:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/07:01:49
5410	MGS	01-353/07:13:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/07:01:49
5411	MGS	01-353/07:13:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/07:01:49
5412	MGS	01-353/07:13:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/07:01:49
5413	MGS	01-353/07:13:30		NOTE: End EVP script		01-353/07:01:50
5414	MGS	01-353/07:13:30		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/07:01:50
5415	MGS	01-353/07:13:34		NOTE: End fixed Sub-Reflector for Radio Science		01-353/07:01:54
5416	MGS	01-353/07:14:34	34	Range Modulation On: SUP=3.0dB		
5417	MGS	01-353/07:15:34	34	Begin Ranging Acquisition		
5418	MGS	01-353/07:26:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/07:14:51
5419	MGS	01-353/07:30:16		: 01:41:00	RPAONX	01-353/07:18:36
5420	MGS	01-353/07:30:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/07:18:36
5421	MGS	01-353/07:31:31		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/07:19:51
5422	MGS	01-353/07:31:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/07:19:51
5423	MGS	01-353/07:31:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/07:19:51
5424	MGS	01-353/07:31:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/07:19:51
5425	MGS	01-353/07:31:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/07:19:51
5426	MGS	01-353/07:32:01		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/07:20:21
5427	MGS	01-353/07:32:08		NOTE: Exit Earth Occultation 12434		01-353/07:20:28
5428	MGS	01-353/07:32:08	34	Acquisition Of X-Band Signal		
5429	MGS	01-353/07:32:08	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5430	MGS	01-353/07:32:08	34	NOTE: Carrier Only -- No Telemetry Modulation		
5431	MGS	01-353/07:33:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/07:22:09
5432	MGS	01-353/07:33:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/07:22:09
5433	MGS	01-353/07:33:54		Set eclipse egress script address: 01DC	SWSEES	01-353/07:22:14
5434	MGS	01-353/07:39:28		NOTE: Exit Planetary Atmosphere 12434		01-353/07:27:48
5435	MGS	01-353/07:41:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/07:29:56
5436	MGS	01-353/07:41:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/07:29:56
5437	MGS	01-353/07:41:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/07:29:56
5438	MGS	01-353/07:41:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/07:29:56
5439	MGS	01-353/07:41:36	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5440	MGS	01-353/07:41:37		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/07:29:57
5441	MGS	01-353/07:41:37		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/07:29:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5442	MGS	01-353/07:41:37		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/07:29:57
5443	MGS	01-353/07:41:37	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5444	MGS	01-353/07:41:41		NOTE: End fixed Sub-Reflector for Radio Science		01-353/07:30:01
5445	MGS	01-353/07:49:35		NOTE: Exit Solar Eclipse 12434		01-353/07:37:55
5446	MGS	01-353/08:05:59		NOTE: Periapsis 12435 ----------		01-353/07:54:19
5447	MGS	01-353/08:10:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/07:58:54
5448	MGS	01-353/08:10:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/07:58:54
5449	MGS	01-353/08:10:35		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/07:58:55
5450	MGS	01-353/08:10:35		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/07:58:55
5451	MGS	01-353/08:28:29	34	NOTE: Transmitter Off in 15 minutes		
5452	MGS	01-353/08:32:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/08:20:55
5453	MGS	01-353/08:32:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/08:20:55
5454	MGS	01-353/08:41:29	34	Range Modulation Off		
5455	MGS	01-353/08:42:33		NOTE: Start Block (SSRMGR)		01-353/08:30:53
5456	MGS	01-353/08:42:33		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-353/08:30:53
5457	MGS	01-353/08:42:34		SSR 1A Data Enable	CSD1AE	01-353/08:30:54
5458	MGS	01-353/08:42:34		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-353/08:30:54
5459	MGS	01-353/08:43:29	34	Transmitter Off		
5460	MGS	01-353/08:56:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/08:44:49
5461	MGS	01-353/08:57:09		NOTE: Start Block (MAP_PB_ODY)		01-353/08:45:29
5462	MGS	01-353/08:57:10		: 00:20:50, 01:41:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:25, 01:23:14, 00:08:06	AEMINI	01-353/08:45:30
5463	MGS	01-353/08:57:10		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/08:45:30
5464	MGS	01-353/08:57:10		NOTE: Start EVP data return script		01-353/08:45:30
5465	MGS	01-353/08:57:11		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-353T09:26:00.000	AEMPBI	01-353/08:45:31
5466	MGS	01-353/09:01:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/08:49:49
5467	MGS	01-353/09:01:29		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9080000, DUR=00:18:55		01-353/08:49:49
5468	MGS	01-353/09:01:29		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-353/08:49:49
5469	MGS	01-353/09:01:29		: 00:09:46, FALSE	RDSCII	01-353/08:49:49
5470	MGS	01-353/09:01:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/08:49:49
5471	MGS	01-353/09:01:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/08:49:49
5472	MGS	01-353/09:01:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/08:49:49
5473	MGS	01-353/09:01:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/08:49:49
5474	MGS	01-353/09:01:29	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5475	MGS	01-353/09:01:29	34	NOTE: Carrier Only -- No Telemetry Modulation		
5476	MGS	01-353/09:03:33		NOTE: Enter Planetary Atmosphere 12435		01-353/08:51:53
5477	MGS	01-353/09:04:29		NOTE: Apoapsis 12435 -		01-353/08:52:49
5478	MGS	01-353/09:06:09		SSR 1B Data Disable	CSD1BX	01-353/08:54:29
5479	MGS	01-353/09:06:09		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-353/08:54:29
5480	MGS	01-353/09:06:10		NOTE: End Block (SSRMGR)		01-353/08:54:30
5481	MGS	01-353/09:07:10		NOTE: Enter Solar Eclipse 12435		01-353/08:55:30
5482	MGS	01-353/09:07:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/08:55:30
5483	MGS	01-353/09:10:19	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
5484	MGS	01-353/09:10:34		NOTE: Enter Earth Occultation 12435		01-353/08:58:54
5485	MGS	01-353/09:10:34	34	NOTE: Loss Of X-Band Signal		
5486	MGS	01-353/09:11:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/08:59:35
5487	MGS	01-353/09:11:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/08:59:35
5488	MGS	01-353/09:11:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/08:59:35
5489	MGS	01-353/09:11:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/08:59:35
5490	MGS	01-353/09:11:16		NOTE: End EVP script		01-353/08:59:36
5491	MGS	01-353/09:11:16		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/08:59:36
5492	MGS	01-353/09:11:17		NOTE: End Block (MAP_RT)		01-353/08:59:37
5493	MGS	01-353/09:11:20		NOTE: End fixed Sub-Reflector for Radio Science		01-353/08:59:40
5494	MGS	01-353/09:12:20	34	Range Modulation On: SUP=3.0dB		
5495	MGS	01-353/09:13:20	34	Begin Ranging Acquisition		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5496	MGS	01-353/09:28:00		: 01:41:01	RPAONX	01-353/09:16:20
5497	MGS	01-353/09:28:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/09:16:20
5498	MGS	01-353/09:29:45		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/09:18:05
5499	MGS	01-353/09:29:54		NOTE: Exit Earth Occultation 12435		01-353/09:18:14
5500	MGS	01-353/09:29:54	34	Acquisition Of X-Band Signal		
5501	MGS	01-353/09:29:54	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5502	MGS	01-353/09:31:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/09:19:55
5503	MGS	01-353/09:31:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/09:19:55
5504	MGS	01-353/09:31:39		Command the PSE with included data word: 3990	SWPSEL	01-353/09:19:59
5505	MGS	01-353/09:31:40		Set eclipse egress script address: 0158	SWSEES	01-353/09:20:00
5506	MGS	01-353/09:33:39	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5507	MGS	01-353/09:37:14		NOTE: Exit Planetary Atmosphere 12435		01-353/09:25:34
5508	MGS	01-353/09:37:40		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:20:42	AEMPB	01-353/09:26:00
5509	MGS	01-353/09:37:40		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-353/09:26:00
5510	MGS	01-353/09:37:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-353/09:26:00
5511	MGS	01-353/09:37:41		SSR 1B Data Enable	CSD1BE	01-353/09:26:01
5512	MGS	01-353/09:37:41		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-353/09:26:01
5513	MGS	01-353/09:37:41	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5514	MGS	01-353/09:47:19		NOTE: Exit Solar Eclipse 12435		01-353/09:35:39
5515	MGS	01-353/10:03:44		NOTE: Periapsis 12436 ----------		01-353/09:52:04
5516	MGS	01-353/10:12:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/10:00:38
5517	MGS	01-353/10:12:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/10:00:38
5518	MGS	01-353/10:12:19		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/10:00:39
5519	MGS	01-353/10:12:19		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/10:00:39
5520	MGS	01-353/10:26:10	34	NOTE: Transmitter Off in 15 minutes		
5521	MGS	01-353/10:34:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/10:22:39
5522	MGS	01-353/10:34:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/10:22:39
5523	MGS	01-353/10:39:11	34	Range Modulation Off		
5524	MGS	01-353/10:41:10	34	Transmitter Off		
5525	MGS	01-353/10:48:19		SSR 1B Data Disable	CSD1BX	01-353/10:36:39
5526	MGS	01-353/10:48:19		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-353/10:36:39
5527	MGS	01-353/10:48:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-353/10:36:39
5528	MGS	01-353/10:48:19	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5529	MGS	01-353/10:50:00	54	Begin Pre-Cal		
5530	MGS	01-353/10:50:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
5531	MGS	01-353/10:50:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
5532	MGS	01-353/10:50:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
5533	MGS	01-353/10:50:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
5534	MGS	01-353/10:50:00	54	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
5535	MGS	01-353/10:50:00	54	Config: TGC: DEST=37		
5536	MGS	01-353/10:50:00	54	Config: TGC: BAND=X, BR=40000.000000		
5537	MGS	01-353/10:50:00	54	Config: FSS: CH=2, PRI_FL=10000		
5538	MGS	01-353/10:50:00	54	Config: RSR		
5539	MGS	01-353/10:50:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
5540	MGS	01-353/10:50:00	54	Config: BVR		
5541	MGS	01-353/10:50:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
5542	MGS	01-353/10:50:00	54	Config: MDA: SMPL=0.1		
5543	MGS	01-353/10:54:51		NOTE: Start Block (MAP_RT)		01-353/10:43:11
5544	MGS	01-353/10:54:52		: 00:20:50, 01:41:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:05, 01:19:53, 00:09:46	AEMINI	01-353/10:43:12
5545	MGS	01-353/10:54:52		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/10:43:12
5546	MGS	01-353/10:54:52		NOTE: Start EVP data return script		01-353/10:43:12
5547	MGS	01-353/10:54:53		: SE_2A, RTM, 01:19:52, MRC, 2001-353T11:25:23.000	AEMRTI	01-353/10:43:13
5548	MGS	01-353/11:01:16		NOTE: Enter Planetary Atmosphere 12436		01-353/10:49:35
5549	MGS	01-353/11:02:25		NOTE: Apoapsis 12436 -		01-353/10:50:44

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5550	MGS	01-353/11:04:31	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5551	MGS	01-353/11:04:52		NOTE: Enter Solar Eclipse 12436		01-353/10:53:12
5552	MGS	01-353/11:04:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/10:53:12
5553	MGS	01-353/11:08:02	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
5554	MGS	01-353/11:08:16		NOTE: Enter Earth Occultation 12436		01-353/10:56:36
5555	MGS	01-353/11:08:16	34	NOTE: Loss Of X-Band Signal		
5556	MGS	01-353/11:09:01		NOTE: End EVP script		01-353/10:57:21
5557	MGS	01-353/11:09:02		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/10:57:21
5558	MGS	01-353/11:09:02		NOTE: End Block (MAP_PB_ODY)		01-353/10:57:22
5559	MGS	01-353/11:10:02	34	Range Modulation On: SUP=3.0dB		
5560	MGS	01-353/11:11:02	34	Begin Ranging Acquisition		
5561	MGS	01-353/11:21:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/11:10:17
5562	MGS	01-353/11:25:43		: 01:41:00	RPAONX	01-353/11:14:02
5563	MGS	01-353/11:25:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/11:14:02
5564	MGS	01-353/11:26:58		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/11:15:17
5565	MGS	01-353/11:26:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/11:15:17
5566	MGS	01-353/11:26:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/11:15:17
5567	MGS	01-353/11:26:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/11:15:17
5568	MGS	01-353/11:26:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/11:15:17
5569	MGS	01-353/11:27:37		NOTE: Exit Earth Occultation 12436		01-353/11:15:57
5570	MGS	01-353/11:27:37	34	Acquisition Of X-Band Signal		
5571	MGS	01-353/11:27:37	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5572	MGS	01-353/11:27:37	34	NOTE: Carrier Only -- No Telemetry Modulation		
5573	MGS	01-353/11:29:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/11:17:39
5574	MGS	01-353/11:29:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/11:17:39
5575	MGS	01-353/11:29:25		Set eclipse egress script address: 019A	SWSEES	01-353/11:17:44
5576	MGS	01-353/11:34:57		NOTE: Exit Planetary Atmosphere 12436		01-353/11:23:17
5577	MGS	01-353/11:37:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/11:25:22
5578	MGS	01-353/11:37:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/11:25:22
5579	MGS	01-353/11:37:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/11:25:22
5580	MGS	01-353/11:37:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/11:25:22
5581	MGS	01-353/11:37:03	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5582	MGS	01-353/11:37:04		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/11:25:23
5583	MGS	01-353/11:37:04		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/11:25:23
5584	MGS	01-353/11:37:04		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/11:25:23
5585	MGS	01-353/11:37:04	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5586	MGS	01-353/11:37:07		NOTE: End fixed Sub-Reflector for Radio Science		01-353/11:25:27
5587	MGS	01-353/11:45:02		NOTE: Exit Solar Eclipse 12436		01-353/11:33:21
5588	MGS	01-353/12:00:00	34	NOTE: Transmitter Off in 15 minutes		
5589	MGS	01-353/12:01:18		NOTE: Periapsis 12437 ----------		01-353/11:49:38
5590	MGS	01-353/12:06:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/11:54:20
5591	MGS	01-353/12:06:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/11:54:20
5592	MGS	01-353/12:06:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/11:54:21
5593	MGS	01-353/12:06:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/11:54:21
5594	MGS	01-353/12:11:40		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-353/11:59:59
5595	MGS	01-353/12:13:00	34	Range Modulation Off		
5596	MGS	01-353/12:15:00	34	Transmitter Off		
5597	MGS	01-353/12:20:00	54	Begin Tracking		
5598	MGS	01-353/12:20:00	54	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5599	MGS	01-353/12:26:17	34	NOTE: Below Uplink Interlock Limit		
5600	MGS	01-353/12:28:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/12:16:21
5601	MGS	01-353/12:28:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/12:16:21
5602	MGS	01-353/12:33:55	54	NOTE: Above Uplink Interlock Limit		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5603	MGS	01-353/12:38:20	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5604	MGS	01-353/12:38:20	54	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5605	MGS	01-353/12:40:00	34	End Tracking		
5606	MGS	01-353/12:51:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/12:40:15
5607	MGS	01-353/12:52:35		NOTE: Start EVP data return script		01-353/12:40:54
5608	MGS	01-353/12:55:00	34	End Post-Cal		
5609	MGS	01-353/12:56:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/12:45:15
5610	MGS	01-353/12:56:56		: 00:09:46, FALSE	RDSCII	01-353/12:45:15
5611	MGS	01-353/12:56:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/12:45:15
5612	MGS	01-353/12:56:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/12:45:15
5613	MGS	01-353/12:56:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/12:45:15
5614	MGS	01-353/12:56:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/12:45:15
5615	MGS	01-353/12:56:56	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5616	MGS	01-353/12:56:56	54	NOTE: Carrier Only -- No Telemetry Modulation		
5617	MGS	01-353/12:58:59		NOTE: Enter Planetary Atmosphere 12437		01-353/12:47:18
5618	MGS	01-353/12:59:55		NOTE: Apoapsis 12437 -		01-353/12:48:14
5619	MGS	01-353/13:02:35		NOTE: Enter Solar Eclipse 12437		01-353/12:50:54
5620	MGS	01-353/13:02:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/12:50:54
5621	MGS	01-353/13:05:58		NOTE: Enter Earth Occultation 12437		01-353/12:54:18
5622	MGS	01-353/13:05:58	54	NOTE: Loss Of X-Band Signal		
5623	MGS	01-353/13:06:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/12:55:01
5624	MGS	01-353/13:06:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/12:55:01
5625	MGS	01-353/13:06:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/12:55:01
5626	MGS	01-353/13:06:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/12:55:01
5627	MGS	01-353/13:06:43		NOTE: End EVP script		01-353/12:55:02
5628	MGS	01-353/13:06:43		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/12:55:02
5629	MGS	01-353/13:06:47		NOTE: End fixed Sub-Reflector for Radio Science		01-353/12:55:06
5630	MGS	01-353/13:19:40		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/13:07:59
5631	MGS	01-353/13:23:25		: 01:41:00	RPAONX	01-353/13:11:44
5632	MGS	01-353/13:23:25		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/13:11:44
5633	MGS	01-353/13:24:40		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/13:12:59
5634	MGS	01-353/13:24:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/13:12:59
5635	MGS	01-353/13:24:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/13:12:59
5636	MGS	01-353/13:24:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/13:12:59
5637	MGS	01-353/13:24:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/13:12:59
5638	MGS	01-353/13:25:10		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/13:13:29
5639	MGS	01-353/13:25:20		NOTE: Exit Earth Occultation 12437		01-353/13:13:40
5640	MGS	01-353/13:25:20	54	Acquisition Of X-Band Signal		
5641	MGS	01-353/13:25:20	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5642	MGS	01-353/13:25:20	54	NOTE: Carrier Only -- No Telemetry Modulation		
5643	MGS	01-353/13:27:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/13:15:21
5644	MGS	01-353/13:27:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/13:15:21
5645	MGS	01-353/13:27:07		Set eclipse egress script address: 01DC	SWSEES	01-353/13:15:26
5646	MGS	01-353/13:32:40		NOTE: Exit Planetary Atmosphere 12437		01-353/13:20:59
5647	MGS	01-353/13:34:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/13:23:04
5648	MGS	01-353/13:34:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/13:23:04
5649	MGS	01-353/13:34:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/13:23:04
5650	MGS	01-353/13:34:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/13:23:04
5651	MGS	01-353/13:34:45	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5652	MGS	01-353/13:34:46		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/13:23:05
5653	MGS	01-353/13:34:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/13:23:05
5654	MGS	01-353/13:34:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/13:23:05
5655	MGS	01-353/13:34:46	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5656	MGS	01-353/13:34:50		NOTE: End fixed Sub-Reflector for Radio Science		01-353/13:23:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5657	MGS	01-353/13:42:44		NOTE: Exit Solar Eclipse 12437		01-353/13:31:03
5658	MGS	01-353/13:58:38		NOTE: Periapsis 12438 ----------		01-353/13:46:57
5659	MGS	01-353/14:03:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/13:52:02
5660	MGS	01-353/14:03:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/13:52:02
5661	MGS	01-353/14:03:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/13:52:03
5662	MGS	01-353/14:03:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/13:52:03
5663	MGS	01-353/14:25:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/14:14:03
5664	MGS	01-353/14:25:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/14:14:03
5665	MGS	01-353/14:35:53		NOTE: Start Block (SSRMGR)		01-353/14:24:12
5666	MGS	01-353/14:35:53		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-353/14:24:12
5667	MGS	01-353/14:35:54		SSR 1B Data Enable	CSD1BE	01-353/14:24:13
5668	MGS	01-353/14:35:54		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-353/14:24:13
5669	MGS	01-353/14:49:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/14:37:57
5670	MGS	01-353/14:50:17		NOTE: Start Block (MAP_PB_ODY)		01-353/14:38:36
5671	MGS	01-353/14:50:18		: 00:20:50, 01:41:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:25, 01:23:14, 00:08:06	AEMINI	01-353/14:38:37
5672	MGS	01-353/14:50:18		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/14:38:37
5673	MGS	01-353/14:50:18		NOTE: Start EVP data return script		01-353/14:38:37
5674	MGS	01-353/14:50:19		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-353T15:19:08.000	AEMPBI	01-353/14:38:38
5675	MGS	01-353/14:54:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/14:42:57
5676	MGS	01-353/14:54:38		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8992000, DUR=00:18:44		01-353/14:42:57
5677	MGS	01-353/14:54:38		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-353/14:42:57
5678	MGS	01-353/14:54:38		: 00:09:46, FALSE	RDSCII	01-353/14:42:57
5679	MGS	01-353/14:54:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/14:42:57
5680	MGS	01-353/14:54:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/14:42:57
5681	MGS	01-353/14:54:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/14:42:57
5682	MGS	01-353/14:54:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/14:42:57
5683	MGS	01-353/14:54:38	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5684	MGS	01-353/14:54:38	54	NOTE: Carrier Only -- No Telemetry Modulation		
5685	MGS	01-353/14:56:41		NOTE: Enter Planetary Atmosphere 12438		01-353/14:45:00
5686	MGS	01-353/14:57:21		NOTE: Apoapsis 12438 -		01-353/14:45:40
5687	MGS	01-353/14:59:18		SSR 1A Data Disable	CSD1AX	01-353/14:47:37
5688	MGS	01-353/14:59:18		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-353/14:47:37
5689	MGS	01-353/14:59:19		NOTE: End Block (SSRMGR)		01-353/14:47:38
5690	MGS	01-353/15:00:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/14:48:37
5691	MGS	01-353/15:00:19		NOTE: Enter Solar Eclipse 12438		01-353/14:48:38
5692	MGS	01-353/15:03:39		NOTE: Enter Earth Occultation 12438		01-353/14:51:58
5693	MGS	01-353/15:03:39	54	NOTE: Loss Of X-Band Signal		
5694	MGS	01-353/15:04:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/14:52:43
5695	MGS	01-353/15:04:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/14:52:43
5696	MGS	01-353/15:04:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/14:52:43
5697	MGS	01-353/15:04:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/14:52:43
5698	MGS	01-353/15:04:25		NOTE: End EVP script		01-353/14:52:44
5699	MGS	01-353/15:04:25		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/14:52:44
5700	MGS	01-353/15:04:26		NOTE: End Block (MAP_RT)		01-353/14:52:45
5701	MGS	01-353/15:04:29		NOTE: End fixed Sub-Reflector for Radio Science		01-353/14:52:48
5702	MGS	01-353/15:21:08		: 01:41:01	RPAONX	01-353/15:09:27
5703	MGS	01-353/15:21:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/15:09:27
5704	MGS	01-353/15:22:53		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/15:11:12
5705	MGS	01-353/15:23:06		NOTE: Exit Earth Occultation 12438		01-353/15:11:25
5706	MGS	01-353/15:23:06	54	Acquisition Of X-Band Signal		
5707	MGS	01-353/15:23:06	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5708	MGS	01-353/15:24:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/15:13:03
5709	MGS	01-353/15:24:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/15:13:03
5710	MGS	01-353/15:24:48		Command the PSE with included data word: 3990	SWPSEL	01-353/15:13:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5711	MGS	01-353/15:24:49		Set eclipse egress script address: 0158	SWSEES	01-353/15:13:08
5712	MGS	01-353/15:30:23		NOTE: Exit Planetary Atmosphere 12438		01-353/15:18:42
5713	MGS	01-353/15:30:48		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:20:42	AEMPB	01-353/15:19:07
5714	MGS	01-353/15:30:48		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-353/15:19:07
5715	MGS	01-353/15:30:48		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-353/15:19:07
5716	MGS	01-353/15:30:49		SSR 1A Data Enable	CSD1AE	01-353/15:19:08
5717	MGS	01-353/15:30:49		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-353/15:19:08
5718	MGS	01-353/15:30:49	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5719	MGS	01-353/15:40:28		NOTE: Exit Solar Eclipse 12438		01-353/15:28:47
5720	MGS	01-353/15:56:33		NOTE: Periapsis 12439 ----------		01-353/15:44:52
5721	MGS	01-353/16:05:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/15:53:46
5722	MGS	01-353/16:05:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/15:53:46
5723	MGS	01-353/16:05:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/15:53:47
5724	MGS	01-353/16:05:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/15:53:47
5725	MGS	01-353/16:27:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/16:15:47
5726	MGS	01-353/16:27:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/16:15:47
5727	MGS	01-353/16:41:27		SSR 1A Data Disable	CSD1AX	01-353/16:29:46
5728	MGS	01-353/16:41:27		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-353/16:29:46
5729	MGS	01-353/16:41:27		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-353/16:29:46
5730	MGS	01-353/16:41:27	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5731	MGS	01-353/16:48:03		NOTE: Start Block (MAP_RT)		01-353/16:36:22
5732	MGS	01-353/16:48:04		: 00:20:50, 01:41:00, FALSE, TRUE, FALSE, 00:01:15, 00:10:05, 01:19:53, 00:09:46	AEMINI	01-353/16:36:23
5733	MGS	01-353/16:48:04		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/16:36:23
5734	MGS	01-353/16:48:04		NOTE: Start EVP data return script		01-353/16:36:23
5735	MGS	01-353/16:48:05		: SE_2A, RTM, 01:19:52, MRC, 2001-353T17:18:35.000	AEMRTI	01-353/16:36:24
5736	MGS	01-353/16:54:24		NOTE: Enter Planetary Atmosphere 12439		01-353/16:42:43
5737	MGS	01-353/16:55:26		NOTE: Apoapsis 12439 -		01-353/16:43:44
5738	MGS	01-353/16:58:04		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/16:46:23
5739	MGS	01-353/16:58:05		NOTE: Enter Solar Eclipse 12439		01-353/16:46:23
5740	MGS	01-353/17:01:21		NOTE: Enter Earth Occultation 12439		01-353/16:49:40
5741	MGS	01-353/17:01:21	54	NOTE: Loss Of X-Band Signal		
5742	MGS	01-353/17:02:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/16:50:28
5743	MGS	01-353/17:02:10		NOTE: End EVP script		01-353/16:50:29
5744	MGS	01-353/17:02:11		NOTE: End Block (MAP_PB_ODY)		01-353/16:50:30
5745	MGS	01-353/17:15:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/17:03:28
5746	MGS	01-353/17:18:54		: 01:41:00	RPAONX	01-353/17:07:13
5747	MGS	01-353/17:18:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/17:07:13
5748	MGS	01-353/17:20:09		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/17:08:28
5749	MGS	01-353/17:20:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/17:08:28
5750	MGS	01-353/17:20:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/17:08:28
5751	MGS	01-353/17:20:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/17:08:28
5752	MGS	01-353/17:20:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/17:08:28
5753	MGS	01-353/17:20:54		NOTE: Exit Earth Occultation 12439		01-353/17:09:12
5754	MGS	01-353/17:20:54	54	Acquisition Of X-Band Signal		
5755	MGS	01-353/17:20:54	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5756	MGS	01-353/17:20:54	54	NOTE: Carrier Only -- No Telemetry Modulation		
5757	MGS	01-353/17:22:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/17:10:47
5758	MGS	01-353/17:22:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/17:10:47
5759	MGS	01-353/17:22:33		Set eclipse egress script address: 019A	SWSEES	01-353/17:10:52
5760	MGS	01-353/17:28:09		NOTE: Exit Planetary Atmosphere 12439		01-353/17:16:27
5761	MGS	01-353/17:30:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/17:18:33
5762	MGS	01-353/17:30:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/17:18:33
5763	MGS	01-353/17:30:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/17:18:33
5764	MGS	01-353/17:30:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/17:18:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5765	MGS	01-353/17:30:14	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5766	MGS	01-353/17:30:15		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/17:18:34
5767	MGS	01-353/17:30:15		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/17:18:34
5768	MGS	01-353/17:30:15		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/17:18:34
5769	MGS	01-353/17:30:15	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5770	MGS	01-353/17:30:20		NOTE: End fixed Sub-Reflector for Radio Science		01-353/17:18:38
5771	MGS	01-353/17:38:14		NOTE: Exit Solar Eclipse 12439		01-353/17:26:33
5772	MGS	01-353/17:54:46		NOTE: Periapsis 12440 ----------		01-353/17:43:05
5773	MGS	01-353/17:59:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/17:47:32
5774	MGS	01-353/17:59:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/17:47:32
5775	MGS	01-353/17:59:15		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/17:47:33
5776	MGS	01-353/17:59:15		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/17:47:33
5777	MGS	01-353/18:10:00	15	Begin Pre-Cal		
5778	MGS	01-353/18:10:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
5779	MGS	01-353/18:10:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
5780	MGS	01-353/18:10:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
5781	MGS	01-353/18:10:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
5782	MGS	01-353/18:10:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
5783	MGS	01-353/18:10:00	15	Config: TGC: DEST=37		
5784	MGS	01-353/18:10:00	15	Config: TGC: BAND=X, BR=40000.000000		
5785	MGS	01-353/18:10:00	15	Config: FSS: CH=2, PRI_FL=10000		
5786	MGS	01-353/18:10:00	15	Config: RSR		
5787	MGS	01-353/18:10:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
5788	MGS	01-353/18:10:00	15	Config: BVR		
5789	MGS	01-353/18:10:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
5790	MGS	01-353/18:10:00	15	Config: MDA: SMPL=0.1		
5791	MGS	01-353/18:21:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/18:09:33
5792	MGS	01-353/18:21:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/18:09:33
5793	MGS	01-353/18:45:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/18:33:26
5794	MGS	01-353/18:45:52		NOTE: Start EVP data return script		01-353/18:34:10
5795	MGS	01-353/18:50:08		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/18:38:26
5796	MGS	01-353/18:50:08		: 00:09:46, FALSE	RDSCII	01-353/18:38:26
5797	MGS	01-353/18:50:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/18:38:26
5798	MGS	01-353/18:50:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/18:38:26
5799	MGS	01-353/18:50:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/18:38:26
5800	MGS	01-353/18:50:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/18:38:26
5801	MGS	01-353/18:50:08	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5802	MGS	01-353/18:50:08	54	NOTE: Carrier Only -- No Telemetry Modulation		
5803	MGS	01-353/18:52:11		NOTE: Enter Planetary Atmosphere 12440		01-353/18:40:30
5804	MGS	01-353/18:53:45		NOTE: Apoapsis 12440 -		01-353/18:42:03
5805	MGS	01-353/18:55:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/18:44:10
5806	MGS	01-353/18:55:52		NOTE: Enter Solar Eclipse 12440		01-353/18:44:10
5807	MGS	01-353/18:59:08		NOTE: Enter Earth Occultation 12440		01-353/18:47:26
5808	MGS	01-353/18:59:08	54	NOTE: Loss Of X-Band Signal		
5809	MGS	01-353/18:59:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/18:48:12
5810	MGS	01-353/18:59:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/18:48:12
5811	MGS	01-353/18:59:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/18:48:12
5812	MGS	01-353/18:59:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/18:48:12
5813	MGS	01-353/18:59:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/18:48:13
5814	MGS	01-353/18:59:55		NOTE: End EVP script		01-353/18:48:13
5815	MGS	01-353/18:59:59		NOTE: End fixed Sub-Reflector for Radio Science		01-353/18:48:17
5816	MGS	01-353/19:12:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/19:01:15
5817	MGS	01-353/19:16:42		: 01:41:00	RPAONX	01-353/19:05:00
5818	MGS	01-353/19:16:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/19:05:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5819	MGS	01-353/19:17:57		: 00:00:30, 00:10:05, FALSE	RDSCIE	01-353/19:06:15
5820	MGS	01-353/19:17:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/19:06:15
5821	MGS	01-353/19:17:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/19:06:15
5822	MGS	01-353/19:17:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/19:06:15
5823	MGS	01-353/19:17:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/19:06:15
5824	MGS	01-353/19:18:27		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/19:06:45
5825	MGS	01-353/19:18:41		NOTE: Exit Earth Occultation 12440		01-353/19:07:00
5826	MGS	01-353/19:18:41	54	Acquisition Of X-Band Signal		
5827	MGS	01-353/19:18:41	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5828	MGS	01-353/19:18:41	54	NOTE: Carrier Only -- No Telemetry Modulation		
5829	MGS	01-353/19:20:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/19:08:33
5830	MGS	01-353/19:20:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/19:08:33
5831	MGS	01-353/19:20:20		Set eclipse egress script address: 01DC	SWSEES	01-353/19:08:38
5832	MGS	01-353/19:25:56		NOTE: Exit Planetary Atmosphere 12440		01-353/19:14:15
5833	MGS	01-353/19:28:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/19:16:20
5834	MGS	01-353/19:28:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/19:16:20
5835	MGS	01-353/19:28:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/19:16:20
5836	MGS	01-353/19:28:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/19:16:20
5837	MGS	01-353/19:28:02	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5838	MGS	01-353/19:28:03		: RTM, MRC, 01:19:52, S&E_2A, FALSE, 00:09:47	AEMRT	01-353/19:16:21
5839	MGS	01-353/19:28:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/19:16:21
5840	MGS	01-353/19:28:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/19:16:21
5841	MGS	01-353/19:28:03	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5842	MGS	01-353/19:28:07		NOTE: End fixed Sub-Reflector for Radio Science		01-353/19:16:25
5843	MGS	01-353/19:36:02		NOTE: Exit Solar Eclipse 12440		01-353/19:24:20
5844	MGS	01-353/19:40:00	15	Begin Tracking		
5845	MGS	01-353/19:40:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5846	MGS	01-353/19:52:50		NOTE: Periapsis 12441 ----------		01-353/19:41:09
5847	MGS	01-353/19:53:32	15	NOTE: Above Uplink Interlock Limit		
5848	MGS	01-353/19:57:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/19:45:19
5849	MGS	01-353/19:57:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/19:45:19
5850	MGS	01-353/19:57:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/19:45:20
5851	MGS	01-353/19:57:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/19:45:20
5852	MGS	01-353/20:00:00	54	End Tracking		
5853	MGS	01-353/20:15:00	54	End Post-Cal		
5854	MGS	01-353/20:19:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/20:07:20
5855	MGS	01-353/20:19:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/20:07:20
5856	MGS	01-353/20:29:01		NOTE: Start Block (SSRMGR)		01-353/20:17:19
5857	MGS	01-353/20:29:01		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-353/20:17:19
5858	MGS	01-353/20:29:02		SSR 1A Data Enable	CSD1AE	01-353/20:17:20
5859	MGS	01-353/20:29:02		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-353/20:17:20
5860	MGS	01-353/20:42:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/20:31:13
5861	MGS	01-353/20:43:37		NOTE: Start Block (MAP_PB_ODY)		01-353/20:31:55
5862	MGS	01-353/20:43:38		: 00:20:50, 01:41:01, FALSE, FALSE, FALSE, 00:01:15, 00:08:25, 01:23:14, 00:08:06	AEMINI	01-353/20:31:56
5863	MGS	01-353/20:43:38		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/20:31:56
5864	MGS	01-353/20:43:38		NOTE: Start EVP data return script		01-353/20:31:56
5865	MGS	01-353/20:43:39		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-353T21:12:27.000	AEMPBI	01-353/20:31:57
5866	MGS	01-353/20:47:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-353/20:36:13
5867	MGS	01-353/20:47:55		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9064000, DUR=00:18:53		01-353/20:36:13
5868	MGS	01-353/20:47:55		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-353/20:36:13
5869	MGS	01-353/20:47:55		: 00:09:46, FALSE	RDSCII	01-353/20:36:13
5870	MGS	01-353/20:47:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/20:36:13
5871	MGS	01-353/20:47:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/20:36:13
5872	MGS	01-353/20:47:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/20:36:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5873	MGS	01-353/20:47:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/20:36:13
5874	MGS	01-353/20:47:55	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5875	MGS	01-353/20:47:55	15	NOTE: Carrier Only -- No Telemetry Modulation		
5876	MGS	01-353/20:49:59		NOTE: Enter Planetary Atmosphere 12441		01-353/20:38:17
5877	MGS	01-353/20:51:37		NOTE: Apoapsis 12441 -		01-353/20:39:55
5878	MGS	01-353/20:52:38		SSR 1B Data Disable	CSD1BX	01-353/20:40:56
5879	MGS	01-353/20:52:38		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-353/20:40:56
5880	MGS	01-353/20:52:39		NOTE: End Block (SSRMGR)		01-353/20:40:57
5881	MGS	01-353/20:53:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/20:41:56
5882	MGS	01-353/20:53:38		NOTE: Enter Solar Eclipse 12441		01-353/20:41:56
5883	MGS	01-353/20:56:56		NOTE: Enter Earth Occultation 12441		01-353/20:45:14
5884	MGS	01-353/20:56:56	15	NOTE: Loss Of X-Band Signal		
5885	MGS	01-353/20:57:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/20:45:59
5886	MGS	01-353/20:57:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/20:45:59
5887	MGS	01-353/20:57:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/20:45:59
5888	MGS	01-353/20:57:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/20:45:59
5889	MGS	01-353/20:57:42		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/20:46:00
5890	MGS	01-353/20:57:42		NOTE: End EVP script		01-353/20:46:00
5891	MGS	01-353/20:57:43		NOTE: End Block (MAP_RT)		01-353/20:46:01
5892	MGS	01-353/20:57:46		NOTE: End fixed Sub-Reflector for Radio Science		01-353/20:46:04
5893	MGS	01-353/21:14:28		: 01:41:01	RPAONX	01-353/21:02:46
5894	MGS	01-353/21:14:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/21:02:46
5895	MGS	01-353/21:16:13		Disables autonomous command to send eclipse ingress script	SWEISX	01-353/21:04:31
5896	MGS	01-353/21:16:28		NOTE: Exit Earth Occultation 12441		01-353/21:04:47
5897	MGS	01-353/21:16:28	15	Acquisition Of X-Band Signal		
5898	MGS	01-353/21:16:28	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5899	MGS	01-353/21:18:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/21:06:20
5900	MGS	01-353/21:18:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/21:06:20
5901	MGS	01-353/21:18:06		Command the PSE with included data word: 3990	SWPSEL	01-353/21:06:24
5902	MGS	01-353/21:18:07		Set eclipse egress script address: 0158	SWSEES	01-353/21:06:25
5903	MGS	01-353/21:23:45		NOTE: Exit Planetary Atmosphere 12441		01-353/21:12:03
5904	MGS	01-353/21:24:08		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:20:42	AEMPB	01-353/21:12:26
5905	MGS	01-353/21:24:08		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-353/21:12:26
5906	MGS	01-353/21:24:08		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-353/21:12:26
5907	MGS	01-353/21:24:09		SSR 1B Data Enable	CSD1BE	01-353/21:12:27
5908	MGS	01-353/21:24:09		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-353/21:12:27
5909	MGS	01-353/21:24:09	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5910	MGS	01-353/21:33:48		NOTE: Exit Solar Eclipse 12441		01-353/21:22:06
5911	MGS	01-353/21:50:28		NOTE: Periapsis 12442 ----------		01-353/21:38:46
5912	MGS	01-353/21:58:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/21:47:05
5913	MGS	01-353/21:58:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/21:47:05
5914	MGS	01-353/21:58:48		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/21:47:06
5915	MGS	01-353/21:58:48		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/21:47:06
5916	MGS	01-353/22:20:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-353/22:09:06
5917	MGS	01-353/22:20:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-353/22:09:06
5918	MGS	01-353/22:34:47		SSR 1B Data Disable	CSD1BX	01-353/22:23:05
5919	MGS	01-353/22:34:47		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-353/22:23:05
5920	MGS	01-353/22:34:47		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-353/22:23:05
5921	MGS	01-353/22:34:47	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5922	MGS	01-353/22:41:20		NOTE: Start Block (MAP_RT)		01-353/22:29:38
5923	MGS	01-353/22:41:21		: 00:21:05, 01:40:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:56, 01:19:41, 00:09:36	AEMINI	01-353/22:29:39
5924	MGS	01-353/22:41:21		Enable sending eclipse ingress script when array power disappears	SWEISE	01-353/22:29:39
5925	MGS	01-353/22:41:21		NOTE: Start EVP data return script		01-353/22:29:39
5926	MGS	01-353/22:41:22		: SE_2A, RTM, 01:19:40, MRC, 2001-353T23:11:57.000	AEMRTI	01-353/22:29:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5927	MGS	01-353/22:47:43		NOTE: Enter Planetary Atmosphere 12442		01-353/22:36:01
5928	MGS	01-353/22:49:01		NOTE: Apoapsis 12442 -		01-353/22:37:19
5929	MGS	01-353/22:51:21		NOTE: Enter Solar Eclipse 12442		01-353/22:39:39
5930	MGS	01-353/22:51:21		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-353/22:39:39
5931	MGS	01-353/22:54:40		NOTE: Enter Earth Occultation 12442		01-353/22:42:58
5932	MGS	01-353/22:54:40	15	NOTE: Loss Of X-Band Signal		
5933	MGS	01-353/22:55:29		Turn off the MOT Exciter and RPA beam	STRPAF	01-353/22:43:47
5934	MGS	01-353/22:55:29		NOTE: End EVP script		01-353/22:43:47
5935	MGS	01-353/22:55:30		NOTE: End Block (MAP_PB_ODY)		01-353/22:43:48
5936	MGS	01-353/23:08:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-353/22:56:59
5937	MGS	01-353/23:12:26		: 01:40:29	RPAONX	01-353/23:00:44
5938	MGS	01-353/23:12:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-353/23:00:44
5939	MGS	01-353/23:13:41		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-353/23:01:59
5940	MGS	01-353/23:13:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-353/23:01:59
5941	MGS	01-353/23:13:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-353/23:01:59
5942	MGS	01-353/23:13:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-353/23:01:59
5943	MGS	01-353/23:13:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-353/23:01:59
5944	MGS	01-353/23:14:13		NOTE: Exit Earth Occultation 12442		01-353/23:02:31
5945	MGS	01-353/23:14:13	15	Acquisition Of X-Band Signal		
5946	MGS	01-353/23:14:13	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5947	MGS	01-353/23:14:13	15	NOTE: Carrier Only -- No Telemetry Modulation		
5948	MGS	01-353/23:15:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-353/23:04:06
5949	MGS	01-353/23:15:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-353/23:04:06
5950	MGS	01-353/23:15:53		Set eclipse egress script address: 019A	SWSEES	01-353/23:04:11
5951	MGS	01-353/23:21:30		NOTE: Exit Planetary Atmosphere 12442		01-353/23:09:47
5952	MGS	01-353/23:23:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-353/23:11:55
5953	MGS	01-353/23:23:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-353/23:11:55
5954	MGS	01-353/23:23:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-353/23:11:55
5955	MGS	01-353/23:23:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-353/23:11:55
5956	MGS	01-353/23:23:37	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5957	MGS	01-353/23:23:38		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-353/23:11:56
5958	MGS	01-353/23:23:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-353/23:11:56
5959	MGS	01-353/23:23:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-353/23:11:56
5960	MGS	01-353/23:23:38	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
5961	MGS	01-353/23:23:42		NOTE: End fixed Sub-Reflector for Radio Science		01-353/23:12:00
5962	MGS	01-353/23:31:31		NOTE: Exit Solar Eclipse 12442		01-353/23:19:49
5963	MGS	01-353/23:47:49		NOTE: Periapsis 12443 ----------		01-353/23:36:07
5964	MGS	01-353/23:52:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-353/23:40:48
5965	MGS	01-353/23:52:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-353/23:40:48
5966	MGS	01-353/23:52:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-353/23:40:49
5967	MGS	01-353/23:52:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-353/23:40:49
5968	MGS	01-354/00:00:00		Light Time: OWLT = 11:42, RTLT = 23:24		
5969	MGS	01-354/00:14:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/00:02:49
5970	MGS	01-354/00:14:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/00:02:49
5971	MGS	01-354/00:38:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/00:26:36
5972	MGS	01-354/00:39:02		NOTE: Start EVP data return script		01-354/00:27:19
5973	MGS	01-354/00:43:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/00:31:36
5974	MGS	01-354/00:43:19		: 00:09:36, FALSE	RDSCII	01-354/00:31:36
5975	MGS	01-354/00:43:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/00:31:36
5976	MGS	01-354/00:43:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/00:31:36
5977	MGS	01-354/00:43:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/00:31:36
5978	MGS	01-354/00:43:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/00:31:36
5979	MGS	01-354/00:43:19	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
5980	MGS	01-354/00:43:19	15	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
5981	MGS	01-354/00:45:21		NOTE: Enter Planetary Atmosphere 12443		01-354/00:33:39
5982	MGS	01-354/00:46:32		NOTE: Apoapsis 12443 -		01-354/00:34:50
5983	MGS	01-354/00:49:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/00:37:19
5984	MGS	01-354/00:49:02		NOTE: Enter Solar Eclipse 12443		01-354/00:37:20
5985	MGS	01-354/00:52:17		NOTE: Enter Earth Occultation 12443		01-354/00:40:34
5986	MGS	01-354/00:52:17	15	NOTE: Loss Of X-Band Signal		
5987	MGS	01-354/00:52:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/00:41:12
5988	MGS	01-354/00:52:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/00:41:12
5989	MGS	01-354/00:52:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/00:41:12
5990	MGS	01-354/00:52:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/00:41:12
5991	MGS	01-354/00:52:56		NOTE: End EVP script		01-354/00:41:13
5992	MGS	01-354/00:52:56		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/00:41:13
5993	MGS	01-354/00:53:00		NOTE: End fixed Sub-Reflector for Radio Science		01-354/00:41:17
5994	MGS	01-354/01:06:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/00:54:39
5995	MGS	01-354/01:10:07		: 01:40:29	RPAONX	01-354/00:58:24
5996	MGS	01-354/01:10:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/00:58:24
5997	MGS	01-354/01:11:22		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/00:59:39
5998	MGS	01-354/01:11:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/00:59:39
5999	MGS	01-354/01:11:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/00:59:39
6000	MGS	01-354/01:11:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/00:59:39
6001	MGS	01-354/01:11:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/00:59:39
6002	MGS	01-354/01:11:52		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/01:00:09
6003	MGS	01-354/01:11:57		NOTE: Exit Earth Occultation 12443		01-354/01:00:14
6004	MGS	01-354/01:11:57	15	Acquisition Of X-Band Signal		
6005	MGS	01-354/01:11:57	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6006	MGS	01-354/01:11:57	15	NOTE: Carrier Only -- No Telemetry Modulation		
6007	MGS	01-354/01:13:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/01:01:49
6008	MGS	01-354/01:13:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/01:01:49
6009	MGS	01-354/01:13:37		Set eclipse egress script address: 01DC	SWSEES	01-354/01:01:54
6010	MGS	01-354/01:19:11		NOTE: Exit Planetary Atmosphere 12443		01-354/01:07:28
6011	MGS	01-354/01:21:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/01:09:35
6012	MGS	01-354/01:21:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/01:09:35
6013	MGS	01-354/01:21:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/01:09:35
6014	MGS	01-354/01:21:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/01:09:35
6015	MGS	01-354/01:21:18	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6016	MGS	01-354/01:21:19		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/01:09:36
6017	MGS	01-354/01:21:19		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/01:09:36
6018	MGS	01-354/01:21:19		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/01:09:36
6019	MGS	01-354/01:21:19	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6020	MGS	01-354/01:21:23		NOTE: End fixed Sub-Reflector for Radio Science		01-354/01:09:40
6021	MGS	01-354/01:29:12		NOTE: Exit Solar Eclipse 12443		01-354/01:17:29
6022	MGS	01-354/01:45:23		NOTE: Periapsis 12444 ----------		01-354/01:33:40
6023	MGS	01-354/01:50:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/01:38:28
6024	MGS	01-354/01:50:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/01:38:28
6025	MGS	01-354/01:50:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/01:38:29
6026	MGS	01-354/01:50:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/01:38:29
6027	MGS	01-354/02:12:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/02:00:29
6028	MGS	01-354/02:12:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/02:00:29
6029	MGS	01-354/02:22:22		NOTE: Start Block (SSRMGR)		01-354/02:10:39
6030	MGS	01-354/02:22:22		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-354/02:10:39
6031	MGS	01-354/02:22:23		SSR 1B Data Enable	CSD1BE	01-354/02:10:40
6032	MGS	01-354/02:22:23		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-354/02:10:40
6033	MGS	01-354/02:35:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/02:24:16
6034	MGS	01-354/02:36:45		NOTE: Start Block (MAP_PB_ODY)		01-354/02:25:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6035	MGS	01-354/02:36:46		: 00:21:05, 01:40:30, FALSE, FALSE, FALSE, 00:01:15, 00:08:16, 01:23:02, 00:07:56	AEMINI	01-354/02:25:03
6036	MGS	01-354/02:36:46		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/02:25:03
6037	MGS	01-354/02:36:46		NOTE: Start EVP data return script		01-354/02:25:03
6038	MGS	01-354/02:36:47		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-354T03:05:40.000	AEMPBI	01-354/02:25:04
6039	MGS	01-354/02:40:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/02:29:16
6040	MGS	01-354/02:40:59		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8928000, DUR=00:18:36		01-354/02:29:16
6041	MGS	01-354/02:40:59		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-354/02:29:16
6042	MGS	01-354/02:40:59		: 00:09:36, FALSE	RDSCII	01-354/02:29:16
6043	MGS	01-354/02:40:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/02:29:16
6044	MGS	01-354/02:40:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/02:29:16
6045	MGS	01-354/02:40:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/02:29:16
6046	MGS	01-354/02:40:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/02:29:16
6047	MGS	01-354/02:40:59	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6048	MGS	01-354/02:40:59	15	NOTE: Carrier Only -- No Telemetry Modulation		
6049	MGS	01-354/02:43:05		NOTE: Enter Planetary Atmosphere 12444		01-354/02:31:22
6050	MGS	01-354/02:44:28		NOTE: Apoapsis 12444 -		01-354/02:32:45
6051	MGS	01-354/02:45:46		SSR 1A Data Disable	CSD1AX	01-354/02:34:03
6052	MGS	01-354/02:45:46		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-354/02:34:03
6053	MGS	01-354/02:45:47		NOTE: End Block (SSRMGR)		01-354/02:34:04
6054	MGS	01-354/02:46:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/02:35:03
6055	MGS	01-354/02:46:46		NOTE: Enter Solar Eclipse 12444		01-354/02:35:03
6056	MGS	01-354/02:49:59		NOTE: Enter Earth Occultation 12444		01-354/02:38:16
6057	MGS	01-354/02:49:59	15	NOTE: Loss Of X-Band Signal		
6058	MGS	01-354/02:50:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/02:38:52
6059	MGS	01-354/02:50:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/02:38:52
6060	MGS	01-354/02:50:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/02:38:52
6061	MGS	01-354/02:50:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/02:38:52
6062	MGS	01-354/02:50:36		NOTE: End EVP script		01-354/02:38:53
6063	MGS	01-354/02:50:36		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/02:38:53
6064	MGS	01-354/02:50:37		NOTE: End Block (MAP_RT)		01-354/02:38:54
6065	MGS	01-354/02:50:40		NOTE: End fixed Sub-Reflector for Radio Science		01-354/02:38:57
6066	MGS	01-354/03:07:51		: 01:40:30	RPAONX	01-354/02:56:08
6067	MGS	01-354/03:07:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/02:56:08
6068	MGS	01-354/03:09:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/02:57:53
6069	MGS	01-354/03:09:41		NOTE: Exit Earth Occultation 12444		01-354/02:57:58
6070	MGS	01-354/03:09:41	15	Acquisition Of X-Band Signal		
6071	MGS	01-354/03:09:41	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6072	MGS	01-354/03:11:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/02:59:29
6073	MGS	01-354/03:11:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/02:59:29
6074	MGS	01-354/03:11:16		Command the PSE with included data word: 3990	SWPSEL	01-354/02:59:33
6075	MGS	01-354/03:11:17		Set eclipse egress script address: 0158	SWSEES	01-354/02:59:34
6076	MGS	01-354/03:16:54		NOTE: Exit Planetary Atmosphere 12444		01-354/03:05:11
6077	MGS	01-354/03:17:22		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:20:20	AEMPB	01-354/03:05:39
6078	MGS	01-354/03:17:22		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-354/03:05:39
6079	MGS	01-354/03:17:22		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-354/03:05:39
6080	MGS	01-354/03:17:23		SSR 1A Data Enable	CSD1AE	01-354/03:05:40
6081	MGS	01-354/03:17:23		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-354/03:05:40
6082	MGS	01-354/03:17:23	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6083	MGS	01-354/03:26:56		NOTE: Exit Solar Eclipse 12444		01-354/03:15:13
6084	MGS	01-354/03:43:16		NOTE: Periapsis 12445 ----------		01-354/03:31:34
6085	MGS	01-354/03:51:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/03:40:12
6086	MGS	01-354/03:51:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/03:40:12
6087	MGS	01-354/03:51:56		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/03:40:13
6088	MGS	01-354/03:51:56		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/03:40:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6089	MGS	01-354/04:05:00	34	Begin Pre-Cal		
6090	MGS	01-354/04:05:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6091	MGS	01-354/04:05:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6092	MGS	01-354/04:05:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6093	MGS	01-354/04:05:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
6094	MGS	01-354/04:05:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
6095	MGS	01-354/04:05:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
6096	MGS	01-354/04:05:00	34	Config: TGC: DEST=37		
6097	MGS	01-354/04:05:00	34	Config: TGC: BAND=X, BR=8000.000000		
6098	MGS	01-354/04:05:00	34	Config: FSS: CH=2, PRI_FL=10000		
6099	MGS	01-354/04:05:00	34	Config: RSR		
6100	MGS	01-354/04:05:00	34	Config: TXL		
6101	MGS	01-354/04:05:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
6102	MGS	01-354/04:05:00	34	Config: BVR		
6103	MGS	01-354/04:05:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
6104	MGS	01-354/04:05:00	34	Config: MDA: SMPL=0.1		
6105	MGS	01-354/04:05:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
6106	MGS	01-354/04:05:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
6107	MGS	01-354/04:05:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
6108	MGS	01-354/04:13:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/04:02:13
6109	MGS	01-354/04:13:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/04:02:13
6110	MGS	01-354/04:28:01		SSR 1A Data Disable	CSD1AX	01-354/04:16:18
6111	MGS	01-354/04:28:01		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-354/04:16:18
6112	MGS	01-354/04:28:01		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-354/04:16:18
6113	MGS	01-354/04:28:01	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6114	MGS	01-354/04:34:32		NOTE: Start Block (MAP_RT)		01-354/04:22:49
6115	MGS	01-354/04:34:33		: 00:21:05, 01:40:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:56, 01:19:41, 00:09:36	AEMINI	01-354/04:22:50
6116	MGS	01-354/04:34:33		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/04:22:50
6117	MGS	01-354/04:34:33		NOTE: Start EVP data return script		01-354/04:22:50
6118	MGS	01-354/04:34:34		: SE_2A, RTM, 01:19:40, MRC, 2001-354T05:05:08.000	AEMRTI	01-354/04:22:51
6119	MGS	01-354/04:40:53		NOTE: Enter Planetary Atmosphere 12445		01-354/04:29:10
6120	MGS	01-354/04:42:16		NOTE: Apoapsis 12445 -		01-354/04:30:33
6121	MGS	01-354/04:44:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/04:32:50
6122	MGS	01-354/04:44:34		NOTE: Enter Solar Eclipse 12445		01-354/04:32:51
6123	MGS	01-354/04:47:46		NOTE: Enter Earth Occultation 12445		01-354/04:36:03
6124	MGS	01-354/04:47:46	15	NOTE: Loss Of X-Band Signal		
6125	MGS	01-354/04:48:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/04:36:38
6126	MGS	01-354/04:48:21		NOTE: End EVP script		01-354/04:36:38
6127	MGS	01-354/04:48:22		NOTE: End Block (MAP_PB_ODY)		01-354/04:36:39
6128	MGS	01-354/05:01:54		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/04:50:11
6129	MGS	01-354/05:05:00	34	Begin Tracking		
6130	MGS	01-354/05:05:38		: 01:40:29	RPAONX	01-354/04:53:55
6131	MGS	01-354/05:05:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/04:53:55
6132	MGS	01-354/05:06:53		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/04:55:10
6133	MGS	01-354/05:06:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/04:55:10
6134	MGS	01-354/05:06:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/04:55:10
6135	MGS	01-354/05:06:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/04:55:10
6136	MGS	01-354/05:06:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/04:55:10
6137	MGS	01-354/05:07:29		NOTE: Exit Earth Occultation 12445		01-354/04:55:46
6138	MGS	01-354/05:07:29	15	Acquisition Of X-Band Signal		
6139	MGS	01-354/05:07:29	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6140	MGS	01-354/05:07:29	15	NOTE: Carrier Only -- No Telemetry Modulation		
6141	MGS	01-354/05:07:29	34	Acquisition Of X-Band Signal		
6142	MGS	01-354/05:07:29	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6143	MGS	01-354/05:07:29	34	NOTE: Carrier Only -- No Telemetry Modulation		
6144	MGS	01-354/05:08:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/04:57:13
6145	MGS	01-354/05:08:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/04:57:13
6146	MGS	01-354/05:09:01		Set eclipse egress script address: 019A	SWSEES	01-354/04:57:18
6147	MGS	01-354/05:13:38	15	NOTE: Below Uplink Interlock Limit		
6148	MGS	01-354/05:14:41		NOTE: Exit Planetary Atmosphere 12445		01-354/05:02:58
6149	MGS	01-354/05:15:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6150	MGS	01-354/05:16:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/05:05:06
6151	MGS	01-354/05:16:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/05:05:06
6152	MGS	01-354/05:16:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/05:05:06
6153	MGS	01-354/05:16:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/05:05:06
6154	MGS	01-354/05:16:49	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6155	MGS	01-354/05:16:49	34	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6156	MGS	01-354/05:16:50		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/05:05:07
6157	MGS	01-354/05:16:50		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/05:05:07
6158	MGS	01-354/05:16:50		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/05:05:07
6159	MGS	01-354/05:16:50	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6160	MGS	01-354/05:16:50	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6161	MGS	01-354/05:16:55		NOTE: End fixed Sub-Reflector for Radio Science		01-354/05:05:12
6162	MGS	01-354/05:17:00	34	Range Modulation On: SUP=3.0dB		
6163	MGS	01-354/05:18:00	34	Begin Ranging Acquisition		
6164	MGS	01-354/05:24:44		NOTE: Exit Solar Eclipse 12445		01-354/05:13:01
6165	MGS	01-354/05:25:00	15	End Tracking		
6166	MGS	01-354/05:38:26	34	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6167	MGS	01-354/05:40:00	15	End Post-Cal		
6168	MGS	01-354/05:41:07		NOTE: Periapsis 12446 ----------		01-354/05:29:24
6169	MGS	01-354/05:45:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/05:34:00
6170	MGS	01-354/05:45:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/05:34:00
6171	MGS	01-354/05:45:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/05:34:01
6172	MGS	01-354/05:45:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/05:34:01
6173	MGS	01-354/06:03:21	34	NOTE: Transmitter Off in 15 minutes		
6174	MGS	01-354/06:07:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/05:56:01
6175	MGS	01-354/06:07:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/05:56:01
6176	MGS	01-354/06:16:21	34	Range Modulation Off		
6177	MGS	01-354/06:18:21	34	Transmitter Off		
6178	MGS	01-354/06:31:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/06:19:48
6179	MGS	01-354/06:32:20		NOTE: Start EVP data return script		01-354/06:20:37
6180	MGS	01-354/06:36:30		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/06:24:47
6181	MGS	01-354/06:36:30		: 00:09:36, FALSE	RDSCII	01-354/06:24:47
6182	MGS	01-354/06:36:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/06:24:47
6183	MGS	01-354/06:36:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/06:24:47
6184	MGS	01-354/06:36:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/06:24:47
6185	MGS	01-354/06:36:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/06:24:47
6186	MGS	01-354/06:36:30	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6187	MGS	01-354/06:36:30	34	NOTE: Carrier Only -- No Telemetry Modulation		
6188	MGS	01-354/06:38:40		NOTE: Enter Planetary Atmosphere 12446		01-354/06:26:56
6189	MGS	01-354/06:39:52		NOTE: Apoapsis 12446 -		01-354/06:28:09
6190	MGS	01-354/06:42:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/06:30:37
6191	MGS	01-354/06:42:21		NOTE: Enter Solar Eclipse 12446		01-354/06:30:37
6192	MGS	01-354/06:45:32		NOTE: Enter Earth Occultation 12446		01-354/06:33:49
6193	MGS	01-354/06:45:32	34	NOTE: Loss Of X-Band Signal		
6194	MGS	01-354/06:45:36	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6195	MGS	01-354/06:46:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/06:34:23
6196	MGS	01-354/06:46:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/06:34:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6197	MGS	01-354/06:46:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/06:34:23
6198	MGS	01-354/06:46:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/06:34:23
6199	MGS	01-354/06:46:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/06:34:24
6200	MGS	01-354/06:46:08		NOTE: End EVP script		01-354/06:34:25
6201	MGS	01-354/06:46:12		NOTE: End fixed Sub-Reflector for Radio Science		01-354/06:34:29
6202	MGS	01-354/06:47:36	34	Range Modulation On: SUP=3.0dB		
6203	MGS	01-354/06:48:36	34	Begin Ranging Acquisition		
6204	MGS	01-354/06:59:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/06:47:58
6205	MGS	01-354/07:03:26		: 01:40:29	RPAONX	01-354/06:51:42
6206	MGS	01-354/07:03:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/06:51:42
6207	MGS	01-354/07:04:41		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/06:52:57
6208	MGS	01-354/07:04:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/06:52:57
6209	MGS	01-354/07:04:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/06:52:57
6210	MGS	01-354/07:04:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/06:52:57
6211	MGS	01-354/07:04:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/06:52:57
6212	MGS	01-354/07:05:11		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/06:53:27
6213	MGS	01-354/07:05:17		NOTE: Exit Earth Occultation 12446		01-354/06:53:34
6214	MGS	01-354/07:05:17	34	Acquisition Of X-Band Signal		
6215	MGS	01-354/07:05:17	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6216	MGS	01-354/07:05:17	34	NOTE: Carrier Only -- No Telemetry Modulation		
6217	MGS	01-354/07:06:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/06:55:01
6218	MGS	01-354/07:06:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/06:55:01
6219	MGS	01-354/07:06:50		Set eclipse egress script address: 01DC	SWSEES	01-354/06:55:06
6220	MGS	01-354/07:12:29		NOTE: Exit Planetary Atmosphere 12446		01-354/07:00:46
6221	MGS	01-354/07:14:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/07:02:53
6222	MGS	01-354/07:14:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/07:02:53
6223	MGS	01-354/07:14:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/07:02:53
6224	MGS	01-354/07:14:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/07:02:53
6225	MGS	01-354/07:14:37	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6226	MGS	01-354/07:14:38		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/07:02:54
6227	MGS	01-354/07:14:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/07:02:54
6228	MGS	01-354/07:14:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/07:02:54
6229	MGS	01-354/07:14:38	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6230	MGS	01-354/07:14:42		NOTE: End fixed Sub-Reflector for Radio Science		01-354/07:02:59
6231	MGS	01-354/07:22:31		NOTE: Exit Solar Eclipse 12446		01-354/07:10:48
6232	MGS	01-354/07:38:49		NOTE: Periapsis 12447 ----------		01-354/07:27:05
6233	MGS	01-354/07:43:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/07:31:47
6234	MGS	01-354/07:43:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/07:31:47
6235	MGS	01-354/07:43:32		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/07:31:48
6236	MGS	01-354/07:43:32		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/07:31:48
6237	MGS	01-354/08:01:04	34	NOTE: Transmitter Off in 15 minutes		
6238	MGS	01-354/08:05:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/07:53:48
6239	MGS	01-354/08:05:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/07:53:48
6240	MGS	01-354/08:14:04	34	Range Modulation Off		
6241	MGS	01-354/08:15:30		NOTE: Start Block (SSRMGR)		01-354/08:03:46
6242	MGS	01-354/08:15:30		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-354/08:03:46
6243	MGS	01-354/08:15:31		SSR 1A Data Enable	CSD1AE	01-354/08:03:47
6244	MGS	01-354/08:15:31		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-354/08:03:47
6245	MGS	01-354/08:16:04	34	Transmitter Off		
6246	MGS	01-354/08:29:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/08:17:35
6247	MGS	01-354/08:30:06		NOTE: Start Block (MAP_PB_ODY)		01-354/08:18:22
6248	MGS	01-354/08:30:07		: 00:21:05, 01:40:30, FALSE, FALSE, FALSE, 00:01:15, 00:08:16, 01:23:02, 00:07:56	AEMINI	01-354/08:18:23
6249	MGS	01-354/08:30:07		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/08:18:23
6250	MGS	01-354/08:30:07		NOTE: Start EVP data return script		01-354/08:18:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6251	MGS	01-354/08:30:08		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-354T08:58:59.000	AEMPBI	01-354/08:18:24
6252	MGS	01-354/08:34:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/08:22:34
6253	MGS	01-354/08:34:18		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=9016000, DUR=00:18:47		01-354/08:22:34
6254	MGS	01-354/08:34:18		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-354/08:22:34
6255	MGS	01-354/08:34:18		: 00:09:36, FALSE	RDSCII	01-354/08:22:34
6256	MGS	01-354/08:34:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/08:22:34
6257	MGS	01-354/08:34:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/08:22:34
6258	MGS	01-354/08:34:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/08:22:34
6259	MGS	01-354/08:34:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/08:22:34
6260	MGS	01-354/08:34:18	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6261	MGS	01-354/08:34:18	34	NOTE: Carrier Only -- No Telemetry Modulation		
6262	MGS	01-354/08:36:24		NOTE: Enter Planetary Atmosphere 12447		01-354/08:24:40
6263	MGS	01-354/08:37:20		NOTE: Apoapsis 12447 -		01-354/08:25:36
6264	MGS	01-354/08:39:07		SSR 1B Data Disable	CSD1BX	01-354/08:27:23
6265	MGS	01-354/08:39:07		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-354/08:27:23
6266	MGS	01-354/08:39:08		NOTE: End Block (SSRMGR)		01-354/08:27:24
6267	MGS	01-354/08:40:06		NOTE: Enter Solar Eclipse 12447		01-354/08:28:23
6268	MGS	01-354/08:40:07		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/08:28:23
6269	MGS	01-354/08:43:16		NOTE: Enter Earth Occultation 12447		01-354/08:31:32
6270	MGS	01-354/08:43:16	34	NOTE: Loss Of X-Band Signal		
6271	MGS	01-354/08:43:23	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6272	MGS	01-354/08:43:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/08:32:10
6273	MGS	01-354/08:43:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/08:32:10
6274	MGS	01-354/08:43:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/08:32:10
6275	MGS	01-354/08:43:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/08:32:10
6276	MGS	01-354/08:43:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/08:32:11
6277	MGS	01-354/08:43:55		NOTE: End EVP script		01-354/08:32:12
6278	MGS	01-354/08:43:56		NOTE: End Block (MAP_RT)		01-354/08:32:13
6279	MGS	01-354/08:43:59		NOTE: End fixed Sub-Reflector for Radio Science		01-354/08:32:16
6280	MGS	01-354/08:45:23	34	Range Modulation On: SUP=3.0dB		
6281	MGS	01-354/08:46:23	34	Begin Ranging Acquisition		
6282	MGS	01-354/09:01:12		: 01:40:30	RPAONX	01-354/08:49:28
6283	MGS	01-354/09:01:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/08:49:28
6284	MGS	01-354/09:02:57		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/08:51:13
6285	MGS	01-354/09:03:05		NOTE: Exit Earth Occultation 12447		01-354/08:51:21
6286	MGS	01-354/09:03:05	34	Acquisition Of X-Band Signal		
6287	MGS	01-354/09:03:05	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6288	MGS	01-354/09:04:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/08:52:48
6289	MGS	01-354/09:04:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/08:52:48
6290	MGS	01-354/09:04:36		Command the PSE with included data word: 3990	SWPSEL	01-354/08:52:52
6291	MGS	01-354/09:04:37		Set eclipse egress script address: 0158	SWSEES	01-354/08:52:53
6292	MGS	01-354/09:06:50	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6293	MGS	01-354/09:10:16		NOTE: Exit Planetary Atmosphere 12447		01-354/08:58:33
6294	MGS	01-354/09:10:43		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:20:20	AEMPB	01-354/08:58:59
6295	MGS	01-354/09:10:43		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-354/08:58:59
6296	MGS	01-354/09:10:43		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-354/08:58:59
6297	MGS	01-354/09:10:44		SSR 1B Data Enable	CSD1BE	01-354/08:59:00
6298	MGS	01-354/09:10:44		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-354/08:59:00
6299	MGS	01-354/09:10:44	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6300	MGS	01-354/09:20:17		NOTE: Exit Solar Eclipse 12447		01-354/09:08:33
6301	MGS	01-354/09:36:35		NOTE: Periapsis 12448 ----------		01-354/09:24:51
6302	MGS	01-354/09:45:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/09:33:32
6303	MGS	01-354/09:45:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/09:33:32
6304	MGS	01-354/09:45:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/09:33:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6305	MGS	01-354/09:45:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/09:33:33
6306	MGS	01-354/09:58:45	34	NOTE: Transmitter Off in 15 minutes		
6307	MGS	01-354/10:07:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/09:55:33
6308	MGS	01-354/10:07:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/09:55:33
6309	MGS	01-354/10:11:46	34	Range Modulation Off		
6310	MGS	01-354/10:13:45	34	Transmitter Off		
6311	MGS	01-354/10:21:22		SSR 1B Data Disable	CSD1BX	01-354/10:09:38
6312	MGS	01-354/10:21:22		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-354/10:09:38
6313	MGS	01-354/10:21:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-354/10:09:38
6314	MGS	01-354/10:21:22	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6315	MGS	01-354/10:27:49		NOTE: Start Block (MAP_RT)		01-354/10:16:05
6316	MGS	01-354/10:27:50		: 00:21:05, 01:40:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:56, 01:19:41, 00:09:36	AEMINI	01-354/10:16:06
6317	MGS	01-354/10:27:50		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/10:16:06
6318	MGS	01-354/10:27:50		NOTE: Start EVP data return script		01-354/10:16:06
6319	MGS	01-354/10:27:51		: SE_2A, RTM, 01:19:40, MRC, 2001-354T10:58:23.000	AEMRTI	01-354/10:16:07
6320	MGS	01-354/10:34:06		NOTE: Enter Planetary Atmosphere 12448		01-354/10:22:22
6321	MGS	01-354/10:35:08		NOTE: Apoapsis 12448 -		01-354/10:23:25
6322	MGS	01-354/10:37:13	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6323	MGS	01-354/10:37:50		NOTE: Enter Solar Eclipse 12448		01-354/10:26:06
6324	MGS	01-354/10:37:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/10:26:06
6325	MGS	01-354/10:40:58		NOTE: Enter Earth Occultation 12448		01-354/10:29:14
6326	MGS	01-354/10:40:58	34	NOTE: Loss Of X-Band Signal		
6327	MGS	01-354/10:41:07	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6328	MGS	01-354/10:41:42		NOTE: End EVP script		01-354/10:29:58
6329	MGS	01-354/10:41:42		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/10:29:58
6330	MGS	01-354/10:41:43		NOTE: End Block (MAP_PB_ODY)		01-354/10:29:59
6331	MGS	01-354/10:43:08	34	Range Modulation On: SUP=3.0dB		
6332	MGS	01-354/10:44:08	34	Begin Ranging Acquisition		
6333	MGS	01-354/10:50:00	65	Begin Pre-Cal		
6334	MGS	01-354/10:50:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6335	MGS	01-354/10:50:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6336	MGS	01-354/10:50:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6337	MGS	01-354/10:50:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
6338	MGS	01-354/10:50:00	65	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
6339	MGS	01-354/10:50:00	65	Config: TGC: DEST=37		
6340	MGS	01-354/10:50:00	65	Config: TGC: BAND=X, BR=40000.000000		
6341	MGS	01-354/10:50:00	65	Config: FSS: CH=2, PRI_FL=10000		
6342	MGS	01-354/10:50:00	65	Config: RSR		
6343	MGS	01-354/10:50:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
6344	MGS	01-354/10:50:00	65	Config: BVR		
6345	MGS	01-354/10:50:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
6346	MGS	01-354/10:50:00	65	Config: MDA: SMPL=0.1		
6347	MGS	01-354/10:55:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/10:43:26
6348	MGS	01-354/10:58:55		: 01:40:29	RPAONX	01-354/10:47:11
6349	MGS	01-354/10:58:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/10:47:11
6350	MGS	01-354/11:00:10		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/10:48:26
6351	MGS	01-354/11:00:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/10:48:26
6352	MGS	01-354/11:00:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/10:48:26
6353	MGS	01-354/11:00:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/10:48:26
6354	MGS	01-354/11:00:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/10:48:26
6355	MGS	01-354/11:00:50		NOTE: Exit Earth Occultation 12448		01-354/10:49:06
6356	MGS	01-354/11:00:50	34	Acquisition Of X-Band Signal		
6357	MGS	01-354/11:00:50	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6358	MGS	01-354/11:00:50	34	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6359	MGS	01-354/11:02:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/10:50:33
6360	MGS	01-354/11:02:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/10:50:33
6361	MGS	01-354/11:02:22		Set eclipse egress script address: 019A	SWSEES	01-354/10:50:38
6362	MGS	01-354/11:08:01		NOTE: Exit Planetary Atmosphere 12448		01-354/10:56:17
6363	MGS	01-354/11:10:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/10:58:22
6364	MGS	01-354/11:10:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/10:58:22
6365	MGS	01-354/11:10:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/10:58:22
6366	MGS	01-354/11:10:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/10:58:22
6367	MGS	01-354/11:10:06	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6368	MGS	01-354/11:10:07		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/10:58:23
6369	MGS	01-354/11:10:07		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/10:58:23
6370	MGS	01-354/11:10:07		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/10:58:23
6371	MGS	01-354/11:10:07	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6372	MGS	01-354/11:10:11		NOTE: End fixed Sub-Reflector for Radio Science		01-354/10:58:27
6373	MGS	01-354/11:18:00		NOTE: Exit Solar Eclipse 12448		01-354/11:06:16
6374	MGS	01-354/11:34:17		NOTE: Periapsis 12449 ----------		01-354/11:22:33
6375	MGS	01-354/11:38:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/11:27:15
6376	MGS	01-354/11:38:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/11:27:15
6377	MGS	01-354/11:39:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/11:27:16
6378	MGS	01-354/11:39:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/11:27:16
6379	MGS	01-354/11:55:00	34	NOTE: Transmitter Off in 15 minutes		
6380	MGS	01-354/12:01:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/11:49:16
6381	MGS	01-354/12:01:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/11:49:16
6382	MGS	01-354/12:08:00	34	Range Modulation Off		
6383	MGS	01-354/12:10:00	34	Transmitter Off		
6384	MGS	01-354/12:11:43		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-354/11:59:59
6385	MGS	01-354/12:20:00	65	Begin Tracking		
6386	MGS	01-354/12:20:00	65	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6387	MGS	01-354/12:24:15	34	NOTE: Below Uplink Interlock Limit		
6388	MGS	01-354/12:24:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/12:13:03
6389	MGS	01-354/12:25:32		NOTE: Start EVP data return script		01-354/12:13:48
6390	MGS	01-354/12:29:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/12:18:03
6391	MGS	01-354/12:29:47		: 00:09:36, FALSE	RDSCII	01-354/12:18:03
6392	MGS	01-354/12:29:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/12:18:03
6393	MGS	01-354/12:29:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/12:18:03
6394	MGS	01-354/12:29:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/12:18:03
6395	MGS	01-354/12:29:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/12:18:03
6396	MGS	01-354/12:29:47	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6397	MGS	01-354/12:29:47	34	NOTE: Carrier Only -- No Telemetry Modulation		
6398	MGS	01-354/12:29:47	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6399	MGS	01-354/12:29:47	65	NOTE: Carrier Only -- No Telemetry Modulation		
6400	MGS	01-354/12:30:24	65	NOTE: Above Uplink Interlock Limit		
6401	MGS	01-354/12:31:49		NOTE: Enter Planetary Atmosphere 12449		01-354/12:20:05
6402	MGS	01-354/12:32:55		NOTE: Apoapsis 12449 -		01-354/12:21:11
6403	MGS	01-354/12:35:00	34	End Tracking		
6404	MGS	01-354/12:35:32		NOTE: Enter Solar Eclipse 12449		01-354/12:23:48
6405	MGS	01-354/12:35:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/12:23:48
6406	MGS	01-354/12:38:41		NOTE: Enter Earth Occultation 12449		01-354/12:26:57
6407	MGS	01-354/12:38:41	65	NOTE: Loss Of X-Band Signal		
6408	MGS	01-354/12:39:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/12:27:39
6409	MGS	01-354/12:39:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/12:27:39
6410	MGS	01-354/12:39:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/12:27:39
6411	MGS	01-354/12:39:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/12:27:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6412	MGS	01-354/12:39:24		NOTE: End EVP script		01-354/12:27:40
6413	MGS	01-354/12:39:24		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/12:27:40
6414	MGS	01-354/12:39:28		NOTE: End fixed Sub-Reflector for Radio Science		01-354/12:27:44
6415	MGS	01-354/12:50:00	34	End Post-Cal		
6416	MGS	01-354/12:52:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/12:41:08
6417	MGS	01-354/12:56:37		: 01:40:29	RPAONX	01-354/12:44:53
6418	MGS	01-354/12:56:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/12:44:53
6419	MGS	01-354/12:57:52		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/12:46:08
6420	MGS	01-354/12:57:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/12:46:08
6421	MGS	01-354/12:57:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/12:46:08
6422	MGS	01-354/12:57:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/12:46:08
6423	MGS	01-354/12:57:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/12:46:08
6424	MGS	01-354/12:58:22		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/12:46:38
6425	MGS	01-354/12:58:33		NOTE: Exit Earth Occultation 12449		01-354/12:46:48
6426	MGS	01-354/12:58:33	65	Acquisition Of X-Band Signal		
6427	MGS	01-354/12:58:33	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6428	MGS	01-354/12:58:33	65	NOTE: Carrier Only -- No Telemetry Modulation		
6429	MGS	01-354/13:00:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/12:48:16
6430	MGS	01-354/13:00:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/12:48:16
6431	MGS	01-354/13:00:05		Set eclipse egress script address: 01DC	SWSEES	01-354/12:48:21
6432	MGS	01-354/13:05:44		NOTE: Exit Planetary Atmosphere 12449		01-354/12:54:00
6433	MGS	01-354/13:07:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/12:56:04
6434	MGS	01-354/13:07:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/12:56:04
6435	MGS	01-354/13:07:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/12:56:04
6436	MGS	01-354/13:07:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/12:56:04
6437	MGS	01-354/13:07:48	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6438	MGS	01-354/13:07:49		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/12:56:05
6439	MGS	01-354/13:07:49		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/12:56:05
6440	MGS	01-354/13:07:49		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/12:56:05
6441	MGS	01-354/13:07:49	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6442	MGS	01-354/13:07:53		NOTE: End fixed Sub-Reflector for Radio Science		01-354/12:56:09
6443	MGS	01-354/13:15:42		NOTE: Exit Solar Eclipse 12449		01-354/13:03:58
6444	MGS	01-354/13:31:44		NOTE: Periapsis 12450 ----------		01-354/13:19:59
6445	MGS	01-354/13:36:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/13:24:57
6446	MGS	01-354/13:36:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/13:24:57
6447	MGS	01-354/13:36:43		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/13:24:58
6448	MGS	01-354/13:36:43		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/13:24:58
6449	MGS	01-354/13:58:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/13:46:58
6450	MGS	01-354/13:58:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/13:46:58
6451	MGS	01-354/14:08:50		NOTE: Start Block (SSRMGR)		01-354/13:57:05
6452	MGS	01-354/14:08:50		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-354/13:57:05
6453	MGS	01-354/14:08:51		SSR 1B Data Enable	CSD1BE	01-354/13:57:06
6454	MGS	01-354/14:08:51		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-354/13:57:06
6455	MGS	01-354/14:15:00	63	Begin Pre-Cal		
6456	MGS	01-354/14:15:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6457	MGS	01-354/14:15:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6458	MGS	01-354/14:15:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6459	MGS	01-354/14:15:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
6460	MGS	01-354/14:15:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
6461	MGS	01-354/14:15:00	63	Config: TGC: DEST=37		
6462	MGS	01-354/14:15:00	63	Config: TGC: BAND=X, BR=42666.666667		
6463	MGS	01-354/14:15:00	63	Config: FSS: CH=2, PRI_FL=10000		
6464	MGS	01-354/14:15:00	63	Config: RSR		
6465	MGS	01-354/14:15:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6466	MGS	01-354/14:15:00	63	Config: BVR		
6467	MGS	01-354/14:15:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
6468	MGS	01-354/14:15:00	63	Config: MDA: SMPL=0.1		
6469	MGS	01-354/14:22:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/14:10:45
6470	MGS	01-354/14:23:14		NOTE: Start Block (MAP_PB_ODY)		01-354/14:11:29
6471	MGS	01-354/14:23:15		: 00:21:05, 01:40:30, FALSE, FALSE, FALSE, 00:01:15, 00:08:16, 01:23:02, 00:07:56	AEMINI	01-354/14:11:30
6472	MGS	01-354/14:23:15		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/14:11:30
6473	MGS	01-354/14:23:15		NOTE: Start EVP data return script		01-354/14:11:30
6474	MGS	01-354/14:23:16		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-354T14:52:07.000	AEMPBI	01-354/14:11:31
6475	MGS	01-354/14:27:30		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/14:15:45
6476	MGS	01-354/14:27:30		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8952000, DUR=00:18:39		01-354/14:15:45
6477	MGS	01-354/14:27:30		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-354/14:15:45
6478	MGS	01-354/14:27:30		: 00:09:36, FALSE	RDSCII	01-354/14:15:45
6479	MGS	01-354/14:27:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/14:15:45
6480	MGS	01-354/14:27:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/14:15:45
6481	MGS	01-354/14:27:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/14:15:45
6482	MGS	01-354/14:27:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/14:15:45
6483	MGS	01-354/14:27:30	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6484	MGS	01-354/14:27:30	65	NOTE: Carrier Only -- No Telemetry Modulation		
6485	MGS	01-354/14:29:32		NOTE: Enter Planetary Atmosphere 12450		01-354/14:17:48
6486	MGS	01-354/14:30:22		NOTE: Apoapsis 12450 -		01-354/14:18:38
6487	MGS	01-354/14:32:15		SSR 1A Data Disable	CSD1AX	01-354/14:20:30
6488	MGS	01-354/14:32:15		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-354/14:20:30
6489	MGS	01-354/14:32:16		NOTE: End Block (SSRMGR)		01-354/14:20:31
6490	MGS	01-354/14:33:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/14:21:30
6491	MGS	01-354/14:33:15		NOTE: Enter Solar Eclipse 12450		01-354/14:21:31
6492	MGS	01-354/14:36:22		NOTE: Enter Earth Occultation 12450		01-354/14:24:38
6493	MGS	01-354/14:36:22	65	NOTE: Loss Of X-Band Signal		
6494	MGS	01-354/14:37:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/14:25:21
6495	MGS	01-354/14:37:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/14:25:21
6496	MGS	01-354/14:37:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/14:25:21
6497	MGS	01-354/14:37:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/14:25:21
6498	MGS	01-354/14:37:06		NOTE: End EVP script		01-354/14:25:22
6499	MGS	01-354/14:37:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/14:25:22
6500	MGS	01-354/14:37:07		NOTE: End Block (MAP_RT)		01-354/14:25:23
6501	MGS	01-354/14:37:10		NOTE: End fixed Sub-Reflector for Radio Science		01-354/14:25:26
6502	MGS	01-354/14:54:20		: 01:40:30	RPAONX	01-354/14:42:35
6503	MGS	01-354/14:54:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/14:42:35
6504	MGS	01-354/14:56:05		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/14:44:20
6505	MGS	01-354/14:56:17		NOTE: Exit Earth Occultation 12450		01-354/14:44:32
6506	MGS	01-354/14:56:17	65	Acquisition Of X-Band Signal		
6507	MGS	01-354/14:56:17	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6508	MGS	01-354/14:57:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/14:45:58
6509	MGS	01-354/14:57:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/14:45:58
6510	MGS	01-354/14:57:47		Command the PSE with included data word: 3990	SWPSEL	01-354/14:46:02
6511	MGS	01-354/14:57:48		Set eclipse egress script address: 0158	SWSEES	01-354/14:46:03
6512	MGS	01-354/15:03:26		NOTE: Exit Planetary Atmosphere 12450		01-354/14:51:42
6513	MGS	01-354/15:03:51		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:20:20	AEMPB	01-354/14:52:06
6514	MGS	01-354/15:03:51		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-354/14:52:06
6515	MGS	01-354/15:03:51		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-354/14:52:06
6516	MGS	01-354/15:03:52		SSR 1A Data Enable	CSD1AE	01-354/14:52:07
6517	MGS	01-354/15:03:52		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-354/14:52:07
6518	MGS	01-354/15:03:52	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6519	MGS	01-354/15:13:25		NOTE: Exit Solar Eclipse 12450		01-354/15:01:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6520	MGS	01-354/15:29:18		NOTE: Periapsis 12451 ----------		01-354/15:17:34
6521	MGS	01-354/15:38:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/15:26:39
6522	MGS	01-354/15:38:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/15:26:39
6523	MGS	01-354/15:38:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/15:26:40
6524	MGS	01-354/15:38:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/15:26:40
6525	MGS	01-354/15:45:00	63	Begin Tracking		
6526	MGS	01-354/15:45:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6527	MGS	01-354/16:00:00	65	End Tracking		
6528	MGS	01-354/16:00:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/15:48:40
6529	MGS	01-354/16:00:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/15:48:40
6530	MGS	01-354/16:14:30		SSR 1A Data Disable	CSD1AX	01-354/16:02:45
6531	MGS	01-354/16:14:30		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-354/16:02:45
6532	MGS	01-354/16:14:30		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-354/16:02:45
6533	MGS	01-354/16:14:30	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6534	MGS	01-354/16:15:00	65	End Post-Cal		
6535	MGS	01-354/16:20:59		NOTE: Start Block (MAP_RT)		01-354/16:09:14
6536	MGS	01-354/16:21:00		: 00:21:05, 01:40:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:56, 01:19:41, 00:09:36	AEMINI	01-354/16:09:15
6537	MGS	01-354/16:21:00		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/16:09:15
6538	MGS	01-354/16:21:00		NOTE: Start EVP data return script		01-354/16:09:15
6539	MGS	01-354/16:21:01		: SE_2A, RTM, 01:19:40, MRC, 2001-354T16:51:33.000	AEMRTI	01-354/16:09:16
6540	MGS	01-354/16:27:14		NOTE: Enter Planetary Atmosphere 12451		01-354/16:15:29
6541	MGS	01-354/16:28:06		NOTE: Apoapsis 12451 -		01-354/16:16:22
6542	MGS	01-354/16:31:00		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/16:19:15
6543	MGS	01-354/16:31:00		NOTE: Enter Solar Eclipse 12451		01-354/16:19:15
6544	MGS	01-354/16:34:03		NOTE: Enter Earth Occultation 12451		01-354/16:22:18
6545	MGS	01-354/16:34:03	63	NOTE: Loss Of X-Band Signal		
6546	MGS	01-354/16:34:50		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/16:23:05
6547	MGS	01-354/16:34:50		NOTE: End EVP script		01-354/16:23:06
6548	MGS	01-354/16:34:51		NOTE: End Block (MAP_PB_ODY)		01-354/16:23:07
6549	MGS	01-354/16:48:20		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/16:36:35
6550	MGS	01-354/16:52:05		: 01:40:29	RPAONX	01-354/16:40:20
6551	MGS	01-354/16:52:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/16:40:20
6552	MGS	01-354/16:53:20		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/16:41:35
6553	MGS	01-354/16:53:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/16:41:35
6554	MGS	01-354/16:53:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/16:41:35
6555	MGS	01-354/16:53:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/16:41:35
6556	MGS	01-354/16:53:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/16:41:35
6557	MGS	01-354/16:54:04		NOTE: Exit Earth Occultation 12451		01-354/16:42:19
6558	MGS	01-354/16:54:04	63	Acquisition Of X-Band Signal		
6559	MGS	01-354/16:54:04	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6560	MGS	01-354/16:54:04	63	NOTE: Carrier Only -- No Telemetry Modulation		
6561	MGS	01-354/16:55:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/16:43:40
6562	MGS	01-354/16:55:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/16:43:40
6563	MGS	01-354/16:55:30		Set eclipse egress script address: 019A	SWSEES	01-354/16:43:45
6564	MGS	01-354/17:01:11		NOTE: Exit Planetary Atmosphere 12451		01-354/16:49:26
6565	MGS	01-354/17:03:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/16:51:31
6566	MGS	01-354/17:03:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/16:51:31
6567	MGS	01-354/17:03:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/16:51:31
6568	MGS	01-354/17:03:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/16:51:31
6569	MGS	01-354/17:03:16	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6570	MGS	01-354/17:03:17		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/16:51:32
6571	MGS	01-354/17:03:17		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/16:51:32
6572	MGS	01-354/17:03:17		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/16:51:32
6573	MGS	01-354/17:03:17	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6574	MGS	01-354/17:03:21		NOTE: End fixed Sub-Reflector for Radio Science		01-354/16:51:36
6575	MGS	01-354/17:11:10		NOTE: Exit Solar Eclipse 12451		01-354/16:59:25
6576	MGS	01-354/17:27:26		NOTE: Periapsis 12452 ----------		01-354/17:15:41
6577	MGS	01-354/17:32:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/17:20:24
6578	MGS	01-354/17:32:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/17:20:24
6579	MGS	01-354/17:32:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/17:20:25
6580	MGS	01-354/17:32:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/17:20:25
6581	MGS	01-354/17:54:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/17:42:25
6582	MGS	01-354/17:54:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/17:42:25
6583	MGS	01-354/18:17:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/18:06:12
6584	MGS	01-354/18:18:46		NOTE: Start EVP data return script		01-354/18:07:01
6585	MGS	01-354/18:22:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/18:11:12
6586	MGS	01-354/18:22:57		: 00:09:36, FALSE	RDSCII	01-354/18:11:12
6587	MGS	01-354/18:22:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/18:11:12
6588	MGS	01-354/18:22:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/18:11:12
6589	MGS	01-354/18:22:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/18:11:12
6590	MGS	01-354/18:22:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/18:11:12
6591	MGS	01-354/18:22:57	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6592	MGS	01-354/18:22:57	63	NOTE: Carrier Only -- No Telemetry Modulation		
6593	MGS	01-354/18:24:59		NOTE: Enter Planetary Atmosphere 12452		01-354/18:13:14
6594	MGS	01-354/18:26:22		NOTE: Apoapsis 12452 -		01-354/18:14:37
6595	MGS	01-354/18:28:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/18:17:01
6596	MGS	01-354/18:28:47		NOTE: Enter Solar Eclipse 12452		01-354/18:17:02
6597	MGS	01-354/18:31:47		NOTE: Enter Earth Occultation 12452		01-354/18:20:02
6598	MGS	01-354/18:31:47	63	NOTE: Loss Of X-Band Signal		
6599	MGS	01-354/18:32:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/18:20:48
6600	MGS	01-354/18:32:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/18:20:48
6601	MGS	01-354/18:32:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/18:20:48
6602	MGS	01-354/18:32:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/18:20:48
6603	MGS	01-354/18:32:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/18:20:49
6604	MGS	01-354/18:32:34		NOTE: End EVP script		01-354/18:20:49
6605	MGS	01-354/18:32:38		NOTE: End fixed Sub-Reflector for Radio Science		01-354/18:20:53
6606	MGS	01-354/18:46:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/18:34:21
6607	MGS	01-354/18:49:51		: 01:40:29	RPAONX	01-354/18:38:06
6608	MGS	01-354/18:49:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/18:38:06
6609	MGS	01-354/18:51:06		: 00:00:30, 00:09:56, FALSE	RDSCIE	01-354/18:39:21
6610	MGS	01-354/18:51:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/18:39:21
6611	MGS	01-354/18:51:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/18:39:21
6612	MGS	01-354/18:51:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/18:39:21
6613	MGS	01-354/18:51:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/18:39:21
6614	MGS	01-354/18:51:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/18:39:51
6615	MGS	01-354/18:51:51		NOTE: Exit Earth Occultation 12452		01-354/18:40:06
6616	MGS	01-354/18:51:51	63	Acquisition Of X-Band Signal		
6617	MGS	01-354/18:51:51	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6618	MGS	01-354/18:51:51	63	NOTE: Carrier Only -- No Telemetry Modulation		
6619	MGS	01-354/18:53:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/18:41:25
6620	MGS	01-354/18:53:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/18:41:25
6621	MGS	01-354/18:53:15		Set eclipse egress script address: 01DC	SWSEES	01-354/18:41:30
6622	MGS	01-354/18:58:58		NOTE: Exit Planetary Atmosphere 12452		01-354/18:47:13
6623	MGS	01-354/19:01:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/18:49:17
6624	MGS	01-354/19:01:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/18:49:17
6625	MGS	01-354/19:01:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/18:49:17
6626	MGS	01-354/19:01:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/18:49:17
6627	MGS	01-354/19:01:02	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6628	MGS	01-354/19:01:03		: RTM, MRC, 01:19:40, S&E_2A, FALSE, 00:09:37	AEMRT	01-354/18:49:18
6629	MGS	01-354/19:01:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/18:49:18
6630	MGS	01-354/19:01:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/18:49:18
6631	MGS	01-354/19:01:03	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6632	MGS	01-354/19:01:07		NOTE: End fixed Sub-Reflector for Radio Science		01-354/18:49:22
6633	MGS	01-354/19:08:57		NOTE: Exit Solar Eclipse 12452		01-354/18:57:12
6634	MGS	01-354/19:25:37		NOTE: Periapsis 12453 ----------		01-354/19:13:52
6635	MGS	01-354/19:29:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/19:18:11
6636	MGS	01-354/19:29:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/19:18:11
6637	MGS	01-354/19:29:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/19:18:12
6638	MGS	01-354/19:29:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/19:18:12
6639	MGS	01-354/19:50:00	25	Begin Pre-Cal		
6640	MGS	01-354/19:50:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6641	MGS	01-354/19:50:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6642	MGS	01-354/19:50:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6643	MGS	01-354/19:50:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
6644	MGS	01-354/19:50:00	25	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
6645	MGS	01-354/19:50:00	25	Config: TGC: DEST=37		
6646	MGS	01-354/19:50:00	25	Config: TGC: BAND=X, BR=42666.666667		
6647	MGS	01-354/19:50:00	25	Config: FSS: CH=2, PRI_FL=10000		
6648	MGS	01-354/19:50:00	25	Config: RSR		
6649	MGS	01-354/19:50:00	25	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
6650	MGS	01-354/19:50:00	25	Config: BVR		
6651	MGS	01-354/19:50:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
6652	MGS	01-354/19:50:00	25	Config: MDA: SMPL=0.1		
6653	MGS	01-354/19:51:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/19:40:12
6654	MGS	01-354/19:51:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/19:40:12
6655	MGS	01-354/20:01:58		NOTE: Start Block (SSRMGR)		01-354/19:50:12
6656	MGS	01-354/20:01:58		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-354/19:50:12
6657	MGS	01-354/20:01:59		SSR 1A Data Enable	CSD1AE	01-354/19:50:13
6658	MGS	01-354/20:01:59		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-354/19:50:13
6659	MGS	01-354/20:15:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/20:03:58
6660	MGS	01-354/20:16:34		NOTE: Start Block (MAP_PB_ODY)		01-354/20:04:48
6661	MGS	01-354/20:16:35		: 00:21:05, 01:40:30, FALSE, FALSE, FALSE, 00:01:15, 00:08:16, 01:23:02, 00:07:56	AEMINI	01-354/20:04:49
6662	MGS	01-354/20:16:35		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/20:04:49
6663	MGS	01-354/20:16:35		NOTE: Start EVP data return script		01-354/20:04:49
6664	MGS	01-354/20:16:36		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-354T20:45:25.000	AEMPBI	01-354/20:04:50
6665	MGS	01-354/20:20:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-354/20:08:58
6666	MGS	01-354/20:20:44		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9000000, DUR=00:18:45		01-354/20:08:58
6667	MGS	01-354/20:20:44		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-354/20:08:58
6668	MGS	01-354/20:20:44		: 00:09:36, FALSE	RDSCII	01-354/20:08:58
6669	MGS	01-354/20:20:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/20:08:58
6670	MGS	01-354/20:20:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/20:08:58
6671	MGS	01-354/20:20:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/20:08:58
6672	MGS	01-354/20:20:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/20:08:58
6673	MGS	01-354/20:20:44	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6674	MGS	01-354/20:20:44	63	NOTE: Carrier Only -- No Telemetry Modulation		
6675	MGS	01-354/20:22:47		NOTE: Enter Planetary Atmosphere 12453		01-354/20:11:02
6676	MGS	01-354/20:24:33		NOTE: Apoapsis 12453 -		01-354/20:12:48
6677	MGS	01-354/20:25:35		SSR 1B Data Disable	CSD1BX	01-354/20:13:49
6678	MGS	01-354/20:25:35		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-354/20:13:49
6679	MGS	01-354/20:25:36		NOTE: End Block (SSRMGR)		01-354/20:13:50
6680	MGS	01-354/20:26:34		NOTE: Enter Solar Eclipse 12453		01-354/20:14:49
6681	MGS	01-354/20:26:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/20:14:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6682	MGS	01-354/20:29:36		NOTE: Enter Earth Occultation 12453		01-354/20:17:50
6683	MGS	01-354/20:29:36	63	NOTE: Loss Of X-Band Signal		
6684	MGS	01-354/20:30:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/20:18:34
6685	MGS	01-354/20:30:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/20:18:34
6686	MGS	01-354/20:30:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/20:18:34
6687	MGS	01-354/20:30:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/20:18:34
6688	MGS	01-354/20:30:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/20:18:35
6689	MGS	01-354/20:30:21		NOTE: End EVP script		01-354/20:18:35
6690	MGS	01-354/20:30:22		NOTE: End Block (MAP_RT)		01-354/20:18:36
6691	MGS	01-354/20:30:25		NOTE: End fixed Sub-Reflector for Radio Science		01-354/20:18:39
6692	MGS	01-354/20:47:40		: 01:40:30	RPAONX	01-354/20:35:54
6693	MGS	01-354/20:47:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/20:35:54
6694	MGS	01-354/20:49:25		Disables autonomous command to send eclipse ingress script	SWEISX	01-354/20:37:39
6695	MGS	01-354/20:49:39		NOTE: Exit Earth Occultation 12453		01-354/20:37:54
6696	MGS	01-354/20:49:39	63	Acquisition Of X-Band Signal		
6697	MGS	01-354/20:49:39	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6698	MGS	01-354/20:50:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/20:39:12
6699	MGS	01-354/20:50:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/20:39:12
6700	MGS	01-354/20:51:02		Command the PSE with included data word: 3990	SWPSEL	01-354/20:39:16
6701	MGS	01-354/20:51:03		Set eclipse egress script address: 0158	SWSEES	01-354/20:39:17
6702	MGS	01-354/20:56:47		NOTE: Exit Planetary Atmosphere 12453		01-354/20:45:01
6703	MGS	01-354/20:57:11		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:20:20	AEMPB	01-354/20:45:25
6704	MGS	01-354/20:57:11		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-354/20:45:25
6705	MGS	01-354/20:57:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-354/20:45:25
6706	MGS	01-354/20:57:12		SSR 1B Data Enable	CSD1BE	01-354/20:45:26
6707	MGS	01-354/20:57:12		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-354/20:45:26
6708	MGS	01-354/20:57:12	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6709	MGS	01-354/21:06:45		NOTE: Exit Solar Eclipse 12453		01-354/20:55:00
6710	MGS	01-354/21:20:00	25	Begin Tracking		
6711	MGS	01-354/21:20:00	25	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6712	MGS	01-354/21:23:33		NOTE: Periapsis 12454 ----------		01-354/21:11:47
6713	MGS	01-354/21:31:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/21:19:59
6714	MGS	01-354/21:31:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/21:19:59
6715	MGS	01-354/21:31:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/21:20:00
6716	MGS	01-354/21:31:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/21:20:00
6717	MGS	01-354/21:34:37	63	NOTE: Below Uplink Interlock Limit		
6718	MGS	01-354/21:40:00	63	End Tracking		
6719	MGS	01-354/21:53:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/21:42:00
6720	MGS	01-354/21:53:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/21:42:00
6721	MGS	01-354/21:55:00	63	End Post-Cal		
6722	MGS	01-354/22:07:50		SSR 1B Data Disable	CSD1BX	01-354/21:56:04
6723	MGS	01-354/22:07:50		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-354/21:56:04
6724	MGS	01-354/22:07:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-354/21:56:04
6725	MGS	01-354/22:07:50	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6726	MGS	01-354/22:14:19		NOTE: Start Block (MAP_RT)		01-354/22:02:33
6727	MGS	01-354/22:14:20		: 00:21:20, 01:39:59, FALSE, TRUE, FALSE, 00:01:15, 00:09:47, 01:19:27, 00:09:29	AEMINI	01-354/22:02:34
6728	MGS	01-354/22:14:20		Enable sending eclipse ingress script when array power disappears	SWEISE	01-354/22:02:34
6729	MGS	01-354/22:14:20		NOTE: Start EVP data return script		01-354/22:02:34
6730	MGS	01-354/22:14:21		: SE_2A, RTM, 01:19:26, MRC, 2001-354T22:44:57.000	AEMRTI	01-354/22:02:35
6731	MGS	01-354/22:20:34		NOTE: Enter Planetary Atmosphere 12454		01-354/22:08:48
6732	MGS	01-354/22:22:14		NOTE: Apoapsis 12454 -		01-354/22:10:28
6733	MGS	01-354/22:24:20		NOTE: Enter Solar Eclipse 12454		01-354/22:12:34
6734	MGS	01-354/22:24:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-354/22:12:34
6735	MGS	01-354/22:27:23		NOTE: Enter Earth Occultation 12454		01-354/22:15:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6736	MGS	01-354/22:27:23	25	NOTE: Loss Of X-Band Signal		
6737	MGS	01-354/22:28:10		NOTE: End EVP script		01-354/22:16:24
6738	MGS	01-354/22:28:10		Turn off the MOT Exciter and RPA beam	STRPAF	01-354/22:16:24
6739	MGS	01-354/22:28:11		NOTE: End Block (MAP_PB_ODY)		01-354/22:16:25
6740	MGS	01-354/22:41:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/22:30:09
6741	MGS	01-354/22:45:40		: 01:39:59	RPAONX	01-354/22:33:54
6742	MGS	01-354/22:45:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-354/22:33:54
6743	MGS	01-354/22:46:55		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-354/22:35:09
6744	MGS	01-354/22:46:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-354/22:35:09
6745	MGS	01-354/22:46:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-354/22:35:09
6746	MGS	01-354/22:46:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-354/22:35:09
6747	MGS	01-354/22:46:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-354/22:35:09
6748	MGS	01-354/22:47:26		NOTE: Exit Earth Occultation 12454		01-354/22:35:40
6749	MGS	01-354/22:47:26	25	Acquisition Of X-Band Signal		
6750	MGS	01-354/22:47:26	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6751	MGS	01-354/22:47:26	25	NOTE: Carrier Only -- No Telemetry Modulation		
6752	MGS	01-354/22:48:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-354/22:37:00
6753	MGS	01-354/22:48:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-354/22:37:00
6754	MGS	01-354/22:48:51		Set eclipse egress script address: 019A	SWSEES	01-354/22:37:05
6755	MGS	01-354/22:54:34		NOTE: Exit Planetary Atmosphere 12454		01-354/22:42:48
6756	MGS	01-354/22:56:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-354/22:44:56
6757	MGS	01-354/22:56:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-354/22:44:56
6758	MGS	01-354/22:56:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-354/22:44:56
6759	MGS	01-354/22:56:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-354/22:44:56
6760	MGS	01-354/22:56:42	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6761	MGS	01-354/22:56:43		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-354/22:44:57
6762	MGS	01-354/22:56:43		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-354/22:44:57
6763	MGS	01-354/22:56:43		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-354/22:44:57
6764	MGS	01-354/22:56:43	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6765	MGS	01-354/22:56:47		NOTE: End fixed Sub-Reflector for Radio Science		01-354/22:45:01
6766	MGS	01-354/23:04:31		NOTE: Exit Solar Eclipse 12454		01-354/22:52:45
6767	MGS	01-354/23:21:00		NOTE: Periapsis 12455 ----------		01-354/23:09:14
6768	MGS	01-354/23:25:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-354/23:13:44
6769	MGS	01-354/23:25:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-354/23:13:44
6770	MGS	01-354/23:25:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-354/23:13:45
6771	MGS	01-354/23:25:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-354/23:13:45
6772	MGS	01-354/23:47:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-354/23:35:45
6773	MGS	01-354/23:47:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-354/23:35:45
6774	MGS	01-355/00:00:00		Light Time: OWLT = 11:45, RTLT = 23:31		
6775	MGS	01-355/00:00:00	15	Begin Pre-Cal		
6776	MGS	01-355/00:00:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6777	MGS	01-355/00:00:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6778	MGS	01-355/00:00:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6779	MGS	01-355/00:00:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
6780	MGS	01-355/00:00:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
6781	MGS	01-355/00:00:00	15	Config: TGC: DEST=37		
6782	MGS	01-355/00:00:00	15	Config: TGC: BAND=X, BR=40000.000000		
6783	MGS	01-355/00:00:00	15	Config: FSS: CH=2, PRI_FL=10000		
6784	MGS	01-355/00:00:00	15	Config: RSR		
6785	MGS	01-355/00:00:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
6786	MGS	01-355/00:00:00	15	Config: BVR		
6787	MGS	01-355/00:00:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
6788	MGS	01-355/00:00:00	15	Config: MDA: SMPL=0.1		
6789	MGS	01-355/00:11:09		NOTE: Begin fixed Sub-Reflector for Radio Science		01-354/23:59:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6790	MGS	01-355/00:12:01		NOTE: Start EVP data return script		01-355/00:00:15
6791	MGS	01-355/00:16:09		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/00:04:23
6792	MGS	01-355/00:16:09		: 00:09:29, FALSE	RDSCII	01-355/00:04:23
6793	MGS	01-355/00:16:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/00:04:23
6794	MGS	01-355/00:16:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/00:04:23
6795	MGS	01-355/00:16:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/00:04:23
6796	MGS	01-355/00:16:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/00:04:23
6797	MGS	01-355/00:16:09	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6798	MGS	01-355/00:16:09	25	NOTE: Carrier Only -- No Telemetry Modulation		
6799	MGS	01-355/00:18:15		NOTE: Enter Planetary Atmosphere 12455		01-355/00:06:29
6800	MGS	01-355/00:19:34		NOTE: Apoapsis 12455 -		01-355/00:07:48
6801	MGS	01-355/00:22:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/00:10:15
6802	MGS	01-355/00:22:01		NOTE: Enter Solar Eclipse 12455		01-355/00:10:15
6803	MGS	01-355/00:25:03		NOTE: Enter Earth Occultation 12455		01-355/00:13:17
6804	MGS	01-355/00:25:03	25	NOTE: Loss Of X-Band Signal		
6805	MGS	01-355/00:25:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/00:13:52
6806	MGS	01-355/00:25:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/00:13:52
6807	MGS	01-355/00:25:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/00:13:52
6808	MGS	01-355/00:25:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/00:13:52
6809	MGS	01-355/00:25:39		NOTE: End EVP script		01-355/00:13:53
6810	MGS	01-355/00:25:39		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/00:13:53
6811	MGS	01-355/00:25:43		NOTE: End fixed Sub-Reflector for Radio Science		01-355/00:13:57
6812	MGS	01-355/00:39:36		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/00:27:50
6813	MGS	01-355/00:43:21		: 01:39:59	RPAONX	01-355/00:31:35
6814	MGS	01-355/00:43:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/00:31:35
6815	MGS	01-355/00:44:36		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/00:32:50
6816	MGS	01-355/00:44:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/00:32:50
6817	MGS	01-355/00:44:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/00:32:50
6818	MGS	01-355/00:44:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/00:32:50
6819	MGS	01-355/00:44:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/00:32:50
6820	MGS	01-355/00:45:00	34	Begin Pre-Cal		
6821	MGS	01-355/00:45:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
6822	MGS	01-355/00:45:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
6823	MGS	01-355/00:45:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6824	MGS	01-355/00:45:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
6825	MGS	01-355/00:45:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
6826	MGS	01-355/00:45:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
6827	MGS	01-355/00:45:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
6828	MGS	01-355/00:45:00	34	Config: TGC: DEST=37		
6829	MGS	01-355/00:45:00	34	Config: TGC: BAND=X, BR=40000.000000		
6830	MGS	01-355/00:45:00	34	Config: FSS: CH=2, PRI_FL=10000		
6831	MGS	01-355/00:45:00	34	Config: RSR		
6832	MGS	01-355/00:45:00	34	Config: TXL		
6833	MGS	01-355/00:45:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
6834	MGS	01-355/00:45:00	34	Config: BVR		
6835	MGS	01-355/00:45:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
6836	MGS	01-355/00:45:00	34	Config: MDA: SMPL=0.1		
6837	MGS	01-355/00:45:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
6838	MGS	01-355/00:45:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
6839	MGS	01-355/00:45:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
6840	MGS	01-355/00:45:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/00:33:20
6841	MGS	01-355/00:45:10		NOTE: Exit Earth Occultation 12455		01-355/00:33:24
6842	MGS	01-355/00:45:10	25	Acquisition Of X-Band Signal		
6843	MGS	01-355/00:45:10	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6844	MGS	01-355/00:45:10	25	NOTE: Carrier Only -- No Telemetry Modulation		
6845	MGS	01-355/00:46:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/00:34:45
6846	MGS	01-355/00:46:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/00:34:45
6847	MGS	01-355/00:46:36		Set eclipse egress script address: 01DC	SWSEES	01-355/00:34:50
6848	MGS	01-355/00:52:17		NOTE: Exit Planetary Atmosphere 12455		01-355/00:40:31
6849	MGS	01-355/00:54:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/00:42:37
6850	MGS	01-355/00:54:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/00:42:37
6851	MGS	01-355/00:54:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/00:42:37
6852	MGS	01-355/00:54:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/00:42:37
6853	MGS	01-355/00:54:23	25	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6854	MGS	01-355/00:54:24		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/00:42:38
6855	MGS	01-355/00:54:24		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/00:42:38
6856	MGS	01-355/00:54:24		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/00:42:38
6857	MGS	01-355/00:54:24	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6858	MGS	01-355/00:54:28		NOTE: End fixed Sub-Reflector for Radio Science		01-355/00:42:42
6859	MGS	01-355/01:02:12		NOTE: Exit Solar Eclipse 12455		01-355/00:50:26
6860	MGS	01-355/01:18:24		NOTE: Periapsis 12456 ----------		01-355/01:06:37
6861	MGS	01-355/01:23:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/01:11:25
6862	MGS	01-355/01:23:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/01:11:25
6863	MGS	01-355/01:23:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/01:11:26
6864	MGS	01-355/01:23:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/01:11:26
6865	MGS	01-355/01:30:00	15	Begin Tracking		
6866	MGS	01-355/01:30:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6867	MGS	01-355/01:45:00	34	Begin Tracking		
6868	MGS	01-355/01:45:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6869	MGS	01-355/01:45:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/01:33:26
6870	MGS	01-355/01:45:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/01:33:26
6871	MGS	01-355/01:50:00	25	End Tracking		
6872	MGS	01-355/01:55:17		NOTE: Start Block (SSRMGR)		01-355/01:43:31
6873	MGS	01-355/01:55:17		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-355/01:43:31
6874	MGS	01-355/01:55:18		SSR 1B Data Enable	CSD1BE	01-355/01:43:32
6875	MGS	01-355/01:55:18		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-355/01:43:32
6876	MGS	01-355/02:05:00	25	End Post-Cal		
6877	MGS	01-355/02:08:50		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/01:57:04
6878	MGS	01-355/02:09:41		NOTE: Start Block (MAP_PB_ODY)		01-355/01:57:55
6879	MGS	01-355/02:09:42		: 00:21:20, 01:40:00, FALSE, FALSE, FALSE, 00:01:15, 00:08:07, 01:22:48, 00:07:49	AEMINI	01-355/01:57:56
6880	MGS	01-355/02:09:42		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/01:57:56
6881	MGS	01-355/02:09:42		NOTE: Start EVP data return script		01-355/01:57:56
6882	MGS	01-355/02:09:43		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-355T02:38:39.000	AEMPBI	01-355/01:57:57
6883	MGS	01-355/02:13:50		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/02:02:04
6884	MGS	01-355/02:13:50		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8896000, DUR=00:18:32		01-355/02:02:04
6885	MGS	01-355/02:13:50		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-355/02:02:04
6886	MGS	01-355/02:13:50		: 00:09:29, FALSE	RDSCII	01-355/02:02:04
6887	MGS	01-355/02:13:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/02:02:04
6888	MGS	01-355/02:13:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/02:02:04
6889	MGS	01-355/02:13:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/02:02:04
6890	MGS	01-355/02:13:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/02:02:04
6891	MGS	01-355/02:13:50	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6892	MGS	01-355/02:13:50	15	NOTE: Carrier Only -- No Telemetry Modulation		
6893	MGS	01-355/02:13:50	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6894	MGS	01-355/02:13:50	34	NOTE: Carrier Only -- No Telemetry Modulation		
6895	MGS	01-355/02:15:54		NOTE: Enter Planetary Atmosphere 12456		01-355/02:04:08
6896	MGS	01-355/02:17:18		NOTE: Apoapsis 12456 -		01-355/02:05:32
6897	MGS	01-355/02:18:42		SSR 1A Data Disable	CSD1AX	01-355/02:06:56

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6898	MGS	01-355/02:18:42		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-355/02:06:56
6899	MGS	01-355/02:18:43		NOTE: End Block (SSRMGR)		01-355/02:06:57
6900	MGS	01-355/02:19:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/02:07:56
6901	MGS	01-355/02:19:43		NOTE: Enter Solar Eclipse 12456		01-355/02:07:56
6902	MGS	01-355/02:22:41		NOTE: Enter Earth Occultation 12456		01-355/02:10:55
6903	MGS	01-355/02:22:41	15	NOTE: Loss Of X-Band Signal		
6904	MGS	01-355/02:22:41	34	NOTE: Loss Of X-Band Signal		
6905	MGS	01-355/02:23:05	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6906	MGS	01-355/02:23:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/02:11:33
6907	MGS	01-355/02:23:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/02:11:33
6908	MGS	01-355/02:23:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/02:11:33
6909	MGS	01-355/02:23:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/02:11:33
6910	MGS	01-355/02:23:20		NOTE: End EVP script		01-355/02:11:34
6911	MGS	01-355/02:23:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/02:11:34
6912	MGS	01-355/02:23:21		NOTE: End Block (MAP_RT)		01-355/02:11:35
6913	MGS	01-355/02:23:24		NOTE: End fixed Sub-Reflector for Radio Science		01-355/02:11:38
6914	MGS	01-355/02:25:06	34	Range Modulation On: SUP=3.0dB		
6915	MGS	01-355/02:26:06	34	Begin Ranging Acquisition		
6916	MGS	01-355/02:41:03		: 01:40:00	RPAONX	01-355/02:29:16
6917	MGS	01-355/02:41:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/02:29:16
6918	MGS	01-355/02:42:48		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/02:31:01
6919	MGS	01-355/02:42:53		NOTE: Exit Earth Occultation 12456		01-355/02:31:06
6920	MGS	01-355/02:42:53	15	Acquisition Of X-Band Signal		
6921	MGS	01-355/02:42:53	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6922	MGS	01-355/02:42:53	34	Acquisition Of X-Band Signal		
6923	MGS	01-355/02:42:53	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6924	MGS	01-355/02:44:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/02:32:26
6925	MGS	01-355/02:44:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/02:32:26
6926	MGS	01-355/02:44:17		Command the PSE with included data word: 3990	SWPSEL	01-355/02:32:30
6927	MGS	01-355/02:44:18		Set eclipse egress script address: 0158	SWSEES	01-355/02:32:31
6928	MGS	01-355/02:46:38	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6929	MGS	01-355/02:46:38	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6930	MGS	01-355/02:49:58		NOTE: Exit Planetary Atmosphere 12456		01-355/02:38:12
6931	MGS	01-355/02:50:25		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:19:59	AEMPB	01-355/02:38:38
6932	MGS	01-355/02:50:25		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-355/02:38:38
6933	MGS	01-355/02:50:25		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-355/02:38:38
6934	MGS	01-355/02:50:26		SSR 1A Data Enable	CSD1AE	01-355/02:38:39
6935	MGS	01-355/02:50:26		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-355/02:38:39
6936	MGS	01-355/02:50:26	15	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6937	MGS	01-355/02:50:26	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6938	MGS	01-355/02:59:53		NOTE: Exit Solar Eclipse 12456		01-355/02:48:07
6939	MGS	01-355/03:16:06		NOTE: Periapsis 12457 ----------		01-355/03:04:20
6940	MGS	01-355/03:24:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/03:13:06
6941	MGS	01-355/03:24:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/03:13:06
6942	MGS	01-355/03:24:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/03:13:07
6943	MGS	01-355/03:24:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/03:13:07
6944	MGS	01-355/03:38:08	34	NOTE: Transmitter Off in 15 minutes		
6945	MGS	01-355/03:46:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/03:35:07
6946	MGS	01-355/03:46:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/03:35:07
6947	MGS	01-355/03:51:08	34	Range Modulation Off		
6948	MGS	01-355/03:53:08	34	Transmitter Off		
6949	MGS	01-355/04:01:04		SSR 1A Data Disable	CSD1AX	01-355/03:49:17
6950	MGS	01-355/04:01:04		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-355/03:49:17
6951	MGS	01-355/04:01:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-355/03:49:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
6952	MGS	01-355/04:01:04	15	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6953	MGS	01-355/04:01:04	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6954	MGS	01-355/04:07:28		NOTE: Start Block (MAP_RT)		01-355/03:55:41
6955	MGS	01-355/04:07:29		: 00:21:20, 01:39:59, FALSE, TRUE, FALSE, 00:01:15, 00:09:47, 01:19:27, 00:09:29	AEMINI	01-355/03:55:42
6956	MGS	01-355/04:07:29		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/03:55:42
6957	MGS	01-355/04:07:29		NOTE: Start EVP data return script		01-355/03:55:42
6958	MGS	01-355/04:07:30		: SE_2A, RTM, 01:19:26, MRC, 2001-355T04:38:06.000	AEMRTI	01-355/03:55:43
6959	MGS	01-355/04:13:40		NOTE: Enter Planetary Atmosphere 12457		01-355/04:01:54
6960	MGS	01-355/04:15:11		NOTE: Apoapsis 12457 -		01-355/04:03:25
6961	MGS	01-355/04:16:41	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6962	MGS	01-355/04:16:41	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6963	MGS	01-355/04:17:29		NOTE: Enter Solar Eclipse 12457		01-355/04:05:42
6964	MGS	01-355/04:17:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/04:05:42
6965	MGS	01-355/04:20:26		NOTE: Enter Earth Occultation 12457		01-355/04:08:39
6966	MGS	01-355/04:20:26	15	NOTE: Loss Of X-Band Signal		
6967	MGS	01-355/04:20:26	34	NOTE: Loss Of X-Band Signal		
6968	MGS	01-355/04:20:51	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
6969	MGS	01-355/04:21:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/04:09:16
6970	MGS	01-355/04:21:03		NOTE: End EVP script		01-355/04:09:16
6971	MGS	01-355/04:21:04		NOTE: End Block (MAP_PB_ODY)		01-355/04:09:17
6972	MGS	01-355/04:22:51	34	Range Modulation On: SUP=3.0dB		
6973	MGS	01-355/04:23:51	34	Begin Ranging Acquisition		
6974	MGS	01-355/04:35:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/04:23:17
6975	MGS	01-355/04:38:49		: 01:39:59	RPAONX	01-355/04:27:02
6976	MGS	01-355/04:38:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/04:27:02
6977	MGS	01-355/04:40:04		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/04:28:17
6978	MGS	01-355/04:40:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/04:28:17
6979	MGS	01-355/04:40:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/04:28:17
6980	MGS	01-355/04:40:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/04:28:17
6981	MGS	01-355/04:40:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/04:28:17
6982	MGS	01-355/04:40:39		NOTE: Exit Earth Occultation 12457		01-355/04:28:52
6983	MGS	01-355/04:40:39	15	Acquisition Of X-Band Signal		
6984	MGS	01-355/04:40:39	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6985	MGS	01-355/04:40:39	15	NOTE: Carrier Only -- No Telemetry Modulation		
6986	MGS	01-355/04:40:39	34	Acquisition Of X-Band Signal		
6987	MGS	01-355/04:40:39	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
6988	MGS	01-355/04:40:39	34	NOTE: Carrier Only -- No Telemetry Modulation		
6989	MGS	01-355/04:41:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/04:30:07
6990	MGS	01-355/04:41:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/04:30:07
6991	MGS	01-355/04:41:59		Set eclipse egress script address: 019A	SWSEES	01-355/04:30:12
6992	MGS	01-355/04:47:43		NOTE: Exit Planetary Atmosphere 12457		01-355/04:35:57
6993	MGS	01-355/04:49:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/04:38:04
6994	MGS	01-355/04:49:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/04:38:04
6995	MGS	01-355/04:49:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/04:38:04
6996	MGS	01-355/04:49:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/04:38:04
6997	MGS	01-355/04:49:51	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6998	MGS	01-355/04:49:51	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
6999	MGS	01-355/04:49:52		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/04:38:05
7000	MGS	01-355/04:49:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/04:38:05
7001	MGS	01-355/04:49:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/04:38:05
7002	MGS	01-355/04:49:52	15	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7003	MGS	01-355/04:49:52	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7004	MGS	01-355/04:49:56		NOTE: End fixed Sub-Reflector for Radio Science		01-355/04:38:09
7005	MGS	01-355/04:57:39		NOTE: Exit Solar Eclipse 12457		01-355/04:45:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7006	MGS	01-355/05:13:22	15	NOTE: Below Uplink Interlock Limit		
7007	MGS	01-355/05:14:00		NOTE: Periapsis 12458 ----------		01-355/05:02:14
7008	MGS	01-355/05:18:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/05:06:52
7009	MGS	01-355/05:18:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/05:06:52
7010	MGS	01-355/05:18:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/05:06:53
7011	MGS	01-355/05:18:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/05:06:53
7012	MGS	01-355/05:25:00	15	End Tracking		
7013	MGS	01-355/05:35:54	34	NOTE: Transmitter Off in 15 minutes		
7014	MGS	01-355/05:40:00	15	End Post-Cal		
7015	MGS	01-355/05:40:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/05:28:53
7016	MGS	01-355/05:40:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/05:28:53
7017	MGS	01-355/05:48:55	34	Range Modulation Off		
7018	MGS	01-355/05:50:54	34	Transmitter Off		
7019	MGS	01-355/06:04:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/05:52:31
7020	MGS	01-355/06:05:16		NOTE: Start EVP data return script		01-355/05:53:29
7021	MGS	01-355/06:09:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/05:57:31
7022	MGS	01-355/06:09:18		: 00:09:29, FALSE	RDSCII	01-355/05:57:31
7023	MGS	01-355/06:09:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/05:57:31
7024	MGS	01-355/06:09:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/05:57:31
7025	MGS	01-355/06:09:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/05:57:31
7026	MGS	01-355/06:09:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/05:57:31
7027	MGS	01-355/06:09:18	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7028	MGS	01-355/06:09:18	34	NOTE: Carrier Only -- No Telemetry Modulation		
7029	MGS	01-355/06:11:28		NOTE: Enter Planetary Atmosphere 12458		01-355/05:59:41
7030	MGS	01-355/06:12:55		NOTE: Apoapsis 12458 -		01-355/06:01:08
7031	MGS	01-355/06:15:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/06:03:29
7032	MGS	01-355/06:15:16		NOTE: Enter Solar Eclipse 12458		01-355/06:03:29
7033	MGS	01-355/06:18:13		NOTE: Enter Earth Occultation 12458		01-355/06:06:26
7034	MGS	01-355/06:18:13	34	NOTE: Loss Of X-Band Signal		
7035	MGS	01-355/06:18:38	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
7036	MGS	01-355/06:18:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/06:07:00
7037	MGS	01-355/06:18:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/06:07:00
7038	MGS	01-355/06:18:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/06:07:00
7039	MGS	01-355/06:18:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/06:07:00
7040	MGS	01-355/06:18:48		NOTE: End EVP script		01-355/06:07:01
7041	MGS	01-355/06:18:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/06:07:01
7042	MGS	01-355/06:18:52		NOTE: End fixed Sub-Reflector for Radio Science		01-355/06:07:05
7043	MGS	01-355/06:20:38	34	Range Modulation On: SUP=3.0dB		
7044	MGS	01-355/06:21:38	34	Begin Ranging Acquisition		
7045	MGS	01-355/06:32:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/06:21:04
7046	MGS	01-355/06:36:36		: 01:39:59	RPAONX	01-355/06:24:49
7047	MGS	01-355/06:36:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/06:24:49
7048	MGS	01-355/06:37:51		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/06:26:04
7049	MGS	01-355/06:37:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/06:26:04
7050	MGS	01-355/06:37:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/06:26:04
7051	MGS	01-355/06:37:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/06:26:04
7052	MGS	01-355/06:37:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/06:26:04
7053	MGS	01-355/06:38:21		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/06:26:34
7054	MGS	01-355/06:38:27		NOTE: Exit Earth Occultation 12458		01-355/06:26:40
7055	MGS	01-355/06:38:27	34	Acquisition Of X-Band Signal		
7056	MGS	01-355/06:38:27	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7057	MGS	01-355/06:38:27	34	NOTE: Carrier Only -- No Telemetry Modulation		
7058	MGS	01-355/06:39:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/06:27:53
7059	MGS	01-355/06:39:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/06:27:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7060	MGS	01-355/06:39:45		Set eclipse egress script address: 01DC	SWSEES	01-355/06:27:58
7061	MGS	01-355/06:45:31		NOTE: Exit Planetary Atmosphere 12458		01-355/06:33:44
7062	MGS	01-355/06:47:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/06:35:51
7063	MGS	01-355/06:47:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/06:35:51
7064	MGS	01-355/06:47:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/06:35:51
7065	MGS	01-355/06:47:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/06:35:51
7066	MGS	01-355/06:47:38	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7067	MGS	01-355/06:47:39		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/06:35:52
7068	MGS	01-355/06:47:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/06:35:52
7069	MGS	01-355/06:47:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/06:35:52
7070	MGS	01-355/06:47:39	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7071	MGS	01-355/06:47:43		NOTE: End fixed Sub-Reflector for Radio Science		01-355/06:35:56
7072	MGS	01-355/06:55:27		NOTE: Exit Solar Eclipse 12458		01-355/06:43:40
7073	MGS	01-355/07:11:46		NOTE: Periapsis 12459 ----------		01-355/06:59:59
7074	MGS	01-355/07:16:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/07:04:39
7075	MGS	01-355/07:16:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/07:04:39
7076	MGS	01-355/07:16:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/07:04:40
7077	MGS	01-355/07:16:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/07:04:40
7078	MGS	01-355/07:33:39	34	NOTE: Transmitter Off in 15 minutes		
7079	MGS	01-355/07:38:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/07:26:40
7080	MGS	01-355/07:38:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/07:26:40
7081	MGS	01-355/07:46:39	34	Range Modulation Off		
7082	MGS	01-355/07:48:26		NOTE: Start Block (SSRMGR)		01-355/07:36:39
7083	MGS	01-355/07:48:26		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-355/07:36:39
7084	MGS	01-355/07:48:27		SSR 1A Data Enable	CSD1AE	01-355/07:36:40
7085	MGS	01-355/07:48:27		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-355/07:36:40
7086	MGS	01-355/07:48:39	34	Transmitter Off		
7087	MGS	01-355/08:02:05		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/07:50:18
7088	MGS	01-355/08:03:01		NOTE: Start Block (MAP_PB_ODY)		01-355/07:51:14
7089	MGS	01-355/08:03:02		: 00:21:20, 01:40:00, FALSE, FALSE, FALSE, 00:01:15, 00:08:07, 01:22:48, 00:07:49	AEMINI	01-355/07:51:15
7090	MGS	01-355/08:03:02		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/07:51:15
7091	MGS	01-355/08:03:02		NOTE: Start EVP data return script		01-355/07:51:15
7092	MGS	01-355/08:03:03		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-355T08:31:58.000	AEMPBI	01-355/07:51:16
7093	MGS	01-355/08:07:05		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/07:55:18
7094	MGS	01-355/08:07:05		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8944000, DUR=00:18:38		01-355/07:55:18
7095	MGS	01-355/08:07:05		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-355/07:55:18
7096	MGS	01-355/08:07:05		: 00:09:29, FALSE	RDSCII	01-355/07:55:18
7097	MGS	01-355/08:07:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/07:55:18
7098	MGS	01-355/08:07:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/07:55:18
7099	MGS	01-355/08:07:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/07:55:18
7100	MGS	01-355/08:07:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/07:55:18
7101	MGS	01-355/08:07:05	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7102	MGS	01-355/08:07:05	34	NOTE: Carrier Only -- No Telemetry Modulation		
7103	MGS	01-355/08:09:14		NOTE: Enter Planetary Atmosphere 12459		01-355/07:57:27
7104	MGS	01-355/08:10:24		NOTE: Apoapsis 12459 -		01-355/07:58:37
7105	MGS	01-355/08:12:02		SSR 1B Data Disable	CSD1BX	01-355/08:00:15
7106	MGS	01-355/08:12:02		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-355/08:00:15
7107	MGS	01-355/08:12:03		NOTE: End Block (SSRMGR)		01-355/08:00:16
7108	MGS	01-355/08:13:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/08:01:15
7109	MGS	01-355/08:13:03		NOTE: Enter Solar Eclipse 12459		01-355/08:01:15
7110	MGS	01-355/08:15:58		NOTE: Enter Earth Occultation 12459		01-355/08:04:11
7111	MGS	01-355/08:15:58	34	NOTE: Loss Of X-Band Signal		
7112	MGS	01-355/08:16:26	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
7113	MGS	01-355/08:16:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/08:04:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7114	MGS	01-355/08:16:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/08:04:47
7115	MGS	01-355/08:16:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/08:04:47
7116	MGS	01-355/08:16:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/08:04:47
7117	MGS	01-355/08:16:35		NOTE: End EVP script		01-355/08:04:48
7118	MGS	01-355/08:16:35		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/08:04:48
7119	MGS	01-355/08:16:36		NOTE: End Block (MAP_RT)		01-355/08:04:49
7120	MGS	01-355/08:16:39		NOTE: End fixed Sub-Reflector for Radio Science		01-355/08:04:52
7121	MGS	01-355/08:18:26	34	Range Modulation On: SUP=3.0dB		
7122	MGS	01-355/08:19:26	34	Begin Ranging Acquisition		
7123	MGS	01-355/08:34:22		: 01:40:00	RPAONX	01-355/08:22:35
7124	MGS	01-355/08:34:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/08:22:35
7125	MGS	01-355/08:36:07		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/08:24:20
7126	MGS	01-355/08:36:15		NOTE: Exit Earth Occultation 12459		01-355/08:24:28
7127	MGS	01-355/08:36:15	34	Acquisition Of X-Band Signal		
7128	MGS	01-355/08:36:15	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7129	MGS	01-355/08:37:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/08:25:40
7130	MGS	01-355/08:37:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/08:25:40
7131	MGS	01-355/08:37:31		Command the PSE with included data word: 3990	SWPSEL	01-355/08:25:44
7132	MGS	01-355/08:37:32		Set eclipse egress script address: 0158	SWSEES	01-355/08:25:45
7133	MGS	01-355/08:40:00	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7134	MGS	01-355/08:43:19		NOTE: Exit Planetary Atmosphere 12459		01-355/08:31:31
7135	MGS	01-355/08:43:44		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:19:59	AEMPB	01-355/08:31:57
7136	MGS	01-355/08:43:44		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-355/08:31:57
7137	MGS	01-355/08:43:44		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-355/08:31:57
7138	MGS	01-355/08:43:45		SSR 1B Data Enable	CSD1BE	01-355/08:31:58
7139	MGS	01-355/08:43:45		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-355/08:31:58
7140	MGS	01-355/08:43:45	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7141	MGS	01-355/08:53:14		NOTE: Exit Solar Eclipse 12459		01-355/08:41:26
7142	MGS	01-355/09:09:28		NOTE: Periapsis 12460 ----------		01-355/08:57:40
7143	MGS	01-355/09:18:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/09:06:25
7144	MGS	01-355/09:18:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/09:06:25
7145	MGS	01-355/09:18:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/09:06:26
7146	MGS	01-355/09:18:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/09:06:26
7147	MGS	01-355/09:31:21	34	NOTE: Transmitter Off in 15 minutes		
7148	MGS	01-355/09:40:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/09:28:26
7149	MGS	01-355/09:40:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/09:28:26
7150	MGS	01-355/09:44:21	34	Range Modulation Off		
7151	MGS	01-355/09:46:21	34	Transmitter Off		
7152	MGS	01-355/09:54:24		SSR 1B Data Disable	CSD1BX	01-355/09:42:36
7153	MGS	01-355/09:54:24		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-355/09:42:36
7154	MGS	01-355/09:54:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-355/09:42:36
7155	MGS	01-355/09:54:24	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7156	MGS	01-355/10:00:46		NOTE: Start Block (MAP_RT)		01-355/09:48:58
7157	MGS	01-355/10:00:47		: 00:21:20, 01:39:59, FALSE, TRUE, FALSE, 00:01:15, 00:09:47, 01:19:27, 00:09:29	AEMINI	01-355/09:48:59
7158	MGS	01-355/10:00:47		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/09:48:59
7159	MGS	01-355/10:00:47		NOTE: Start EVP data return script		01-355/09:48:59
7160	MGS	01-355/10:00:48		: SE_2A, RTM, 01:19:26, MRC, 2001-355T10:31:23.000	AEMRTI	01-355/09:49:00
7161	MGS	01-355/10:06:57		NOTE: Enter Planetary Atmosphere 12460		01-355/09:55:09
7162	MGS	01-355/10:07:56		NOTE: Apoapsis 12460 -		01-355/09:56:08
7163	MGS	01-355/10:09:56	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7164	MGS	01-355/10:10:47		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/09:58:59
7165	MGS	01-355/10:10:47		NOTE: Enter Solar Eclipse 12460		01-355/09:59:00
7166	MGS	01-355/10:13:41		NOTE: Enter Earth Occultation 12460		01-355/10:01:53
7167	MGS	01-355/10:13:41	34	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7168	MGS	01-355/10:14:12	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
7169	MGS	01-355/10:14:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/10:02:35
7170	MGS	01-355/10:14:23		NOTE: End EVP script		01-355/10:02:35
7171	MGS	01-355/10:14:24		NOTE: End Block (MAP_PB_ODY)		01-355/10:02:36
7172	MGS	01-355/10:16:12	34	Range Modulation On: SUP=3.0dB		
7173	MGS	01-355/10:17:12	34	Begin Ranging Acquisition		
7174	MGS	01-355/10:28:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/10:16:35
7175	MGS	01-355/10:32:07		: 01:39:59	RPAONX	01-355/10:20:19
7176	MGS	01-355/10:32:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/10:20:19
7177	MGS	01-355/10:33:22		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/10:21:34
7178	MGS	01-355/10:33:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/10:21:34
7179	MGS	01-355/10:33:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/10:21:34
7180	MGS	01-355/10:33:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/10:21:34
7181	MGS	01-355/10:33:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/10:21:34
7182	MGS	01-355/10:34:02		NOTE: Exit Earth Occultation 12460		01-355/10:22:14
7183	MGS	01-355/10:34:02	34	Acquisition Of X-Band Signal		
7184	MGS	01-355/10:34:02	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7185	MGS	01-355/10:34:02	34	NOTE: Carrier Only -- No Telemetry Modulation		
7186	MGS	01-355/10:35:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/10:23:26
7187	MGS	01-355/10:35:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/10:23:26
7188	MGS	01-355/10:35:19		Set eclipse egress script address: 019A	SWSEES	01-355/10:23:31
7189	MGS	01-355/10:41:05		NOTE: Exit Planetary Atmosphere 12460		01-355/10:29:17
7190	MGS	01-355/10:43:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/10:31:21
7191	MGS	01-355/10:43:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/10:31:21
7192	MGS	01-355/10:43:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/10:31:21
7193	MGS	01-355/10:43:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/10:31:21
7194	MGS	01-355/10:43:09	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7195	MGS	01-355/10:43:10		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/10:31:22
7196	MGS	01-355/10:43:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/10:31:22
7197	MGS	01-355/10:43:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/10:31:22
7198	MGS	01-355/10:43:10	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7199	MGS	01-355/10:43:14		NOTE: End fixed Sub-Reflector for Radio Science		01-355/10:31:27
7200	MGS	01-355/10:45:00	65	Begin Pre-Cal		
7201	MGS	01-355/10:45:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
7202	MGS	01-355/10:45:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
7203	MGS	01-355/10:45:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
7204	MGS	01-355/10:45:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
7205	MGS	01-355/10:45:00	65	Config: TGC: DEST=37		
7206	MGS	01-355/10:45:00	65	Config: TGC: BAND=X, BR=0.000000		
7207	MGS	01-355/10:45:00	65	Config: FSS: CH=2, PRI_FL=10000		
7208	MGS	01-355/10:45:00	65	Config: RSR		
7209	MGS	01-355/10:45:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
7210	MGS	01-355/10:45:00	65	Config: BVR		
7211	MGS	01-355/10:45:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
7212	MGS	01-355/10:45:00	65	Config: MDA: SMPL=0.1		
7213	MGS	01-355/10:50:58		NOTE: Exit Solar Eclipse 12460		01-355/10:39:10
7214	MGS	01-355/11:07:12		NOTE: Periapsis 12461 ----------		01-355/10:55:25
7215	MGS	01-355/11:11:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/11:00:09
7216	MGS	01-355/11:11:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/11:00:09
7217	MGS	01-355/11:11:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/11:00:10
7218	MGS	01-355/11:11:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/11:00:10
7219	MGS	01-355/11:29:02	34	NOTE: Transmitter Off in 15 minutes		
7220	MGS	01-355/11:33:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/11:22:10
7221	MGS	01-355/11:33:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/11:22:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7222	MGS	01-355/11:42:03	34	Range Modulation Off		
7223	MGS	01-355/11:44:02	34	Transmitter Off		
7224	MGS	01-355/11:57:36		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/11:45:49
7225	MGS	01-355/11:58:29		NOTE: Start EVP data return script		01-355/11:46:41
7226	MGS	01-355/12:02:36		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/11:50:48
7227	MGS	01-355/12:02:36		: 00:09:29, FALSE	RDSCII	01-355/11:50:48
7228	MGS	01-355/12:02:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/11:50:48
7229	MGS	01-355/12:02:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/11:50:48
7230	MGS	01-355/12:02:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/11:50:48
7231	MGS	01-355/12:02:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/11:50:48
7232	MGS	01-355/12:02:36	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7233	MGS	01-355/12:02:36	34	NOTE: Carrier Only -- No Telemetry Modulation		
7234	MGS	01-355/12:04:39		NOTE: Enter Planetary Atmosphere 12461		01-355/11:52:51
7235	MGS	01-355/12:05:51		NOTE: Apoapsis 12461 -		01-355/11:54:03
7236	MGS	01-355/12:08:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/11:56:41
7237	MGS	01-355/12:08:30		NOTE: Enter Solar Eclipse 12461		01-355/11:56:42
7238	MGS	01-355/12:11:23		NOTE: Enter Earth Occultation 12461		01-355/11:59:35
7239	MGS	01-355/12:11:23	34	NOTE: Loss Of X-Band Signal		
7240	MGS	01-355/12:11:47		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-355/11:59:59
7241	MGS	01-355/12:12:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/12:00:17
7242	MGS	01-355/12:12:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/12:00:17
7243	MGS	01-355/12:12:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/12:00:17
7244	MGS	01-355/12:12:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/12:00:17
7245	MGS	01-355/12:12:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/12:00:18
7246	MGS	01-355/12:12:06		NOTE: End EVP script		01-355/12:00:19
7247	MGS	01-355/12:12:10		NOTE: End fixed Sub-Reflector for Radio Science		01-355/12:00:23
7248	MGS	01-355/12:15:00	65	Begin Tracking		
7249	MGS	01-355/12:22:12	34	NOTE: Below Uplink Interlock Limit		
7250	MGS	01-355/12:26:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/12:14:17
7251	MGS	01-355/12:28:01	65	NOTE: Above Uplink Interlock Limit		
7252	MGS	01-355/12:29:49		: 01:39:59	RPAONX	01-355/12:18:01
7253	MGS	01-355/12:29:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/12:18:01
7254	MGS	01-355/12:31:04		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/12:19:16
7255	MGS	01-355/12:31:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/12:19:16
7256	MGS	01-355/12:31:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/12:19:16
7257	MGS	01-355/12:31:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/12:19:16
7258	MGS	01-355/12:31:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/12:19:16
7259	MGS	01-355/12:31:34		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/12:19:46
7260	MGS	01-355/12:31:45		NOTE: Exit Earth Occultation 12461		01-355/12:19:57
7261	MGS	01-355/12:31:45	34	Acquisition Of X-Band Signal		
7262	MGS	01-355/12:31:45	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7263	MGS	01-355/12:31:45	34	NOTE: Carrier Only -- No Telemetry Modulation		
7264	MGS	01-355/12:31:45	65	Acquisition Of X-Band Signal		
7265	MGS	01-355/12:31:45	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7266	MGS	01-355/12:31:45	65	NOTE: Carrier Only -- No Telemetry Modulation		
7267	MGS	01-355/12:32:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/12:21:10
7268	MGS	01-355/12:32:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/12:21:10
7269	MGS	01-355/12:33:03		Set eclipse egress script address: 01DC	SWSEES	01-355/12:21:15
7270	MGS	01-355/12:35:00	34	End Tracking		
7271	MGS	01-355/12:38:49		NOTE: Exit Planetary Atmosphere 12461		01-355/12:27:01
7272	MGS	01-355/12:40:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/12:29:03
7273	MGS	01-355/12:40:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/12:29:03
7274	MGS	01-355/12:40:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/12:29:03
7275	MGS	01-355/12:40:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/12:29:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7276	MGS	01-355/12:40:51	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7277	MGS	01-355/12:40:52		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/12:29:04
7278	MGS	01-355/12:40:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/12:29:04
7279	MGS	01-355/12:40:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/12:29:04
7280	MGS	01-355/12:40:52	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7281	MGS	01-355/12:40:56		NOTE: End fixed Sub-Reflector for Radio Science		01-355/12:29:09
7282	MGS	01-355/12:48:40		NOTE: Exit Solar Eclipse 12461		01-355/12:36:53
7283	MGS	01-355/12:50:00	34	End Post-Cal		
7284	MGS	01-355/13:04:49		NOTE: Periapsis 12462 ----------		01-355/12:53:02
7285	MGS	01-355/13:09:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/12:57:51
7286	MGS	01-355/13:09:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/12:57:51
7287	MGS	01-355/13:09:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/12:57:52
7288	MGS	01-355/13:09:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/12:57:52
7289	MGS	01-355/13:31:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/13:19:52
7290	MGS	01-355/13:31:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/13:19:52
7291	MGS	01-355/13:41:42		NOTE: Start Block (SSRMGR)		01-355/13:29:54
7292	MGS	01-355/13:41:42		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-355/13:29:54
7293	MGS	01-355/13:41:43		SSR 1B Data Enable	CSD1BE	01-355/13:29:55
7294	MGS	01-355/13:41:43		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-355/13:29:55
7295	MGS	01-355/13:55:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/13:43:31
7296	MGS	01-355/13:56:11		NOTE: Start Block (MAP_PB_ODY)		01-355/13:44:23
7297	MGS	01-355/13:56:12		: 00:21:20, 01:40:00, FALSE, FALSE, FALSE, 00:01:15, 00:08:07, 01:22:48, 00:07:49	AEMINI	01-355/13:44:24
7298	MGS	01-355/13:56:12		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/13:44:24
7299	MGS	01-355/13:56:12		NOTE: Start EVP data return script		01-355/13:44:24
7300	MGS	01-355/13:56:13		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-355T14:25:06.000	AEMPBI	01-355/13:44:25
7301	MGS	01-355/14:00:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/13:48:30
7302	MGS	01-355/14:00:18		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8920000, DUR=00:18:35		01-355/13:48:30
7303	MGS	01-355/14:00:18		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-355/13:48:30
7304	MGS	01-355/14:00:18		: 00:09:29, FALSE	RDSCII	01-355/13:48:30
7305	MGS	01-355/14:00:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/13:48:30
7306	MGS	01-355/14:00:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/13:48:30
7307	MGS	01-355/14:00:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/13:48:30
7308	MGS	01-355/14:00:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/13:48:30
7309	MGS	01-355/14:00:18	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7310	MGS	01-355/14:00:18	65	NOTE: Carrier Only -- No Telemetry Modulation		
7311	MGS	01-355/14:02:22		NOTE: Enter Planetary Atmosphere 12462		01-355/13:50:34
7312	MGS	01-355/14:03:24		NOTE: Apoapsis 12462 -		01-355/13:51:36
7313	MGS	01-355/14:05:00	54	Begin Pre-Cal		
7314	MGS	01-355/14:05:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
7315	MGS	01-355/14:05:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
7316	MGS	01-355/14:05:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
7317	MGS	01-355/14:05:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
7318	MGS	01-355/14:05:00	54	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
7319	MGS	01-355/14:05:00	54	Config: TGC: DEST=37		
7320	MGS	01-355/14:05:00	54	Config: TGC: BAND=X, BR=42666.666667		
7321	MGS	01-355/14:05:00	54	Config: FSS: CH=2, PRI_FL=10000		
7322	MGS	01-355/14:05:00	54	Config: RSR		
7323	MGS	01-355/14:05:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
7324	MGS	01-355/14:05:00	54	Config: BVR		
7325	MGS	01-355/14:05:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
7326	MGS	01-355/14:05:00	54	Config: MDA: SMPL=0.1		
7327	MGS	01-355/14:05:11		SSR 1A Data Disable	CSD1AX	01-355/13:53:23
7328	MGS	01-355/14:05:11		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-355/13:53:23
7329	MGS	01-355/14:05:12		NOTE: End Block (SSRMGR)		01-355/13:53:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7330	MGS	01-355/14:06:12		NOTE: Enter Solar Eclipse 12462		01-355/13:54:24
7331	MGS	01-355/14:06:12		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/13:54:24
7332	MGS	01-355/14:09:05		NOTE: Enter Earth Occultation 12462		01-355/13:57:17
7333	MGS	01-355/14:09:05	65	NOTE: Loss Of X-Band Signal		
7334	MGS	01-355/14:09:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/13:57:59
7335	MGS	01-355/14:09:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/13:57:59
7336	MGS	01-355/14:09:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/13:57:59
7337	MGS	01-355/14:09:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/13:57:59
7338	MGS	01-355/14:09:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/13:58:00
7339	MGS	01-355/14:09:49		NOTE: End EVP script		01-355/13:58:01
7340	MGS	01-355/14:09:50		NOTE: End Block (MAP_RT)		01-355/13:58:02
7341	MGS	01-355/14:09:53		NOTE: End fixed Sub-Reflector for Radio Science		01-355/13:58:05
7342	MGS	01-355/14:27:32		: 01:40:00	RPAONX	01-355/14:15:44
7343	MGS	01-355/14:27:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/14:15:44
7344	MGS	01-355/14:29:17		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/14:17:29
7345	MGS	01-355/14:29:28		NOTE: Exit Earth Occultation 12462		01-355/14:17:40
7346	MGS	01-355/14:29:28	65	Acquisition Of X-Band Signal		
7347	MGS	01-355/14:29:28	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7348	MGS	01-355/14:30:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/14:18:52
7349	MGS	01-355/14:30:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/14:18:52
7350	MGS	01-355/14:30:44		Command the PSE with included data word: 3990	SWPSEL	01-355/14:18:56
7351	MGS	01-355/14:30:45		Set eclipse egress script address: 0158	SWSEES	01-355/14:18:57
7352	MGS	01-355/14:36:31		NOTE: Exit Planetary Atmosphere 12462		01-355/14:24:43
7353	MGS	01-355/14:36:54		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:19:59	AEMPB	01-355/14:25:06
7354	MGS	01-355/14:36:54		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-355/14:25:06
7355	MGS	01-355/14:36:54		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-355/14:25:06
7356	MGS	01-355/14:36:55		SSR 1A Data Enable	CSD1AE	01-355/14:25:07
7357	MGS	01-355/14:36:55		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-355/14:25:07
7358	MGS	01-355/14:36:55	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7359	MGS	01-355/14:46:22		NOTE: Exit Solar Eclipse 12462		01-355/14:34:34
7360	MGS	01-355/15:02:10		NOTE: Periapsis 12463 ----------		01-355/14:50:22
7361	MGS	01-355/15:11:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/14:59:33
7362	MGS	01-355/15:11:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/14:59:33
7363	MGS	01-355/15:11:22		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/14:59:34
7364	MGS	01-355/15:11:22		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/14:59:34
7365	MGS	01-355/15:33:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/15:21:34
7366	MGS	01-355/15:33:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/15:21:34
7367	MGS	01-355/15:35:00	54	Begin Tracking		
7368	MGS	01-355/15:35:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7369	MGS	01-355/15:47:33		SSR 1A Data Disable	CSD1AX	01-355/15:35:45
7370	MGS	01-355/15:47:33		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-355/15:35:45
7371	MGS	01-355/15:47:33		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-355/15:35:45
7372	MGS	01-355/15:47:33	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7373	MGS	01-355/15:47:33	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7374	MGS	01-355/15:53:55		NOTE: Start Block (MAP_RT)		01-355/15:42:06
7375	MGS	01-355/15:53:56		: 00:21:20, 01:39:59, FALSE, TRUE, FALSE, 00:01:15, 00:09:47, 01:19:27, 00:09:29	AEMINI	01-355/15:42:07
7376	MGS	01-355/15:53:56		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/15:42:07
7377	MGS	01-355/15:53:56		NOTE: Start EVP data return script		01-355/15:42:07
7378	MGS	01-355/15:53:57		: SE_2A, RTM, 01:19:26, MRC, 2001-355T16:24:31.000	AEMRTI	01-355/15:42:08
7379	MGS	01-355/15:55:00	65	End Tracking		
7380	MGS	01-355/16:00:04		NOTE: Enter Planetary Atmosphere 12463		01-355/15:48:16
7381	MGS	01-355/16:00:51		NOTE: Apoapsis 12463 -		01-355/15:49:03
7382	MGS	01-355/16:03:55		NOTE: Enter Solar Eclipse 12463		01-355/15:52:07
7383	MGS	01-355/16:03:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/15:52:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7384	MGS	01-355/16:06:46		NOTE: Enter Earth Occultation 12463		01-355/15:54:58
7385	MGS	01-355/16:06:46	54	NOTE: Loss Of X-Band Signal		
7386	MGS	01-355/16:07:32		NOTE: End EVP script		01-355/15:55:44
7387	MGS	01-355/16:07:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/15:55:44
7388	MGS	01-355/16:07:33		NOTE: End Block (MAP_PB_ODY)		01-355/15:55:45
7389	MGS	01-355/16:10:00	65	End Post-Cal		
7390	MGS	01-355/16:21:30		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/16:09:42
7391	MGS	01-355/16:25:16		: 01:39:59	RPAONX	01-355/16:13:27
7392	MGS	01-355/16:25:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/16:13:27
7393	MGS	01-355/16:26:31		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/16:14:42
7394	MGS	01-355/16:26:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/16:14:42
7395	MGS	01-355/16:26:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/16:14:42
7396	MGS	01-355/16:26:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/16:14:42
7397	MGS	01-355/16:26:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/16:14:42
7398	MGS	01-355/16:27:13		NOTE: Exit Earth Occultation 12463		01-355/16:15:25
7399	MGS	01-355/16:27:13	54	Acquisition Of X-Band Signal		
7400	MGS	01-355/16:27:13	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7401	MGS	01-355/16:27:13	54	NOTE: Carrier Only -- No Telemetry Modulation		
7402	MGS	01-355/16:28:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/16:16:34
7403	MGS	01-355/16:28:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/16:16:34
7404	MGS	01-355/16:28:28		Set eclipse egress script address: 019A	SWSEES	01-355/16:16:39
7405	MGS	01-355/16:34:14		NOTE: Exit Planetary Atmosphere 12463		01-355/16:22:25
7406	MGS	01-355/16:36:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/16:24:29
7407	MGS	01-355/16:36:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/16:24:29
7408	MGS	01-355/16:36:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/16:24:29
7409	MGS	01-355/16:36:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/16:24:29
7410	MGS	01-355/16:36:18	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7411	MGS	01-355/16:36:19		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/16:24:30
7412	MGS	01-355/16:36:19		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/16:24:30
7413	MGS	01-355/16:36:19		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/16:24:30
7414	MGS	01-355/16:36:19	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7415	MGS	01-355/16:36:23		NOTE: End fixed Sub-Reflector for Radio Science		01-355/16:24:34
7416	MGS	01-355/16:44:06		NOTE: Exit Solar Eclipse 12463		01-355/16:32:18
7417	MGS	01-355/17:00:01		NOTE: Periapsis 12464 ----------		01-355/16:48:13
7418	MGS	01-355/17:05:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/16:53:16
7419	MGS	01-355/17:05:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/16:53:16
7420	MGS	01-355/17:05:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/16:53:17
7421	MGS	01-355/17:05:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/16:53:17
7422	MGS	01-355/17:27:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/17:15:17
7423	MGS	01-355/17:27:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/17:15:17
7424	MGS	01-355/17:50:45		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/17:38:56
7425	MGS	01-355/17:51:41		NOTE: Start EVP data return script		01-355/17:39:52
7426	MGS	01-355/17:55:45		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/17:43:56
7427	MGS	01-355/17:55:45		: 00:09:29, FALSE	RDSCII	01-355/17:43:56
7428	MGS	01-355/17:55:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/17:43:56
7429	MGS	01-355/17:55:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/17:43:56
7430	MGS	01-355/17:55:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/17:43:56
7431	MGS	01-355/17:55:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/17:43:56
7432	MGS	01-355/17:55:45	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7433	MGS	01-355/17:55:45	54	NOTE: Carrier Only -- No Telemetry Modulation		
7434	MGS	01-355/17:57:47		NOTE: Enter Planetary Atmosphere 12464		01-355/17:45:58
7435	MGS	01-355/17:58:52		NOTE: Apoapsis 12464 -		01-355/17:47:03
7436	MGS	01-355/18:01:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/17:49:52
7437	MGS	01-355/18:01:41		NOTE: Enter Solar Eclipse 12464		01-355/17:49:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7438	MGS	01-355/18:04:28		NOTE: Enter Earth Occultation 12464		01-355/17:52:39
7439	MGS	01-355/18:04:28	54	NOTE: Loss Of X-Band Signal		
7440	MGS	01-355/18:05:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/17:53:25
7441	MGS	01-355/18:05:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/17:53:25
7442	MGS	01-355/18:05:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/17:53:25
7443	MGS	01-355/18:05:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/17:53:25
7444	MGS	01-355/18:05:15		NOTE: End EVP script		01-355/17:53:26
7445	MGS	01-355/18:05:15		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/17:53:26
7446	MGS	01-355/18:05:19		NOTE: End fixed Sub-Reflector for Radio Science		01-355/17:53:30
7447	MGS	01-355/18:10:00	15	Begin Pre-Cal		
7448	MGS	01-355/18:10:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
7449	MGS	01-355/18:10:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
7450	MGS	01-355/18:10:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
7451	MGS	01-355/18:10:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
7452	MGS	01-355/18:10:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
7453	MGS	01-355/18:10:00	15	Config: TGC: DEST=37		
7454	MGS	01-355/18:10:00	15	Config: TGC: BAND=X, BR=40000.000000		
7455	MGS	01-355/18:10:00	15	Config: FSS: CH=2, PRI_FL=10000		
7456	MGS	01-355/18:10:00	15	Config: RSR		
7457	MGS	01-355/18:10:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
7458	MGS	01-355/18:10:00	15	Config: BVR		
7459	MGS	01-355/18:10:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
7460	MGS	01-355/18:10:00	15	Config: MDA: SMPL=0.1		
7461	MGS	01-355/18:19:16		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/18:07:27
7462	MGS	01-355/18:23:01		: 01:39:59	RPAONX	01-355/18:11:12
7463	MGS	01-355/18:23:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/18:11:12
7464	MGS	01-355/18:24:16		: 00:00:30, 00:09:47, FALSE	RDSCIE	01-355/18:12:27
7465	MGS	01-355/18:24:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/18:12:27
7466	MGS	01-355/18:24:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/18:12:27
7467	MGS	01-355/18:24:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/18:12:27
7468	MGS	01-355/18:24:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/18:12:27
7469	MGS	01-355/18:24:46		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/18:12:57
7470	MGS	01-355/18:25:00		NOTE: Exit Earth Occultation 12464		01-355/18:13:11
7471	MGS	01-355/18:25:00	54	Acquisition Of X-Band Signal		
7472	MGS	01-355/18:25:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7473	MGS	01-355/18:25:00	54	NOTE: Carrier Only -- No Telemetry Modulation		
7474	MGS	01-355/18:26:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/18:14:17
7475	MGS	01-355/18:26:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/18:14:17
7476	MGS	01-355/18:26:11		Set eclipse egress script address: 01DC	SWSEES	01-355/18:14:22
7477	MGS	01-355/18:31:59		NOTE: Exit Planetary Atmosphere 12464		01-355/18:20:10
7478	MGS	01-355/18:34:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/18:22:14
7479	MGS	01-355/18:34:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/18:22:14
7480	MGS	01-355/18:34:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/18:22:14
7481	MGS	01-355/18:34:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/18:22:14
7482	MGS	01-355/18:34:03	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7483	MGS	01-355/18:34:04		: RTM, MRC, 01:19:26, S&E_2A, FALSE, 00:09:30	AEMRT	01-355/18:22:15
7484	MGS	01-355/18:34:04		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/18:22:15
7485	MGS	01-355/18:34:04		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/18:22:15
7486	MGS	01-355/18:34:04	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7487	MGS	01-355/18:34:08		NOTE: End fixed Sub-Reflector for Radio Science		01-355/18:22:19
7488	MGS	01-355/18:41:52		NOTE: Exit Solar Eclipse 12464		01-355/18:30:03
7489	MGS	01-355/18:58:14		NOTE: Periapsis 12465 ----------		01-355/18:46:25
7490	MGS	01-355/19:02:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/18:51:02
7491	MGS	01-355/19:02:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/18:51:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7492	MGS	01-355/19:02:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/18:51:03
7493	MGS	01-355/19:02:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/18:51:03
7494	MGS	01-355/19:24:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/19:13:03
7495	MGS	01-355/19:24:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/19:13:03
7496	MGS	01-355/19:34:53		NOTE: Start Block (SSRMGR)		01-355/19:23:04
7497	MGS	01-355/19:34:53		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-355/19:23:04
7498	MGS	01-355/19:34:54		SSR 1A Data Enable	CSD1AE	01-355/19:23:05
7499	MGS	01-355/19:34:54		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-355/19:23:05
7500	MGS	01-355/19:40:00	15	Begin Tracking		
7501	MGS	01-355/19:40:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7502	MGS	01-355/19:48:30		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/19:36:41
7503	MGS	01-355/19:49:10	15	NOTE: Above Uplink Interlock Limit		
7504	MGS	01-355/19:49:27		NOTE: Start Block (MAP_PB_ODY)		01-355/19:37:38
7505	MGS	01-355/19:49:28		: 00:21:20, 01:40:00, FALSE, FALSE, FALSE, 00:01:15, 00:08:07, 01:22:48, 00:07:49	AEMINI	01-355/19:37:39
7506	MGS	01-355/19:49:28		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/19:37:39
7507	MGS	01-355/19:49:28		NOTE: Start EVP data return script		01-355/19:37:39
7508	MGS	01-355/19:49:29		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-355T20:18:22.000	AEMPBI	01-355/19:37:40
7509	MGS	01-355/19:53:30		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/19:41:41
7510	MGS	01-355/19:53:30		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8928000, DUR=00:18:36		01-355/19:41:41
7511	MGS	01-355/19:53:30		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-355/19:41:41
7512	MGS	01-355/19:53:30		: 00:09:29, FALSE	RDSCII	01-355/19:41:41
7513	MGS	01-355/19:53:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/19:41:41
7514	MGS	01-355/19:53:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/19:41:41
7515	MGS	01-355/19:53:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/19:41:41
7516	MGS	01-355/19:53:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/19:41:41
7517	MGS	01-355/19:53:30	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7518	MGS	01-355/19:53:30	15	NOTE: Carrier Only -- No Telemetry Modulation		
7519	MGS	01-355/19:53:30	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7520	MGS	01-355/19:53:30	54	NOTE: Carrier Only -- No Telemetry Modulation		
7521	MGS	01-355/19:55:33		NOTE: Enter Planetary Atmosphere 12465		01-355/19:43:44
7522	MGS	01-355/19:57:12		NOTE: Apoapsis 12465 -		01-355/19:45:23
7523	MGS	01-355/19:58:27		SSR 1B Data Disable	CSD1BX	01-355/19:46:38
7524	MGS	01-355/19:58:27		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-355/19:46:38
7525	MGS	01-355/19:58:28		NOTE: End Block (SSRMGR)		01-355/19:46:39
7526	MGS	01-355/19:59:28		NOTE: Enter Solar Eclipse 12465		01-355/19:47:39
7527	MGS	01-355/19:59:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/19:47:39
7528	MGS	01-355/20:00:00	54	End Tracking		
7529	MGS	01-355/20:02:14		NOTE: Enter Earth Occultation 12465		01-355/19:50:25
7530	MGS	01-355/20:02:14	15	NOTE: Loss Of X-Band Signal		
7531	MGS	01-355/20:02:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/19:51:10
7532	MGS	01-355/20:02:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/19:51:10
7533	MGS	01-355/20:02:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/19:51:10
7534	MGS	01-355/20:02:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/19:51:10
7535	MGS	01-355/20:03:00		NOTE: End EVP script		01-355/19:51:11
7536	MGS	01-355/20:03:00		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/19:51:11
7537	MGS	01-355/20:03:01		NOTE: End Block (MAP_RT)		01-355/19:51:12
7538	MGS	01-355/20:03:04		NOTE: End fixed Sub-Reflector for Radio Science		01-355/19:51:15
7539	MGS	01-355/20:15:00	54	End Post-Cal		
7540	MGS	01-355/20:20:48		: 01:40:00	RPAONX	01-355/20:08:59
7541	MGS	01-355/20:20:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/20:08:59
7542	MGS	01-355/20:22:33		Disables autonomous command to send eclipse ingress script	SWEISX	01-355/20:10:44
7543	MGS	01-355/20:22:48		NOTE: Exit Earth Occultation 12465		01-355/20:10:59
7544	MGS	01-355/20:22:48	15	Acquisition Of X-Band Signal		
7545	MGS	01-355/20:22:48	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7546	MGS	01-355/20:23:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/20:12:03
7547	MGS	01-355/20:23:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/20:12:03
7548	MGS	01-355/20:23:56		Command the PSE with included data word: 3990	SWPSEL	01-355/20:12:07
7549	MGS	01-355/20:23:57		Set eclipse egress script address: 0158	SWSEES	01-355/20:12:08
7550	MGS	01-355/20:29:47		NOTE: Exit Planetary Atmosphere 12465		01-355/20:17:57
7551	MGS	01-355/20:30:10		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:19:59	AEMPB	01-355/20:18:21
7552	MGS	01-355/20:30:10		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-355/20:18:21
7553	MGS	01-355/20:30:10		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-355/20:18:21
7554	MGS	01-355/20:30:11		SSR 1B Data Enable	CSD1BE	01-355/20:18:22
7555	MGS	01-355/20:30:11		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-355/20:18:22
7556	MGS	01-355/20:30:11	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7557	MGS	01-355/20:39:39		NOTE: Exit Solar Eclipse 12465		01-355/20:27:50
7558	MGS	01-355/20:56:20		NOTE: Periapsis 12466 ----------		01-355/20:44:30
7559	MGS	01-355/21:04:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/20:52:49
7560	MGS	01-355/21:04:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/20:52:49
7561	MGS	01-355/21:04:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/20:52:50
7562	MGS	01-355/21:04:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/20:52:50
7563	MGS	01-355/21:26:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/21:14:50
7564	MGS	01-355/21:26:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/21:14:50
7565	MGS	01-355/21:40:49		SSR 1B Data Disable	CSD1BX	01-355/21:29:00
7566	MGS	01-355/21:40:49		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-355/21:29:00
7567	MGS	01-355/21:40:49		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-355/21:29:00
7568	MGS	01-355/21:40:49	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7569	MGS	01-355/21:47:13		NOTE: Start Block (MAP_RT)		01-355/21:35:24
7570	MGS	01-355/21:47:14		: 00:21:35, 01:39:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:39, 01:19:13, 00:09:21	AEMINI	01-355/21:35:25
7571	MGS	01-355/21:47:14		Enable sending eclipse ingress script when array power disappears	SWEISE	01-355/21:35:25
7572	MGS	01-355/21:47:14		NOTE: Start EVP data return script		01-355/21:35:25
7573	MGS	01-355/21:47:15		: SE_2A, RTM, 01:19:12, MRC, 2001-355T22:17:56.000	AEMRTI	01-355/21:35:26
7574	MGS	01-355/21:53:21		NOTE: Enter Planetary Atmosphere 12466		01-355/21:41:32
7575	MGS	01-355/21:55:08		NOTE: Apoapsis 12466 -		01-355/21:43:19
7576	MGS	01-355/21:57:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/21:45:25
7577	MGS	01-355/21:57:15		NOTE: Enter Solar Eclipse 12466		01-355/21:45:25
7578	MGS	01-355/22:00:02		NOTE: Enter Earth Occultation 12466		01-355/21:48:13
7579	MGS	01-355/22:00:02	15	NOTE: Loss Of X-Band Signal		
7580	MGS	01-355/22:00:48		NOTE: End EVP script		01-355/21:48:59
7581	MGS	01-355/22:00:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/21:48:59
7582	MGS	01-355/22:00:49		NOTE: End Block (MAP_PB_ODY)		01-355/21:49:00
7583	MGS	01-355/22:15:05		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/22:03:15
7584	MGS	01-355/22:18:49		: 01:39:29	RPAONX	01-355/22:07:00
7585	MGS	01-355/22:18:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-355/22:07:00
7586	MGS	01-355/22:20:04		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-355/22:08:15
7587	MGS	01-355/22:20:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/22:08:15
7588	MGS	01-355/22:20:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/22:08:15
7589	MGS	01-355/22:20:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/22:08:15
7590	MGS	01-355/22:20:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/22:08:15
7591	MGS	01-355/22:20:35		NOTE: Exit Earth Occultation 12466		01-355/22:08:46
7592	MGS	01-355/22:20:35	15	Acquisition Of X-Band Signal		
7593	MGS	01-355/22:20:35	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7594	MGS	01-355/22:20:35	15	NOTE: Carrier Only -- No Telemetry Modulation		
7595	MGS	01-355/22:21:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-355/22:09:50
7596	MGS	01-355/22:21:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-355/22:09:50
7597	MGS	01-355/22:21:44		Set eclipse egress script address: 019A	SWSEES	01-355/22:09:55
7598	MGS	01-355/22:27:35		NOTE: Exit Planetary Atmosphere 12466		01-355/22:15:46
7599	MGS	01-355/22:29:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/22:17:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7600	MGS	01-355/22:29:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/22:17:54
7601	MGS	01-355/22:29:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/22:17:54
7602	MGS	01-355/22:29:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/22:17:54
7603	MGS	01-355/22:29:44	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7604	MGS	01-355/22:29:45		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-355/22:17:55
7605	MGS	01-355/22:29:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-355/22:17:55
7606	MGS	01-355/22:29:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-355/22:17:55
7607	MGS	01-355/22:29:45	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7608	MGS	01-355/22:29:49		NOTE: End fixed Sub-Reflector for Radio Science		01-355/22:17:59
7609	MGS	01-355/22:37:26		NOTE: Exit Solar Eclipse 12466		01-355/22:25:37
7610	MGS	01-355/22:54:01		NOTE: Periapsis 12467 ----------		01-355/22:42:11
7611	MGS	01-355/22:58:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-355/22:46:36
7612	MGS	01-355/22:58:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-355/22:46:36
7613	MGS	01-355/22:58:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-355/22:46:37
7614	MGS	01-355/22:58:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-355/22:46:37
7615	MGS	01-355/23:10:00	34	Begin Pre-Cal		
7616	MGS	01-355/23:10:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
7617	MGS	01-355/23:10:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
7618	MGS	01-355/23:10:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
7619	MGS	01-355/23:10:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
7620	MGS	01-355/23:10:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
7621	MGS	01-355/23:10:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
7622	MGS	01-355/23:10:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
7623	MGS	01-355/23:10:00	34	Config: TGC: DEST=37		
7624	MGS	01-355/23:10:00	34	Config: TGC: BAND=X, BR=40000.000000		
7625	MGS	01-355/23:10:00	34	Config: FSS: CH=2, PRI_FL=10000		
7626	MGS	01-355/23:10:00	34	Config: RSR		
7627	MGS	01-355/23:10:00	34	Config: TXL		
7628	MGS	01-355/23:10:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
7629	MGS	01-355/23:10:00	34	Config: BVR		
7630	MGS	01-355/23:10:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
7631	MGS	01-355/23:10:00	34	Config: MDA: SMPL=0.1		
7632	MGS	01-355/23:10:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
7633	MGS	01-355/23:10:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
7634	MGS	01-355/23:10:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
7635	MGS	01-355/23:20:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-355/23:08:37
7636	MGS	01-355/23:20:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-355/23:08:37
7637	MGS	01-355/23:43:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-355/23:32:07
7638	MGS	01-355/23:44:58		NOTE: Start EVP data return script		01-355/23:33:08
7639	MGS	01-355/23:48:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-355/23:37:07
7640	MGS	01-355/23:48:57		: 00:09:21, FALSE	RDSCII	01-355/23:37:07
7641	MGS	01-355/23:48:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-355/23:37:07
7642	MGS	01-355/23:48:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-355/23:37:07
7643	MGS	01-355/23:48:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-355/23:37:07
7644	MGS	01-355/23:48:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-355/23:37:07
7645	MGS	01-355/23:48:57	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7646	MGS	01-355/23:48:57	15	NOTE: Carrier Only -- No Telemetry Modulation		
7647	MGS	01-355/23:51:06		NOTE: Enter Planetary Atmosphere 12467		01-355/23:39:16
7648	MGS	01-355/23:52:35		NOTE: Apoapsis 12467 -		01-355/23:40:45
7649	MGS	01-355/23:54:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-355/23:43:08
7650	MGS	01-355/23:54:58		NOTE: Enter Solar Eclipse 12467		01-355/23:43:09
7651	MGS	01-355/23:57:47		NOTE: Enter Earth Occultation 12467		01-355/23:45:57
7652	MGS	01-355/23:57:47	15	NOTE: Loss Of X-Band Signal		
7653	MGS	01-355/23:58:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-355/23:46:28

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7654	MGS	01-355/23:58:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-355/23:46:28
7655	MGS	01-355/23:58:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-355/23:46:28
7656	MGS	01-355/23:58:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-355/23:46:28
7657	MGS	01-355/23:58:19		Turn off the MOT Exciter and RPA beam	STRPAF	01-355/23:46:29
7658	MGS	01-355/23:58:19		NOTE: End EVP script		01-355/23:46:29
7659	MGS	01-355/23:58:23		NOTE: End fixed Sub-Reflector for Radio Science		01-355/23:46:33
7660	MGS	01-356/00:00:00		Light Time: OWLT = 11:49, RTLT = 23:39		
7661	MGS	01-356/00:12:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/00:00:58
7662	MGS	01-356/00:16:33		: 01:39:29	RPAONX	01-356/00:04:43
7663	MGS	01-356/00:16:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/00:04:43
7664	MGS	01-356/00:17:48		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/00:05:58
7665	MGS	01-356/00:17:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/00:05:58
7666	MGS	01-356/00:17:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/00:05:58
7667	MGS	01-356/00:17:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/00:05:58
7668	MGS	01-356/00:17:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/00:05:58
7669	MGS	01-356/00:18:18		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/00:06:28
7670	MGS	01-356/00:18:20		NOTE: Exit Earth Occultation 12467		01-356/00:06:30
7671	MGS	01-356/00:18:20	15	Acquisition Of X-Band Signal		
7672	MGS	01-356/00:18:20	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7673	MGS	01-356/00:18:20	15	NOTE: Carrier Only -- No Telemetry Modulation		
7674	MGS	01-356/00:19:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/00:07:37
7675	MGS	01-356/00:19:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/00:07:37
7676	MGS	01-356/00:19:32		Set eclipse egress script address: 01DC	SWSEES	01-356/00:07:42
7677	MGS	01-356/00:25:20		NOTE: Exit Planetary Atmosphere 12467		01-356/00:13:31
7678	MGS	01-356/00:27:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/00:15:37
7679	MGS	01-356/00:27:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/00:15:37
7680	MGS	01-356/00:27:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/00:15:37
7681	MGS	01-356/00:27:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/00:15:37
7682	MGS	01-356/00:27:27	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7683	MGS	01-356/00:27:28		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/00:15:38
7684	MGS	01-356/00:27:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/00:15:38
7685	MGS	01-356/00:27:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/00:15:38
7686	MGS	01-356/00:27:28	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7687	MGS	01-356/00:27:32		NOTE: End fixed Sub-Reflector for Radio Science		01-356/00:15:42
7688	MGS	01-356/00:35:10		NOTE: Exit Solar Eclipse 12467		01-356/00:23:20
7689	MGS	01-356/00:51:22		NOTE: Periapsis 12468 ----------		01-356/00:39:32
7690	MGS	01-356/00:56:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/00:44:19
7691	MGS	01-356/00:56:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/00:44:19
7692	MGS	01-356/00:56:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/00:44:20
7693	MGS	01-356/00:56:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/00:44:20
7694	MGS	01-356/01:10:00	34	Begin Tracking		
7695	MGS	01-356/01:10:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7696	MGS	01-356/01:13:46	34	NOTE: Above Uplink Interlock Limit		
7697	MGS	01-356/01:18:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/01:06:20
7698	MGS	01-356/01:18:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/01:06:20
7699	MGS	01-356/01:28:11		NOTE: Start Block (SSRMGR)		01-356/01:16:21
7700	MGS	01-356/01:28:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-356/01:16:21
7701	MGS	01-356/01:28:12		SSR 1B Data Enable	CSD1BE	01-356/01:16:22
7702	MGS	01-356/01:28:12		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-356/01:16:22
7703	MGS	01-356/01:41:40		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/01:29:50
7704	MGS	01-356/01:42:38		NOTE: Start Block (MAP_PB_ODY)		01-356/01:30:48
7705	MGS	01-356/01:42:39		: 00:21:35, 01:39:30, FALSE, FALSE, FALSE, 00:01:15, 00:07:59, 01:22:34, 00:07:41	AEMINI	01-356/01:30:49
7706	MGS	01-356/01:42:39		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/01:30:49
7707	MGS	01-356/01:42:39		NOTE: Start EVP data return script		01-356/01:30:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7708	MGS	01-356/01:42:40		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-356T02:11:38.000	AEMPBI	01-356/01:30:50
7709	MGS	01-356/01:46:40		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/01:34:50
7710	MGS	01-356/01:46:40		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8864000, DUR=00:18:28		01-356/01:34:50
7711	MGS	01-356/01:46:40		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-356/01:34:50
7712	MGS	01-356/01:46:40		: 00:09:21, FALSE	RDSCII	01-356/01:34:50
7713	MGS	01-356/01:46:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/01:34:50
7714	MGS	01-356/01:46:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/01:34:50
7715	MGS	01-356/01:46:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/01:34:50
7716	MGS	01-356/01:46:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/01:34:50
7717	MGS	01-356/01:46:40	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7718	MGS	01-356/01:46:40	15	NOTE: Carrier Only -- No Telemetry Modulation		
7719	MGS	01-356/01:46:40	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7720	MGS	01-356/01:46:40	34	NOTE: Carrier Only -- No Telemetry Modulation		
7721	MGS	01-356/01:48:45		NOTE: Enter Planetary Atmosphere 12468		01-356/01:36:55
7722	MGS	01-356/01:50:00		NOTE: Apoapsis 12468 -		01-356/01:38:10
7723	MGS	01-356/01:51:38		SSR 1A Data Disable	CSD1AX	01-356/01:39:48
7724	MGS	01-356/01:51:38		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-356/01:39:48
7725	MGS	01-356/01:51:39		NOTE: End Block (SSRMGR)		01-356/01:39:49
7726	MGS	01-356/01:52:39		NOTE: Enter Solar Eclipse 12468		01-356/01:40:49
7727	MGS	01-356/01:52:39		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/01:40:49
7728	MGS	01-356/01:55:24		NOTE: Enter Earth Occultation 12468		01-356/01:43:35
7729	MGS	01-356/01:55:24	15	NOTE: Loss Of X-Band Signal		
7730	MGS	01-356/01:55:24	34	NOTE: Loss Of X-Band Signal		
7731	MGS	01-356/01:56:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/01:44:11
7732	MGS	01-356/01:56:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/01:44:11
7733	MGS	01-356/01:56:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/01:44:11
7734	MGS	01-356/01:56:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/01:44:11
7735	MGS	01-356/01:56:02		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/01:44:12
7736	MGS	01-356/01:56:02		NOTE: End EVP script		01-356/01:44:12
7737	MGS	01-356/01:56:03		NOTE: End Block (MAP_RT)		01-356/01:44:13
7738	MGS	01-356/01:56:06		NOTE: End fixed Sub-Reflector for Radio Science		01-356/01:44:16
7739	MGS	01-356/01:56:08	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
7740	MGS	01-356/01:58:09	34	Range Modulation On: SUP=3.0dB		
7741	MGS	01-356/01:59:09	34	Begin Ranging Acquisition		
7742	MGS	01-356/02:14:14		: 01:39:30	RPAONX	01-356/02:02:24
7743	MGS	01-356/02:14:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/02:02:24
7744	MGS	01-356/02:15:59		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/02:04:09
7745	MGS	01-356/02:16:03		NOTE: Exit Earth Occultation 12468		01-356/02:04:13
7746	MGS	01-356/02:16:03	15	Acquisition Of X-Band Signal		
7747	MGS	01-356/02:16:03	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7748	MGS	01-356/02:16:03	34	Acquisition Of X-Band Signal		
7749	MGS	01-356/02:16:03	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7750	MGS	01-356/02:17:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/02:05:20
7751	MGS	01-356/02:17:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/02:05:20
7752	MGS	01-356/02:17:14		Command the PSE with included data word: 3990	SWPSEL	01-356/02:05:24
7753	MGS	01-356/02:17:15		Set eclipse egress script address: 0158	SWSEES	01-356/02:05:25
7754	MGS	01-356/02:19:48	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7755	MGS	01-356/02:19:48	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7756	MGS	01-356/02:23:01		NOTE: Exit Planetary Atmosphere 12468		01-356/02:11:12
7757	MGS	01-356/02:23:28		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:19:37	AEMPB	01-356/02:11:38
7758	MGS	01-356/02:23:28		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-356/02:11:38
7759	MGS	01-356/02:23:28		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-356/02:11:38
7760	MGS	01-356/02:23:29		SSR 1A Data Enable	CSD1AE	01-356/02:11:39
7761	MGS	01-356/02:23:29		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-356/02:11:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7762	MGS	01-356/02:23:29	15	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7763	MGS	01-356/02:23:29	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7764	MGS	01-356/02:32:50		NOTE: Exit Solar Eclipse 12468		01-356/02:21:00
7765	MGS	01-356/02:48:52		NOTE: Periapsis 12469 ----------		01-356/02:37:02
7766	MGS	01-356/02:57:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/02:45:59
7767	MGS	01-356/02:57:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/02:45:59
7768	MGS	01-356/02:57:50		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/02:46:00
7769	MGS	01-356/02:57:50		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/02:46:00
7770	MGS	01-356/03:10:40	34	NOTE: Transmitter Off in 15 minutes		
7771	MGS	01-356/03:19:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/03:08:00
7772	MGS	01-356/03:19:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/03:08:00
7773	MGS	01-356/03:23:40	34	Range Modulation Off		
7774	MGS	01-356/03:25:40	34	Transmitter Off		
7775	MGS	01-356/03:34:07		SSR 1A Data Disable	CSD1AX	01-356/03:22:17
7776	MGS	01-356/03:34:07		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-356/03:22:17
7777	MGS	01-356/03:34:07		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-356/03:22:17
7778	MGS	01-356/03:34:07	15	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7779	MGS	01-356/03:34:07	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7780	MGS	01-356/03:40:21		NOTE: Start Block (MAP_RT)		01-356/03:28:31
7781	MGS	01-356/03:40:22		: 00:21:35, 01:39:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:39, 01:19:13, 00:09:21	AEMINI	01-356/03:28:32
7782	MGS	01-356/03:40:22		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/03:28:32
7783	MGS	01-356/03:40:22		NOTE: Start EVP data return script		01-356/03:28:32
7784	MGS	01-356/03:40:23		: SE_2A, RTM, 01:19:12, MRC, 2001-356T04:11:02.000	AEMRTI	01-356/03:28:33
7785	MGS	01-356/03:46:26		NOTE: Enter Planetary Atmosphere 12469		01-356/03:34:36
7786	MGS	01-356/03:47:53		NOTE: Apoapsis 12469 -		01-356/03:36:03
7787	MGS	01-356/03:49:20	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7788	MGS	01-356/03:49:20	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7789	MGS	01-356/03:50:22		NOTE: Enter Solar Eclipse 12469		01-356/03:38:32
7790	MGS	01-356/03:50:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/03:38:32
7791	MGS	01-356/03:53:05		NOTE: Enter Earth Occultation 12469		01-356/03:41:15
7792	MGS	01-356/03:53:05	15	NOTE: Loss Of X-Band Signal		
7793	MGS	01-356/03:53:05	34	NOTE: Loss Of X-Band Signal		
7794	MGS	01-356/03:53:44		NOTE: End EVP script		01-356/03:41:54
7795	MGS	01-356/03:53:44		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/03:41:54
7796	MGS	01-356/03:53:45		NOTE: End Block (MAP_PB_ODY)		01-356/03:41:55
7797	MGS	01-356/03:53:52	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
7798	MGS	01-356/03:55:52	34	Range Modulation On: SUP=3.0dB		
7799	MGS	01-356/03:56:52	34	Begin Ranging Acquisition		
7800	MGS	01-356/04:05:00	45	Begin Pre-Cal		
7801	MGS	01-356/04:05:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
7802	MGS	01-356/04:05:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
7803	MGS	01-356/04:05:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
7804	MGS	01-356/04:05:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
7805	MGS	01-356/04:05:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
7806	MGS	01-356/04:05:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
7807	MGS	01-356/04:05:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
7808	MGS	01-356/04:05:00	45	Config: TGC: DEST=37		
7809	MGS	01-356/04:05:00	45	Config: TGC: BAND=X, BR=40000.000000		
7810	MGS	01-356/04:05:00	45	Config: FSS: CH=2, PRI_FL=10000		
7811	MGS	01-356/04:05:00	45	Config: RSR		
7812	MGS	01-356/04:05:00	45	Config: TXL		
7813	MGS	01-356/04:05:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
7814	MGS	01-356/04:05:00	45	Config: BVR		
7815	MGS	01-356/04:05:00	45	Config: Doppler Extractor: BIAS=+1MHZ		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7816	MGS	01-356/04:05:00	45	Config: MDA: SMPL=0.1		
7817	MGS	01-356/04:05:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
7818	MGS	01-356/04:05:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
7819	MGS	01-356/04:05:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
7820	MGS	01-356/04:08:12		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/03:56:22
7821	MGS	01-356/04:11:57		: 01:39:29	RPAONX	01-356/04:00:07
7822	MGS	01-356/04:11:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/04:00:07
7823	MGS	01-356/04:13:12		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/04:01:22
7824	MGS	01-356/04:13:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/04:01:22
7825	MGS	01-356/04:13:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/04:01:22
7826	MGS	01-356/04:13:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/04:01:22
7827	MGS	01-356/04:13:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/04:01:22
7828	MGS	01-356/04:13:47		NOTE: Exit Earth Occultation 12469		01-356/04:01:57
7829	MGS	01-356/04:13:47	15	Acquisition Of X-Band Signal		
7830	MGS	01-356/04:13:47	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7831	MGS	01-356/04:13:47	15	NOTE: Carrier Only -- No Telemetry Modulation		
7832	MGS	01-356/04:13:47	34	Acquisition Of X-Band Signal		
7833	MGS	01-356/04:13:47	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7834	MGS	01-356/04:13:47	34	NOTE: Carrier Only -- No Telemetry Modulation		
7835	MGS	01-356/04:14:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/04:03:00
7836	MGS	01-356/04:14:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/04:03:00
7837	MGS	01-356/04:14:55		Set eclipse egress script address: 019A	SWSEES	01-356/04:03:05
7838	MGS	01-356/04:20:44		NOTE: Exit Planetary Atmosphere 12469		01-356/04:08:54
7839	MGS	01-356/04:22:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/04:11:01
7840	MGS	01-356/04:22:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/04:11:01
7841	MGS	01-356/04:22:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/04:11:01
7842	MGS	01-356/04:22:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/04:11:01
7843	MGS	01-356/04:22:51	15	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7844	MGS	01-356/04:22:51	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7845	MGS	01-356/04:22:52		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/04:11:02
7846	MGS	01-356/04:22:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/04:11:02
7847	MGS	01-356/04:22:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/04:11:02
7848	MGS	01-356/04:22:52	15	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7849	MGS	01-356/04:22:52	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7850	MGS	01-356/04:22:56		NOTE: End fixed Sub-Reflector for Radio Science		01-356/04:11:06
7851	MGS	01-356/04:30:33		NOTE: Exit Solar Eclipse 12469		01-356/04:18:43
7852	MGS	01-356/04:37:00	34	NOTE: Transmitter Off in 15 minutes		
7853	MGS	01-356/04:46:43		NOTE: Periapsis 12470 ----------		01-356/04:34:53
7854	MGS	01-356/04:50:00	34	Range Modulation Off		
7855	MGS	01-356/04:51:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/04:39:42
7856	MGS	01-356/04:51:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/04:39:42
7857	MGS	01-356/04:51:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/04:39:43
7858	MGS	01-356/04:51:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/04:39:43
7859	MGS	01-356/04:52:00	34	Transmitter Off		
7860	MGS	01-356/05:05:00	45	Begin Tracking		
7861	MGS	01-356/05:05:00	45	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7862	MGS	01-356/05:13:05	15	NOTE: Below Uplink Interlock Limit		
7863	MGS	01-356/05:13:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/05:01:43
7864	MGS	01-356/05:13:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/05:01:43
7865	MGS	01-356/05:15:40	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7866	MGS	01-356/05:15:40	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7867	MGS	01-356/05:15:40	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7868	MGS	01-356/05:25:00	15	End Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7869	MGS	01-356/05:37:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/05:25:14
7870	MGS	01-356/05:38:10		NOTE: Start EVP data return script		01-356/05:26:19
7871	MGS	01-356/05:40:00	15	End Post-Cal		
7872	MGS	01-356/05:42:05		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/05:30:14
7873	MGS	01-356/05:42:05		: 00:09:21, FALSE	RDSCII	01-356/05:30:14
7874	MGS	01-356/05:42:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/05:30:14
7875	MGS	01-356/05:42:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/05:30:14
7876	MGS	01-356/05:42:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/05:30:14
7877	MGS	01-356/05:42:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/05:30:14
7878	MGS	01-356/05:42:05	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7879	MGS	01-356/05:42:05	34	NOTE: Carrier Only -- No Telemetry Modulation		
7880	MGS	01-356/05:42:05	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7881	MGS	01-356/05:42:05	45	NOTE: Carrier Only -- No Telemetry Modulation		
7882	MGS	01-356/05:44:14		NOTE: Enter Planetary Atmosphere 12470		01-356/05:32:24
7883	MGS	01-356/05:45:43		NOTE: Apoapsis 12470 -		01-356/05:33:52
7884	MGS	01-356/05:48:09		NOTE: Enter Solar Eclipse 12470		01-356/05:36:18
7885	MGS	01-356/05:48:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/05:36:19
7886	MGS	01-356/05:50:52		NOTE: Enter Earth Occultation 12470		01-356/05:39:01
7887	MGS	01-356/05:50:52	34	NOTE: Loss Of X-Band Signal		
7888	MGS	01-356/05:50:52	45	NOTE: Loss Of X-Band Signal		
7889	MGS	01-356/05:51:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/05:39:35
7890	MGS	01-356/05:51:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/05:39:35
7891	MGS	01-356/05:51:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/05:39:35
7892	MGS	01-356/05:51:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/05:39:35
7893	MGS	01-356/05:51:26		NOTE: End EVP script		01-356/05:39:36
7894	MGS	01-356/05:51:27		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/05:39:36
7895	MGS	01-356/05:51:30		NOTE: End fixed Sub-Reflector for Radio Science		01-356/05:39:40
7896	MGS	01-356/05:51:38	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
7897	MGS	01-356/05:53:38	45	Range Modulation On: SUP=3.0dB		
7898	MGS	01-356/05:54:38	45	Begin Ranging Acquisition		
7899	MGS	01-356/06:05:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/05:54:09
7900	MGS	01-356/06:09:45		: 01:39:29	RPAONX	01-356/05:57:54
7901	MGS	01-356/06:09:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/05:57:54
7902	MGS	01-356/06:11:00		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/05:59:09
7903	MGS	01-356/06:11:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/05:59:09
7904	MGS	01-356/06:11:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/05:59:09
7905	MGS	01-356/06:11:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/05:59:09
7906	MGS	01-356/06:11:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/05:59:09
7907	MGS	01-356/06:11:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/05:59:39
7908	MGS	01-356/06:11:34		NOTE: Exit Earth Occultation 12470		01-356/05:59:43
7909	MGS	01-356/06:11:34	34	Acquisition Of X-Band Signal		
7910	MGS	01-356/06:11:34	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7911	MGS	01-356/06:11:34	34	NOTE: Carrier Only -- No Telemetry Modulation		
7912	MGS	01-356/06:11:34	45	Acquisition Of X-Band Signal		
7913	MGS	01-356/06:11:34	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7914	MGS	01-356/06:11:34	45	NOTE: Carrier Only -- No Telemetry Modulation		
7915	MGS	01-356/06:12:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/06:00:43
7916	MGS	01-356/06:12:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/06:00:43
7917	MGS	01-356/06:12:39		Set eclipse egress script address: 01DC	SWSEES	01-356/06:00:48
7918	MGS	01-356/06:18:31		NOTE: Exit Planetary Atmosphere 12470		01-356/06:06:40
7919	MGS	01-356/06:20:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/06:08:48
7920	MGS	01-356/06:20:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/06:08:48
7921	MGS	01-356/06:20:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/06:08:48
7922	MGS	01-356/06:20:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/06:08:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7923	MGS	01-356/06:20:39	34	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7924	MGS	01-356/06:20:39	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7925	MGS	01-356/06:20:40		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/06:08:49
7926	MGS	01-356/06:20:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/06:08:49
7927	MGS	01-356/06:20:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/06:08:49
7928	MGS	01-356/06:20:40	34	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7929	MGS	01-356/06:20:40	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7930	MGS	01-356/06:20:43		NOTE: End fixed Sub-Reflector for Radio Science		01-356/06:08:53
7931	MGS	01-356/06:28:21		NOTE: Exit Solar Eclipse 12470		01-356/06:16:30
7932	MGS	01-356/06:44:35		NOTE: Periapsis 12471 ----------		01-356/06:32:44
7933	MGS	01-356/06:49:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/06:37:29
7934	MGS	01-356/06:49:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/06:37:29
7935	MGS	01-356/06:49:21		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/06:37:30
7936	MGS	01-356/06:49:21		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/06:37:30
7937	MGS	01-356/07:06:12	45	NOTE: Transmitter Off in 15 minutes		
7938	MGS	01-356/07:11:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/06:59:30
7939	MGS	01-356/07:11:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/06:59:30
7940	MGS	01-356/07:19:12	45	Range Modulation Off		
7941	MGS	01-356/07:21:12	45	Transmitter Off		
7942	MGS	01-356/07:21:23		NOTE: Start Block (SSRMGR)		01-356/07:09:32
7943	MGS	01-356/07:21:23		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-356/07:09:32
7944	MGS	01-356/07:21:24		SSR 1A Data Enable	CSD1AE	01-356/07:09:33
7945	MGS	01-356/07:21:24		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-356/07:09:33
7946	MGS	01-356/07:34:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/07:23:01
7947	MGS	01-356/07:35:55		NOTE: Start Block (MAP_PB_ODY)		01-356/07:24:04
7948	MGS	01-356/07:35:56		: 00:21:35, 01:39:30, FALSE, FALSE, FALSE, 00:01:15, 00:07:59, 01:22:34, 00:07:41	AEMINI	01-356/07:24:05
7949	MGS	01-356/07:35:56		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/07:24:05
7950	MGS	01-356/07:35:56		NOTE: Start EVP data return script		01-356/07:24:05
7951	MGS	01-356/07:35:57		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-356T08:04:55.000	AEMPBI	01-356/07:24:06
7952	MGS	01-356/07:39:52		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/07:28:01
7953	MGS	01-356/07:39:52		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8864000, DUR=00:18:28		01-356/07:28:01
7954	MGS	01-356/07:39:52		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-356/07:28:01
7955	MGS	01-356/07:39:52		: 00:09:21, FALSE	RDSCII	01-356/07:28:01
7956	MGS	01-356/07:39:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/07:28:01
7957	MGS	01-356/07:39:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/07:28:01
7958	MGS	01-356/07:39:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/07:28:01
7959	MGS	01-356/07:39:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/07:28:01
7960	MGS	01-356/07:39:52	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7961	MGS	01-356/07:39:52	34	NOTE: Carrier Only -- No Telemetry Modulation		
7962	MGS	01-356/07:39:52	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
7963	MGS	01-356/07:39:52	45	NOTE: Carrier Only -- No Telemetry Modulation		
7964	MGS	01-356/07:42:01		NOTE: Enter Planetary Atmosphere 12471		01-356/07:30:10
7965	MGS	01-356/07:43:21		NOTE: Apoapsis 12471 -		01-356/07:31:31
7966	MGS	01-356/07:44:56		SSR 1B Data Disable	CSD1BX	01-356/07:33:05
7967	MGS	01-356/07:44:56		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-356/07:33:05
7968	MGS	01-356/07:44:57		NOTE: End Block (SSRMGR)		01-356/07:33:06
7969	MGS	01-356/07:45:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/07:34:05
7970	MGS	01-356/07:45:56		NOTE: Enter Solar Eclipse 12471		01-356/07:34:06
7971	MGS	01-356/07:48:38		NOTE: Enter Earth Occultation 12471		01-356/07:36:48
7972	MGS	01-356/07:48:38	34	NOTE: Loss Of X-Band Signal		
7973	MGS	01-356/07:48:38	45	NOTE: Loss Of X-Band Signal		
7974	MGS	01-356/07:49:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/07:37:22
7975	MGS	01-356/07:49:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/07:37:22
7976	MGS	01-356/07:49:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/07:37:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
7977	MGS	01-356/07:49:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/07:37:22
7978	MGS	01-356/07:49:14		NOTE: End EVP script		01-356/07:37:23
7979	MGS	01-356/07:49:14		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/07:37:23
7980	MGS	01-356/07:49:15		NOTE: End Block (MAP_RT)		01-356/07:37:24
7981	MGS	01-356/07:49:18		NOTE: End fixed Sub-Reflector for Radio Science		01-356/07:37:27
7982	MGS	01-356/07:49:26	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
7983	MGS	01-356/07:51:26	45	Range Modulation On: SUP=3.0dB		
7984	MGS	01-356/07:52:26	45	Begin Ranging Acquisition		
7985	MGS	01-356/08:07:31		: 01:39:30	RPAONX	01-356/07:55:40
7986	MGS	01-356/08:07:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/07:55:40
7987	MGS	01-356/08:09:16		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/07:57:25
7988	MGS	01-356/08:09:22		NOTE: Exit Earth Occultation 12471		01-356/07:57:31
7989	MGS	01-356/08:09:22	34	Acquisition Of X-Band Signal		
7990	MGS	01-356/08:09:22	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7991	MGS	01-356/08:09:22	45	Acquisition Of X-Band Signal		
7992	MGS	01-356/08:09:22	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7993	MGS	01-356/08:10:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/07:58:30
7994	MGS	01-356/08:10:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/07:58:30
7995	MGS	01-356/08:10:25		Command the PSE with included data word: 3990	SWPSEL	01-356/07:58:34
7996	MGS	01-356/08:10:26		Set eclipse egress script address: 0158	SWSEES	01-356/07:58:35
7997	MGS	01-356/08:13:07	34	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7998	MGS	01-356/08:13:07	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
7999	MGS	01-356/08:16:19		NOTE: Exit Planetary Atmosphere 12471		01-356/08:04:28
8000	MGS	01-356/08:16:45		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:19:37	AEMPB	01-356/08:04:54
8001	MGS	01-356/08:16:45		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-356/08:04:54
8002	MGS	01-356/08:16:45		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-356/08:04:54
8003	MGS	01-356/08:16:46		SSR 1B Data Enable	CSD1BE	01-356/08:04:55
8004	MGS	01-356/08:16:46		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-356/08:04:55
8005	MGS	01-356/08:16:46	34	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8006	MGS	01-356/08:16:46	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8007	MGS	01-356/08:26:08		NOTE: Exit Solar Eclipse 12471		01-356/08:14:17
8008	MGS	01-356/08:42:17		NOTE: Periapsis 12472 ----------		01-356/08:30:26
8009	MGS	01-356/08:51:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/08:39:16
8010	MGS	01-356/08:51:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/08:39:16
8011	MGS	01-356/08:51:08		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/08:39:17
8012	MGS	01-356/08:51:08		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/08:39:17
8013	MGS	01-356/09:03:56	45	NOTE: Transmitter Off in 15 minutes		
8014	MGS	01-356/09:13:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/09:01:17
8015	MGS	01-356/09:13:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/09:01:17
8016	MGS	01-356/09:16:56	45	Range Modulation Off		
8017	MGS	01-356/09:18:56	45	Transmitter Off		
8018	MGS	01-356/09:27:24		SSR 1B Data Disable	CSD1BX	01-356/09:15:33
8019	MGS	01-356/09:27:24		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-356/09:15:33
8020	MGS	01-356/09:27:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-356/09:15:33
8021	MGS	01-356/09:27:24	34	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8022	MGS	01-356/09:27:24	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8023	MGS	01-356/09:33:41		NOTE: Start Block (MAP_RT)		01-356/09:21:50
8024	MGS	01-356/09:33:42		: 00:21:35, 01:39:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:39, 01:19:13, 00:09:21	AEMINI	01-356/09:21:51
8025	MGS	01-356/09:33:42		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/09:21:51
8026	MGS	01-356/09:33:42		NOTE: Start EVP data return script		01-356/09:21:51
8027	MGS	01-356/09:33:43		: SE_2A, RTM, 01:19:12, MRC, 2001-356T10:04:22.000	AEMRTI	01-356/09:21:52
8028	MGS	01-356/09:39:46		NOTE: Enter Planetary Atmosphere 12472		01-356/09:27:55
8029	MGS	01-356/09:40:49		NOTE: Apoapsis 12472 -		01-356/09:28:58
8030	MGS	01-356/09:42:38	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8031	MGS	01-356/09:42:38	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8032	MGS	01-356/09:43:42		NOTE: Enter Solar Eclipse 12472		01-356/09:31:51
8033	MGS	01-356/09:43:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/09:31:51
8034	MGS	01-356/09:46:23		NOTE: Enter Earth Occultation 12472		01-356/09:34:31
8035	MGS	01-356/09:46:23	34	NOTE: Loss Of X-Band Signal		
8036	MGS	01-356/09:46:23	45	NOTE: Loss Of X-Band Signal		
8037	MGS	01-356/09:47:01		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/09:35:10
8038	MGS	01-356/09:47:02		NOTE: End EVP script		01-356/09:35:11
8039	MGS	01-356/09:47:03		NOTE: End Block (MAP_PB_ODY)		01-356/09:35:12
8040	MGS	01-356/09:47:13	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
8041	MGS	01-356/09:49:13	45	Range Modulation On: SUP=3.0dB		
8042	MGS	01-356/09:50:13	45	Begin Ranging Acquisition		
8043	MGS	01-356/10:01:32		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/09:49:41
8044	MGS	01-356/10:05:17		: 01:39:29	RPAONX	01-356/09:53:26
8045	MGS	01-356/10:05:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/09:53:26
8046	MGS	01-356/10:06:32		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/09:54:41
8047	MGS	01-356/10:06:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/09:54:41
8048	MGS	01-356/10:06:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/09:54:41
8049	MGS	01-356/10:06:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/09:54:41
8050	MGS	01-356/10:06:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/09:54:41
8051	MGS	01-356/10:07:10		NOTE: Exit Earth Occultation 12472		01-356/09:55:19
8052	MGS	01-356/10:07:10	34	Acquisition Of X-Band Signal		
8053	MGS	01-356/10:07:10	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8054	MGS	01-356/10:07:10	34	NOTE: Carrier Only -- No Telemetry Modulation		
8055	MGS	01-356/10:07:10	45	Acquisition Of X-Band Signal		
8056	MGS	01-356/10:07:10	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8057	MGS	01-356/10:07:10	45	NOTE: Carrier Only -- No Telemetry Modulation		
8058	MGS	01-356/10:08:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/09:56:17
8059	MGS	01-356/10:08:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/09:56:17
8060	MGS	01-356/10:08:13		Set eclipse egress script address: 019A	SWSEES	01-356/09:56:22
8061	MGS	01-356/10:14:06		NOTE: Exit Planetary Atmosphere 12472		01-356/10:02:15
8062	MGS	01-356/10:16:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/10:04:20
8063	MGS	01-356/10:16:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/10:04:20
8064	MGS	01-356/10:16:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/10:04:20
8065	MGS	01-356/10:16:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/10:04:20
8066	MGS	01-356/10:16:11	34	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8067	MGS	01-356/10:16:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8068	MGS	01-356/10:16:12		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/10:04:21
8069	MGS	01-356/10:16:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/10:04:21
8070	MGS	01-356/10:16:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/10:04:21
8071	MGS	01-356/10:16:12	34	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8072	MGS	01-356/10:16:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8073	MGS	01-356/10:16:16		NOTE: End fixed Sub-Reflector for Radio Science		01-356/10:04:25
8074	MGS	01-356/10:23:54		NOTE: Exit Solar Eclipse 12472		01-356/10:12:03
8075	MGS	01-356/10:40:00	65	Begin Pre-Cal		
8076	MGS	01-356/10:40:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
8077	MGS	01-356/10:40:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
8078	MGS	01-356/10:40:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
8079	MGS	01-356/10:40:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
8080	MGS	01-356/10:40:00	65	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
8081	MGS	01-356/10:40:00	65	Config: TGC: DEST=37		
8082	MGS	01-356/10:40:00	65	Config: TGC: BAND=X, BR=0.000000		
8083	MGS	01-356/10:40:00	65	Config: FSS: CH=2, PRI_FL=10000		
8084	MGS	01-356/10:40:00	65	Config: RSR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8085	MGS	01-356/10:40:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
8086	MGS	01-356/10:40:00	65	Config: BVR		
8087	MGS	01-356/10:40:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
8088	MGS	01-356/10:40:00	65	Config: MDA: SMPL=0.1		
8089	MGS	01-356/10:40:03		NOTE: Periapsis 12473 ----------		01-356/10:28:12
8090	MGS	01-356/10:44:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/10:33:02
8091	MGS	01-356/10:44:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/10:33:02
8092	MGS	01-356/10:44:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/10:33:03
8093	MGS	01-356/10:44:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/10:33:03
8094	MGS	01-356/11:01:37	45	NOTE: Transmitter Off in 15 minutes		
8095	MGS	01-356/11:06:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/10:55:03
8096	MGS	01-356/11:06:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/10:55:03
8097	MGS	01-356/11:14:38	45	Range Modulation Off		
8098	MGS	01-356/11:16:37	45	Transmitter Off		
8099	MGS	01-356/11:30:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/11:18:33
8100	MGS	01-356/11:31:25		NOTE: Start EVP data return script		01-356/11:19:34
8101	MGS	01-356/11:35:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/11:23:33
8102	MGS	01-356/11:35:24		: 00:09:21, FALSE	RDSCII	01-356/11:23:33
8103	MGS	01-356/11:35:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/11:23:33
8104	MGS	01-356/11:35:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/11:23:33
8105	MGS	01-356/11:35:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/11:23:33
8106	MGS	01-356/11:35:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/11:23:33
8107	MGS	01-356/11:35:24	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8108	MGS	01-356/11:35:24	34	NOTE: Carrier Only -- No Telemetry Modulation		
8109	MGS	01-356/11:35:24	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8110	MGS	01-356/11:35:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
8111	MGS	01-356/11:37:28		NOTE: Enter Planetary Atmosphere 12473		01-356/11:25:37
8112	MGS	01-356/11:38:35		NOTE: Apoapsis 12473 -		01-356/11:26:43
8113	MGS	01-356/11:41:26		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/11:29:34
8114	MGS	01-356/11:41:26		NOTE: Enter Solar Eclipse 12473		01-356/11:29:34
8115	MGS	01-356/11:44:05		NOTE: Enter Earth Occultation 12473		01-356/11:32:14
8116	MGS	01-356/11:44:05	34	NOTE: Loss Of X-Band Signal		
8117	MGS	01-356/11:44:05	45	NOTE: Loss Of X-Band Signal		
8118	MGS	01-356/11:44:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/11:32:54
8119	MGS	01-356/11:44:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/11:32:54
8120	MGS	01-356/11:44:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/11:32:54
8121	MGS	01-356/11:44:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/11:32:54
8122	MGS	01-356/11:44:46		NOTE: End EVP script		01-356/11:32:55
8123	MGS	01-356/11:44:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/11:32:55
8124	MGS	01-356/11:44:50		NOTE: End fixed Sub-Reflector for Radio Science		01-356/11:32:59
8125	MGS	01-356/11:50:00	45	End Tracking		
8126	MGS	01-356/11:59:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/11:47:24
8127	MGS	01-356/12:03:01		: 01:39:29	RPAONX	01-356/11:51:09
8128	MGS	01-356/12:03:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/11:51:09
8129	MGS	01-356/12:04:16		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/11:52:24
8130	MGS	01-356/12:04:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/11:52:24
8131	MGS	01-356/12:04:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/11:52:24
8132	MGS	01-356/12:04:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/11:52:24
8133	MGS	01-356/12:04:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/11:52:24
8134	MGS	01-356/12:04:46		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/11:52:54
8135	MGS	01-356/12:04:55		NOTE: Exit Earth Occultation 12473		01-356/11:53:04
8136	MGS	01-356/12:04:55	34	Acquisition Of X-Band Signal		
8137	MGS	01-356/12:04:55	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8138	MGS	01-356/12:04:55	34	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8139	MGS	01-356/12:05:00	45	End Post-Cal		
8140	MGS	01-356/12:05:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/11:54:03
8141	MGS	01-356/12:05:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/11:54:03
8142	MGS	01-356/12:06:00		Set eclipse egress script address: 01DC	SWSEES	01-356/11:54:08
8143	MGS	01-356/12:10:00	65	Begin Tracking		
8144	MGS	01-356/12:10:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8145	MGS	01-356/12:10:00	65	NOTE: Carrier Only -- No Telemetry Modulation		
8146	MGS	01-356/12:11:51		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-356/11:59:59
8147	MGS	01-356/12:11:51		NOTE: Exit Planetary Atmosphere 12473		01-356/12:00:00
8148	MGS	01-356/12:13:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/12:02:03
8149	MGS	01-356/12:13:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/12:02:03
8150	MGS	01-356/12:13:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/12:02:03
8151	MGS	01-356/12:13:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/12:02:03
8152	MGS	01-356/12:13:55	34	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8153	MGS	01-356/12:13:55	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8154	MGS	01-356/12:13:56		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/12:02:04
8155	MGS	01-356/12:13:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/12:02:04
8156	MGS	01-356/12:13:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/12:02:04
8157	MGS	01-356/12:13:56	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8158	MGS	01-356/12:13:56	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8159	MGS	01-356/12:14:00		NOTE: End fixed Sub-Reflector for Radio Science		01-356/12:02:08
8160	MGS	01-356/12:20:09	34	NOTE: Below Uplink Interlock Limit		
8161	MGS	01-356/12:21:37		NOTE: Exit Solar Eclipse 12473		01-356/12:09:46
8162	MGS	01-356/12:25:38	65	NOTE: Above Uplink Interlock Limit		
8163	MGS	01-356/12:30:00	34	End Tracking		
8164	MGS	01-356/12:37:47		NOTE: Periapsis 12474 ----------		01-356/12:25:55
8165	MGS	01-356/12:42:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/12:30:45
8166	MGS	01-356/12:42:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/12:30:45
8167	MGS	01-356/12:42:38		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/12:30:46
8168	MGS	01-356/12:42:38		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/12:30:46
8169	MGS	01-356/12:45:00	34	End Post-Cal		
8170	MGS	01-356/13:04:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/12:52:46
8171	MGS	01-356/13:04:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/12:52:46
8172	MGS	01-356/13:14:37		NOTE: Start Block (SSRMGR)		01-356/13:02:45
8173	MGS	01-356/13:14:37		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-356/13:02:45
8174	MGS	01-356/13:14:38		SSR 1B Data Enable	CSD1BE	01-356/13:02:46
8175	MGS	01-356/13:14:38		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-356/13:02:46
8176	MGS	01-356/13:25:00	63	Begin Pre-Cal		
8177	MGS	01-356/13:25:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
8178	MGS	01-356/13:25:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
8179	MGS	01-356/13:25:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
8180	MGS	01-356/13:25:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
8181	MGS	01-356/13:25:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
8182	MGS	01-356/13:25:00	63	Config: TGC: DEST=37		
8183	MGS	01-356/13:25:00	63	Config: TGC: BAND=X, BR=42666.666667		
8184	MGS	01-356/13:25:00	63	Config: FSS: CH=2, PRI_FL=10000		
8185	MGS	01-356/13:25:00	63	Config: RSR		
8186	MGS	01-356/13:25:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
8187	MGS	01-356/13:25:00	63	Config: BVR		
8188	MGS	01-356/13:25:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
8189	MGS	01-356/13:25:00	63	Config: MDA: SMPL=0.1		
8190	MGS	01-356/13:28:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/13:16:16
8191	MGS	01-356/13:29:07		NOTE: Start Block (MAP_PB_ODY)		01-356/13:17:15
8192	MGS	01-356/13:29:08		: 00:21:35, 01:39:30, FALSE, FALSE, FALSE, 00:01:15, 00:07:59, 01:22:34, 00:07:41	AEMINI	01-356/13:17:16

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8193	MGS	01-356/13:29:08		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/13:17:16
8194	MGS	01-356/13:29:08		NOTE: Start EVP data return script		01-356/13:17:16
8195	MGS	01-356/13:29:09		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-356T13:58:06.000	AEMPBI	01-356/13:17:17
8196	MGS	01-356/13:33:08		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/13:21:16
8197	MGS	01-356/13:33:08		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8880000, DUR=00:18:30		01-356/13:21:16
8198	MGS	01-356/13:33:08		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-356/13:21:16
8199	MGS	01-356/13:33:08		: 00:09:21, FALSE	RDSCII	01-356/13:21:16
8200	MGS	01-356/13:33:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/13:21:16
8201	MGS	01-356/13:33:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/13:21:16
8202	MGS	01-356/13:33:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/13:21:16
8203	MGS	01-356/13:33:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/13:21:16
8204	MGS	01-356/13:33:08	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8205	MGS	01-356/13:33:08	65	NOTE: Carrier Only -- No Telemetry Modulation		
8206	MGS	01-356/13:35:11		NOTE: Enter Planetary Atmosphere 12474		01-356/13:23:19
8207	MGS	01-356/13:36:25		NOTE: Apoapsis 12474 -		01-356/13:24:33
8208	MGS	01-356/13:38:08		SSR 1A Data Disable	CSD1AX	01-356/13:26:16
8209	MGS	01-356/13:38:08		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-356/13:26:16
8210	MGS	01-356/13:38:09		NOTE: End Block (SSRMGR)		01-356/13:26:17
8211	MGS	01-356/13:39:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/13:27:16
8212	MGS	01-356/13:39:08		NOTE: Enter Solar Eclipse 12474		01-356/13:27:16
8213	MGS	01-356/13:41:48		NOTE: Enter Earth Occultation 12474		01-356/13:29:56
8214	MGS	01-356/13:41:48	65	NOTE: Loss Of X-Band Signal		
8215	MGS	01-356/13:42:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/13:30:37
8216	MGS	01-356/13:42:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/13:30:37
8217	MGS	01-356/13:42:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/13:30:37
8218	MGS	01-356/13:42:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/13:30:37
8219	MGS	01-356/13:42:30		NOTE: End EVP script		01-356/13:30:38
8220	MGS	01-356/13:42:30		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/13:30:38
8221	MGS	01-356/13:42:31		NOTE: End Block (MAP_RT)		01-356/13:30:39
8222	MGS	01-356/13:42:34		NOTE: End fixed Sub-Reflector for Radio Science		01-356/13:30:42
8223	MGS	01-356/14:00:43		: 01:39:30	RPAONX	01-356/13:48:51
8224	MGS	01-356/14:00:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/13:48:51
8225	MGS	01-356/14:02:28		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/13:50:36
8226	MGS	01-356/14:02:38		NOTE: Exit Earth Occultation 12474		01-356/13:50:46
8227	MGS	01-356/14:02:38	65	Acquisition Of X-Band Signal		
8228	MGS	01-356/14:02:38	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8229	MGS	01-356/14:03:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/13:51:46
8230	MGS	01-356/14:03:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/13:51:46
8231	MGS	01-356/14:03:42		Command the PSE with included data word: 3990	SWPSEL	01-356/13:51:50
8232	MGS	01-356/14:03:43		Set eclipse egress script address: 0158	SWSEES	01-356/13:51:51
8233	MGS	01-356/14:09:34		NOTE: Exit Planetary Atmosphere 12474		01-356/13:57:42
8234	MGS	01-356/14:09:57		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:19:37	AEMPB	01-356/13:58:05
8235	MGS	01-356/14:09:57		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-356/13:58:05
8236	MGS	01-356/14:09:57		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-356/13:58:05
8237	MGS	01-356/14:09:58		SSR 1A Data Enable	CSD1AE	01-356/13:58:06
8238	MGS	01-356/14:09:58		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-356/13:58:06
8239	MGS	01-356/14:09:58	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8240	MGS	01-356/14:19:19		NOTE: Exit Solar Eclipse 12474		01-356/14:07:28
8241	MGS	01-356/14:35:16		NOTE: Periapsis 12475 ----------		01-356/14:23:24
8242	MGS	01-356/14:44:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/14:32:27
8243	MGS	01-356/14:44:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/14:32:27
8244	MGS	01-356/14:44:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/14:32:28
8245	MGS	01-356/14:44:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/14:32:28
8246	MGS	01-356/14:55:00	63	Begin Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8247	MGS	01-356/14:55:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8248	MGS	01-356/15:06:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/14:54:28
8249	MGS	01-356/15:06:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/14:54:28
8250	MGS	01-356/15:15:00	65	End Tracking		
8251	MGS	01-356/15:20:36		SSR 1A Data Disable	CSD1AX	01-356/15:08:44
8252	MGS	01-356/15:20:36		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-356/15:08:44
8253	MGS	01-356/15:20:36		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-356/15:08:44
8254	MGS	01-356/15:20:36	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8255	MGS	01-356/15:26:50		NOTE: Start Block (MAP_RT)		01-356/15:14:58
8256	MGS	01-356/15:26:51		: 00:21:35, 01:39:29, FALSE, TRUE, FALSE, 00:01:15, 00:09:39, 01:19:13, 00:09:21	AEMINI	01-356/15:14:59
8257	MGS	01-356/15:26:51		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/15:14:59
8258	MGS	01-356/15:26:51		NOTE: Start EVP data return script		01-356/15:14:59
8259	MGS	01-356/15:26:52		: SE_2A, RTM, 01:19:12, MRC, 2001-356T15:57:29.000	AEMRTI	01-356/15:15:00
8260	MGS	01-356/15:30:00	65	End Post-Cal		
8261	MGS	01-356/15:32:54		NOTE: Enter Planetary Atmosphere 12475		01-356/15:21:02
8262	MGS	01-356/15:33:53		NOTE: Apoapsis 12475 -		01-356/15:22:01
8263	MGS	01-356/15:36:51		NOTE: Enter Solar Eclipse 12475		01-356/15:24:59
8264	MGS	01-356/15:36:51		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/15:24:59
8265	MGS	01-356/15:39:30		NOTE: Enter Earth Occultation 12475		01-356/15:27:38
8266	MGS	01-356/15:39:30	63	NOTE: Loss Of X-Band Signal		
8267	MGS	01-356/15:40:13		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/15:28:21
8268	MGS	01-356/15:40:13		NOTE: End EVP script		01-356/15:28:21
8269	MGS	01-356/15:40:14		NOTE: End Block (MAP_PB_ODY)		01-356/15:28:22
8270	MGS	01-356/15:54:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/15:42:49
8271	MGS	01-356/15:58:26		: 01:39:29	RPAONX	01-356/15:46:34
8272	MGS	01-356/15:58:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/15:46:34
8273	MGS	01-356/15:59:41		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/15:47:49
8274	MGS	01-356/15:59:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/15:47:49
8275	MGS	01-356/15:59:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/15:47:49
8276	MGS	01-356/15:59:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/15:47:49
8277	MGS	01-356/15:59:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/15:47:49
8278	MGS	01-356/16:00:21		NOTE: Exit Earth Occultation 12475		01-356/15:48:29
8279	MGS	01-356/16:00:21	63	Acquisition Of X-Band Signal		
8280	MGS	01-356/16:00:21	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8281	MGS	01-356/16:00:21	63	NOTE: Carrier Only -- No Telemetry Modulation		
8282	MGS	01-356/16:01:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/15:49:28
8283	MGS	01-356/16:01:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/15:49:28
8284	MGS	01-356/16:01:25		Set eclipse egress script address: 019A	SWSEES	01-356/15:49:33
8285	MGS	01-356/16:07:16		NOTE: Exit Planetary Atmosphere 12475		01-356/15:55:24
8286	MGS	01-356/16:09:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/15:57:28
8287	MGS	01-356/16:09:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/15:57:28
8288	MGS	01-356/16:09:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/15:57:28
8289	MGS	01-356/16:09:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/15:57:28
8290	MGS	01-356/16:09:20	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8291	MGS	01-356/16:09:21		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/15:57:29
8292	MGS	01-356/16:09:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/15:57:29
8293	MGS	01-356/16:09:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/15:57:29
8294	MGS	01-356/16:09:21	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8295	MGS	01-356/16:09:25		NOTE: End fixed Sub-Reflector for Radio Science		01-356/15:57:33
8296	MGS	01-356/16:17:02		NOTE: Exit Solar Eclipse 12475		01-356/16:05:10
8297	MGS	01-356/16:32:45		NOTE: Periapsis 12476 ----------		01-356/16:20:53
8298	MGS	01-356/16:38:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/16:26:09
8299	MGS	01-356/16:38:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/16:26:09
8300	MGS	01-356/16:38:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/16:26:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8301	MGS	01-356/16:38:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/16:26:10
8302	MGS	01-356/17:00:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/16:48:10
8303	MGS	01-356/17:00:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/16:48:10
8304	MGS	01-356/17:23:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/17:11:41
8305	MGS	01-356/17:24:35		NOTE: Start EVP data return script		01-356/17:12:43
8306	MGS	01-356/17:28:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/17:16:41
8307	MGS	01-356/17:28:33		: 00:09:21, FALSE	RDSCII	01-356/17:16:41
8308	MGS	01-356/17:28:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/17:16:41
8309	MGS	01-356/17:28:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/17:16:41
8310	MGS	01-356/17:28:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/17:16:41
8311	MGS	01-356/17:28:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/17:16:41
8312	MGS	01-356/17:28:33	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8313	MGS	01-356/17:28:33	63	NOTE: Carrier Only -- No Telemetry Modulation		
8314	MGS	01-356/17:30:36		NOTE: Enter Planetary Atmosphere 12476		01-356/17:18:44
8315	MGS	01-356/17:31:30		NOTE: Apoapsis 12476 -		01-356/17:19:38
8316	MGS	01-356/17:34:35		NOTE: Enter Solar Eclipse 12476		01-356/17:22:43
8317	MGS	01-356/17:34:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/17:22:43
8318	MGS	01-356/17:37:10		NOTE: Enter Earth Occultation 12476		01-356/17:25:18
8319	MGS	01-356/17:37:10	63	NOTE: Loss Of X-Band Signal		
8320	MGS	01-356/17:37:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/17:26:02
8321	MGS	01-356/17:37:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/17:26:02
8322	MGS	01-356/17:37:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/17:26:02
8323	MGS	01-356/17:37:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/17:26:02
8324	MGS	01-356/17:37:55		NOTE: End EVP script		01-356/17:26:03
8325	MGS	01-356/17:37:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/17:26:03
8326	MGS	01-356/17:37:59		NOTE: End fixed Sub-Reflector for Radio Science		01-356/17:26:07
8327	MGS	01-356/17:52:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/17:40:33
8328	MGS	01-356/17:56:10		: 01:39:29	RPAONX	01-356/17:44:18
8329	MGS	01-356/17:56:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/17:44:18
8330	MGS	01-356/17:57:25		: 00:00:30, 00:09:39, FALSE	RDSCIE	01-356/17:45:33
8331	MGS	01-356/17:57:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/17:45:33
8332	MGS	01-356/17:57:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/17:45:33
8333	MGS	01-356/17:57:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/17:45:33
8334	MGS	01-356/17:57:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/17:45:33
8335	MGS	01-356/17:57:55		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/17:46:03
8336	MGS	01-356/17:58:08		NOTE: Exit Earth Occultation 12476		01-356/17:46:15
8337	MGS	01-356/17:58:08	63	Acquisition Of X-Band Signal		
8338	MGS	01-356/17:58:08	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8339	MGS	01-356/17:58:08	63	NOTE: Carrier Only -- No Telemetry Modulation		
8340	MGS	01-356/17:59:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/17:47:10
8341	MGS	01-356/17:59:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/17:47:10
8342	MGS	01-356/17:59:07		Set eclipse egress script address: 01DC	SWSEES	01-356/17:47:15
8343	MGS	01-356/18:05:00		NOTE: Exit Planetary Atmosphere 12476		01-356/17:53:08
8344	MGS	01-356/18:07:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/17:55:12
8345	MGS	01-356/18:07:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/17:55:12
8346	MGS	01-356/18:07:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/17:55:12
8347	MGS	01-356/18:07:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/17:55:12
8348	MGS	01-356/18:07:04	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8349	MGS	01-356/18:07:05		: RTM, MRC, 01:19:12, S&E_2A, FALSE, 00:09:22	AEMRT	01-356/17:55:13
8350	MGS	01-356/18:07:05		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/17:55:13
8351	MGS	01-356/18:07:05		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/17:55:13
8352	MGS	01-356/18:07:05	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8353	MGS	01-356/18:07:09		NOTE: End fixed Sub-Reflector for Radio Science		01-356/17:55:17
8354	MGS	01-356/18:14:47		NOTE: Exit Solar Eclipse 12476		01-356/18:02:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8355	MGS	01-356/18:30:49		NOTE: Periapsis 12477 ----------		01-356/18:18:56
8356	MGS	01-356/18:35:00	15	Begin Pre-Cal		
8357	MGS	01-356/18:35:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
8358	MGS	01-356/18:35:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
8359	MGS	01-356/18:35:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
8360	MGS	01-356/18:35:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
8361	MGS	01-356/18:35:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
8362	MGS	01-356/18:35:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
8363	MGS	01-356/18:35:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
8364	MGS	01-356/18:35:00	15	Config: TGC: DEST=37		
8365	MGS	01-356/18:35:00	15	Config: TGC: BAND=X, BR=0.000000		
8366	MGS	01-356/18:35:00	15	Config: FSS: CH=2, PRI_FL=10000		
8367	MGS	01-356/18:35:00	15	Config: RSR		
8368	MGS	01-356/18:35:00	15	Config: TXL		
8369	MGS	01-356/18:35:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
8370	MGS	01-356/18:35:00	15	Config: BVR		
8371	MGS	01-356/18:35:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
8372	MGS	01-356/18:35:00	15	Config: MDA: SMPL=0.1		
8373	MGS	01-356/18:35:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
8374	MGS	01-356/18:35:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
8375	MGS	01-356/18:35:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
8376	MGS	01-356/18:35:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/18:23:53
8377	MGS	01-356/18:35:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/18:23:53
8378	MGS	01-356/18:35:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/18:23:54
8379	MGS	01-356/18:35:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/18:23:54
8380	MGS	01-356/18:57:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/18:45:54
8381	MGS	01-356/18:57:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/18:45:54
8382	MGS	01-356/19:07:53		NOTE: Start Block (SSRMGR)		01-356/18:56:00
8383	MGS	01-356/19:07:53		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-356/18:56:00
8384	MGS	01-356/19:07:54		SSR 1A Data Enable	CSD1AE	01-356/18:56:01
8385	MGS	01-356/19:07:54		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-356/18:56:01
8386	MGS	01-356/19:21:17		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/19:09:25
8387	MGS	01-356/19:22:21		NOTE: Start Block (MAP_PB_ODY)		01-356/19:10:28
8388	MGS	01-356/19:22:22		: 00:21:35, 01:39:30, FALSE, FALSE, FALSE, 00:01:15, 00:07:59, 01:22:34, 00:07:41	AEMINI	01-356/19:10:29
8389	MGS	01-356/19:22:22		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/19:10:29
8390	MGS	01-356/19:22:22		NOTE: Start EVP data return script		01-356/19:10:29
8391	MGS	01-356/19:22:23		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-356T19:51:19.000	AEMPBI	01-356/19:10:30
8392	MGS	01-356/19:26:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/19:14:25
8393	MGS	01-356/19:26:18		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8832000, DUR=00:18:24		01-356/19:14:25
8394	MGS	01-356/19:26:18		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-356/19:14:25
8395	MGS	01-356/19:26:18		: 00:09:21, FALSE	RDSCII	01-356/19:14:25
8396	MGS	01-356/19:26:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/19:14:25
8397	MGS	01-356/19:26:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/19:14:25
8398	MGS	01-356/19:26:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/19:14:25
8399	MGS	01-356/19:26:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/19:14:25
8400	MGS	01-356/19:26:18	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8401	MGS	01-356/19:26:18	63	NOTE: Carrier Only -- No Telemetry Modulation		
8402	MGS	01-356/19:28:21		NOTE: Enter Planetary Atmosphere 12477		01-356/19:16:28
8403	MGS	01-356/19:29:43		NOTE: Apoapsis 12477 -		01-356/19:17:50
8404	MGS	01-356/19:31:22		SSR 1B Data Disable	CSD1BX	01-356/19:19:29
8405	MGS	01-356/19:31:22		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-356/19:19:29
8406	MGS	01-356/19:31:23		NOTE: End Block (SSRMGR)		01-356/19:19:30
8407	MGS	01-356/19:32:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/19:20:29
8408	MGS	01-356/19:32:22		NOTE: Enter Solar Eclipse 12477		01-356/19:20:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8409	MGS	01-356/19:34:54		NOTE: Enter Earth Occultation 12477		01-356/19:23:01
8410	MGS	01-356/19:34:54	63	NOTE: Loss Of X-Band Signal		
8411	MGS	01-356/19:35:00	15	Begin Tracking		
8412	MGS	01-356/19:35:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/19:23:46
8413	MGS	01-356/19:35:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/19:23:46
8414	MGS	01-356/19:35:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/19:23:46
8415	MGS	01-356/19:35:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/19:23:46
8416	MGS	01-356/19:35:39		NOTE: End EVP script		01-356/19:23:47
8417	MGS	01-356/19:35:40		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/19:23:47
8418	MGS	01-356/19:35:40		NOTE: End Block (MAP_RT)		01-356/19:23:48
8419	MGS	01-356/19:35:43		NOTE: End fixed Sub-Reflector for Radio Science		01-356/19:23:51
8420	MGS	01-356/19:46:59	15	NOTE: Above Uplink Interlock Limit		
8421	MGS	01-356/19:50:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
8422	MGS	01-356/19:52:00	15	Range Modulation On: SUP=3.0dB		
8423	MGS	01-356/19:53:00	15	Begin Ranging Acquisition		
8424	MGS	01-356/19:53:57		: 01:39:30	RPAONX	01-356/19:42:04
8425	MGS	01-356/19:53:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/19:42:04
8426	MGS	01-356/19:55:00	63	End Tracking		
8427	MGS	01-356/19:55:42		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/19:43:49
8428	MGS	01-356/19:55:55		NOTE: Exit Earth Occultation 12477		01-356/19:44:03
8429	MGS	01-356/19:55:55	15	Acquisition Of X-Band Signal		
8430	MGS	01-356/19:55:55	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8431	MGS	01-356/19:56:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/19:44:54
8432	MGS	01-356/19:56:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/19:44:54
8433	MGS	01-356/19:56:51		Command the PSE with included data word: 3990	SWPSEL	01-356/19:44:58
8434	MGS	01-356/19:56:52		Set eclipse egress script address: 0158	SWSEES	01-356/19:44:59
8435	MGS	01-356/20:02:47		NOTE: Exit Planetary Atmosphere 12477		01-356/19:50:54
8436	MGS	01-356/20:03:11		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:19:37	AEMPB	01-356/19:51:18
8437	MGS	01-356/20:03:11		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-356/19:51:18
8438	MGS	01-356/20:03:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-356/19:51:18
8439	MGS	01-356/20:03:12		SSR 1B Data Enable	CSD1BE	01-356/19:51:19
8440	MGS	01-356/20:03:12		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-356/19:51:19
8441	MGS	01-356/20:03:12	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8442	MGS	01-356/20:10:00	63	End Post-Cal		
8443	MGS	01-356/20:12:34		NOTE: Exit Solar Eclipse 12477		01-356/20:00:41
8444	MGS	01-356/20:13:45	15	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8445	MGS	01-356/20:29:01		NOTE: Periapsis 12478 ----------		01-356/20:17:09
8446	MGS	01-356/20:37:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/20:25:40
8447	MGS	01-356/20:37:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/20:25:40
8448	MGS	01-356/20:37:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/20:25:41
8449	MGS	01-356/20:37:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/20:25:41
8450	MGS	01-356/20:50:12	15	NOTE: Transmitter Off in 15 minutes		
8451	MGS	01-356/20:59:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/20:47:41
8452	MGS	01-356/20:59:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/20:47:41
8453	MGS	01-356/21:03:12	15	Range Modulation Off		
8454	MGS	01-356/21:05:12	15	Transmitter Off		
8455	MGS	01-356/21:13:50		SSR 1B Data Disable	CSD1BX	01-356/21:01:57
8456	MGS	01-356/21:13:50		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-356/21:01:57
8457	MGS	01-356/21:13:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-356/21:01:57
8458	MGS	01-356/21:13:50	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8459	MGS	01-356/21:20:08		NOTE: Start Block (MAP_RT)		01-356/21:08:15
8460	MGS	01-356/21:20:09		: 00:21:49, 01:39:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:31, 01:19:02, 00:09:13	AEMINI	01-356/21:08:16
8461	MGS	01-356/21:20:09		Enable sending eclipse ingress script when array power disappears	SWEISE	01-356/21:08:16
8462	MGS	01-356/21:20:09		NOTE: Start EVP data return script		01-356/21:08:16

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8463	MGS	01-356/21:20:10		: SE_2A, RTM, 01:19:01, MRC, 2001-356T21:50:53.000	AEMRTI	01-356/21:08:17
8464	MGS	01-356/21:26:09		NOTE: Enter Planetary Atmosphere 12478		01-356/21:14:16
8465	MGS	01-356/21:27:57		NOTE: Apoapsis 12478 -		01-356/21:16:04
8466	MGS	01-356/21:28:57	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8467	MGS	01-356/21:30:09		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/21:18:16
8468	MGS	01-356/21:30:09		NOTE: Enter Solar Eclipse 12478		01-356/21:18:17
8469	MGS	01-356/21:32:42		NOTE: Enter Earth Occultation 12478		01-356/21:20:49
8470	MGS	01-356/21:32:42	15	NOTE: Loss Of X-Band Signal		
8471	MGS	01-356/21:33:27		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/21:21:34
8472	MGS	01-356/21:33:27		NOTE: End EVP script		01-356/21:21:34
8473	MGS	01-356/21:33:28		NOTE: End Block (MAP_PB_ODY)		01-356/21:21:35
8474	MGS	01-356/21:33:43	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
8475	MGS	01-356/21:35:43	15	Range Modulation On: SUP=3.0dB		
8476	MGS	01-356/21:36:43	15	Begin Ranging Acquisition		
8477	MGS	01-356/21:48:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/21:36:21
8478	MGS	01-356/21:51:58		: 01:39:02	RPAONX	01-356/21:40:05
8479	MGS	01-356/21:51:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/21:40:05
8480	MGS	01-356/21:53:13		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-356/21:41:20
8481	MGS	01-356/21:53:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/21:41:20
8482	MGS	01-356/21:53:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/21:41:20
8483	MGS	01-356/21:53:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/21:41:20
8484	MGS	01-356/21:53:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/21:41:20
8485	MGS	01-356/21:53:43		NOTE: Exit Earth Occultation 12478		01-356/21:41:50
8486	MGS	01-356/21:53:43	15	Acquisition Of X-Band Signal		
8487	MGS	01-356/21:53:43	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8488	MGS	01-356/21:53:43	15	NOTE: Carrier Only -- No Telemetry Modulation		
8489	MGS	01-356/21:54:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/21:42:41
8490	MGS	01-356/21:54:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/21:42:41
8491	MGS	01-356/21:54:39		Set eclipse egress script address: 019A	SWSEES	01-356/21:42:46
8492	MGS	01-356/22:00:35		NOTE: Exit Planetary Atmosphere 12478		01-356/21:48:42
8493	MGS	01-356/22:02:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/21:50:51
8494	MGS	01-356/22:02:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/21:50:51
8495	MGS	01-356/22:02:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/21:50:51
8496	MGS	01-356/22:02:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/21:50:51
8497	MGS	01-356/22:02:44	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8498	MGS	01-356/22:02:45		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-356/21:50:52
8499	MGS	01-356/22:02:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/21:50:52
8500	MGS	01-356/22:02:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/21:50:52
8501	MGS	01-356/22:02:45	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8502	MGS	01-356/22:02:49		NOTE: End fixed Sub-Reflector for Radio Science		01-356/21:50:57
8503	MGS	01-356/22:10:22		NOTE: Exit Solar Eclipse 12478		01-356/21:58:29
8504	MGS	01-356/22:27:00		NOTE: Periapsis 12479 ----------		01-356/22:15:07
8505	MGS	01-356/22:31:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-356/22:19:28
8506	MGS	01-356/22:31:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-356/22:19:28
8507	MGS	01-356/22:31:22		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-356/22:19:29
8508	MGS	01-356/22:31:22		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-356/22:19:29
8509	MGS	01-356/22:47:58	15	NOTE: Transmitter Off in 15 minutes		
8510	MGS	01-356/22:53:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-356/22:41:29
8511	MGS	01-356/22:53:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-356/22:41:29
8512	MGS	01-356/23:00:59	15	Range Modulation Off		
8513	MGS	01-356/23:02:58	15	Transmitter Off		
8514	MGS	01-356/23:16:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/23:04:54
8515	MGS	01-356/23:17:54		NOTE: Start EVP data return script		01-356/23:06:01
8516	MGS	01-356/23:21:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-356/23:09:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8517	MGS	01-356/23:21:46		: 00:09:13, FALSE	RDSCII	01-356/23:09:53
8518	MGS	01-356/23:21:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/23:09:53
8519	MGS	01-356/23:21:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/23:09:53
8520	MGS	01-356/23:21:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/23:09:53
8521	MGS	01-356/23:21:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/23:09:53
8522	MGS	01-356/23:21:46	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8523	MGS	01-356/23:21:46	15	NOTE: Carrier Only -- No Telemetry Modulation		
8524	MGS	01-356/23:23:56		NOTE: Enter Planetary Atmosphere 12479		01-356/23:12:03
8525	MGS	01-356/23:25:42		NOTE: Apoapsis 12479 -		01-356/23:13:49
8526	MGS	01-356/23:27:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-356/23:16:01
8527	MGS	01-356/23:27:55		NOTE: Enter Solar Eclipse 12479		01-356/23:16:02
8528	MGS	01-356/23:30:30		NOTE: Enter Earth Occultation 12479		01-356/23:18:36
8529	MGS	01-356/23:30:30	15	NOTE: Loss Of X-Band Signal		
8530	MGS	01-356/23:30:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/23:19:06
8531	MGS	01-356/23:30:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/23:19:06
8532	MGS	01-356/23:30:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/23:19:06
8533	MGS	01-356/23:30:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/23:19:06
8534	MGS	01-356/23:31:00		Turn off the MOT Exciter and RPA beam	STRPAF	01-356/23:19:07
8535	MGS	01-356/23:31:01		NOTE: End EVP script		01-356/23:19:08
8536	MGS	01-356/23:31:05		NOTE: End fixed Sub-Reflector for Radio Science		01-356/23:19:12
8537	MGS	01-356/23:31:29	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
8538	MGS	01-356/23:33:29	15	Range Modulation On: SUP=3.0dB		
8539	MGS	01-356/23:34:29	15	Begin Ranging Acquisition		
8540	MGS	01-356/23:45:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-356/23:34:06
8541	MGS	01-356/23:49:43		: 01:39:02	RPAONX	01-356/23:37:50
8542	MGS	01-356/23:49:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-356/23:37:50
8543	MGS	01-356/23:50:58		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-356/23:39:05
8544	MGS	01-356/23:50:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-356/23:39:05
8545	MGS	01-356/23:50:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-356/23:39:05
8546	MGS	01-356/23:50:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-356/23:39:05
8547	MGS	01-356/23:50:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-356/23:39:05
8548	MGS	01-356/23:51:28		Disables autonomous command to send eclipse ingress script	SWEISX	01-356/23:39:35
8549	MGS	01-356/23:51:30		NOTE: Exit Earth Occultation 12479		01-356/23:39:37
8550	MGS	01-356/23:51:30	15	Acquisition Of X-Band Signal		
8551	MGS	01-356/23:51:30	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8552	MGS	01-356/23:51:30	15	NOTE: Carrier Only -- No Telemetry Modulation		
8553	MGS	01-356/23:52:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-356/23:40:29
8554	MGS	01-356/23:52:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-356/23:40:29
8555	MGS	01-356/23:52:27		Set eclipse egress script address: 01DC	SWSEES	01-356/23:40:34
8556	MGS	01-356/23:58:23		NOTE: Exit Planetary Atmosphere 12479		01-356/23:46:30
8557	MGS	01-357/00:00:00		Light Time: OWLT = 11:53, RTLT = 23:46		
8558	MGS	01-357/00:00:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-356/23:48:36
8559	MGS	01-357/00:00:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-356/23:48:36
8560	MGS	01-357/00:00:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-356/23:48:36
8561	MGS	01-357/00:00:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-356/23:48:36
8562	MGS	01-357/00:00:29	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8563	MGS	01-357/00:00:30		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-356/23:48:37
8564	MGS	01-357/00:00:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-356/23:48:37
8565	MGS	01-357/00:00:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-356/23:48:37
8566	MGS	01-357/00:00:30	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8567	MGS	01-357/00:00:35		NOTE: End fixed Sub-Reflector for Radio Science		01-356/23:48:42
8568	MGS	01-357/00:08:07		NOTE: Exit Solar Eclipse 12479		01-356/23:56:14
8569	MGS	01-357/00:10:00	34	Begin Pre-Cal		
8570	MGS	01-357/00:10:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8571	MGS	01-357/00:10:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
8572	MGS	01-357/00:10:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
8573	MGS	01-357/00:10:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
8574	MGS	01-357/00:10:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
8575	MGS	01-357/00:10:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
8576	MGS	01-357/00:10:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
8577	MGS	01-357/00:10:00	34	Config: TGC: DEST=37		
8578	MGS	01-357/00:10:00	34	Config: TGC: BAND=X, BR=40000.000000		
8579	MGS	01-357/00:10:00	34	Config: FSS: CH=2, PRI_FL=10000		
8580	MGS	01-357/00:10:00	34	Config: RSR		
8581	MGS	01-357/00:10:00	34	Config: TXL		
8582	MGS	01-357/00:10:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
8583	MGS	01-357/00:10:00	34	Config: BVR		
8584	MGS	01-357/00:10:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
8585	MGS	01-357/00:10:00	34	Config: MDA: SMPL=0.1		
8586	MGS	01-357/00:10:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
8587	MGS	01-357/00:10:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
8588	MGS	01-357/00:10:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
8589	MGS	01-357/00:24:30		NOTE: Periapsis 12480 ----------		01-357/00:12:37
8590	MGS	01-357/00:29:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/00:17:13
8591	MGS	01-357/00:29:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/00:17:13
8592	MGS	01-357/00:29:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/00:17:14
8593	MGS	01-357/00:29:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/00:17:14
8594	MGS	01-357/00:45:39	15	NOTE: Transmitter Off in 15 minutes		
8595	MGS	01-357/00:51:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/00:39:14
8596	MGS	01-357/00:51:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/00:39:14
8597	MGS	01-357/00:58:40	15	Range Modulation Off		
8598	MGS	01-357/01:00:39	15	Transmitter Off		
8599	MGS	01-357/01:01:07		NOTE: Start Block (SSRMGR)		01-357/00:49:13
8600	MGS	01-357/01:01:07		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-357/00:49:13
8601	MGS	01-357/01:01:08		SSR 1B Data Enable	CSD1BE	01-357/00:49:14
8602	MGS	01-357/01:01:08		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-357/00:49:14
8603	MGS	01-357/01:10:00	34	Begin Tracking		
8604	MGS	01-357/01:10:00	34	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8605	MGS	01-357/01:13:21	34	NOTE: Above Uplink Interlock Limit		
8606	MGS	01-357/01:14:32		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/01:02:39
8607	MGS	01-357/01:15:37		NOTE: Start Block (MAP_PB_ODY)		01-357/01:03:43
8608	MGS	01-357/01:15:38		: 00:21:49, 01:39:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:51, 01:22:23, 00:07:33	AEMINI	01-357/01:03:44
8609	MGS	01-357/01:15:38		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/01:03:44
8610	MGS	01-357/01:15:38		NOTE: Start EVP data return script		01-357/01:03:44
8611	MGS	01-357/01:15:39		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-357T01:44:39.000	AEMPBI	01-357/01:03:45
8612	MGS	01-357/01:19:32		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/01:07:38
8613	MGS	01-357/01:19:32		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8832000, DUR=00:18:24		01-357/01:07:38
8614	MGS	01-357/01:19:32		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-357/01:07:38
8615	MGS	01-357/01:19:32		: 00:09:13, FALSE	RDSCII	01-357/01:07:38
8616	MGS	01-357/01:19:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/01:07:38
8617	MGS	01-357/01:19:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/01:07:38
8618	MGS	01-357/01:19:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/01:07:38
8619	MGS	01-357/01:19:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/01:07:38
8620	MGS	01-357/01:19:32	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8621	MGS	01-357/01:19:32	15	NOTE: Carrier Only -- No Telemetry Modulation		
8622	MGS	01-357/01:19:32	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8623	MGS	01-357/01:19:32	34	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8624	MGS	01-357/01:20:00	15	End Tracking		
8625	MGS	01-357/01:21:38		NOTE: Enter Planetary Atmosphere 12480		01-357/01:09:44
8626	MGS	01-357/01:23:02		NOTE: Apoapsis 12480 -		01-357/01:11:09
8627	MGS	01-357/01:24:38		SSR 1A Data Disable	CSD1AX	01-357/01:12:44
8628	MGS	01-357/01:24:38		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-357/01:12:44
8629	MGS	01-357/01:24:39		NOTE: End Block (SSRMGR)		01-357/01:12:45
8630	MGS	01-357/01:25:37		NOTE: Enter Solar Eclipse 12480		01-357/01:13:44
8631	MGS	01-357/01:25:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/01:13:44
8632	MGS	01-357/01:28:11		NOTE: Enter Earth Occultation 12480		01-357/01:16:18
8633	MGS	01-357/01:28:11	34	NOTE: Loss Of X-Band Signal		
8634	MGS	01-357/01:28:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/01:16:51
8635	MGS	01-357/01:28:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/01:16:51
8636	MGS	01-357/01:28:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/01:16:51
8637	MGS	01-357/01:28:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/01:16:51
8638	MGS	01-357/01:28:46		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/01:16:52
8639	MGS	01-357/01:28:46		NOTE: End EVP script		01-357/01:16:53
8640	MGS	01-357/01:28:47		NOTE: End Block (MAP_RT)		01-357/01:16:54
8641	MGS	01-357/01:28:50		NOTE: End fixed Sub-Reflector for Radio Science		01-357/01:16:57
8642	MGS	01-357/01:29:12	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8643	MGS	01-357/01:31:13	34	Range Modulation On: SUP=3.0dB		
8644	MGS	01-357/01:32:13	34	Begin Ranging Acquisition		
8645	MGS	01-357/01:35:00	15	End Post-Cal		
8646	MGS	01-357/01:47:27		: 01:39:03	RPAONX	01-357/01:35:33
8647	MGS	01-357/01:47:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/01:35:33
8648	MGS	01-357/01:49:12		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/01:37:18
8649	MGS	01-357/01:49:14		NOTE: Exit Earth Occultation 12480		01-357/01:37:20
8650	MGS	01-357/01:49:14	34	Acquisition Of X-Band Signal		
8651	MGS	01-357/01:49:14	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8652	MGS	01-357/01:50:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/01:38:14
8653	MGS	01-357/01:50:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/01:38:14
8654	MGS	01-357/01:50:12		Command the PSE with included data word: 3990	SWPSEL	01-357/01:38:18
8655	MGS	01-357/01:50:13		Set eclipse egress script address: 0158	SWSEES	01-357/01:38:19
8656	MGS	01-357/01:52:59	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8657	MGS	01-357/01:56:06		NOTE: Exit Planetary Atmosphere 12480		01-357/01:44:13
8658	MGS	01-357/01:56:33		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:19:18	AEMPB	01-357/01:44:39
8659	MGS	01-357/01:56:33		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-357/01:44:39
8660	MGS	01-357/01:56:33		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-357/01:44:39
8661	MGS	01-357/01:56:34		SSR 1A Data Enable	CSD1AE	01-357/01:44:40
8662	MGS	01-357/01:56:34		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-357/01:44:40
8663	MGS	01-357/01:56:34	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8664	MGS	01-357/02:05:49		NOTE: Exit Solar Eclipse 12480		01-357/01:53:56
8665	MGS	01-357/02:21:53		NOTE: Periapsis 12481 ----------		01-357/02:10:00
8666	MGS	01-357/02:30:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/02:18:54
8667	MGS	01-357/02:30:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/02:18:54
8668	MGS	01-357/02:30:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/02:18:55
8669	MGS	01-357/02:30:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/02:18:55
8670	MGS	01-357/02:43:16	34	NOTE: Transmitter Off in 15 minutes		
8671	MGS	01-357/02:52:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/02:40:55
8672	MGS	01-357/02:52:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/02:40:55
8673	MGS	01-357/02:56:17	34	Range Modulation Off		
8674	MGS	01-357/02:58:16	34	Transmitter Off		
8675	MGS	01-357/03:07:12		SSR 1A Data Disable	CSD1AX	01-357/02:55:18
8676	MGS	01-357/03:07:12		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-357/02:55:18
8677	MGS	01-357/03:07:12		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-357/02:55:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8678	MGS	01-357/03:07:12	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8679	MGS	01-357/03:13:17		NOTE: Start Block (MAP_RT)		01-357/03:01:23
8680	MGS	01-357/03:13:18		: 00:21:49, 01:39:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:31, 01:19:02, 00:09:13	AEMINI	01-357/03:01:24
8681	MGS	01-357/03:13:18		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/03:01:24
8682	MGS	01-357/03:13:18		NOTE: Start EVP data return script		01-357/03:01:24
8683	MGS	01-357/03:13:19		: SE_2A, RTM, 01:19:01, MRC, 2001-357T03:44:01.000	AEMRTI	01-357/03:01:25
8684	MGS	01-357/03:19:17		NOTE: Enter Planetary Atmosphere 12481		01-357/03:07:23
8685	MGS	01-357/03:20:47		NOTE: Apoapsis 12481 -		01-357/03:08:53
8686	MGS	01-357/03:22:04	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8687	MGS	01-357/03:23:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/03:11:24
8688	MGS	01-357/03:23:18		NOTE: Enter Solar Eclipse 12481		01-357/03:11:24
8689	MGS	01-357/03:25:49		NOTE: Enter Earth Occultation 12481		01-357/03:13:55
8690	MGS	01-357/03:25:49	34	NOTE: Loss Of X-Band Signal		
8691	MGS	01-357/03:26:29		NOTE: End EVP script		01-357/03:14:36
8692	MGS	01-357/03:26:30		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/03:14:36
8693	MGS	01-357/03:26:30		NOTE: End Block (MAP_PB_ODY)		01-357/03:14:37
8694	MGS	01-357/03:26:54	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8695	MGS	01-357/03:28:55	34	Range Modulation On: SUP=3.0dB		
8696	MGS	01-357/03:29:55	34	Begin Ranging Acquisition		
8697	MGS	01-357/03:41:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/03:29:28
8698	MGS	01-357/03:45:07		: 01:39:02	RPAONX	01-357/03:33:13
8699	MGS	01-357/03:45:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/03:33:13
8700	MGS	01-357/03:46:22		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/03:34:28
8701	MGS	01-357/03:46:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/03:34:28
8702	MGS	01-357/03:46:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/03:34:28
8703	MGS	01-357/03:46:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/03:34:28
8704	MGS	01-357/03:46:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/03:34:28
8705	MGS	01-357/03:46:57		NOTE: Exit Earth Occultation 12481		01-357/03:35:03
8706	MGS	01-357/03:46:57	34	Acquisition Of X-Band Signal		
8707	MGS	01-357/03:46:57	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8708	MGS	01-357/03:46:57	34	NOTE: Carrier Only -- No Telemetry Modulation		
8709	MGS	01-357/03:47:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/03:35:55
8710	MGS	01-357/03:47:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/03:35:55
8711	MGS	01-357/03:47:54		Set eclipse egress script address: 019A	SWSEES	01-357/03:36:00
8712	MGS	01-357/03:53:47		NOTE: Exit Planetary Atmosphere 12481		01-357/03:41:53
8713	MGS	01-357/03:55:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/03:43:59
8714	MGS	01-357/03:55:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/03:43:59
8715	MGS	01-357/03:55:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/03:43:59
8716	MGS	01-357/03:55:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/03:43:59
8717	MGS	01-357/03:55:53	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8718	MGS	01-357/03:55:54		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/03:44:00
8719	MGS	01-357/03:55:54		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/03:44:00
8720	MGS	01-357/03:55:54		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/03:44:00
8721	MGS	01-357/03:55:54	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8722	MGS	01-357/03:55:58		NOTE: End fixed Sub-Reflector for Radio Science		01-357/03:44:04
8723	MGS	01-357/04:03:30		NOTE: Exit Solar Eclipse 12481		01-357/03:51:36
8724	MGS	01-357/04:19:35		NOTE: Periapsis 12482 ----------		01-357/04:07:41
8725	MGS	01-357/04:24:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/04:12:35
8726	MGS	01-357/04:24:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/04:12:35
8727	MGS	01-357/04:24:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/04:12:36
8728	MGS	01-357/04:24:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/04:12:36
8729	MGS	01-357/04:41:00	34	NOTE: Transmitter Off in 15 minutes		
8730	MGS	01-357/04:46:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/04:34:36
8731	MGS	01-357/04:46:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/04:34:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8732	MGS	01-357/04:54:01	34	Range Modulation Off		
8733	MGS	01-357/04:56:00	34	Transmitter Off		
8734	MGS	01-357/05:09:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/04:58:01
8735	MGS	01-357/05:11:03		NOTE: Start EVP data return script		01-357/04:59:09
8736	MGS	01-357/05:14:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/05:03:01
8737	MGS	01-357/05:14:55		: 00:09:13, FALSE	RDSCII	01-357/05:03:01
8738	MGS	01-357/05:14:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/05:03:01
8739	MGS	01-357/05:14:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/05:03:01
8740	MGS	01-357/05:14:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/05:03:01
8741	MGS	01-357/05:14:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/05:03:01
8742	MGS	01-357/05:14:55	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8743	MGS	01-357/05:14:55	34	NOTE: Carrier Only -- No Telemetry Modulation		
8744	MGS	01-357/05:17:02		NOTE: Enter Planetary Atmosphere 12482		01-357/05:05:08
8745	MGS	01-357/05:18:40		NOTE: Apoapsis 12482 -		01-357/05:06:46
8746	MGS	01-357/05:21:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/05:09:09
8747	MGS	01-357/05:21:04		NOTE: Enter Solar Eclipse 12482		01-357/05:09:10
8748	MGS	01-357/05:23:33		NOTE: Enter Earth Occultation 12482		01-357/05:11:39
8749	MGS	01-357/05:23:33	34	NOTE: Loss Of X-Band Signal		
8750	MGS	01-357/05:24:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/05:12:14
8751	MGS	01-357/05:24:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/05:12:14
8752	MGS	01-357/05:24:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/05:12:14
8753	MGS	01-357/05:24:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/05:12:14
8754	MGS	01-357/05:24:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/05:12:15
8755	MGS	01-357/05:24:09		NOTE: End EVP script		01-357/05:12:15
8756	MGS	01-357/05:24:13		NOTE: End fixed Sub-Reflector for Radio Science		01-357/05:12:19
8757	MGS	01-357/05:24:39	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8758	MGS	01-357/05:26:40	34	Range Modulation On: SUP=3.0dB		
8759	MGS	01-357/05:27:40	34	Begin Ranging Acquisition		
8760	MGS	01-357/05:39:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/05:27:13
8761	MGS	01-357/05:42:52		: 01:39:02	RPAONX	01-357/05:30:58
8762	MGS	01-357/05:42:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/05:30:58
8763	MGS	01-357/05:44:07		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/05:32:13
8764	MGS	01-357/05:44:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/05:32:13
8765	MGS	01-357/05:44:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/05:32:13
8766	MGS	01-357/05:44:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/05:32:13
8767	MGS	01-357/05:44:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/05:32:13
8768	MGS	01-357/05:44:37		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/05:32:43
8769	MGS	01-357/05:44:42		NOTE: Exit Earth Occultation 12482		01-357/05:32:48
8770	MGS	01-357/05:44:42	34	Acquisition Of X-Band Signal		
8771	MGS	01-357/05:44:42	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8772	MGS	01-357/05:44:42	34	NOTE: Carrier Only -- No Telemetry Modulation		
8773	MGS	01-357/05:45:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/05:33:36
8774	MGS	01-357/05:45:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/05:33:36
8775	MGS	01-357/05:45:35		Set eclipse egress script address: 01DC	SWSEES	01-357/05:33:41
8776	MGS	01-357/05:51:32		NOTE: Exit Planetary Atmosphere 12482		01-357/05:39:38
8777	MGS	01-357/05:53:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/05:41:44
8778	MGS	01-357/05:53:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/05:41:44
8779	MGS	01-357/05:53:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/05:41:44
8780	MGS	01-357/05:53:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/05:41:44
8781	MGS	01-357/05:53:38	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8782	MGS	01-357/05:53:39		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/05:41:45
8783	MGS	01-357/05:53:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/05:41:45
8784	MGS	01-357/05:53:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/05:41:45
8785	MGS	01-357/05:53:39	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8786	MGS	01-357/05:53:44		NOTE: End fixed Sub-Reflector for Radio Science		01-357/05:41:49
8787	MGS	01-357/06:01:16		NOTE: Exit Solar Eclipse 12482		01-357/05:49:22
8788	MGS	01-357/06:17:29		NOTE: Periapsis 12483 ----------		01-357/06:05:35
8789	MGS	01-357/06:22:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/06:10:21
8790	MGS	01-357/06:22:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/06:10:21
8791	MGS	01-357/06:22:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/06:10:22
8792	MGS	01-357/06:22:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/06:10:22
8793	MGS	01-357/06:38:47	34	NOTE: Transmitter Off in 15 minutes		
8794	MGS	01-357/06:44:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/06:32:22
8795	MGS	01-357/06:44:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/06:32:22
8796	MGS	01-357/06:51:47	34	Range Modulation Off		
8797	MGS	01-357/06:53:47	34	Transmitter Off		
8798	MGS	01-357/06:54:20		NOTE: Start Block (SSRMGR)		01-357/06:42:26
8799	MGS	01-357/06:54:20		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-357/06:42:26
8800	MGS	01-357/06:54:21		SSR 1A Data Enable	CSD1AE	01-357/06:42:27
8801	MGS	01-357/06:54:21		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-357/06:42:27
8802	MGS	01-357/07:07:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/06:55:46
8803	MGS	01-357/07:08:50		NOTE: Start Block (MAP_PB_ODY)		01-357/06:56:56
8804	MGS	01-357/07:08:51		: 00:21:49, 01:39:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:51, 01:22:23, 00:07:33	AEMINI	01-357/06:56:57
8805	MGS	01-357/07:08:51		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/06:56:57
8806	MGS	01-357/07:08:51		NOTE: Start EVP data return script		01-357/06:56:57
8807	MGS	01-357/07:08:52		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-357T07:37:52.000	AEMPBI	01-357/06:56:58
8808	MGS	01-357/07:12:40		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/07:00:46
8809	MGS	01-357/07:12:40		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8792000, DUR=00:18:19		01-357/07:00:46
8810	MGS	01-357/07:12:40		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-357/07:00:46
8811	MGS	01-357/07:12:40		: 00:09:13, FALSE	RDSCII	01-357/07:00:46
8812	MGS	01-357/07:12:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/07:00:46
8813	MGS	01-357/07:12:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/07:00:46
8814	MGS	01-357/07:12:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/07:00:46
8815	MGS	01-357/07:12:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/07:00:46
8816	MGS	01-357/07:12:40	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8817	MGS	01-357/07:12:40	34	NOTE: Carrier Only -- No Telemetry Modulation		
8818	MGS	01-357/07:14:50		NOTE: Enter Planetary Atmosphere 12483		01-357/07:02:55
8819	MGS	01-357/07:16:25		NOTE: Apoapsis 12483 -		01-357/07:04:31
8820	MGS	01-357/07:17:51		SSR 1B Data Disable	CSD1BX	01-357/07:05:57
8821	MGS	01-357/07:17:51		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-357/07:05:57
8822	MGS	01-357/07:17:52		NOTE: End Block (SSRMGR)		01-357/07:05:58
8823	MGS	01-357/07:18:51		NOTE: Enter Solar Eclipse 12483		01-357/07:06:57
8824	MGS	01-357/07:18:51		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/07:06:57
8825	MGS	01-357/07:21:20		NOTE: Enter Earth Occultation 12483		01-357/07:09:26
8826	MGS	01-357/07:21:20	34	NOTE: Loss Of X-Band Signal		
8827	MGS	01-357/07:21:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/07:09:59
8828	MGS	01-357/07:21:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/07:09:59
8829	MGS	01-357/07:21:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/07:09:59
8830	MGS	01-357/07:21:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/07:09:59
8831	MGS	01-357/07:21:54		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/07:10:00
8832	MGS	01-357/07:21:55		NOTE: End EVP script		01-357/07:10:00
8833	MGS	01-357/07:21:56		NOTE: End Block (MAP_RT)		01-357/07:10:01
8834	MGS	01-357/07:21:59		NOTE: End fixed Sub-Reflector for Radio Science		01-357/07:10:04
8835	MGS	01-357/07:22:26	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8836	MGS	01-357/07:24:27	34	Range Modulation On: SUP=3.0dB		
8837	MGS	01-357/07:25:27	34	Begin Ranging Acquisition		
8838	MGS	01-357/07:40:41		: 01:39:03	RPAONX	01-357/07:28:46
8839	MGS	01-357/07:40:41		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/07:28:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8840	MGS	01-357/07:42:26		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/07:30:31
8841	MGS	01-357/07:42:30		NOTE: Exit Earth Occultation 12483		01-357/07:30:35
8842	MGS	01-357/07:42:30	34	Acquisition Of X-Band Signal		
8843	MGS	01-357/07:42:30	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8844	MGS	01-357/07:43:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/07:31:22
8845	MGS	01-357/07:43:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/07:31:22
8846	MGS	01-357/07:43:21		Command the PSE with included data word: 3990	SWPSEL	01-357/07:31:26
8847	MGS	01-357/07:43:22		Set eclipse egress script address: 0158	SWSEES	01-357/07:31:27
8848	MGS	01-357/07:46:15	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8849	MGS	01-357/07:49:20		NOTE: Exit Planetary Atmosphere 12483		01-357/07:37:25
8850	MGS	01-357/07:49:47		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:19:18	AEMPB	01-357/07:37:52
8851	MGS	01-357/07:49:47		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-357/07:37:52
8852	MGS	01-357/07:49:47		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-357/07:37:52
8853	MGS	01-357/07:49:48		SSR 1B Data Enable	CSD1BE	01-357/07:37:53
8854	MGS	01-357/07:49:48		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-357/07:37:53
8855	MGS	01-357/07:49:48	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8856	MGS	01-357/07:59:04		NOTE: Exit Solar Eclipse 12483		01-357/07:47:09
8857	MGS	01-357/08:15:16		NOTE: Periapsis 12484 ----------		01-357/08:03:22
8858	MGS	01-357/08:24:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/08:12:08
8859	MGS	01-357/08:24:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/08:12:08
8860	MGS	01-357/08:24:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/08:12:09
8861	MGS	01-357/08:24:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/08:12:09
8862	MGS	01-357/08:36:32	34	NOTE: Transmitter Off in 15 minutes		
8863	MGS	01-357/08:46:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/08:34:09
8864	MGS	01-357/08:46:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/08:34:09
8865	MGS	01-357/08:49:32	34	Range Modulation Off		
8866	MGS	01-357/08:51:32	34	Transmitter Off		
8867	MGS	01-357/09:00:26		SSR 1B Data Disable	CSD1BX	01-357/08:48:31
8868	MGS	01-357/09:00:26		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-357/08:48:31
8869	MGS	01-357/09:00:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-357/08:48:31
8870	MGS	01-357/09:00:26	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8871	MGS	01-357/09:06:37		NOTE: Start Block (MAP_RT)		01-357/08:54:42
8872	MGS	01-357/09:06:38		: 00:21:49, 01:39:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:31, 01:19:02, 00:09:13	AEMINI	01-357/08:54:43
8873	MGS	01-357/09:06:38		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/08:54:43
8874	MGS	01-357/09:06:38		NOTE: Start EVP data return script		01-357/08:54:43
8875	MGS	01-357/09:06:39		: SE_2A, RTM, 01:19:01, MRC, 2001-357T09:37:20.000	AEMRTI	01-357/08:54:44
8876	MGS	01-357/09:12:36		NOTE: Enter Planetary Atmosphere 12484		01-357/09:00:41
8877	MGS	01-357/09:13:56		NOTE: Apoapsis 12484 -		01-357/09:02:01
8878	MGS	01-357/09:15:21	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8879	MGS	01-357/09:16:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/09:04:43
8880	MGS	01-357/09:16:38		NOTE: Enter Solar Eclipse 12484		01-357/09:04:43
8881	MGS	01-357/09:19:06		NOTE: Enter Earth Occultation 12484		01-357/09:07:11
8882	MGS	01-357/09:19:06	34	NOTE: Loss Of X-Band Signal		
8883	MGS	01-357/09:19:43		NOTE: End EVP script		01-357/09:07:49
8884	MGS	01-357/09:19:44		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/09:07:49
8885	MGS	01-357/09:19:44		NOTE: End Block (MAP_PB_ODY)		01-357/09:07:50
8886	MGS	01-357/09:20:14	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8887	MGS	01-357/09:22:14	34	Range Modulation On: SUP=3.0dB		
8888	MGS	01-357/09:23:14	34	Begin Ranging Acquisition		
8889	MGS	01-357/09:34:42		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/09:22:47
8890	MGS	01-357/09:38:27		: 01:39:02	RPAONX	01-357/09:26:32
8891	MGS	01-357/09:38:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/09:26:32
8892	MGS	01-357/09:39:42		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/09:27:47
8893	MGS	01-357/09:39:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/09:27:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8894	MGS	01-357/09:39:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/09:27:47
8895	MGS	01-357/09:39:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/09:27:47
8896	MGS	01-357/09:39:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/09:27:47
8897	MGS	01-357/09:40:18		NOTE: Exit Earth Occultation 12484		01-357/09:28:23
8898	MGS	01-357/09:40:18	34	Acquisition Of X-Band Signal		
8899	MGS	01-357/09:40:18	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8900	MGS	01-357/09:40:18	34	NOTE: Carrier Only -- No Telemetry Modulation		
8901	MGS	01-357/09:41:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/09:29:09
8902	MGS	01-357/09:41:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/09:29:09
8903	MGS	01-357/09:41:09		Set eclipse egress script address: 019A	SWSEES	01-357/09:29:14
8904	MGS	01-357/09:47:07		NOTE: Exit Planetary Atmosphere 12484		01-357/09:35:13
8905	MGS	01-357/09:49:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/09:37:18
8906	MGS	01-357/09:49:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/09:37:18
8907	MGS	01-357/09:49:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/09:37:18
8908	MGS	01-357/09:49:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/09:37:18
8909	MGS	01-357/09:49:13	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8910	MGS	01-357/09:49:14		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/09:37:19
8911	MGS	01-357/09:49:14		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/09:37:19
8912	MGS	01-357/09:49:14		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/09:37:19
8913	MGS	01-357/09:49:14	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8914	MGS	01-357/09:49:18		NOTE: End fixed Sub-Reflector for Radio Science		01-357/09:37:23
8915	MGS	01-357/09:56:50		NOTE: Exit Solar Eclipse 12484		01-357/09:44:56
8916	MGS	01-357/10:12:57		NOTE: Periapsis 12485 ----------		01-357/10:01:03
8917	MGS	01-357/10:17:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/10:05:55
8918	MGS	01-357/10:17:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/10:05:55
8919	MGS	01-357/10:17:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/10:05:56
8920	MGS	01-357/10:17:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/10:05:56
8921	MGS	01-357/10:34:14	34	NOTE: Transmitter Off in 15 minutes		
8922	MGS	01-357/10:39:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/10:27:56
8923	MGS	01-357/10:39:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/10:27:56
8924	MGS	01-357/10:45:00	63	Begin Pre-Cal		
8925	MGS	01-357/10:45:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
8926	MGS	01-357/10:45:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
8927	MGS	01-357/10:45:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
8928	MGS	01-357/10:45:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
8929	MGS	01-357/10:45:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
8930	MGS	01-357/10:45:00	63	Config: TGC: DEST=37		
8931	MGS	01-357/10:45:00	63	Config: TGC: BAND=X, BR=40000.000000		
8932	MGS	01-357/10:45:00	63	Config: FSS: CH=2, PRI_FL=10000		
8933	MGS	01-357/10:45:00	63	Config: RSR		
8934	MGS	01-357/10:45:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
8935	MGS	01-357/10:45:00	63	Config: BVR		
8936	MGS	01-357/10:45:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
8937	MGS	01-357/10:45:00	63	Config: MDA: SMPL=0.1		
8938	MGS	01-357/10:47:15	34	Range Modulation Off		
8939	MGS	01-357/10:49:14	34	Transmitter Off		
8940	MGS	01-357/11:03:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/10:51:20
8941	MGS	01-357/11:04:22		NOTE: Start EVP data return script		01-357/10:52:27
8942	MGS	01-357/11:08:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/10:56:20
8943	MGS	01-357/11:08:15		: 00:09:13, FALSE	RDSCII	01-357/10:56:20
8944	MGS	01-357/11:08:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/10:56:20
8945	MGS	01-357/11:08:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/10:56:20
8946	MGS	01-357/11:08:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/10:56:20
8947	MGS	01-357/11:08:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/10:56:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
8948	MGS	01-357/11:08:15	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8949	MGS	01-357/11:08:15	34	NOTE: Carrier Only -- No Telemetry Modulation		
8950	MGS	01-357/11:10:19		NOTE: Enter Planetary Atmosphere 12485		01-357/10:58:24
8951	MGS	01-357/11:11:25		NOTE: Apoapsis 12485 -		01-357/10:59:30
8952	MGS	01-357/11:14:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/11:02:27
8953	MGS	01-357/11:14:23		NOTE: Enter Solar Eclipse 12485		01-357/11:02:28
8954	MGS	01-357/11:16:49		NOTE: Enter Earth Occultation 12485		01-357/11:04:54
8955	MGS	01-357/11:16:49	34	NOTE: Loss Of X-Band Signal		
8956	MGS	01-357/11:17:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/11:05:33
8957	MGS	01-357/11:17:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/11:05:33
8958	MGS	01-357/11:17:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/11:05:33
8959	MGS	01-357/11:17:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/11:05:33
8960	MGS	01-357/11:17:29		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/11:05:34
8961	MGS	01-357/11:17:29		NOTE: End EVP script		01-357/11:05:34
8962	MGS	01-357/11:17:33		NOTE: End fixed Sub-Reflector for Radio Science		01-357/11:05:38
8963	MGS	01-357/11:18:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
8964	MGS	01-357/11:20:01	34	Range Modulation On: SUP=3.0dB		
8965	MGS	01-357/11:21:01	34	Begin Ranging Acquisition		
8966	MGS	01-357/11:32:26		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/11:20:31
8967	MGS	01-357/11:36:11		: 01:39:02	RPAONX	01-357/11:24:16
8968	MGS	01-357/11:36:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/11:24:16
8969	MGS	01-357/11:37:26		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/11:25:31
8970	MGS	01-357/11:37:26		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/11:25:31
8971	MGS	01-357/11:37:26		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/11:25:31
8972	MGS	01-357/11:37:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/11:25:31
8973	MGS	01-357/11:37:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/11:25:31
8974	MGS	01-357/11:37:56		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/11:26:01
8975	MGS	01-357/11:38:05		NOTE: Exit Earth Occultation 12485		01-357/11:26:10
8976	MGS	01-357/11:38:05	34	Acquisition Of X-Band Signal		
8977	MGS	01-357/11:38:05	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
8978	MGS	01-357/11:38:05	34	NOTE: Carrier Only -- No Telemetry Modulation		
8979	MGS	01-357/11:38:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/11:26:56
8980	MGS	01-357/11:38:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/11:26:56
8981	MGS	01-357/11:38:56		Set eclipse egress script address: 01DC	SWSEES	01-357/11:27:01
8982	MGS	01-357/11:44:54		NOTE: Exit Planetary Atmosphere 12485		01-357/11:32:59
8983	MGS	01-357/11:46:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/11:35:02
8984	MGS	01-357/11:46:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/11:35:02
8985	MGS	01-357/11:46:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/11:35:02
8986	MGS	01-357/11:46:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/11:35:02
8987	MGS	01-357/11:46:57	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8988	MGS	01-357/11:46:58		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/11:35:03
8989	MGS	01-357/11:46:58		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/11:35:03
8990	MGS	01-357/11:46:58		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/11:35:03
8991	MGS	01-357/11:46:58	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
8992	MGS	01-357/11:47:02		NOTE: End fixed Sub-Reflector for Radio Science		01-357/11:35:07
8993	MGS	01-357/11:50:00	34	NOTE: Transmitter Off in 15 minutes		
8994	MGS	01-357/11:54:35		NOTE: Exit Solar Eclipse 12485		01-357/11:42:40
8995	MGS	01-357/12:03:00	34	Range Modulation Off		
8996	MGS	01-357/12:05:00	34	Transmitter Off		
8997	MGS	01-357/12:10:42		NOTE: Periapsis 12486 ----------		01-357/11:58:47
8998	MGS	01-357/12:11:54		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-357/11:59:59
8999	MGS	01-357/12:15:00	63	Begin Tracking		
9000	MGS	01-357/12:15:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9001	MGS	01-357/12:15:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/12:03:39
9002	MGS	01-357/12:15:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/12:03:39
9003	MGS	01-357/12:15:35		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/12:03:40
9004	MGS	01-357/12:15:35		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/12:03:40
9005	MGS	01-357/12:18:05	34	NOTE: Below Uplink Interlock Limit		
9006	MGS	01-357/12:22:41	63	NOTE: Above Uplink Interlock Limit		
9007	MGS	01-357/12:28:50	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9008	MGS	01-357/12:28:50	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9009	MGS	01-357/12:30:00	34	End Tracking		
9010	MGS	01-357/12:37:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/12:25:40
9011	MGS	01-357/12:37:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/12:25:40
9012	MGS	01-357/12:45:00	34	End Post-Cal		
9013	MGS	01-357/12:47:30		NOTE: Start Block (SSRMGR)		01-357/12:35:35
9014	MGS	01-357/12:47:30		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-357/12:35:35
9015	MGS	01-357/12:47:31		SSR 1B Data Enable	CSD1BE	01-357/12:35:36
9016	MGS	01-357/12:47:31		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-357/12:35:36
9017	MGS	01-357/13:00:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/12:49:04
9018	MGS	01-357/13:02:04		NOTE: Start Block (MAP_PB_ODY)		01-357/12:50:09
9019	MGS	01-357/13:02:05		: 00:21:49, 01:39:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:51, 01:22:23, 00:07:33	AEMINI	01-357/12:50:10
9020	MGS	01-357/13:02:05		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/12:50:10
9021	MGS	01-357/13:02:05		NOTE: Start EVP data return script		01-357/12:50:10
9022	MGS	01-357/13:02:06		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-357T13:31:06.000	AEMPBI	01-357/12:50:11
9023	MGS	01-357/13:05:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/12:54:04
9024	MGS	01-357/13:05:59		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8864000, DUR=00:18:28		01-357/12:54:04
9025	MGS	01-357/13:05:59		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-357/12:54:04
9026	MGS	01-357/13:05:59		: 00:09:13, FALSE	RDSCII	01-357/12:54:04
9027	MGS	01-357/13:05:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/12:54:04
9028	MGS	01-357/13:05:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/12:54:04
9029	MGS	01-357/13:05:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/12:54:04
9030	MGS	01-357/13:05:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/12:54:04
9031	MGS	01-357/13:05:59	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9032	MGS	01-357/13:05:59	63	NOTE: Carrier Only -- No Telemetry Modulation		
9033	MGS	01-357/13:08:01		NOTE: Enter Planetary Atmosphere 12486		01-357/12:56:06
9034	MGS	01-357/13:09:18		NOTE: Apoapsis 12486 -		01-357/12:57:23
9035	MGS	01-357/13:11:05		SSR 1A Data Disable	CSD1AX	01-357/12:59:10
9036	MGS	01-357/13:11:05		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-357/12:59:10
9037	MGS	01-357/13:11:06		NOTE: End Block (SSRMGR)		01-357/12:59:11
9038	MGS	01-357/13:12:05		NOTE: Enter Solar Eclipse 12486		01-357/13:00:10
9039	MGS	01-357/13:12:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/13:00:10
9040	MGS	01-357/13:14:31		NOTE: Enter Earth Occultation 12486		01-357/13:02:36
9041	MGS	01-357/13:14:31	63	NOTE: Loss Of X-Band Signal		
9042	MGS	01-357/13:15:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/13:03:17
9043	MGS	01-357/13:15:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/13:03:17
9044	MGS	01-357/13:15:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/13:03:17
9045	MGS	01-357/13:15:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/13:03:17
9046	MGS	01-357/13:15:13		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/13:03:18
9047	MGS	01-357/13:15:13		NOTE: End EVP script		01-357/13:03:18
9048	MGS	01-357/13:15:14		NOTE: End Block (MAP_RT)		01-357/13:03:19
9049	MGS	01-357/13:15:17		NOTE: End fixed Sub-Reflector for Radio Science		01-357/13:03:22
9050	MGS	01-357/13:33:54		: 01:39:03	RPAONX	01-357/13:21:59
9051	MGS	01-357/13:33:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/13:21:59
9052	MGS	01-357/13:35:39		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/13:23:44
9053	MGS	01-357/13:35:49		NOTE: Exit Earth Occultation 12486		01-357/13:23:54
9054	MGS	01-357/13:35:49	63	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9055	MGS	01-357/13:35:49	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9056	MGS	01-357/13:36:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/13:24:40
9057	MGS	01-357/13:36:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/13:24:40
9058	MGS	01-357/13:36:39		Command the PSE with included data word: 3990	SWPSEL	01-357/13:24:44
9059	MGS	01-357/13:36:40		Set eclipse egress script address: 0158	SWSEES	01-357/13:24:45
9060	MGS	01-357/13:42:38		NOTE: Exit Planetary Atmosphere 12486		01-357/13:30:42
9061	MGS	01-357/13:43:00		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:19:18	AEMPB	01-357/13:31:05
9062	MGS	01-357/13:43:00		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-357/13:31:05
9063	MGS	01-357/13:43:00		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-357/13:31:05
9064	MGS	01-357/13:43:01		SSR 1A Data Enable	CSD1AE	01-357/13:31:06
9065	MGS	01-357/13:43:01		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-357/13:31:06
9066	MGS	01-357/13:43:01	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9067	MGS	01-357/13:52:18		NOTE: Exit Solar Eclipse 12486		01-357/13:40:22
9068	MGS	01-357/14:08:22		NOTE: Periapsis 12487 ----------		01-357/13:56:26
9069	MGS	01-357/14:17:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/14:05:21
9070	MGS	01-357/14:17:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/14:05:21
9071	MGS	01-357/14:17:18		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/14:05:22
9072	MGS	01-357/14:17:18		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/14:05:22
9073	MGS	01-357/14:39:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/14:27:22
9074	MGS	01-357/14:39:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/14:27:22
9075	MGS	01-357/14:53:40		SSR 1A Data Disable	CSD1AX	01-357/14:41:44
9076	MGS	01-357/14:53:40		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-357/14:41:44
9077	MGS	01-357/14:53:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-357/14:41:44
9078	MGS	01-357/14:53:40	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9079	MGS	01-357/14:59:47		NOTE: Start Block (MAP_RT)		01-357/14:47:51
9080	MGS	01-357/14:59:48		: 00:21:49, 01:39:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:31, 01:19:02, 00:09:13	AEMINI	01-357/14:47:52
9081	MGS	01-357/14:59:48		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/14:47:52
9082	MGS	01-357/14:59:48		NOTE: Start EVP data return script		01-357/14:47:52
9083	MGS	01-357/14:59:49		: SE_2A, RTM, 01:19:01, MRC, 2001-357T15:30:28.000	AEMRTI	01-357/14:47:53
9084	MGS	01-357/15:05:44		NOTE: Enter Planetary Atmosphere 12487		01-357/14:53:49
9085	MGS	01-357/15:06:57		NOTE: Apoapsis 12487 -		01-357/14:55:02
9086	MGS	01-357/15:09:47		NOTE: Enter Solar Eclipse 12487		01-357/14:57:52
9087	MGS	01-357/15:09:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/14:57:52
9088	MGS	01-357/15:12:14		NOTE: Enter Earth Occultation 12487		01-357/15:00:18
9089	MGS	01-357/15:12:14	63	NOTE: Loss Of X-Band Signal		
9090	MGS	01-357/15:12:58		NOTE: End EVP script		01-357/15:01:02
9091	MGS	01-357/15:12:58		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/15:01:02
9092	MGS	01-357/15:12:59		NOTE: End Block (MAP_PB_ODY)		01-357/15:01:03
9093	MGS	01-357/15:27:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/15:15:56
9094	MGS	01-357/15:31:37		: 01:39:02	RPAONX	01-357/15:19:41
9095	MGS	01-357/15:31:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/15:19:41
9096	MGS	01-357/15:32:52		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/15:20:56
9097	MGS	01-357/15:32:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/15:20:56
9098	MGS	01-357/15:32:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/15:20:56
9099	MGS	01-357/15:32:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/15:20:56
9100	MGS	01-357/15:32:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/15:20:56
9101	MGS	01-357/15:33:31		NOTE: Exit Earth Occultation 12487		01-357/15:21:36
9102	MGS	01-357/15:33:31	63	Acquisition Of X-Band Signal		
9103	MGS	01-357/15:33:31	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9104	MGS	01-357/15:33:31	63	NOTE: Carrier Only -- No Telemetry Modulation		
9105	MGS	01-357/15:34:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/15:22:22
9106	MGS	01-357/15:34:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/15:22:22
9107	MGS	01-357/15:34:23		Set eclipse egress script address: 019A	SWSEES	01-357/15:22:27
9108	MGS	01-357/15:40:20		NOTE: Exit Planetary Atmosphere 12487		01-357/15:28:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9109	MGS	01-357/15:42:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/15:30:27
9110	MGS	01-357/15:42:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/15:30:27
9111	MGS	01-357/15:42:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/15:30:27
9112	MGS	01-357/15:42:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/15:30:27
9113	MGS	01-357/15:42:23	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9114	MGS	01-357/15:42:24		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/15:30:28
9115	MGS	01-357/15:42:24		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/15:30:28
9116	MGS	01-357/15:42:24		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/15:30:28
9117	MGS	01-357/15:42:24	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9118	MGS	01-357/15:42:27		NOTE: End fixed Sub-Reflector for Radio Science		01-357/15:30:32
9119	MGS	01-357/15:49:59		NOTE: Exit Solar Eclipse 12487		01-357/15:38:04
9120	MGS	01-357/16:05:44		NOTE: Periapsis 12488 ----------		01-357/15:53:48
9121	MGS	01-357/16:10:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/15:59:03
9122	MGS	01-357/16:10:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/15:59:03
9123	MGS	01-357/16:11:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/15:59:04
9124	MGS	01-357/16:11:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/15:59:04
9125	MGS	01-357/16:33:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/16:21:04
9126	MGS	01-357/16:33:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/16:21:04
9127	MGS	01-357/16:56:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/16:44:29
9128	MGS	01-357/16:57:31		NOTE: Start EVP data return script		01-357/16:45:35
9129	MGS	01-357/17:01:25		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/16:49:29
9130	MGS	01-357/17:01:25		: 00:09:13, FALSE	RDSCII	01-357/16:49:29
9131	MGS	01-357/17:01:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/16:49:29
9132	MGS	01-357/17:01:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/16:49:29
9133	MGS	01-357/17:01:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/16:49:29
9134	MGS	01-357/17:01:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/16:49:29
9135	MGS	01-357/17:01:25	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9136	MGS	01-357/17:01:25	63	NOTE: Carrier Only -- No Telemetry Modulation		
9137	MGS	01-357/17:03:27		NOTE: Enter Planetary Atmosphere 12488		01-357/16:51:31
9138	MGS	01-357/17:04:24		NOTE: Apoapsis 12488 -		01-357/16:52:28
9139	MGS	01-357/17:07:31		NOTE: Enter Solar Eclipse 12488		01-357/16:55:35
9140	MGS	01-357/17:07:31		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/16:55:35
9141	MGS	01-357/17:09:55		NOTE: Enter Earth Occultation 12488		01-357/16:57:59
9142	MGS	01-357/17:09:55	63	NOTE: Loss Of X-Band Signal		
9143	MGS	01-357/17:10:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/16:58:42
9144	MGS	01-357/17:10:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/16:58:42
9145	MGS	01-357/17:10:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/16:58:42
9146	MGS	01-357/17:10:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/16:58:42
9147	MGS	01-357/17:10:39		NOTE: End EVP script		01-357/16:58:43
9148	MGS	01-357/17:10:39		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/16:58:43
9149	MGS	01-357/17:10:43		NOTE: End fixed Sub-Reflector for Radio Science		01-357/16:58:47
9150	MGS	01-357/17:25:35		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/17:13:39
9151	MGS	01-357/17:29:20		: 01:39:02	RPAONX	01-357/17:17:24
9152	MGS	01-357/17:29:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/17:17:24
9153	MGS	01-357/17:30:35		: 00:00:30, 00:09:31, FALSE	RDSCIE	01-357/17:18:39
9154	MGS	01-357/17:30:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/17:18:39
9155	MGS	01-357/17:30:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/17:18:39
9156	MGS	01-357/17:30:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/17:18:39
9157	MGS	01-357/17:30:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/17:18:39
9158	MGS	01-357/17:31:05		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/17:19:09
9159	MGS	01-357/17:31:16		NOTE: Exit Earth Occultation 12488		01-357/17:19:20
9160	MGS	01-357/17:31:16	63	Acquisition Of X-Band Signal		
9161	MGS	01-357/17:31:16	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9162	MGS	01-357/17:31:16	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9163	MGS	01-357/17:32:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/17:20:04
9164	MGS	01-357/17:32:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/17:20:04
9165	MGS	01-357/17:32:05		Set eclipse egress script address: 01DC	SWSEES	01-357/17:20:09
9166	MGS	01-357/17:38:03		NOTE: Exit Planetary Atmosphere 12488		01-357/17:26:07
9167	MGS	01-357/17:40:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/17:28:10
9168	MGS	01-357/17:40:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/17:28:10
9169	MGS	01-357/17:40:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/17:28:10
9170	MGS	01-357/17:40:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/17:28:10
9171	MGS	01-357/17:40:06	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9172	MGS	01-357/17:40:07		: RTM, MRC, 01:19:01, S&E_2A, FALSE, 00:09:14	AEMRT	01-357/17:28:11
9173	MGS	01-357/17:40:07		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/17:28:11
9174	MGS	01-357/17:40:07		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/17:28:11
9175	MGS	01-357/17:40:07	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9176	MGS	01-357/17:40:11		NOTE: End fixed Sub-Reflector for Radio Science		01-357/17:28:15
9177	MGS	01-357/17:47:43		NOTE: Exit Solar Eclipse 12488		01-357/17:35:47
9178	MGS	01-357/18:03:30		NOTE: Periapsis 12489 ----------		01-357/17:51:34
9179	MGS	01-357/18:08:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/17:56:46
9180	MGS	01-357/18:08:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/17:56:46
9181	MGS	01-357/18:08:43		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/17:56:47
9182	MGS	01-357/18:08:43		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/17:56:47
9183	MGS	01-357/18:30:00	15	Begin Pre-Cal		
9184	MGS	01-357/18:30:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
9185	MGS	01-357/18:30:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
9186	MGS	01-357/18:30:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
9187	MGS	01-357/18:30:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
9188	MGS	01-357/18:30:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=HIGH, MI=80.0		
9189	MGS	01-357/18:30:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
9190	MGS	01-357/18:30:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
9191	MGS	01-357/18:30:00	15	Config: TGC: DEST=37		
9192	MGS	01-357/18:30:00	15	Config: TGC: BAND=X, BR=0.000000		
9193	MGS	01-357/18:30:00	15	Config: FSS: CH=2, PRI_FL=10000		
9194	MGS	01-357/18:30:00	15	Config: RSR		
9195	MGS	01-357/18:30:00	15	Config: TXL		
9196	MGS	01-357/18:30:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
9197	MGS	01-357/18:30:00	15	Config: BVR		
9198	MGS	01-357/18:30:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
9199	MGS	01-357/18:30:00	15	Config: MDA: SMPL=0.1		
9200	MGS	01-357/18:30:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
9201	MGS	01-357/18:30:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
9202	MGS	01-357/18:30:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
9203	MGS	01-357/18:30:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/18:18:47
9204	MGS	01-357/18:30:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/18:18:47
9205	MGS	01-357/18:40:49		NOTE: Start Block (SSRMGR)		01-357/18:28:53
9206	MGS	01-357/18:40:49		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-357/18:28:53
9207	MGS	01-357/18:40:50		SSR 1A Data Enable	CSD1AE	01-357/18:28:54
9208	MGS	01-357/18:40:50		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-357/18:28:54
9209	MGS	01-357/18:54:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/18:42:12
9210	MGS	01-357/18:55:15		NOTE: Start Block (MAP_PB_ODY)		01-357/18:43:19
9211	MGS	01-357/18:55:16		: 00:21:49, 01:39:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:51, 01:22:23, 00:07:33	AEMINI	01-357/18:43:20
9212	MGS	01-357/18:55:16		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/18:43:20
9213	MGS	01-357/18:55:16		NOTE: Start EVP data return script		01-357/18:43:20
9214	MGS	01-357/18:55:17		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-357T19:24:16.000	AEMPBI	01-357/18:43:21
9215	MGS	01-357/18:59:08		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/18:47:12
9216	MGS	01-357/18:59:08		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8784000, DUR=00:18:18		01-357/18:47:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9217	MGS	01-357/18:59:08		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-357/18:47:12
9218	MGS	01-357/18:59:08		: 00:09:13, FALSE	RDSCII	01-357/18:47:12
9219	MGS	01-357/18:59:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/18:47:12
9220	MGS	01-357/18:59:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/18:47:12
9221	MGS	01-357/18:59:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/18:47:12
9222	MGS	01-357/18:59:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/18:47:12
9223	MGS	01-357/18:59:08	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9224	MGS	01-357/18:59:08	63	NOTE: Carrier Only -- No Telemetry Modulation		
9225	MGS	01-357/19:01:09		NOTE: Enter Planetary Atmosphere 12489		01-357/18:49:13
9226	MGS	01-357/19:02:20		NOTE: Apoapsis 12489 -		01-357/18:50:24
9227	MGS	01-357/19:04:15		SSR 1B Data Disable	CSD1BX	01-357/18:52:19
9228	MGS	01-357/19:04:15		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-357/18:52:19
9229	MGS	01-357/19:04:16		NOTE: End Block (SSRMGR)		01-357/18:52:20
9230	MGS	01-357/19:05:16		NOTE: Enter Solar Eclipse 12489		01-357/18:53:20
9231	MGS	01-357/19:05:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/18:53:20
9232	MGS	01-357/19:07:36		NOTE: Enter Earth Occultation 12489		01-357/18:55:40
9233	MGS	01-357/19:07:36	63	NOTE: Loss Of X-Band Signal		
9234	MGS	01-357/19:08:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/18:56:25
9235	MGS	01-357/19:08:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/18:56:25
9236	MGS	01-357/19:08:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/18:56:25
9237	MGS	01-357/19:08:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/18:56:25
9238	MGS	01-357/19:08:22		NOTE: End EVP script		01-357/18:56:26
9239	MGS	01-357/19:08:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/18:56:26
9240	MGS	01-357/19:08:23		NOTE: End Block (MAP_RT)		01-357/18:56:27
9241	MGS	01-357/19:08:26		NOTE: End fixed Sub-Reflector for Radio Science		01-357/18:56:30
9242	MGS	01-357/19:27:05		: 01:39:03	RPAONX	01-357/19:15:09
9243	MGS	01-357/19:27:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/19:15:09
9244	MGS	01-357/19:28:50		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/19:16:54
9245	MGS	01-357/19:29:03		NOTE: Exit Earth Occultation 12489		01-357/19:17:07
9246	MGS	01-357/19:29:03	63	Acquisition Of X-Band Signal		
9247	MGS	01-357/19:29:03	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9248	MGS	01-357/19:29:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/19:17:47
9249	MGS	01-357/19:29:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/19:17:47
9250	MGS	01-357/19:29:47		Command the PSE with included data word: 3990	SWPSEL	01-357/19:17:51
9251	MGS	01-357/19:29:48		Set eclipse egress script address: 0158	SWSEES	01-357/19:17:52
9252	MGS	01-357/19:30:00	15	Begin Tracking		
9253	MGS	01-357/19:30:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9254	MGS	01-357/19:35:48		NOTE: Exit Planetary Atmosphere 12489		01-357/19:23:51
9255	MGS	01-357/19:36:11		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:19:18	AEMPB	01-357/19:24:15
9256	MGS	01-357/19:36:11		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-357/19:24:15
9257	MGS	01-357/19:36:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-357/19:24:15
9258	MGS	01-357/19:36:12		SSR 1B Data Enable	CSD1BE	01-357/19:24:16
9259	MGS	01-357/19:36:12		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-357/19:24:16
9260	MGS	01-357/19:36:12	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9261	MGS	01-357/19:36:12	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9262	MGS	01-357/19:44:48	15	NOTE: Above Uplink Interlock Limit		
9263	MGS	01-357/19:45:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
9264	MGS	01-357/19:45:29		NOTE: Exit Solar Eclipse 12489		01-357/19:33:32
9265	MGS	01-357/19:47:00	15	Range Modulation On: SUP=3.0dB		
9266	MGS	01-357/19:48:00	15	Begin Ranging Acquisition		
9267	MGS	01-357/19:50:00	63	End Tracking		
9268	MGS	01-357/20:01:42		NOTE: Periapsis 12490 ----------		01-357/19:49:46
9269	MGS	01-357/20:05:00	63	End Post-Cal		
9270	MGS	01-357/20:08:52	15	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9271	MGS	01-357/20:10:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/19:58:31
9272	MGS	01-357/20:10:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/19:58:31
9273	MGS	01-357/20:10:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/19:58:32
9274	MGS	01-357/20:10:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/19:58:32
9275	MGS	01-357/20:22:44	15	NOTE: Transmitter Off in 15 minutes		
9276	MGS	01-357/20:32:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/20:20:32
9277	MGS	01-357/20:32:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/20:20:32
9278	MGS	01-357/20:35:44	15	Range Modulation Off		
9279	MGS	01-357/20:37:44	15	Transmitter Off		
9280	MGS	01-357/20:46:51		SSR 1B Data Disable	CSD1BX	01-357/20:34:54
9281	MGS	01-357/20:46:51		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-357/20:34:54
9282	MGS	01-357/20:46:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-357/20:34:54
9283	MGS	01-357/20:46:51	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9284	MGS	01-357/20:53:02		NOTE: Start Block (MAP_RT)		01-357/20:41:05
9285	MGS	01-357/20:53:03		: 00:22:01, 01:38:36, FALSE, TRUE, FALSE, 00:01:15, 00:09:25, 01:18:49, 00:09:06	AEMINI	01-357/20:41:06
9286	MGS	01-357/20:53:03		Enable sending eclipse ingress script when array power disappears	SWEISE	01-357/20:41:06
9287	MGS	01-357/20:53:03		NOTE: Start EVP data return script		01-357/20:41:06
9288	MGS	01-357/20:53:04		: SE_2A, RTM, 01:18:48, MRC, 2001-357T21:23:49.000	AEMRTI	01-357/20:41:07
9289	MGS	01-357/20:58:55		NOTE: Enter Planetary Atmosphere 12490		01-357/20:46:59
9290	MGS	01-357/21:00:40		NOTE: Apoapsis 12490 -		01-357/20:48:44
9291	MGS	01-357/21:01:37	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9292	MGS	01-357/21:03:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/20:51:06
9293	MGS	01-357/21:03:03		NOTE: Enter Solar Eclipse 12490		01-357/20:51:07
9294	MGS	01-357/21:05:22		NOTE: Enter Earth Occultation 12490		01-357/20:53:25
9295	MGS	01-357/21:05:22	15	NOTE: Loss Of X-Band Signal		
9296	MGS	01-357/21:06:09		NOTE: End EVP script		01-357/20:54:12
9297	MGS	01-357/21:06:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/20:54:12
9298	MGS	01-357/21:06:10		NOTE: End Block (MAP_PB_ODY)		01-357/20:54:13
9299	MGS	01-357/21:06:42	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
9300	MGS	01-357/21:08:43	15	Range Modulation On: SUP=3.0dB		
9301	MGS	01-357/21:09:43	15	Begin Ranging Acquisition		
9302	MGS	01-357/21:21:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/21:09:23
9303	MGS	01-357/21:25:04		: 01:38:36	RPAONX	01-357/21:13:07
9304	MGS	01-357/21:25:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/21:13:07
9305	MGS	01-357/21:26:19		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-357/21:14:22
9306	MGS	01-357/21:26:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/21:14:22
9307	MGS	01-357/21:26:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/21:14:22
9308	MGS	01-357/21:26:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/21:14:22
9309	MGS	01-357/21:26:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/21:14:22
9310	MGS	01-357/21:26:50		NOTE: Exit Earth Occultation 12490		01-357/21:14:54
9311	MGS	01-357/21:26:50	15	Acquisition Of X-Band Signal		
9312	MGS	01-357/21:26:50	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9313	MGS	01-357/21:26:50	15	NOTE: Carrier Only -- No Telemetry Modulation		
9314	MGS	01-357/21:27:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/21:15:32
9315	MGS	01-357/21:27:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/21:15:32
9316	MGS	01-357/21:27:34		Set eclipse egress script address: 019A	SWSEES	01-357/21:15:37
9317	MGS	01-357/21:33:35		NOTE: Exit Planetary Atmosphere 12490		01-357/21:21:38
9318	MGS	01-357/21:35:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/21:23:47
9319	MGS	01-357/21:35:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/21:23:47
9320	MGS	01-357/21:35:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/21:23:47
9321	MGS	01-357/21:35:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/21:23:47
9322	MGS	01-357/21:35:44	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9323	MGS	01-357/21:35:45		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-357/21:23:48
9324	MGS	01-357/21:35:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/21:23:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9325	MGS	01-357/21:35:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/21:23:48
9326	MGS	01-357/21:35:45	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9327	MGS	01-357/21:35:49		NOTE: End fixed Sub-Reflector for Radio Science		01-357/21:23:53
9328	MGS	01-357/21:43:16		NOTE: Exit Solar Eclipse 12490		01-357/21:31:19
9329	MGS	01-357/21:59:50		NOTE: Periapsis 12491 ----------		01-357/21:47:53
9330	MGS	01-357/22:04:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/21:52:18
9331	MGS	01-357/22:04:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/21:52:18
9332	MGS	01-357/22:04:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/21:52:19
9333	MGS	01-357/22:04:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/21:52:19
9334	MGS	01-357/22:20:32	15	NOTE: Transmitter Off in 15 minutes		
9335	MGS	01-357/22:26:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-357/22:14:19
9336	MGS	01-357/22:26:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-357/22:14:19
9337	MGS	01-357/22:33:33	15	Range Modulation Off		
9338	MGS	01-357/22:35:32	15	Transmitter Off		
9339	MGS	01-357/22:49:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/22:37:37
9340	MGS	01-357/22:50:50		NOTE: Start EVP data return script		01-357/22:38:53
9341	MGS	01-357/22:54:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-357/22:42:36
9342	MGS	01-357/22:54:33		: 00:09:06, FALSE	RDSCII	01-357/22:42:36
9343	MGS	01-357/22:54:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/22:42:36
9344	MGS	01-357/22:54:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/22:42:36
9345	MGS	01-357/22:54:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/22:42:36
9346	MGS	01-357/22:54:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/22:42:36
9347	MGS	01-357/22:54:33	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9348	MGS	01-357/22:54:33	15	NOTE: Carrier Only -- No Telemetry Modulation		
9349	MGS	01-357/22:56:43		NOTE: Enter Planetary Atmosphere 12491		01-357/22:44:47
9350	MGS	01-357/22:58:42		NOTE: Apoapsis 12491 -		01-357/22:46:45
9351	MGS	01-357/23:00:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-357/22:48:53
9352	MGS	01-357/23:00:50		NOTE: Enter Solar Eclipse 12491		01-357/22:48:53
9353	MGS	01-357/23:03:10		NOTE: Enter Earth Occultation 12491		01-357/22:51:14
9354	MGS	01-357/23:03:10	15	NOTE: Loss Of X-Band Signal		
9355	MGS	01-357/23:03:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/22:51:42
9356	MGS	01-357/23:03:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/22:51:42
9357	MGS	01-357/23:03:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/22:51:42
9358	MGS	01-357/23:03:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/22:51:42
9359	MGS	01-357/23:03:40		Turn off the MOT Exciter and RPA beam	STRPAF	01-357/22:51:43
9360	MGS	01-357/23:03:40		NOTE: End EVP script		01-357/22:51:44
9361	MGS	01-357/23:03:44		NOTE: End fixed Sub-Reflector for Radio Science		01-357/22:51:48
9362	MGS	01-357/23:04:29	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
9363	MGS	01-357/23:06:30	15	Range Modulation On: SUP=3.0dB		
9364	MGS	01-357/23:07:30	15	Begin Ranging Acquisition		
9365	MGS	01-357/23:19:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-357/23:07:10
9366	MGS	01-357/23:22:51		: 01:38:36	RPAONX	01-357/23:10:54
9367	MGS	01-357/23:22:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-357/23:10:54
9368	MGS	01-357/23:24:06		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-357/23:12:09
9369	MGS	01-357/23:24:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-357/23:12:09
9370	MGS	01-357/23:24:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-357/23:12:09
9371	MGS	01-357/23:24:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-357/23:12:09
9372	MGS	01-357/23:24:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-357/23:12:09
9373	MGS	01-357/23:24:36		Disables autonomous command to send eclipse ingress script	SWEISX	01-357/23:12:39
9374	MGS	01-357/23:24:38		NOTE: Exit Earth Occultation 12491		01-357/23:12:41
9375	MGS	01-357/23:24:38	15	Acquisition Of X-Band Signal		
9376	MGS	01-357/23:24:38	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9377	MGS	01-357/23:24:38	15	NOTE: Carrier Only -- No Telemetry Modulation		
9378	MGS	01-357/23:25:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-357/23:13:19

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9379	MGS	01-357/23:25:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-357/23:13:19
9380	MGS	01-357/23:25:21		Set eclipse egress script address: 01DC	SWSEES	01-357/23:13:24
9381	MGS	01-357/23:31:23		NOTE: Exit Planetary Atmosphere 12491		01-357/23:19:27
9382	MGS	01-357/23:33:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-357/23:21:34
9383	MGS	01-357/23:33:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-357/23:21:34
9384	MGS	01-357/23:33:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-357/23:21:34
9385	MGS	01-357/23:33:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-357/23:21:34
9386	MGS	01-357/23:33:31	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9387	MGS	01-357/23:33:32		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-357/23:21:35
9388	MGS	01-357/23:33:32		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-357/23:21:35
9389	MGS	01-357/23:33:32		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-357/23:21:35
9390	MGS	01-357/23:33:32	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9391	MGS	01-357/23:33:36		NOTE: End fixed Sub-Reflector for Radio Science		01-357/23:21:40
9392	MGS	01-357/23:41:03		NOTE: Exit Solar Eclipse 12491		01-357/23:29:06
9393	MGS	01-357/23:57:36		NOTE: Periapsis 12492 ----------		01-357/23:45:39
9394	MGS	01-358/00:00:00		Light Time: OWLT = 11:56, RTLT = 23:53		
9395	MGS	01-358/00:02:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-357/23:50:05
9396	MGS	01-358/00:02:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-357/23:50:05
9397	MGS	01-358/00:02:03		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-357/23:50:06
9398	MGS	01-358/00:02:03		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-357/23:50:06
9399	MGS	01-358/00:18:17	15	NOTE: Transmitter Off in 15 minutes		
9400	MGS	01-358/00:24:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/00:12:06
9401	MGS	01-358/00:24:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/00:12:06
9402	MGS	01-358/00:31:17	15	Range Modulation Off		
9403	MGS	01-358/00:33:17	15	Transmitter Off		
9404	MGS	01-358/00:33:58		NOTE: Start Block (SSRMGR)		01-358/00:22:01
9405	MGS	01-358/00:33:58		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-358/00:22:01
9406	MGS	01-358/00:33:59		SSR 1B Data Enable	CSD1BE	01-358/00:22:02
9407	MGS	01-358/00:33:59		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-358/00:22:02
9408	MGS	01-358/00:47:21		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/00:35:24
9409	MGS	01-358/00:48:33		NOTE: Start Block (MAP_PB_ODY)		01-358/00:36:36
9410	MGS	01-358/00:48:34		: 00:22:01, 01:38:37, FALSE, FALSE, FALSE, 00:01:15, 00:07:45, 01:22:10, 00:07:26	AEMINI	01-358/00:36:37
9411	MGS	01-358/00:48:34		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/00:36:37
9412	MGS	01-358/00:48:34		NOTE: Start EVP data return script		01-358/00:36:37
9413	MGS	01-358/00:48:35		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-358T01:17:39.000	AEMPBI	01-358/00:36:38
9414	MGS	01-358/00:52:20		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/00:40:23
9415	MGS	01-358/00:52:20		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8808000, DUR=00:18:21		01-358/00:40:23
9416	MGS	01-358/00:52:20		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-358/00:40:23
9417	MGS	01-358/00:52:20		: 00:09:06, FALSE	RDSCII	01-358/00:40:23
9418	MGS	01-358/00:52:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/00:40:23
9419	MGS	01-358/00:52:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/00:40:23
9420	MGS	01-358/00:52:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/00:40:23
9421	MGS	01-358/00:52:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/00:40:23
9422	MGS	01-358/00:52:20	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9423	MGS	01-358/00:52:20	15	NOTE: Carrier Only -- No Telemetry Modulation		
9424	MGS	01-358/00:54:29		NOTE: Enter Planetary Atmosphere 12492		01-358/00:42:32
9425	MGS	01-358/00:56:11		NOTE: Apoapsis 12492 -		01-358/00:44:14
9426	MGS	01-358/00:57:34		SSR 1A Data Disable	CSD1AX	01-358/00:45:37
9427	MGS	01-358/00:57:34		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-358/00:45:37
9428	MGS	01-358/00:57:35		NOTE: End Block (SSRMGR)		01-358/00:45:38
9429	MGS	01-358/00:58:34		NOTE: Enter Solar Eclipse 12492		01-358/00:46:37
9430	MGS	01-358/00:58:34		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/00:46:37
9431	MGS	01-358/01:00:56		NOTE: Enter Earth Occultation 12492		01-358/00:48:59
9432	MGS	01-358/01:00:56	15	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9433	MGS	01-358/01:01:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/00:49:29
9434	MGS	01-358/01:01:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/00:49:29
9435	MGS	01-358/01:01:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/00:49:29
9436	MGS	01-358/01:01:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/00:49:29
9437	MGS	01-358/01:01:27		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/00:49:30
9438	MGS	01-358/01:01:28		NOTE: End EVP script		01-358/00:49:31
9439	MGS	01-358/01:01:29		NOTE: End Block (MAP_RT)		01-358/00:49:32
9440	MGS	01-358/01:01:32		NOTE: End fixed Sub-Reflector for Radio Science		01-358/00:49:35
9441	MGS	01-358/01:02:14	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
9442	MGS	01-358/01:04:15	15	Range Modulation On: SUP=3.0dB		
9443	MGS	01-358/01:05:15	15	Begin Ranging Acquisition		
9444	MGS	01-358/01:20:35		: 01:38:37	RPAONX	01-358/01:08:38
9445	MGS	01-358/01:20:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/01:08:38
9446	MGS	01-358/01:22:20		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/01:10:23
9447	MGS	01-358/01:22:23		NOTE: Exit Earth Occultation 12492		01-358/01:10:26
9448	MGS	01-358/01:22:23	15	Acquisition Of X-Band Signal		
9449	MGS	01-358/01:22:23	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9450	MGS	01-358/01:23:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/01:11:06
9451	MGS	01-358/01:23:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/01:11:06
9452	MGS	01-358/01:23:07		Command the PSE with included data word: 3990	SWPSEL	01-358/01:11:10
9453	MGS	01-358/01:23:08		Set eclipse egress script address: 0158	SWSEES	01-358/01:11:11
9454	MGS	01-358/01:26:08	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9455	MGS	01-358/01:29:10		NOTE: Exit Planetary Atmosphere 12492		01-358/01:17:12
9456	MGS	01-358/01:29:35		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:18:58	AEMPB	01-358/01:17:38
9457	MGS	01-358/01:29:35		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-358/01:17:38
9458	MGS	01-358/01:29:35		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-358/01:17:38
9459	MGS	01-358/01:29:36		SSR 1A Data Enable	CSD1AE	01-358/01:17:39
9460	MGS	01-358/01:29:36		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-358/01:17:39
9461	MGS	01-358/01:29:36	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9462	MGS	01-358/01:38:47		NOTE: Exit Solar Eclipse 12492		01-358/01:26:50
9463	MGS	01-358/01:54:57		NOTE: Periapsis 12493 ----------		01-358/01:43:00
9464	MGS	01-358/02:03:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/01:51:49
9465	MGS	01-358/02:03:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/01:51:49
9466	MGS	01-358/02:03:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/01:51:50
9467	MGS	01-358/02:03:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/01:51:50
9468	MGS	01-358/02:15:54	15	NOTE: Transmitter Off in 15 minutes		
9469	MGS	01-358/02:25:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/02:13:50
9470	MGS	01-358/02:25:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/02:13:50
9471	MGS	01-358/02:28:55	15	Range Modulation Off		
9472	MGS	01-358/02:30:54	15	Transmitter Off		
9473	MGS	01-358/02:40:14		SSR 1A Data Disable	CSD1AX	01-358/02:28:17
9474	MGS	01-358/02:40:14		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-358/02:28:17
9475	MGS	01-358/02:40:14		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-358/02:28:17
9476	MGS	01-358/02:40:14	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9477	MGS	01-358/02:46:13		NOTE: Start Block (MAP_RT)		01-358/02:34:16
9478	MGS	01-358/02:46:14		: 00:22:01, 01:38:36, FALSE, TRUE, FALSE, 00:01:15, 00:09:25, 01:18:49, 00:09:06	AEMINI	01-358/02:34:17
9479	MGS	01-358/02:46:14		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/02:34:17
9480	MGS	01-358/02:46:14		NOTE: Start EVP data return script		01-358/02:34:17
9481	MGS	01-358/02:46:15		: SE_2A, RTM, 01:18:48, MRC, 2001-358T03:17:00.000	AEMRTI	01-358/02:34:18
9482	MGS	01-358/02:52:08		NOTE: Enter Planetary Atmosphere 12493		01-358/02:40:10
9483	MGS	01-358/02:53:34		NOTE: Apoapsis 12493 -		01-358/02:41:36
9484	MGS	01-358/02:54:49	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9485	MGS	01-358/02:56:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/02:44:17
9486	MGS	01-358/02:56:15		NOTE: Enter Solar Eclipse 12493		01-358/02:44:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9487	MGS	01-358/02:58:34		NOTE: Enter Earth Occultation 12493		01-358/02:46:37
9488	MGS	01-358/02:58:34	15	NOTE: Loss Of X-Band Signal		
9489	MGS	01-358/02:59:12		NOTE: End EVP script		01-358/02:47:15
9490	MGS	01-358/02:59:12		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/02:47:15
9491	MGS	01-358/02:59:13		NOTE: End Block (MAP_PB_ODY)		01-358/02:47:16
9492	MGS	01-358/02:59:56	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
9493	MGS	01-358/03:01:57	15	Range Modulation On: SUP=3.0dB		
9494	MGS	01-358/03:02:57	15	Begin Ranging Acquisition		
9495	MGS	01-358/03:14:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/03:02:33
9496	MGS	01-358/03:18:16		: 01:38:36	RPAONX	01-358/03:06:18
9497	MGS	01-358/03:18:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/03:06:18
9498	MGS	01-358/03:19:31		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/03:07:33
9499	MGS	01-358/03:19:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/03:07:33
9500	MGS	01-358/03:19:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/03:07:33
9501	MGS	01-358/03:19:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/03:07:33
9502	MGS	01-358/03:19:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/03:07:33
9503	MGS	01-358/03:20:06		NOTE: Exit Earth Occultation 12493		01-358/03:08:08
9504	MGS	01-358/03:20:06	15	Acquisition Of X-Band Signal		
9505	MGS	01-358/03:20:06	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9506	MGS	01-358/03:20:06	15	NOTE: Carrier Only -- No Telemetry Modulation		
9507	MGS	01-358/03:20:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/03:08:50
9508	MGS	01-358/03:20:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/03:08:50
9509	MGS	01-358/03:20:53		Set eclipse egress script address: 019A	SWSEES	01-358/03:08:55
9510	MGS	01-358/03:26:51		NOTE: Exit Planetary Atmosphere 12493		01-358/03:14:53
9511	MGS	01-358/03:28:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/03:16:58
9512	MGS	01-358/03:28:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/03:16:58
9513	MGS	01-358/03:28:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/03:16:58
9514	MGS	01-358/03:28:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/03:16:58
9515	MGS	01-358/03:28:56	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9516	MGS	01-358/03:28:57		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/03:16:59
9517	MGS	01-358/03:28:57		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/03:16:59
9518	MGS	01-358/03:28:57		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/03:16:59
9519	MGS	01-358/03:28:57	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9520	MGS	01-358/03:29:01		NOTE: End fixed Sub-Reflector for Radio Science		01-358/03:17:03
9521	MGS	01-358/03:35:00	43	Begin Pre-Cal		
9522	MGS	01-358/03:35:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
9523	MGS	01-358/03:35:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
9524	MGS	01-358/03:35:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
9525	MGS	01-358/03:35:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
9526	MGS	01-358/03:35:00	43	Config: TGC: DEST=37		
9527	MGS	01-358/03:35:00	43	Config: TGC: BAND=X, BR=0.000000		
9528	MGS	01-358/03:35:00	43	Config: FSS: CH=2, PRI_FL=10000		
9529	MGS	01-358/03:35:00	43	Config: RSR		
9530	MGS	01-358/03:35:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
9531	MGS	01-358/03:35:00	43	Config: BVR		
9532	MGS	01-358/03:35:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
9533	MGS	01-358/03:35:00	43	Config: MDA: SMPL=0.1		
9534	MGS	01-358/03:36:27		NOTE: Exit Solar Eclipse 12493		01-358/03:24:30
9535	MGS	01-358/03:52:25		NOTE: Periapsis 12494 ----------		01-358/03:40:27
9536	MGS	01-358/03:57:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/03:45:28
9537	MGS	01-358/03:57:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/03:45:28
9538	MGS	01-358/03:57:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/03:45:29
9539	MGS	01-358/03:57:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/03:45:29
9540	MGS	01-358/04:13:33	15	NOTE: Transmitter Off in 15 minutes		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9541	MGS	01-358/04:19:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/04:07:29
9542	MGS	01-358/04:19:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/04:07:29
9543	MGS	01-358/04:26:33	15	Range Modulation Off		
9544	MGS	01-358/04:28:33	15	Transmitter Off		
9545	MGS	01-358/04:42:45		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/04:30:47
9546	MGS	01-358/04:43:57		NOTE: Start EVP data return script		01-358/04:31:59
9547	MGS	01-358/04:47:45		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/04:35:47
9548	MGS	01-358/04:47:45		: 00:09:06, FALSE	RDSCII	01-358/04:35:47
9549	MGS	01-358/04:47:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/04:35:47
9550	MGS	01-358/04:47:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/04:35:47
9551	MGS	01-358/04:47:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/04:35:47
9552	MGS	01-358/04:47:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/04:35:47
9553	MGS	01-358/04:47:45	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9554	MGS	01-358/04:47:45	15	NOTE: Carrier Only -- No Telemetry Modulation		
9555	MGS	01-358/04:49:48		NOTE: Enter Planetary Atmosphere 12494		01-358/04:37:51
9556	MGS	01-358/04:51:21		NOTE: Apoapsis 12494 -		01-358/04:39:23
9557	MGS	01-358/04:53:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/04:41:59
9558	MGS	01-358/04:53:57		NOTE: Enter Solar Eclipse 12494		01-358/04:41:59
9559	MGS	01-358/04:56:13		NOTE: Enter Earth Occultation 12494		01-358/04:44:15
9560	MGS	01-358/04:56:13	15	NOTE: Loss Of X-Band Signal		
9561	MGS	01-358/04:56:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/04:44:53
9562	MGS	01-358/04:56:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/04:44:53
9563	MGS	01-358/04:56:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/04:44:53
9564	MGS	01-358/04:56:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/04:44:53
9565	MGS	01-358/04:56:52		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/04:44:54
9566	MGS	01-358/04:56:52		NOTE: End EVP script		01-358/04:44:54
9567	MGS	01-358/04:56:56		NOTE: End fixed Sub-Reflector for Radio Science		01-358/04:44:58
9568	MGS	01-358/05:05:00	43	Begin Tracking		
9569	MGS	01-358/05:12:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/05:00:15
9570	MGS	01-358/05:12:32	15	NOTE: Below Uplink Interlock Limit		
9571	MGS	01-358/05:15:58		: 01:38:36	RPAONX	01-358/05:04:00
9572	MGS	01-358/05:15:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/05:04:00
9573	MGS	01-358/05:17:13		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/05:05:15
9574	MGS	01-358/05:17:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/05:05:15
9575	MGS	01-358/05:17:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/05:05:15
9576	MGS	01-358/05:17:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/05:05:15
9577	MGS	01-358/05:17:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/05:05:15
9578	MGS	01-358/05:17:43		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/05:05:45
9579	MGS	01-358/05:17:49		NOTE: Exit Earth Occultation 12494		01-358/05:05:52
9580	MGS	01-358/05:17:49	15	Acquisition Of X-Band Signal		
9581	MGS	01-358/05:17:49	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9582	MGS	01-358/05:17:49	15	NOTE: Carrier Only -- No Telemetry Modulation		
9583	MGS	01-358/05:17:49	43	Acquisition Of X-Band Signal		
9584	MGS	01-358/05:17:49	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9585	MGS	01-358/05:17:49	43	NOTE: Carrier Only -- No Telemetry Modulation		
9586	MGS	01-358/05:18:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/05:06:29
9587	MGS	01-358/05:18:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/05:06:29
9588	MGS	01-358/05:18:32		Set eclipse egress script address: 01DC	SWSEES	01-358/05:06:34
9589	MGS	01-358/05:24:32		NOTE: Exit Planetary Atmosphere 12494		01-358/05:12:35
9590	MGS	01-358/05:25:00	15	End Tracking		
9591	MGS	01-358/05:26:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/05:14:40
9592	MGS	01-358/05:26:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/05:14:40
9593	MGS	01-358/05:26:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/05:14:40
9594	MGS	01-358/05:26:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/05:14:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9595	MGS	01-358/05:26:38	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9596	MGS	01-358/05:26:39		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/05:14:41
9597	MGS	01-358/05:26:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/05:14:41
9598	MGS	01-358/05:26:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/05:14:41
9599	MGS	01-358/05:26:39	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9600	MGS	01-358/05:26:43		NOTE: End fixed Sub-Reflector for Radio Science		01-358/05:14:45
9601	MGS	01-358/05:34:09		NOTE: Exit Solar Eclipse 12494		01-358/05:22:12
9602	MGS	01-358/05:40:00	15	End Post-Cal		
9603	MGS	01-358/05:50:11		NOTE: Periapsis 12495 ----------		01-358/05:38:13
9604	MGS	01-358/05:55:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/05:43:11
9605	MGS	01-358/05:55:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/05:43:11
9606	MGS	01-358/05:55:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/05:43:12
9607	MGS	01-358/05:55:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/05:43:12
9608	MGS	01-358/06:17:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/06:05:12
9609	MGS	01-358/06:17:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/06:05:12
9610	MGS	01-358/06:27:15		NOTE: Start Block (SSRMGR)		01-358/06:15:17
9611	MGS	01-358/06:27:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-358/06:15:17
9612	MGS	01-358/06:27:16		SSR 1A Data Enable	CSD1AE	01-358/06:15:18
9613	MGS	01-358/06:27:16		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-358/06:15:18
9614	MGS	01-358/06:40:27		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/06:28:29
9615	MGS	01-358/06:41:43		NOTE: Start Block (MAP_PB_ODY)		01-358/06:29:45
9616	MGS	01-358/06:41:44		: 00:22:01, 01:38:37, FALSE, FALSE, FALSE, 00:01:15, 00:07:45, 01:22:10, 00:07:26	AEMINI	01-358/06:29:46
9617	MGS	01-358/06:41:44		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/06:29:46
9618	MGS	01-358/06:41:44		NOTE: Start EVP data return script		01-358/06:29:46
9619	MGS	01-358/06:41:45		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-358T07:10:47.000	AEMPBI	01-358/06:29:47
9620	MGS	01-358/06:45:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/06:33:29
9621	MGS	01-358/06:45:27		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8728000, DUR=00:18:11		01-358/06:33:29
9622	MGS	01-358/06:45:27		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-358/06:33:29
9623	MGS	01-358/06:45:27		: 00:09:06, FALSE	RDSCII	01-358/06:33:29
9624	MGS	01-358/06:45:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/06:33:29
9625	MGS	01-358/06:45:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/06:33:29
9626	MGS	01-358/06:45:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/06:33:29
9627	MGS	01-358/06:45:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/06:33:29
9628	MGS	01-358/06:45:27	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9629	MGS	01-358/06:45:27	43	NOTE: Carrier Only -- No Telemetry Modulation		
9630	MGS	01-358/06:47:35		NOTE: Enter Planetary Atmosphere 12495		01-358/06:35:37
9631	MGS	01-358/06:49:13		NOTE: Apoapsis 12495 -		01-358/06:37:15
9632	MGS	01-358/06:50:43		SSR 1B Data Disable	CSD1BX	01-358/06:38:45
9633	MGS	01-358/06:50:43		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-358/06:38:45
9634	MGS	01-358/06:50:44		NOTE: End Block (SSRMGR)		01-358/06:38:46
9635	MGS	01-358/06:51:44		NOTE: Enter Solar Eclipse 12495		01-358/06:39:46
9636	MGS	01-358/06:51:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/06:39:46
9637	MGS	01-358/06:53:59		NOTE: Enter Earth Occultation 12495		01-358/06:42:01
9638	MGS	01-358/06:53:59	43	NOTE: Loss Of X-Band Signal		
9639	MGS	01-358/06:54:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/06:42:35
9640	MGS	01-358/06:54:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/06:42:35
9641	MGS	01-358/06:54:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/06:42:35
9642	MGS	01-358/06:54:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/06:42:35
9643	MGS	01-358/06:54:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/06:42:36
9644	MGS	01-358/06:54:34		NOTE: End EVP script		01-358/06:42:36
9645	MGS	01-358/06:54:35		NOTE: End Block (MAP_RT)		01-358/06:42:37
9646	MGS	01-358/06:54:38		NOTE: End fixed Sub-Reflector for Radio Science		01-358/06:42:40
9647	MGS	01-358/07:13:45		: 01:38:37	RPAONX	01-358/07:01:47
9648	MGS	01-358/07:13:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/07:01:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9649	MGS	01-358/07:15:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/07:03:32
9650	MGS	01-358/07:15:36		NOTE: Exit Earth Occultation 12495		01-358/07:03:38
9651	MGS	01-358/07:15:36	43	Acquisition Of X-Band Signal		
9652	MGS	01-358/07:15:36	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9653	MGS	01-358/07:16:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/07:04:12
9654	MGS	01-358/07:16:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/07:04:12
9655	MGS	01-358/07:16:14		Command the PSE with included data word: 3990	SWPSEL	01-358/07:04:16
9656	MGS	01-358/07:16:15		Set eclipse egress script address: 0158	SWSEES	01-358/07:04:17
9657	MGS	01-358/07:22:19		NOTE: Exit Planetary Atmosphere 12495		01-358/07:10:21
9658	MGS	01-358/07:22:45		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:18:58	AEMPB	01-358/07:10:47
9659	MGS	01-358/07:22:45		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-358/07:10:47
9660	MGS	01-358/07:22:45		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-358/07:10:47
9661	MGS	01-358/07:22:46		SSR 1B Data Enable	CSD1BE	01-358/07:10:48
9662	MGS	01-358/07:22:46		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-358/07:10:48
9663	MGS	01-358/07:22:46	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9664	MGS	01-358/07:31:57		NOTE: Exit Solar Eclipse 12495		01-358/07:19:59
9665	MGS	01-358/07:48:05		NOTE: Periapsis 12496 ----------		01-358/07:36:06
9666	MGS	01-358/07:56:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/07:44:57
9667	MGS	01-358/07:56:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/07:44:57
9668	MGS	01-358/07:56:56		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/07:44:58
9669	MGS	01-358/07:56:56		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/07:44:58
9670	MGS	01-358/08:18:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/08:06:58
9671	MGS	01-358/08:18:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/08:06:58
9672	MGS	01-358/08:33:24		SSR 1B Data Disable	CSD1BX	01-358/08:21:26
9673	MGS	01-358/08:33:24		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-358/08:21:26
9674	MGS	01-358/08:33:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-358/08:21:26
9675	MGS	01-358/08:33:24	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9676	MGS	01-358/08:39:30		NOTE: Start Block (MAP_RT)		01-358/08:27:32
9677	MGS	01-358/08:39:31		: 00:22:01, 01:38:36, FALSE, TRUE, FALSE, 00:01:15, 00:09:25, 01:18:49, 00:09:06	AEMINI	01-358/08:27:33
9678	MGS	01-358/08:39:31		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/08:27:33
9679	MGS	01-358/08:39:31		NOTE: Start EVP data return script		01-358/08:27:33
9680	MGS	01-358/08:39:32		: SE_2A, RTM, 01:18:48, MRC, 2001-358T09:10:15.000	AEMRTI	01-358/08:27:34
9681	MGS	01-358/08:45:23		NOTE: Enter Planetary Atmosphere 12496		01-358/08:33:25
9682	MGS	01-358/08:46:53		NOTE: Apoapsis 12496 -		01-358/08:34:55
9683	MGS	01-358/08:49:31		NOTE: Enter Solar Eclipse 12496		01-358/08:37:33
9684	MGS	01-358/08:49:31		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/08:37:33
9685	MGS	01-358/08:51:46		NOTE: Enter Earth Occultation 12496		01-358/08:39:48
9686	MGS	01-358/08:51:46	43	NOTE: Loss Of X-Band Signal		
9687	MGS	01-358/08:52:22		NOTE: End EVP script		01-358/08:40:24
9688	MGS	01-358/08:52:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/08:40:24
9689	MGS	01-358/08:52:23		NOTE: End Block (MAP_PB_ODY)		01-358/08:40:25
9690	MGS	01-358/09:07:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/08:55:49
9691	MGS	01-358/09:11:32		: 01:38:36	RPAONX	01-358/08:59:34
9692	MGS	01-358/09:11:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/08:59:34
9693	MGS	01-358/09:12:47		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/09:00:49
9694	MGS	01-358/09:12:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/09:00:49
9695	MGS	01-358/09:12:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/09:00:49
9696	MGS	01-358/09:12:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/09:00:49
9697	MGS	01-358/09:12:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/09:00:49
9698	MGS	01-358/09:13:24		NOTE: Exit Earth Occultation 12496		01-358/09:01:26
9699	MGS	01-358/09:13:24	43	Acquisition Of X-Band Signal		
9700	MGS	01-358/09:13:24	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9701	MGS	01-358/09:13:24	43	NOTE: Carrier Only -- No Telemetry Modulation		
9702	MGS	01-358/09:13:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/09:01:58

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9703	MGS	01-358/09:13:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/09:01:58
9704	MGS	01-358/09:14:01		Set eclipse egress script address: 019A	SWSEES	01-358/09:02:03
9705	MGS	01-358/09:20:06		NOTE: Exit Planetary Atmosphere 12496		01-358/09:08:08
9706	MGS	01-358/09:22:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/09:10:14
9707	MGS	01-358/09:22:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/09:10:14
9708	MGS	01-358/09:22:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/09:10:14
9709	MGS	01-358/09:22:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/09:10:14
9710	MGS	01-358/09:22:12	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9711	MGS	01-358/09:22:13		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/09:10:15
9712	MGS	01-358/09:22:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/09:10:15
9713	MGS	01-358/09:22:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/09:10:15
9714	MGS	01-358/09:22:13	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9715	MGS	01-358/09:22:17		NOTE: End fixed Sub-Reflector for Radio Science		01-358/09:10:19
9716	MGS	01-358/09:29:44		NOTE: Exit Solar Eclipse 12496		01-358/09:17:46
9717	MGS	01-358/09:45:47		NOTE: Periapsis 12497 ----------		01-358/09:33:49
9718	MGS	01-358/09:50:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/09:38:45
9719	MGS	01-358/09:50:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/09:38:45
9720	MGS	01-358/09:50:45		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/09:38:46
9721	MGS	01-358/09:50:45		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/09:38:46
9722	MGS	01-358/10:12:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/10:00:46
9723	MGS	01-358/10:12:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/10:00:46
9724	MGS	01-358/10:35:00	63	Begin Pre-Cal		
9725	MGS	01-358/10:35:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
9726	MGS	01-358/10:35:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
9727	MGS	01-358/10:35:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
9728	MGS	01-358/10:35:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
9729	MGS	01-358/10:35:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
9730	MGS	01-358/10:35:00	63	Config: TGC: DEST=37		
9731	MGS	01-358/10:35:00	63	Config: TGC: BAND=X, BR=40000.000000		
9732	MGS	01-358/10:35:00	63	Config: FSS: CH=2, PRI_FL=10000		
9733	MGS	01-358/10:35:00	63	Config: RSR		
9734	MGS	01-358/10:35:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
9735	MGS	01-358/10:35:00	63	Config: BVR		
9736	MGS	01-358/10:35:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
9737	MGS	01-358/10:35:00	63	Config: MDA: SMPL=0.1		
9738	MGS	01-358/10:36:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/10:24:03
9739	MGS	01-358/10:37:18		NOTE: Start EVP data return script		01-358/10:25:19
9740	MGS	01-358/10:41:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/10:29:03
9741	MGS	01-358/10:41:02		: 00:09:06, FALSE	RDSCII	01-358/10:29:03
9742	MGS	01-358/10:41:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/10:29:03
9743	MGS	01-358/10:41:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/10:29:03
9744	MGS	01-358/10:41:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/10:29:03
9745	MGS	01-358/10:41:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/10:29:03
9746	MGS	01-358/10:41:02	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9747	MGS	01-358/10:41:02	43	NOTE: Carrier Only -- No Telemetry Modulation		
9748	MGS	01-358/10:43:08		NOTE: Enter Planetary Atmosphere 12497		01-358/10:31:09
9749	MGS	01-358/10:44:21		NOTE: Apoapsis 12497 -		01-358/10:32:23
9750	MGS	01-358/10:47:17		NOTE: Enter Solar Eclipse 12497		01-358/10:35:18
9751	MGS	01-358/10:47:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/10:35:19
9752	MGS	01-358/10:49:31		NOTE: Enter Earth Occultation 12497		01-358/10:37:32
9753	MGS	01-358/10:49:31	43	NOTE: Loss Of X-Band Signal		
9754	MGS	01-358/10:50:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/10:38:09
9755	MGS	01-358/10:50:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/10:38:09
9756	MGS	01-358/10:50:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/10:38:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9757	MGS	01-358/10:50:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/10:38:09
9758	MGS	01-358/10:50:08		NOTE: End EVP script		01-358/10:38:10
9759	MGS	01-358/10:50:09		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/10:38:10
9760	MGS	01-358/10:50:12		NOTE: End fixed Sub-Reflector for Radio Science		01-358/10:38:14
9761	MGS	01-358/11:05:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/10:53:35
9762	MGS	01-358/11:09:19		: 01:38:36	RPAONX	01-358/10:57:20
9763	MGS	01-358/11:09:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/10:57:20
9764	MGS	01-358/11:10:34		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/10:58:35
9765	MGS	01-358/11:10:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/10:58:35
9766	MGS	01-358/11:10:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/10:58:35
9767	MGS	01-358/11:10:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/10:58:35
9768	MGS	01-358/11:10:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/10:58:35
9769	MGS	01-358/11:11:04		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/10:59:05
9770	MGS	01-358/11:11:12		NOTE: Exit Earth Occultation 12497		01-358/10:59:13
9771	MGS	01-358/11:11:12	43	Acquisition Of X-Band Signal		
9772	MGS	01-358/11:11:12	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9773	MGS	01-358/11:11:12	43	NOTE: Carrier Only -- No Telemetry Modulation		
9774	MGS	01-358/11:11:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/10:59:46
9775	MGS	01-358/11:11:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/10:59:46
9776	MGS	01-358/11:11:50		Set eclipse egress script address: 01DC	SWSEES	01-358/10:59:51
9777	MGS	01-358/11:17:54		NOTE: Exit Planetary Atmosphere 12497		01-358/11:05:55
9778	MGS	01-358/11:19:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/11:08:00
9779	MGS	01-358/11:19:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/11:08:00
9780	MGS	01-358/11:19:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/11:08:00
9781	MGS	01-358/11:19:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/11:08:00
9782	MGS	01-358/11:19:59	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9783	MGS	01-358/11:20:00		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/11:08:01
9784	MGS	01-358/11:20:00		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/11:08:01
9785	MGS	01-358/11:20:00		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/11:08:01
9786	MGS	01-358/11:20:00	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9787	MGS	01-358/11:20:03		NOTE: End fixed Sub-Reflector for Radio Science		01-358/11:08:05
9788	MGS	01-358/11:27:30		NOTE: Exit Solar Eclipse 12497		01-358/11:15:31
9789	MGS	01-358/11:43:33		NOTE: Periapsis 12498 ----------		01-358/11:31:34
9790	MGS	01-358/11:48:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/11:36:30
9791	MGS	01-358/11:48:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/11:36:30
9792	MGS	01-358/11:48:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/11:36:31
9793	MGS	01-358/11:48:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/11:36:31
9794	MGS	01-358/12:05:00	63	Begin Tracking		
9795	MGS	01-358/12:05:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9796	MGS	01-358/12:10:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/11:58:31
9797	MGS	01-358/12:10:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/11:58:31
9798	MGS	01-358/12:11:58		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-358/11:59:59
9799	MGS	01-358/12:17:30	43	NOTE: Below Uplink Interlock Limit		
9800	MGS	01-358/12:20:18	63	NOTE: Above Uplink Interlock Limit		
9801	MGS	01-358/12:20:25		NOTE: Start Block (SSRMGR)		01-358/12:08:26
9802	MGS	01-358/12:20:25		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-358/12:08:26
9803	MGS	01-358/12:20:26		SSR 1B Data Enable	CSD1BE	01-358/12:08:27
9804	MGS	01-358/12:20:26		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-358/12:08:27
9805	MGS	01-358/12:25:00	43	End Tracking		
9806	MGS	01-358/12:33:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/12:21:49
9807	MGS	01-358/12:35:00		NOTE: Start Block (MAP_PB_ODY)		01-358/12:23:01
9808	MGS	01-358/12:35:01		: 00:22:01, 01:38:37, FALSE, FALSE, FALSE, 00:01:15, 00:07:45, 01:22:10, 00:07:26	AEMINI	01-358/12:23:02
9809	MGS	01-358/12:35:01		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/12:23:02
9810	MGS	01-358/12:35:01		NOTE: Start EVP data return script		01-358/12:23:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9811	MGS	01-358/12:35:02		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-358T13:04:03.000	AEMPBI	01-358/12:23:03
9812	MGS	01-358/12:38:48		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/12:26:49
9813	MGS	01-358/12:38:48		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8816000, DUR=00:18:22		01-358/12:26:49
9814	MGS	01-358/12:38:48		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-358/12:26:49
9815	MGS	01-358/12:38:48		: 00:09:06, FALSE	RDSCII	01-358/12:26:49
9816	MGS	01-358/12:38:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/12:26:49
9817	MGS	01-358/12:38:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/12:26:49
9818	MGS	01-358/12:38:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/12:26:49
9819	MGS	01-358/12:38:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/12:26:49
9820	MGS	01-358/12:38:48	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9821	MGS	01-358/12:38:48	63	NOTE: Carrier Only -- No Telemetry Modulation		
9822	MGS	01-358/12:40:00	43	End Post-Cal		
9823	MGS	01-358/12:40:51		NOTE: Enter Planetary Atmosphere 12498		01-358/12:28:52
9824	MGS	01-358/12:42:03		NOTE: Apoapsis 12498 -		01-358/12:30:04
9825	MGS	01-358/12:44:00		SSR 1A Data Disable	CSD1AX	01-358/12:32:01
9826	MGS	01-358/12:44:00		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-358/12:32:01
9827	MGS	01-358/12:44:01		NOTE: End Block (SSRMGR)		01-358/12:32:02
9828	MGS	01-358/12:45:01		NOTE: Enter Solar Eclipse 12498		01-358/12:33:02
9829	MGS	01-358/12:45:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/12:33:02
9830	MGS	01-358/12:47:14		NOTE: Enter Earth Occultation 12498		01-358/12:35:15
9831	MGS	01-358/12:47:14	63	NOTE: Loss Of X-Band Signal		
9832	MGS	01-358/12:47:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/12:35:55
9833	MGS	01-358/12:47:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/12:35:55
9834	MGS	01-358/12:47:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/12:35:55
9835	MGS	01-358/12:47:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/12:35:55
9836	MGS	01-358/12:47:55		NOTE: End EVP script		01-358/12:35:56
9837	MGS	01-358/12:47:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/12:35:56
9838	MGS	01-358/12:47:56		NOTE: End Block (MAP_RT)		01-358/12:35:57
9839	MGS	01-358/12:47:59		NOTE: End fixed Sub-Reflector for Radio Science		01-358/12:36:00
9840	MGS	01-358/13:07:02		: 01:38:37	RPAONX	01-358/12:55:03
9841	MGS	01-358/13:07:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/12:55:03
9842	MGS	01-358/13:08:47		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/12:56:48
9843	MGS	01-358/13:08:57		NOTE: Exit Earth Occultation 12498		01-358/12:56:58
9844	MGS	01-358/13:08:57	63	Acquisition Of X-Band Signal		
9845	MGS	01-358/13:08:57	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9846	MGS	01-358/13:09:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/12:57:31
9847	MGS	01-358/13:09:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/12:57:31
9848	MGS	01-358/13:09:34		Command the PSE with included data word: 3990	SWPSEL	01-358/12:57:35
9849	MGS	01-358/13:09:35		Set eclipse egress script address: 0158	SWSEES	01-358/12:57:36
9850	MGS	01-358/13:15:39		NOTE: Exit Planetary Atmosphere 12498		01-358/13:03:40
9851	MGS	01-358/13:16:02		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:18:58	AEMPB	01-358/13:04:03
9852	MGS	01-358/13:16:02		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-358/13:04:03
9853	MGS	01-358/13:16:02		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-358/13:04:03
9854	MGS	01-358/13:16:03		SSR 1A Data Enable	CSD1AE	01-358/13:04:04
9855	MGS	01-358/13:16:03		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-358/13:04:04
9856	MGS	01-358/13:16:03	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9857	MGS	01-358/13:25:14		NOTE: Exit Solar Eclipse 12498		01-358/13:13:15
9858	MGS	01-358/13:41:17		NOTE: Periapsis 12499 ----------		01-358/13:29:18
9859	MGS	01-358/13:50:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/13:38:14
9860	MGS	01-358/13:50:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/13:38:14
9861	MGS	01-358/13:50:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/13:38:15
9862	MGS	01-358/13:50:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/13:38:15
9863	MGS	01-358/14:12:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/14:00:15
9864	MGS	01-358/14:12:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/14:00:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9865	MGS	01-358/14:26:41		SSR 1A Data Disable	CSD1AX	01-358/14:14:42
9866	MGS	01-358/14:26:41		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-358/14:14:42
9867	MGS	01-358/14:26:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-358/14:14:42
9868	MGS	01-358/14:26:41	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9869	MGS	01-358/14:32:42		NOTE: Start Block (MAP_RT)		01-358/14:20:43
9870	MGS	01-358/14:32:43		: 00:22:01, 01:38:36, FALSE, TRUE, FALSE, 00:01:15, 00:09:25, 01:18:49, 00:09:06	AEMINI	01-358/14:20:44
9871	MGS	01-358/14:32:43		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/14:20:44
9872	MGS	01-358/14:32:43		NOTE: Start EVP data return script		01-358/14:20:44
9873	MGS	01-358/14:32:44		: SE_2A, RTM, 01:18:48, MRC, 2001-358T15:03:26.000	AEMRTI	01-358/14:20:45
9874	MGS	01-358/14:38:33		NOTE: Enter Planetary Atmosphere 12499		01-358/14:26:34
9875	MGS	01-358/14:39:56		NOTE: Apoapsis 12499 -		01-358/14:27:57
9876	MGS	01-358/14:42:43		NOTE: Enter Solar Eclipse 12499		01-358/14:30:44
9877	MGS	01-358/14:42:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/14:30:44
9878	MGS	01-358/14:44:56		NOTE: Enter Earth Occultation 12499		01-358/14:32:57
9879	MGS	01-358/14:44:56	63	NOTE: Loss Of X-Band Signal		
9880	MGS	01-358/14:45:39		NOTE: End EVP script		01-358/14:33:40
9881	MGS	01-358/14:45:39		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/14:33:40
9882	MGS	01-358/14:45:40		NOTE: End Block (MAP_PB_ODY)		01-358/14:33:41
9883	MGS	01-358/15:00:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/14:49:00
9884	MGS	01-358/15:04:44		: 01:38:36	RPAONX	01-358/14:52:45
9885	MGS	01-358/15:04:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/14:52:45
9886	MGS	01-358/15:05:59		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/14:54:00
9887	MGS	01-358/15:05:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/14:54:00
9888	MGS	01-358/15:05:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/14:54:00
9889	MGS	01-358/15:05:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/14:54:00
9890	MGS	01-358/15:05:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/14:54:00
9891	MGS	01-358/15:06:40		NOTE: Exit Earth Occultation 12499		01-358/14:54:41
9892	MGS	01-358/15:06:40	63	Acquisition Of X-Band Signal		
9893	MGS	01-358/15:06:40	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9894	MGS	01-358/15:06:40	63	NOTE: Carrier Only -- No Telemetry Modulation		
9895	MGS	01-358/15:07:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/14:55:15
9896	MGS	01-358/15:07:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/14:55:15
9897	MGS	01-358/15:07:19		Set eclipse egress script address: 019A	SWSEES	01-358/14:55:20
9898	MGS	01-358/15:13:22		NOTE: Exit Planetary Atmosphere 12499		01-358/15:01:23
9899	MGS	01-358/15:15:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/15:03:25
9900	MGS	01-358/15:15:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/15:03:25
9901	MGS	01-358/15:15:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/15:03:25
9902	MGS	01-358/15:15:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/15:03:25
9903	MGS	01-358/15:15:24	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9904	MGS	01-358/15:15:25		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/15:03:26
9905	MGS	01-358/15:15:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/15:03:26
9906	MGS	01-358/15:15:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/15:03:26
9907	MGS	01-358/15:15:25	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9908	MGS	01-358/15:15:29		NOTE: End fixed Sub-Reflector for Radio Science		01-358/15:03:30
9909	MGS	01-358/15:22:56		NOTE: Exit Solar Eclipse 12499		01-358/15:10:57
9910	MGS	01-358/15:38:49		NOTE: Periapsis 12500 ----------		01-358/15:26:50
9911	MGS	01-358/15:43:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/15:31:56
9912	MGS	01-358/15:43:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/15:31:56
9913	MGS	01-358/15:43:56		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/15:31:57
9914	MGS	01-358/15:43:56		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/15:31:57
9915	MGS	01-358/16:05:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/15:53:57
9916	MGS	01-358/16:05:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/15:53:57
9917	MGS	01-358/16:29:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/16:17:14
9918	MGS	01-358/16:30:26		NOTE: Start EVP data return script		01-358/16:18:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9919	MGS	01-358/16:34:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/16:22:14
9920	MGS	01-358/16:34:14		: 00:09:06, FALSE	RDSCII	01-358/16:22:14
9921	MGS	01-358/16:34:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/16:22:14
9922	MGS	01-358/16:34:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/16:22:14
9923	MGS	01-358/16:34:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/16:22:14
9924	MGS	01-358/16:34:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/16:22:14
9925	MGS	01-358/16:34:14	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9926	MGS	01-358/16:34:14	63	NOTE: Carrier Only -- No Telemetry Modulation		
9927	MGS	01-358/16:36:16		NOTE: Enter Planetary Atmosphere 12500		01-358/16:24:17
9928	MGS	01-358/16:37:25		NOTE: Apoapsis 12500 -		01-358/16:25:25
9929	MGS	01-358/16:40:25		NOTE: Enter Solar Eclipse 12500		01-358/16:28:26
9930	MGS	01-358/16:40:26		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/16:28:26
9931	MGS	01-358/16:42:38		NOTE: Enter Earth Occultation 12500		01-358/16:30:39
9932	MGS	01-358/16:42:38	63	NOTE: Loss Of X-Band Signal		
9933	MGS	01-358/16:43:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/16:31:20
9934	MGS	01-358/16:43:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/16:31:20
9935	MGS	01-358/16:43:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/16:31:20
9936	MGS	01-358/16:43:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/16:31:20
9937	MGS	01-358/16:43:20		NOTE: End EVP script		01-358/16:31:21
9938	MGS	01-358/16:43:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/16:31:21
9939	MGS	01-358/16:43:24		NOTE: End fixed Sub-Reflector for Radio Science		01-358/16:31:25
9940	MGS	01-358/16:58:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/16:46:42
9941	MGS	01-358/17:02:27		: 01:38:36	RPAONX	01-358/16:50:27
9942	MGS	01-358/17:02:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/16:50:27
9943	MGS	01-358/17:03:42		: 00:00:30, 00:09:25, FALSE	RDSCIE	01-358/16:51:42
9944	MGS	01-358/17:03:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/16:51:42
9945	MGS	01-358/17:03:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/16:51:42
9946	MGS	01-358/17:03:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/16:51:42
9947	MGS	01-358/17:03:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/16:51:42
9948	MGS	01-358/17:04:12		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/16:52:12
9949	MGS	01-358/17:04:23		NOTE: Exit Earth Occultation 12500		01-358/16:52:24
9950	MGS	01-358/17:04:23	63	Acquisition Of X-Band Signal		
9951	MGS	01-358/17:04:23	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9952	MGS	01-358/17:04:23	63	NOTE: Carrier Only -- No Telemetry Modulation		
9953	MGS	01-358/17:04:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/16:52:57
9954	MGS	01-358/17:04:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/16:52:57
9955	MGS	01-358/17:05:02		Set eclipse egress script address: 01DC	SWSEES	01-358/16:53:02
9956	MGS	01-358/17:11:04		NOTE: Exit Planetary Atmosphere 12500		01-358/16:59:05
9957	MGS	01-358/17:13:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/17:01:07
9958	MGS	01-358/17:13:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/17:01:07
9959	MGS	01-358/17:13:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/17:01:07
9960	MGS	01-358/17:13:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/17:01:07
9961	MGS	01-358/17:13:07	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9962	MGS	01-358/17:13:08		: RTM, MRC, 01:18:48, S&E_2A, FALSE, 00:09:07	AEMRT	01-358/17:01:08
9963	MGS	01-358/17:13:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/17:01:08
9964	MGS	01-358/17:13:08		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/17:01:08
9965	MGS	01-358/17:13:08	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
9966	MGS	01-358/17:13:11		NOTE: End fixed Sub-Reflector for Radio Science		01-358/17:01:12
9967	MGS	01-358/17:20:38		NOTE: Exit Solar Eclipse 12500		01-358/17:08:39
9968	MGS	01-358/17:36:12		NOTE: Periapsis 12501 ----------		01-358/17:24:13
9969	MGS	01-358/17:41:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/17:29:38
9970	MGS	01-358/17:41:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/17:29:38
9971	MGS	01-358/17:41:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/17:29:39
9972	MGS	01-358/17:41:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/17:29:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
9973	MGS	01-358/18:03:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/17:51:39
9974	MGS	01-358/18:03:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/17:51:39
9975	MGS	01-358/18:13:45		NOTE: Start Block (SSRMGR)		01-358/18:01:45
9976	MGS	01-358/18:13:45		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-358/18:01:45
9977	MGS	01-358/18:13:46		SSR 1A Data Enable	CSD1AE	01-358/18:01:46
9978	MGS	01-358/18:13:46		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-358/18:01:46
9979	MGS	01-358/18:26:56		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/18:14:56
9980	MGS	01-358/18:28:09		NOTE: Start Block (MAP_PB_ODY)		01-358/18:16:09
9981	MGS	01-358/18:28:10		: 00:22:01, 01:38:37, FALSE, FALSE, FALSE, 00:01:15, 00:07:45, 01:22:10, 00:07:26	AEMINI	01-358/18:16:10
9982	MGS	01-358/18:28:10		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/18:16:10
9983	MGS	01-358/18:28:10		NOTE: Start EVP data return script		01-358/18:16:10
9984	MGS	01-358/18:28:11		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-358T18:57:12.000	AEMPBI	01-358/18:16:11
9985	MGS	01-358/18:31:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/18:19:56
9986	MGS	01-358/18:31:56		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8720000, DUR=00:18:10		01-358/18:19:56
9987	MGS	01-358/18:31:56		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-358/18:19:56
9988	MGS	01-358/18:31:56		: 00:09:06, FALSE	RDSCII	01-358/18:19:56
9989	MGS	01-358/18:31:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/18:19:56
9990	MGS	01-358/18:31:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/18:19:56
9991	MGS	01-358/18:31:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/18:19:56
9992	MGS	01-358/18:31:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/18:19:56
9993	MGS	01-358/18:31:56	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
9994	MGS	01-358/18:31:56	63	NOTE: Carrier Only -- No Telemetry Modulation		
9995	MGS	01-358/18:33:59		NOTE: Enter Planetary Atmosphere 12501		01-358/18:21:59
9996	MGS	01-358/18:34:55		NOTE: Apoapsis 12501 -		01-358/18:22:55
9997	MGS	01-358/18:37:10		SSR 1B Data Disable	CSD1BX	01-358/18:25:10
9998	MGS	01-358/18:37:10		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-358/18:25:10
9999	MGS	01-358/18:37:11		NOTE: End Block (SSRMGR)		01-358/18:25:11
10000	MGS	01-358/18:38:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/18:26:10
10001	MGS	01-358/18:38:10		NOTE: Enter Solar Eclipse 12501		01-358/18:26:10
10002	MGS	01-358/18:40:19		NOTE: Enter Earth Occultation 12501		01-358/18:28:19
10003	MGS	01-358/18:40:19	63	NOTE: Loss Of X-Band Signal		
10004	MGS	01-358/18:41:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/18:29:02
10005	MGS	01-358/18:41:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/18:29:02
10006	MGS	01-358/18:41:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/18:29:02
10007	MGS	01-358/18:41:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/18:29:02
10008	MGS	01-358/18:41:03		NOTE: End EVP script		01-358/18:29:03
10009	MGS	01-358/18:41:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/18:29:03
10010	MGS	01-358/18:41:04		NOTE: End Block (MAP_RT)		01-358/18:29:04
10011	MGS	01-358/18:41:07		NOTE: End fixed Sub-Reflector for Radio Science		01-358/18:29:07
10012	MGS	01-358/19:00:11		: 01:38:37	RPAONX	01-358/18:48:11
10013	MGS	01-358/19:00:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/18:48:11
10014	MGS	01-358/19:01:56		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/18:49:56
10015	MGS	01-358/19:02:09		NOTE: Exit Earth Occultation 12501		01-358/18:50:09
10016	MGS	01-358/19:02:09	63	Acquisition Of X-Band Signal		
10017	MGS	01-358/19:02:09	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10018	MGS	01-358/19:02:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/18:50:39
10019	MGS	01-358/19:02:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/18:50:39
10020	MGS	01-358/19:02:43		Command the PSE with included data word: 3990	SWPSEL	01-358/18:50:43
10021	MGS	01-358/19:02:44		Set eclipse egress script address: 0158	SWSEES	01-358/18:50:44
10022	MGS	01-358/19:08:48		NOTE: Exit Planetary Atmosphere 12501		01-358/18:56:48
10023	MGS	01-358/19:09:11		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:18:58	AEMPB	01-358/18:57:11
10024	MGS	01-358/19:09:11		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-358/18:57:11
10025	MGS	01-358/19:09:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-358/18:57:11
10026	MGS	01-358/19:09:12		SSR 1B Data Enable	CSD1BE	01-358/18:57:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10027	MGS	01-358/19:09:12		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-358/18:57:12
10028	MGS	01-358/19:09:12	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10029	MGS	01-358/19:18:23		NOTE: Exit Solar Eclipse 12501		01-358/19:06:23
10030	MGS	01-358/19:34:12		NOTE: Periapsis 12502 ----------		01-358/19:22:12
10031	MGS	01-358/19:43:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/19:31:22
10032	MGS	01-358/19:43:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/19:31:22
10033	MGS	01-358/19:43:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/19:31:23
10034	MGS	01-358/19:43:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/19:31:23
10035	MGS	01-358/19:50:00	15	Begin Pre-Cal		
10036	MGS	01-358/19:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10037	MGS	01-358/19:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10038	MGS	01-358/19:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10039	MGS	01-358/19:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10040	MGS	01-358/19:50:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
10041	MGS	01-358/19:50:00	15	Config: TGC: DEST=37		
10042	MGS	01-358/19:50:00	15	Config: TGC: BAND=X, BR=40000.000000		
10043	MGS	01-358/19:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
10044	MGS	01-358/19:50:00	15	Config: RSR		
10045	MGS	01-358/19:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
10046	MGS	01-358/19:50:00	15	Config: BVR		
10047	MGS	01-358/19:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
10048	MGS	01-358/19:50:00	15	Config: MDA: SMPL=0.1		
10049	MGS	01-358/20:05:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/19:53:23
10050	MGS	01-358/20:05:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/19:53:23
10051	MGS	01-358/20:19:50		SSR 1B Data Disable	CSD1BX	01-358/20:07:50
10052	MGS	01-358/20:19:50		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-358/20:07:50
10053	MGS	01-358/20:19:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-358/20:07:50
10054	MGS	01-358/20:19:50	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10055	MGS	01-358/20:25:55		NOTE: Start Block (MAP_RT)		01-358/20:13:55
10056	MGS	01-358/20:25:56		: 00:22:14, 01:38:12, FALSE, TRUE, FALSE, 00:01:15, 00:09:19, 01:18:36, 00:09:01	AEMINI	01-358/20:13:56
10057	MGS	01-358/20:25:56		Enable sending eclipse ingress script when array power disappears	SWEISE	01-358/20:13:56
10058	MGS	01-358/20:25:56		NOTE: Start EVP data return script		01-358/20:13:56
10059	MGS	01-358/20:25:57		: SE_2A, RTM, 01:18:35, MRC, 2001-358T20:56:46.000	AEMRTI	01-358/20:13:57
10060	MGS	01-358/20:31:43		NOTE: Enter Planetary Atmosphere 12502		01-358/20:19:43
10061	MGS	01-358/20:33:04		NOTE: Apoapsis 12502 -		01-358/20:21:04
10062	MGS	01-358/20:35:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/20:23:56
10063	MGS	01-358/20:35:56		NOTE: Enter Solar Eclipse 12502		01-358/20:23:56
10064	MGS	01-358/20:38:03		NOTE: Enter Earth Occultation 12502		01-358/20:26:03
10065	MGS	01-358/20:38:03	63	NOTE: Loss Of X-Band Signal		
10066	MGS	01-358/20:38:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/20:26:48
10067	MGS	01-358/20:38:48		NOTE: End EVP script		01-358/20:26:48
10068	MGS	01-358/20:38:49		NOTE: End Block (MAP_PB_ODY)		01-358/20:26:49
10069	MGS	01-358/20:54:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/20:42:25
10070	MGS	01-358/20:58:10		: 01:38:12	RPAONX	01-358/20:46:10
10071	MGS	01-358/20:58:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/20:46:10
10072	MGS	01-358/20:59:25		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-358/20:47:25
10073	MGS	01-358/20:59:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/20:47:25
10074	MGS	01-358/20:59:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/20:47:25
10075	MGS	01-358/20:59:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/20:47:25
10076	MGS	01-358/20:59:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/20:47:25
10077	MGS	01-358/20:59:56		NOTE: Exit Earth Occultation 12502		01-358/20:47:56
10078	MGS	01-358/20:59:56	63	Acquisition Of X-Band Signal		
10079	MGS	01-358/20:59:56	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10080	MGS	01-358/20:59:56	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10081	MGS	01-358/21:00:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/20:48:23
10082	MGS	01-358/21:00:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/20:48:23
10083	MGS	01-358/21:00:28		Set eclipse egress script address: 019A	SWSEES	01-358/20:48:28
10084	MGS	01-358/21:06:34		NOTE: Exit Planetary Atmosphere 12502		01-358/20:54:34
10085	MGS	01-358/21:08:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/20:56:44
10086	MGS	01-358/21:08:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/20:56:44
10087	MGS	01-358/21:08:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/20:56:44
10088	MGS	01-358/21:08:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/20:56:44
10089	MGS	01-358/21:08:44	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10090	MGS	01-358/21:08:45		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-358/20:56:45
10091	MGS	01-358/21:08:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/20:56:45
10092	MGS	01-358/21:08:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/20:56:45
10093	MGS	01-358/21:08:45	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10094	MGS	01-358/21:08:49		NOTE: End fixed Sub-Reflector for Radio Science		01-358/20:56:49
10095	MGS	01-358/21:16:09		NOTE: Exit Solar Eclipse 12502		01-358/21:04:09
10096	MGS	01-358/21:20:00	15	Begin Tracking		
10097	MGS	01-358/21:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10098	MGS	01-358/21:32:26		NOTE: Periapsis 12503 ----------		01-358/21:20:25
10099	MGS	01-358/21:34:17	63	NOTE: Below Uplink Interlock Limit		
10100	MGS	01-358/21:37:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/21:25:08
10101	MGS	01-358/21:37:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/21:25:08
10102	MGS	01-358/21:37:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/21:25:09
10103	MGS	01-358/21:37:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/21:25:09
10104	MGS	01-358/21:40:00	63	End Tracking		
10105	MGS	01-358/21:55:00	63	End Post-Cal		
10106	MGS	01-358/21:59:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/21:47:09
10107	MGS	01-358/21:59:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/21:47:09
10108	MGS	01-358/22:22:21		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/22:10:20
10109	MGS	01-358/22:23:43		NOTE: Start EVP data return script		01-358/22:11:43
10110	MGS	01-358/22:27:20		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-358/22:15:20
10111	MGS	01-358/22:27:20		: 00:09:01, FALSE	RDSCII	01-358/22:15:20
10112	MGS	01-358/22:27:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/22:15:20
10113	MGS	01-358/22:27:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/22:15:20
10114	MGS	01-358/22:27:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/22:15:20
10115	MGS	01-358/22:27:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/22:15:20
10116	MGS	01-358/22:27:20	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10117	MGS	01-358/22:27:20	15	NOTE: Carrier Only -- No Telemetry Modulation		
10118	MGS	01-358/22:29:30		NOTE: Enter Planetary Atmosphere 12503		01-358/22:17:30
10119	MGS	01-358/22:31:21		NOTE: Apoapsis 12503 -		01-358/22:19:21
10120	MGS	01-358/22:33:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-358/22:21:43
10121	MGS	01-358/22:33:44		NOTE: Enter Solar Eclipse 12503		01-358/22:21:43
10122	MGS	01-358/22:35:50		NOTE: Enter Earth Occultation 12503		01-358/22:23:50
10123	MGS	01-358/22:35:50	15	NOTE: Loss Of X-Band Signal		
10124	MGS	01-358/22:36:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/22:24:21
10125	MGS	01-358/22:36:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/22:24:21
10126	MGS	01-358/22:36:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/22:24:21
10127	MGS	01-358/22:36:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/22:24:21
10128	MGS	01-358/22:36:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-358/22:24:22
10129	MGS	01-358/22:36:23		NOTE: End EVP script		01-358/22:24:22
10130	MGS	01-358/22:36:27		NOTE: End fixed Sub-Reflector for Radio Science		01-358/22:24:26
10131	MGS	01-358/22:52:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-358/22:40:12
10132	MGS	01-358/22:55:58		: 01:38:12	RPAONX	01-358/22:43:57
10133	MGS	01-358/22:55:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-358/22:43:57
10134	MGS	01-358/22:57:13		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-358/22:45:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10135	MGS	01-358/22:57:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-358/22:45:12
10136	MGS	01-358/22:57:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-358/22:45:12
10137	MGS	01-358/22:57:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-358/22:45:12
10138	MGS	01-358/22:57:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-358/22:45:12
10139	MGS	01-358/22:57:43		Disables autonomous command to send eclipse ingress script	SWEISX	01-358/22:45:42
10140	MGS	01-358/22:57:44		NOTE: Exit Earth Occultation 12503		01-358/22:45:44
10141	MGS	01-358/22:57:44	15	Acquisition Of X-Band Signal		
10142	MGS	01-358/22:57:44	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10143	MGS	01-358/22:57:44	15	NOTE: Carrier Only -- No Telemetry Modulation		
10144	MGS	01-358/22:58:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-358/22:46:09
10145	MGS	01-358/22:58:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-358/22:46:09
10146	MGS	01-358/22:58:15		Set eclipse egress script address: 01DC	SWSEES	01-358/22:46:14
10147	MGS	01-358/23:04:22		NOTE: Exit Planetary Atmosphere 12503		01-358/22:52:22
10148	MGS	01-358/23:06:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-358/22:54:31
10149	MGS	01-358/23:06:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-358/22:54:31
10150	MGS	01-358/23:06:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-358/22:54:31
10151	MGS	01-358/23:06:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-358/22:54:31
10152	MGS	01-358/23:06:32	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10153	MGS	01-358/23:06:33		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-358/22:54:32
10154	MGS	01-358/23:06:33		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-358/22:54:32
10155	MGS	01-358/23:06:33		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-358/22:54:32
10156	MGS	01-358/23:06:33	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10157	MGS	01-358/23:06:37		NOTE: End fixed Sub-Reflector for Radio Science		01-358/22:54:36
10158	MGS	01-358/23:13:57		NOTE: Exit Solar Eclipse 12503		01-358/23:01:57
10159	MGS	01-358/23:30:28		NOTE: Periapsis 12504 ----------		01-358/23:18:27
10160	MGS	01-358/23:34:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-358/23:22:56
10161	MGS	01-358/23:34:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-358/23:22:56
10162	MGS	01-358/23:34:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-358/23:22:57
10163	MGS	01-358/23:34:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-358/23:22:57
10164	MGS	01-358/23:56:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-358/23:44:57
10165	MGS	01-358/23:56:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-358/23:44:57
10166	MGS	01-359/00:00:00		Light Time: OWLT = 12:00, RTLT = 24:01		
10167	MGS	01-359/00:06:53		NOTE: Start Block (SSRMGR)		01-358/23:54:52
10168	MGS	01-359/00:06:53		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-358/23:54:52
10169	MGS	01-359/00:06:54		SSR 1B Data Enable	CSD1BE	01-358/23:54:53
10170	MGS	01-359/00:06:54		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-358/23:54:53
10171	MGS	01-359/00:20:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/00:08:07
10172	MGS	01-359/00:21:29		NOTE: Start Block (MAP_PB_ODY)		01-359/00:09:28
10173	MGS	01-359/00:21:30		: 00:22:14, 01:38:13, FALSE, FALSE, FALSE, 00:01:15, 00:07:39, 01:21:57, 00:07:21	AEMINI	01-359/00:09:29
10174	MGS	01-359/00:21:30		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/00:09:29
10175	MGS	01-359/00:21:30		NOTE: Start EVP data return script		01-359/00:09:29
10176	MGS	01-359/00:21:31		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-359T00:50:38.000	AEMPBI	01-359/00:09:30
10177	MGS	01-359/00:25:08		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/00:13:07
10178	MGS	01-359/00:25:08		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8752000, DUR=00:18:14		01-359/00:13:07
10179	MGS	01-359/00:25:08		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-359/00:13:07
10180	MGS	01-359/00:25:08		: 00:09:01, FALSE	RDSCII	01-359/00:13:07
10181	MGS	01-359/00:25:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/00:13:07
10182	MGS	01-359/00:25:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/00:13:07
10183	MGS	01-359/00:25:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/00:13:07
10184	MGS	01-359/00:25:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/00:13:07
10185	MGS	01-359/00:25:08	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10186	MGS	01-359/00:25:08	15	NOTE: Carrier Only -- No Telemetry Modulation		
10187	MGS	01-359/00:27:17		NOTE: Enter Planetary Atmosphere 12504		01-359/00:15:17
10188	MGS	01-359/00:29:11		NOTE: Apoapsis 12504 -		01-359/00:17:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10189	MGS	01-359/00:30:30		SSR 1A Data Disable	CSD1AX	01-359/00:18:29
10190	MGS	01-359/00:30:30		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-359/00:18:29
10191	MGS	01-359/00:30:31		NOTE: End Block (SSRMGR)		01-359/00:18:30
10192	MGS	01-359/00:31:30		NOTE: Enter Solar Eclipse 12504		01-359/00:19:29
10193	MGS	01-359/00:31:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/00:19:29
10194	MGS	01-359/00:33:38		NOTE: Enter Earth Occultation 12504		01-359/00:21:37
10195	MGS	01-359/00:33:38	15	NOTE: Loss Of X-Band Signal		
10196	MGS	01-359/00:34:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/00:22:08
10197	MGS	01-359/00:34:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/00:22:08
10198	MGS	01-359/00:34:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/00:22:08
10199	MGS	01-359/00:34:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/00:22:08
10200	MGS	01-359/00:34:10		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/00:22:09
10201	MGS	01-359/00:34:10		NOTE: End EVP script		01-359/00:22:09
10202	MGS	01-359/00:34:11		NOTE: End Block (MAP_RT)		01-359/00:22:10
10203	MGS	01-359/00:34:14		NOTE: End fixed Sub-Reflector for Radio Science		01-359/00:22:13
10204	MGS	01-359/00:53:44		: 01:38:13	RPAONX	01-359/00:41:43
10205	MGS	01-359/00:53:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/00:41:43
10206	MGS	01-359/00:55:29		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/00:43:28
10207	MGS	01-359/00:55:31		NOTE: Exit Earth Occultation 12504		01-359/00:43:30
10208	MGS	01-359/00:55:31	15	Acquisition Of X-Band Signal		
10209	MGS	01-359/00:55:31	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10210	MGS	01-359/00:55:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/00:43:57
10211	MGS	01-359/00:55:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/00:43:57
10212	MGS	01-359/00:56:02		Command the PSE with included data word: 3990	SWPSEL	01-359/00:44:01
10213	MGS	01-359/00:56:03		Set eclipse egress script address: 0158	SWSEES	01-359/00:44:02
10214	MGS	01-359/01:02:10		NOTE: Exit Planetary Atmosphere 12504		01-359/00:50:10
10215	MGS	01-359/01:02:38		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:18:40	AEMPB	01-359/00:50:37
10216	MGS	01-359/01:02:38		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-359/00:50:37
10217	MGS	01-359/01:02:38		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-359/00:50:37
10218	MGS	01-359/01:02:39		SSR 1A Data Enable	CSD1AE	01-359/00:50:38
10219	MGS	01-359/01:02:39		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-359/00:50:38
10220	MGS	01-359/01:02:39	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10221	MGS	01-359/01:11:43		NOTE: Exit Solar Eclipse 12504		01-359/00:59:43
10222	MGS	01-359/01:28:01		NOTE: Periapsis 12505 ----------		01-359/01:16:00
10223	MGS	01-359/01:36:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/01:24:41
10224	MGS	01-359/01:36:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/01:24:41
10225	MGS	01-359/01:36:43		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/01:24:42
10226	MGS	01-359/01:36:43		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/01:24:42
10227	MGS	01-359/01:58:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/01:46:42
10228	MGS	01-359/01:58:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/01:46:42
10229	MGS	01-359/02:13:17		SSR 1A Data Disable	CSD1AX	01-359/02:01:16
10230	MGS	01-359/02:13:17		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-359/02:01:16
10231	MGS	01-359/02:13:17		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-359/02:01:16
10232	MGS	01-359/02:13:17	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10233	MGS	01-359/02:19:11		NOTE: Start Block (MAP_RT)		01-359/02:07:10
10234	MGS	01-359/02:19:12		: 00:22:14, 01:38:12, FALSE, TRUE, FALSE, 00:01:15, 00:09:19, 01:18:36, 00:09:01	AEMINI	01-359/02:07:11
10235	MGS	01-359/02:19:12		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/02:07:11
10236	MGS	01-359/02:19:12		NOTE: Start EVP data return script		01-359/02:07:11
10237	MGS	01-359/02:19:13		: SE_2A, RTM, 01:18:35, MRC, 2001-359T02:50:01.000	AEMRTI	01-359/02:07:12
10238	MGS	01-359/02:25:00		NOTE: Enter Planetary Atmosphere 12505		01-359/02:13:00
10239	MGS	01-359/02:26:32		NOTE: Apoapsis 12505 -		01-359/02:14:31
10240	MGS	01-359/02:29:12		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/02:17:11
10241	MGS	01-359/02:29:12		NOTE: Enter Solar Eclipse 12505		01-359/02:17:11
10242	MGS	01-359/02:31:21		NOTE: Enter Earth Occultation 12505		01-359/02:19:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10243	MGS	01-359/02:31:21	15	NOTE: Loss Of X-Band Signal		
10244	MGS	01-359/02:31:57		NOTE: End EVP script		01-359/02:19:56
10245	MGS	01-359/02:31:57		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/02:19:56
10246	MGS	01-359/02:31:58		NOTE: End Block (MAP_PB_ODY)		01-359/02:19:57
10247	MGS	01-359/02:47:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/02:35:40
10248	MGS	01-359/02:51:26		: 01:38:12	RPAONX	01-359/02:39:25
10249	MGS	01-359/02:51:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/02:39:25
10250	MGS	01-359/02:52:41		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/02:40:40
10251	MGS	01-359/02:52:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/02:40:40
10252	MGS	01-359/02:52:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/02:40:40
10253	MGS	01-359/02:52:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/02:40:40
10254	MGS	01-359/02:52:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/02:40:40
10255	MGS	01-359/02:53:15		NOTE: Exit Earth Occultation 12505		01-359/02:41:14
10256	MGS	01-359/02:53:15	15	Acquisition Of X-Band Signal		
10257	MGS	01-359/02:53:15	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10258	MGS	01-359/02:53:15	15	NOTE: Carrier Only -- No Telemetry Modulation		
10259	MGS	01-359/02:53:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/02:41:42
10260	MGS	01-359/02:53:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/02:41:42
10261	MGS	01-359/02:53:48		Set eclipse egress script address: 019A	SWSEES	01-359/02:41:47
10262	MGS	01-359/02:59:55		NOTE: Exit Planetary Atmosphere 12505		01-359/02:47:54
10263	MGS	01-359/03:02:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/02:49:59
10264	MGS	01-359/03:02:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/02:49:59
10265	MGS	01-359/03:02:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/02:49:59
10266	MGS	01-359/03:02:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/02:49:59
10267	MGS	01-359/03:02:00	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10268	MGS	01-359/03:02:01		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/02:50:00
10269	MGS	01-359/03:02:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/02:50:00
10270	MGS	01-359/03:02:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/02:50:00
10271	MGS	01-359/03:02:01	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10272	MGS	01-359/03:02:05		NOTE: End fixed Sub-Reflector for Radio Science		01-359/02:50:04
10273	MGS	01-359/03:09:26		NOTE: Exit Solar Eclipse 12505		01-359/02:57:25
10274	MGS	01-359/03:25:23		NOTE: Periapsis 12506 ----------		01-359/03:13:22
10275	MGS	01-359/03:30:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/03:18:23
10276	MGS	01-359/03:30:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/03:18:23
10277	MGS	01-359/03:30:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/03:18:24
10278	MGS	01-359/03:30:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/03:18:24
10279	MGS	01-359/03:35:00	43	Begin Pre-Cal		
10280	MGS	01-359/03:35:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10281	MGS	01-359/03:35:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10282	MGS	01-359/03:35:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10283	MGS	01-359/03:35:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10284	MGS	01-359/03:35:00	43	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
10285	MGS	01-359/03:35:00	43	Config: TGC: DEST=37		
10286	MGS	01-359/03:35:00	43	Config: TGC: BAND=X, BR=40000.000000		
10287	MGS	01-359/03:35:00	43	Config: FSS: CH=2, PRI_FL=10000		
10288	MGS	01-359/03:35:00	43	Config: RSR		
10289	MGS	01-359/03:35:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
10290	MGS	01-359/03:35:00	43	Config: BVR		
10291	MGS	01-359/03:35:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
10292	MGS	01-359/03:35:00	43	Config: MDA: SMPL=0.1		
10293	MGS	01-359/03:52:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/03:40:24
10294	MGS	01-359/03:52:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/03:40:24
10295	MGS	01-359/04:15:37		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/04:03:35
10296	MGS	01-359/04:16:53		NOTE: Start EVP data return script		01-359/04:04:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10297	MGS	01-359/04:20:36		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/04:08:35
10298	MGS	01-359/04:20:36		: 00:09:01, FALSE	RDSCII	01-359/04:08:35
10299	MGS	01-359/04:20:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/04:08:35
10300	MGS	01-359/04:20:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/04:08:35
10301	MGS	01-359/04:20:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/04:08:35
10302	MGS	01-359/04:20:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/04:08:35
10303	MGS	01-359/04:20:36	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10304	MGS	01-359/04:20:36	15	NOTE: Carrier Only -- No Telemetry Modulation		
10305	MGS	01-359/04:22:39		NOTE: Enter Planetary Atmosphere 12506		01-359/04:10:38
10306	MGS	01-359/04:24:11		NOTE: Apoapsis 12506 -		01-359/04:12:10
10307	MGS	01-359/04:26:53		NOTE: Enter Solar Eclipse 12506		01-359/04:14:52
10308	MGS	01-359/04:26:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/04:14:52
10309	MGS	01-359/04:28:58		NOTE: Enter Earth Occultation 12506		01-359/04:16:57
10310	MGS	01-359/04:28:58	15	NOTE: Loss Of X-Band Signal		
10311	MGS	01-359/04:29:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/04:17:36
10312	MGS	01-359/04:29:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/04:17:36
10313	MGS	01-359/04:29:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/04:17:36
10314	MGS	01-359/04:29:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/04:17:36
10315	MGS	01-359/04:29:38		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/04:17:37
10316	MGS	01-359/04:29:39		NOTE: End EVP script		01-359/04:17:37
10317	MGS	01-359/04:29:43		NOTE: End fixed Sub-Reflector for Radio Science		01-359/04:17:41
10318	MGS	01-359/04:45:23		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/04:33:21
10319	MGS	01-359/04:49:07		: 01:38:12	RPAONX	01-359/04:37:06
10320	MGS	01-359/04:49:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/04:37:06
10321	MGS	01-359/04:50:22		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/04:38:21
10322	MGS	01-359/04:50:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/04:38:21
10323	MGS	01-359/04:50:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/04:38:21
10324	MGS	01-359/04:50:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/04:38:21
10325	MGS	01-359/04:50:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/04:38:21
10326	MGS	01-359/04:50:52		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/04:38:51
10327	MGS	01-359/04:50:58		NOTE: Exit Earth Occultation 12506		01-359/04:38:57
10328	MGS	01-359/04:50:58	15	Acquisition Of X-Band Signal		
10329	MGS	01-359/04:50:58	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10330	MGS	01-359/04:50:58	15	NOTE: Carrier Only -- No Telemetry Modulation		
10331	MGS	01-359/04:51:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/04:39:24
10332	MGS	01-359/04:51:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/04:39:24
10333	MGS	01-359/04:51:30		Set eclipse egress script address: 01DC	SWSEES	01-359/04:39:29
10334	MGS	01-359/04:57:35		NOTE: Exit Planetary Atmosphere 12506		01-359/04:45:34
10335	MGS	01-359/04:59:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/04:47:40
10336	MGS	01-359/04:59:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/04:47:40
10337	MGS	01-359/04:59:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/04:47:40
10338	MGS	01-359/04:59:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/04:47:40
10339	MGS	01-359/04:59:41	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10340	MGS	01-359/04:59:42		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/04:47:41
10341	MGS	01-359/04:59:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/04:47:41
10342	MGS	01-359/04:59:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/04:47:41
10343	MGS	01-359/04:59:42	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10344	MGS	01-359/04:59:47		NOTE: End fixed Sub-Reflector for Radio Science		01-359/04:47:45
10345	MGS	01-359/05:05:00	43	Begin Tracking		
10346	MGS	01-359/05:05:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10347	MGS	01-359/05:07:06		NOTE: Exit Solar Eclipse 12506		01-359/04:55:05
10348	MGS	01-359/05:12:15	15	NOTE: Below Uplink Interlock Limit		
10349	MGS	01-359/05:23:01		NOTE: Periapsis 12507 ----------		01-359/05:11:00
10350	MGS	01-359/05:25:00	15	End Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10351	MGS	01-359/05:28:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/05:16:04
10352	MGS	01-359/05:28:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/05:16:04
10353	MGS	01-359/05:28:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/05:16:05
10354	MGS	01-359/05:28:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/05:16:05
10355	MGS	01-359/05:40:00	15	End Post-Cal		
10356	MGS	01-359/05:50:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/05:38:05
10357	MGS	01-359/05:50:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/05:38:05
10358	MGS	01-359/06:00:13		NOTE: Start Block (SSRMGR)		01-359/05:48:11
10359	MGS	01-359/06:00:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-359/05:48:11
10360	MGS	01-359/06:00:14		SSR 1A Data Enable	CSD1AE	01-359/05:48:12
10361	MGS	01-359/06:00:14		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-359/05:48:12
10362	MGS	01-359/06:13:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/06:01:16
10363	MGS	01-359/06:14:38		NOTE: Start Block (MAP_PB_ODY)		01-359/06:02:36
10364	MGS	01-359/06:14:39		: 00:22:14, 01:38:13, FALSE, FALSE, FALSE, 00:01:15, 00:07:39, 01:21:57, 00:07:21	AEMINI	01-359/06:02:37
10365	MGS	01-359/06:14:39		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/06:02:37
10366	MGS	01-359/06:14:39		NOTE: Start EVP data return script		01-359/06:02:37
10367	MGS	01-359/06:14:40		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-359T06:43:45.000	AEMPBI	01-359/06:02:38
10368	MGS	01-359/06:18:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/06:06:16
10369	MGS	01-359/06:18:18		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8672000, DUR=00:18:04		01-359/06:06:16
10370	MGS	01-359/06:18:18		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-359/06:06:16
10371	MGS	01-359/06:18:18		: 00:09:01, FALSE	RDSCII	01-359/06:06:16
10372	MGS	01-359/06:18:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/06:06:16
10373	MGS	01-359/06:18:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/06:06:16
10374	MGS	01-359/06:18:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/06:06:16
10375	MGS	01-359/06:18:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/06:06:16
10376	MGS	01-359/06:18:18	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10377	MGS	01-359/06:18:18	43	NOTE: Carrier Only -- No Telemetry Modulation		
10378	MGS	01-359/06:20:24		NOTE: Enter Planetary Atmosphere 12507		01-359/06:08:22
10379	MGS	01-359/06:22:07		NOTE: Apoapsis 12507 -		01-359/06:10:05
10380	MGS	01-359/06:23:38		SSR 1B Data Disable	CSD1BX	01-359/06:11:36
10381	MGS	01-359/06:23:38		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-359/06:11:36
10382	MGS	01-359/06:23:39		NOTE: End Block (SSRMGR)		01-359/06:11:37
10383	MGS	01-359/06:24:38		NOTE: Enter Solar Eclipse 12507		01-359/06:12:37
10384	MGS	01-359/06:24:39		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/06:12:37
10385	MGS	01-359/06:26:42		NOTE: Enter Earth Occultation 12507		01-359/06:14:40
10386	MGS	01-359/06:26:42	43	NOTE: Loss Of X-Band Signal		
10387	MGS	01-359/06:27:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/06:15:17
10388	MGS	01-359/06:27:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/06:15:17
10389	MGS	01-359/06:27:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/06:15:17
10390	MGS	01-359/06:27:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/06:15:17
10391	MGS	01-359/06:27:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/06:15:18
10392	MGS	01-359/06:27:20		NOTE: End EVP script		01-359/06:15:18
10393	MGS	01-359/06:27:21		NOTE: End Block (MAP_RT)		01-359/06:15:19
10394	MGS	01-359/06:27:24		NOTE: End fixed Sub-Reflector for Radio Science		01-359/06:15:22
10395	MGS	01-359/06:46:53		: 01:38:13	RPAONX	01-359/06:34:51
10396	MGS	01-359/06:46:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/06:34:51
10397	MGS	01-359/06:48:38		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/06:36:36
10398	MGS	01-359/06:48:43		NOTE: Exit Earth Occultation 12507		01-359/06:36:41
10399	MGS	01-359/06:48:43	43	Acquisition Of X-Band Signal		
10400	MGS	01-359/06:48:43	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10401	MGS	01-359/06:49:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/06:37:05
10402	MGS	01-359/06:49:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/06:37:05
10403	MGS	01-359/06:49:11		Command the PSE with included data word: 3990	SWPSEL	01-359/06:37:09
10404	MGS	01-359/06:49:12		Set eclipse egress script address: 0158	SWSEES	01-359/06:37:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10405	MGS	01-359/06:55:20		NOTE: Exit Planetary Atmosphere 12507		01-359/06:43:18
10406	MGS	01-359/06:55:47		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:18:40	AEMPB	01-359/06:43:45
10407	MGS	01-359/06:55:47		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-359/06:43:45
10408	MGS	01-359/06:55:47		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-359/06:43:45
10409	MGS	01-359/06:55:48		SSR 1B Data Enable	CSD1BE	01-359/06:43:46
10410	MGS	01-359/06:55:48		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-359/06:43:46
10411	MGS	01-359/06:55:48	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10412	MGS	01-359/07:04:52		NOTE: Exit Solar Eclipse 12507		01-359/06:52:50
10413	MGS	01-359/07:20:56		NOTE: Periapsis 12508 ----------		01-359/07:08:55
10414	MGS	01-359/07:29:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/07:17:49
10415	MGS	01-359/07:29:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/07:17:49
10416	MGS	01-359/07:29:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/07:17:50
10417	MGS	01-359/07:29:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/07:17:50
10418	MGS	01-359/07:51:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/07:39:50
10419	MGS	01-359/07:51:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/07:39:50
10420	MGS	01-359/08:06:26		SSR 1B Data Disable	CSD1BX	01-359/07:54:24
10421	MGS	01-359/08:06:26		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-359/07:54:24
10422	MGS	01-359/08:06:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-359/07:54:24
10423	MGS	01-359/08:06:26	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10424	MGS	01-359/08:12:25		NOTE: Start Block (MAP_RT)		01-359/08:00:23
10425	MGS	01-359/08:12:26		: 00:22:14, 01:38:12, FALSE, TRUE, FALSE, 00:01:15, 00:09:19, 01:18:36, 00:09:01	AEMINI	01-359/08:00:24
10426	MGS	01-359/08:12:26		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/08:00:24
10427	MGS	01-359/08:12:26		NOTE: Start EVP data return script		01-359/08:00:24
10428	MGS	01-359/08:12:27		: SE_2A, RTM, 01:18:35, MRC, 2001-359T08:43:13.000	AEMRTI	01-359/08:00:25
10429	MGS	01-359/08:18:12		NOTE: Enter Planetary Atmosphere 12508		01-359/08:06:10
10430	MGS	01-359/08:19:53		NOTE: Apoapsis 12508 -		01-359/08:07:51
10431	MGS	01-359/08:22:26		NOTE: Enter Solar Eclipse 12508		01-359/08:10:24
10432	MGS	01-359/08:22:26		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/08:10:24
10433	MGS	01-359/08:24:29		NOTE: Enter Earth Occultation 12508		01-359/08:12:27
10434	MGS	01-359/08:24:29	43	NOTE: Loss Of X-Band Signal		
10435	MGS	01-359/08:25:05		NOTE: End EVP script		01-359/08:13:04
10436	MGS	01-359/08:25:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/08:13:04
10437	MGS	01-359/08:25:06		NOTE: End Block (MAP_PB_ODY)		01-359/08:13:05
10438	MGS	01-359/08:40:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/08:28:53
10439	MGS	01-359/08:44:40		: 01:38:12	RPAONX	01-359/08:32:38
10440	MGS	01-359/08:44:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/08:32:38
10441	MGS	01-359/08:45:55		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/08:33:53
10442	MGS	01-359/08:45:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/08:33:53
10443	MGS	01-359/08:45:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/08:33:53
10444	MGS	01-359/08:45:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/08:33:53
10445	MGS	01-359/08:45:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/08:33:53
10446	MGS	01-359/08:46:31		NOTE: Exit Earth Occultation 12508		01-359/08:34:29
10447	MGS	01-359/08:46:31	43	Acquisition Of X-Band Signal		
10448	MGS	01-359/08:46:31	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10449	MGS	01-359/08:46:31	43	NOTE: Carrier Only -- No Telemetry Modulation		
10450	MGS	01-359/08:46:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/08:34:50
10451	MGS	01-359/08:46:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/08:34:50
10452	MGS	01-359/08:46:57		Set eclipse egress script address: 019A	SWSEES	01-359/08:34:55
10453	MGS	01-359/08:53:07		NOTE: Exit Planetary Atmosphere 12508		01-359/08:41:05
10454	MGS	01-359/08:55:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/08:43:12
10455	MGS	01-359/08:55:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/08:43:12
10456	MGS	01-359/08:55:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/08:43:12
10457	MGS	01-359/08:55:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/08:43:12
10458	MGS	01-359/08:55:14	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10459	MGS	01-359/08:55:15		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/08:43:13
10460	MGS	01-359/08:55:15		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/08:43:13
10461	MGS	01-359/08:55:15		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/08:43:13
10462	MGS	01-359/08:55:15	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10463	MGS	01-359/08:55:19		NOTE: End fixed Sub-Reflector for Radio Science		01-359/08:43:17
10464	MGS	01-359/09:02:40		NOTE: Exit Solar Eclipse 12508		01-359/08:50:38
10465	MGS	01-359/09:18:45		NOTE: Periapsis 12509 ----------		01-359/09:06:43
10466	MGS	01-359/09:23:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/09:11:36
10467	MGS	01-359/09:23:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/09:11:36
10468	MGS	01-359/09:23:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/09:11:37
10469	MGS	01-359/09:23:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/09:11:37
10470	MGS	01-359/09:45:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/09:33:37
10471	MGS	01-359/09:45:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/09:33:37
10472	MGS	01-359/10:08:50		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/09:56:48
10473	MGS	01-359/10:10:13		NOTE: Start EVP data return script		01-359/09:58:11
10474	MGS	01-359/10:13:50		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/10:01:48
10475	MGS	01-359/10:13:50		: 00:09:01, FALSE	RDSCII	01-359/10:01:48
10476	MGS	01-359/10:13:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/10:01:48
10477	MGS	01-359/10:13:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/10:01:48
10478	MGS	01-359/10:13:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/10:01:48
10479	MGS	01-359/10:13:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/10:01:48
10480	MGS	01-359/10:13:50	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10481	MGS	01-359/10:13:50	43	NOTE: Carrier Only -- No Telemetry Modulation		
10482	MGS	01-359/10:15:58		NOTE: Enter Planetary Atmosphere 12509		01-359/10:03:56
10483	MGS	01-359/10:17:26		NOTE: Apoapsis 12509 -		01-359/10:05:24
10484	MGS	01-359/10:20:13		NOTE: Enter Solar Eclipse 12509		01-359/10:08:11
10485	MGS	01-359/10:20:13		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/10:08:11
10486	MGS	01-359/10:22:15		NOTE: Enter Earth Occultation 12509		01-359/10:10:13
10487	MGS	01-359/10:22:15	43	NOTE: Loss Of X-Band Signal		
10488	MGS	01-359/10:22:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/10:10:49
10489	MGS	01-359/10:22:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/10:10:49
10490	MGS	01-359/10:22:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/10:10:49
10491	MGS	01-359/10:22:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/10:10:49
10492	MGS	01-359/10:22:52		NOTE: End EVP script		01-359/10:10:50
10493	MGS	01-359/10:22:52		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/10:10:50
10494	MGS	01-359/10:22:56		NOTE: End fixed Sub-Reflector for Radio Science		01-359/10:10:54
10495	MGS	01-359/10:35:00	63	Begin Pre-Cal		
10496	MGS	01-359/10:35:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10497	MGS	01-359/10:35:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10498	MGS	01-359/10:35:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10499	MGS	01-359/10:35:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10500	MGS	01-359/10:35:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
10501	MGS	01-359/10:35:00	63	Config: TGC: DEST=37		
10502	MGS	01-359/10:35:00	63	Config: TGC: BAND=X, BR=40000.000000		
10503	MGS	01-359/10:35:00	63	Config: FSS: CH=2, PRI_FL=10000		
10504	MGS	01-359/10:35:00	63	Config: RSR		
10505	MGS	01-359/10:35:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
10506	MGS	01-359/10:35:00	63	Config: BVR		
10507	MGS	01-359/10:35:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
10508	MGS	01-359/10:35:00	63	Config: MDA: SMPL=0.1		
10509	MGS	01-359/10:38:42		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/10:26:40
10510	MGS	01-359/10:42:27		: 01:38:12	RPAONX	01-359/10:30:25
10511	MGS	01-359/10:42:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/10:30:25
10512	MGS	01-359/10:43:42		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/10:31:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10513	MGS	01-359/10:43:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/10:31:40
10514	MGS	01-359/10:43:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/10:31:40
10515	MGS	01-359/10:43:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/10:31:40
10516	MGS	01-359/10:43:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/10:31:40
10517	MGS	01-359/10:44:12		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/10:32:10
10518	MGS	01-359/10:44:19		NOTE: Exit Earth Occultation 12509		01-359/10:32:17
10519	MGS	01-359/10:44:19	43	Acquisition Of X-Band Signal		
10520	MGS	01-359/10:44:19	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10521	MGS	01-359/10:44:19	43	NOTE: Carrier Only -- No Telemetry Modulation		
10522	MGS	01-359/10:44:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/10:32:37
10523	MGS	01-359/10:44:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/10:32:37
10524	MGS	01-359/10:44:44		Set eclipse egress script address: 01DC	SWSEES	01-359/10:32:42
10525	MGS	01-359/10:50:55		NOTE: Exit Planetary Atmosphere 12509		01-359/10:38:53
10526	MGS	01-359/10:53:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/10:40:59
10527	MGS	01-359/10:53:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/10:40:59
10528	MGS	01-359/10:53:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/10:40:59
10529	MGS	01-359/10:53:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/10:40:59
10530	MGS	01-359/10:53:01	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10531	MGS	01-359/10:53:02		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/10:41:00
10532	MGS	01-359/10:53:02		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/10:41:00
10533	MGS	01-359/10:53:02		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/10:41:00
10534	MGS	01-359/10:53:02	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10535	MGS	01-359/10:53:06		NOTE: End fixed Sub-Reflector for Radio Science		01-359/10:41:04
10536	MGS	01-359/11:00:27		NOTE: Exit Solar Eclipse 12509		01-359/10:48:24
10537	MGS	01-359/11:16:26		NOTE: Periapsis 12510 ----------		01-359/11:04:24
10538	MGS	01-359/11:21:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/11:09:23
10539	MGS	01-359/11:21:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/11:09:23
10540	MGS	01-359/11:21:26		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/11:09:24
10541	MGS	01-359/11:21:26		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/11:09:24
10542	MGS	01-359/11:43:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/11:31:24
10543	MGS	01-359/11:43:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/11:31:24
10544	MGS	01-359/11:53:20		NOTE: Start Block (SSRMGR)		01-359/11:41:18
10545	MGS	01-359/11:53:20		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-359/11:41:18
10546	MGS	01-359/11:53:21		SSR 1B Data Enable	CSD1BE	01-359/11:41:19
10547	MGS	01-359/11:53:21		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-359/11:41:19
10548	MGS	01-359/12:05:00	63	Begin Tracking		
10549	MGS	01-359/12:05:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10550	MGS	01-359/12:06:37		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/11:54:35
10551	MGS	01-359/12:07:57		NOTE: Start Block (MAP_PB_ODY)		01-359/11:55:54
10552	MGS	01-359/12:07:58		: 00:22:14, 01:38:13, FALSE, FALSE, FALSE, 00:01:15, 00:07:39, 01:21:57, 00:07:21	AEMINI	01-359/11:55:55
10553	MGS	01-359/12:07:58		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/11:55:55
10554	MGS	01-359/12:07:58		NOTE: Start EVP data return script		01-359/11:55:55
10555	MGS	01-359/12:07:59		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-359T12:37:04.000	AEMPBI	01-359/11:55:56
10556	MGS	01-359/12:11:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/11:59:35
10557	MGS	01-359/12:11:38		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8768000, DUR=00:18:16		01-359/11:59:35
10558	MGS	01-359/12:11:38		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-359/11:59:35
10559	MGS	01-359/12:11:38		: 00:09:01, FALSE	RDSCII	01-359/11:59:35
10560	MGS	01-359/12:11:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/11:59:35
10561	MGS	01-359/12:11:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/11:59:35
10562	MGS	01-359/12:11:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/11:59:35
10563	MGS	01-359/12:11:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/11:59:35
10564	MGS	01-359/12:11:38	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10565	MGS	01-359/12:11:38	43	NOTE: Carrier Only -- No Telemetry Modulation		
10566	MGS	01-359/12:11:38	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10567	MGS	01-359/12:11:38	63	NOTE: Carrier Only -- No Telemetry Modulation		
10568	MGS	01-359/12:12:02		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-359/11:59:59
10569	MGS	01-359/12:13:42		NOTE: Enter Planetary Atmosphere 12510		01-359/12:01:40
10570	MGS	01-359/12:14:54		NOTE: Apoapsis 12510 -		01-359/12:02:52
10571	MGS	01-359/12:15:26	43	NOTE: Below Uplink Interlock Limit		
10572	MGS	01-359/12:16:58		SSR 1A Data Disable	CSD1AX	01-359/12:04:55
10573	MGS	01-359/12:16:58		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-359/12:04:55
10574	MGS	01-359/12:16:59		NOTE: End Block (SSRMGR)		01-359/12:04:56
10575	MGS	01-359/12:17:54	63	NOTE: Above Uplink Interlock Limit		
10576	MGS	01-359/12:17:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/12:05:55
10577	MGS	01-359/12:17:58		NOTE: Enter Solar Eclipse 12510		01-359/12:05:55
10578	MGS	01-359/12:19:59		NOTE: Enter Earth Occultation 12510		01-359/12:07:57
10579	MGS	01-359/12:19:59	43	NOTE: Loss Of X-Band Signal		
10580	MGS	01-359/12:19:59	63	NOTE: Loss Of X-Band Signal		
10581	MGS	01-359/12:20:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/12:08:36
10582	MGS	01-359/12:20:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/12:08:36
10583	MGS	01-359/12:20:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/12:08:36
10584	MGS	01-359/12:20:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/12:08:36
10585	MGS	01-359/12:20:39		NOTE: End EVP script		01-359/12:08:37
10586	MGS	01-359/12:20:40		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/12:08:37
10587	MGS	01-359/12:20:40		NOTE: End Block (MAP_RT)		01-359/12:08:38
10588	MGS	01-359/12:20:43		NOTE: End fixed Sub-Reflector for Radio Science		01-359/12:08:41
10589	MGS	01-359/12:25:00	43	End Tracking		
10590	MGS	01-359/12:40:00	43	End Post-Cal		
10591	MGS	01-359/12:40:12		: 01:38:13	RPAONX	01-359/12:28:09
10592	MGS	01-359/12:40:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/12:28:09
10593	MGS	01-359/12:41:57		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/12:29:54
10594	MGS	01-359/12:42:06		NOTE: Exit Earth Occultation 12510		01-359/12:30:04
10595	MGS	01-359/12:42:06	63	Acquisition Of X-Band Signal		
10596	MGS	01-359/12:42:06	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10597	MGS	01-359/12:42:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/12:30:24
10598	MGS	01-359/12:42:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/12:30:24
10599	MGS	01-359/12:42:31		Command the PSE with included data word: 3990	SWPSEL	01-359/12:30:28
10600	MGS	01-359/12:42:32		Set eclipse egress script address: 0158	SWSEES	01-359/12:30:29
10601	MGS	01-359/12:48:42		NOTE: Exit Planetary Atmosphere 12510		01-359/12:36:39
10602	MGS	01-359/12:49:06		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:18:40	AEMPB	01-359/12:37:03
10603	MGS	01-359/12:49:06		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-359/12:37:03
10604	MGS	01-359/12:49:06		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-359/12:37:03
10605	MGS	01-359/12:49:07		SSR 1A Data Enable	CSD1AE	01-359/12:37:04
10606	MGS	01-359/12:49:07		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-359/12:37:04
10607	MGS	01-359/12:49:07	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10608	MGS	01-359/12:58:11		NOTE: Exit Solar Eclipse 12510		01-359/12:46:09
10609	MGS	01-359/13:14:11		NOTE: Periapsis 12511 ----------		01-359/13:02:08
10610	MGS	01-359/13:23:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/13:11:08
10611	MGS	01-359/13:23:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/13:11:08
10612	MGS	01-359/13:23:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/13:11:09
10613	MGS	01-359/13:23:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/13:11:09
10614	MGS	01-359/13:45:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/13:33:09
10615	MGS	01-359/13:45:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/13:33:09
10616	MGS	01-359/13:59:45		SSR 1A Data Disable	CSD1AX	01-359/13:47:42
10617	MGS	01-359/13:59:45		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-359/13:47:42
10618	MGS	01-359/13:59:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-359/13:47:42
10619	MGS	01-359/13:59:45	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10620	MGS	01-359/14:05:40		NOTE: Start Block (MAP_RT)		01-359/13:53:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10621	MGS	01-359/14:05:41		: 00:22:14, 01:38:12, FALSE, TRUE, FALSE, 00:01:15, 00:09:19, 01:18:36, 00:09:01	AEMINI	01-359/13:53:38
10622	MGS	01-359/14:05:41		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/13:53:38
10623	MGS	01-359/14:05:41		NOTE: Start EVP data return script		01-359/13:53:38
10624	MGS	01-359/14:05:42		: SE_2A, RTM, 01:18:35, MRC, 2001-359T14:36:28.000	AEMRTI	01-359/13:53:39
10625	MGS	01-359/14:11:24		NOTE: Enter Planetary Atmosphere 12511		01-359/13:59:22
10626	MGS	01-359/14:12:46		NOTE: Apoapsis 12511 -		01-359/14:00:43
10627	MGS	01-359/14:15:41		NOTE: Enter Solar Eclipse 12511		01-359/14:03:38
10628	MGS	01-359/14:15:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/14:03:38
10629	MGS	01-359/14:17:41		NOTE: Enter Earth Occultation 12511		01-359/14:05:39
10630	MGS	01-359/14:17:41	63	NOTE: Loss Of X-Band Signal		
10631	MGS	01-359/14:18:25		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/14:06:22
10632	MGS	01-359/14:18:25		NOTE: End EVP script		01-359/14:06:22
10633	MGS	01-359/14:18:26		NOTE: End Block (MAP_PB_ODY)		01-359/14:06:23
10634	MGS	01-359/14:34:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/14:22:07
10635	MGS	01-359/14:37:55		: 01:38:12	RPAONX	01-359/14:25:52
10636	MGS	01-359/14:37:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/14:25:52
10637	MGS	01-359/14:39:10		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/14:27:07
10638	MGS	01-359/14:39:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/14:27:07
10639	MGS	01-359/14:39:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/14:27:07
10640	MGS	01-359/14:39:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/14:27:07
10641	MGS	01-359/14:39:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/14:27:07
10642	MGS	01-359/14:39:50		NOTE: Exit Earth Occultation 12511		01-359/14:27:48
10643	MGS	01-359/14:39:50	63	Acquisition Of X-Band Signal		
10644	MGS	01-359/14:39:50	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10645	MGS	01-359/14:39:50	63	NOTE: Carrier Only -- No Telemetry Modulation		
10646	MGS	01-359/14:40:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/14:28:09
10647	MGS	01-359/14:40:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/14:28:09
10648	MGS	01-359/14:40:17		Set eclipse egress script address: 019A	SWSEES	01-359/14:28:14
10649	MGS	01-359/14:46:26		NOTE: Exit Planetary Atmosphere 12511		01-359/14:34:23
10650	MGS	01-359/14:48:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/14:36:26
10651	MGS	01-359/14:48:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/14:36:26
10652	MGS	01-359/14:48:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/14:36:26
10653	MGS	01-359/14:48:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/14:36:26
10654	MGS	01-359/14:48:29	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10655	MGS	01-359/14:48:30		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/14:36:27
10656	MGS	01-359/14:48:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/14:36:27
10657	MGS	01-359/14:48:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/14:36:27
10658	MGS	01-359/14:48:30	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10659	MGS	01-359/14:48:34		NOTE: End fixed Sub-Reflector for Radio Science		01-359/14:36:31
10660	MGS	01-359/14:55:54		NOTE: Exit Solar Eclipse 12511		01-359/14:43:52
10661	MGS	01-359/15:11:53		NOTE: Periapsis 12512 ----------		01-359/14:59:50
10662	MGS	01-359/15:16:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/15:04:50
10663	MGS	01-359/15:16:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/15:04:50
10664	MGS	01-359/15:16:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/15:04:51
10665	MGS	01-359/15:16:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/15:04:51
10666	MGS	01-359/15:38:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/15:26:51
10667	MGS	01-359/15:38:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/15:26:51
10668	MGS	01-359/16:02:05		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/15:50:02
10669	MGS	01-359/16:03:23		NOTE: Start EVP data return script		01-359/15:51:20
10670	MGS	01-359/16:07:05		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/15:55:02
10671	MGS	01-359/16:07:05		: 00:09:01, FALSE	RDSCII	01-359/15:55:02
10672	MGS	01-359/16:07:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/15:55:02
10673	MGS	01-359/16:07:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/15:55:02
10674	MGS	01-359/16:07:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/15:55:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10675	MGS	01-359/16:07:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/15:55:02
10676	MGS	01-359/16:07:05	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10677	MGS	01-359/16:07:05	63	NOTE: Carrier Only -- No Telemetry Modulation		
10678	MGS	01-359/16:09:07		NOTE: Enter Planetary Atmosphere 12512		01-359/15:57:04
10679	MGS	01-359/16:10:29		NOTE: Apoapsis 12512 -		01-359/15:58:25
10680	MGS	01-359/16:13:23		NOTE: Enter Solar Eclipse 12512		01-359/16:01:20
10681	MGS	01-359/16:13:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/16:01:20
10682	MGS	01-359/16:15:24		NOTE: Enter Earth Occultation 12512		01-359/16:03:21
10683	MGS	01-359/16:15:24	63	NOTE: Loss Of X-Band Signal		
10684	MGS	01-359/16:16:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/16:04:03
10685	MGS	01-359/16:16:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/16:04:03
10686	MGS	01-359/16:16:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/16:04:03
10687	MGS	01-359/16:16:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/16:04:03
10688	MGS	01-359/16:16:07		NOTE: End EVP script		01-359/16:04:04
10689	MGS	01-359/16:16:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/16:04:04
10690	MGS	01-359/16:16:11		NOTE: End fixed Sub-Reflector for Radio Science		01-359/16:04:08
10691	MGS	01-359/16:31:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/16:19:49
10692	MGS	01-359/16:35:37		: 01:38:12	RPAONX	01-359/16:23:34
10693	MGS	01-359/16:35:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/16:23:34
10694	MGS	01-359/16:36:52		: 00:00:30, 00:09:19, FALSE	RDSCIE	01-359/16:24:49
10695	MGS	01-359/16:36:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/16:24:49
10696	MGS	01-359/16:36:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/16:24:49
10697	MGS	01-359/16:36:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/16:24:49
10698	MGS	01-359/16:36:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/16:24:49
10699	MGS	01-359/16:37:22		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/16:25:19
10700	MGS	01-359/16:37:33		NOTE: Exit Earth Occultation 12512		01-359/16:25:30
10701	MGS	01-359/16:37:33	63	Acquisition Of X-Band Signal		
10702	MGS	01-359/16:37:33	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10703	MGS	01-359/16:37:33	63	NOTE: Carrier Only -- No Telemetry Modulation		
10704	MGS	01-359/16:37:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/16:25:51
10705	MGS	01-359/16:37:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/16:25:51
10706	MGS	01-359/16:37:59		Set eclipse egress script address: 01DC	SWSEES	01-359/16:25:56
10707	MGS	01-359/16:44:08		NOTE: Exit Planetary Atmosphere 12512		01-359/16:32:05
10708	MGS	01-359/16:46:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/16:34:08
10709	MGS	01-359/16:46:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/16:34:08
10710	MGS	01-359/16:46:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/16:34:08
10711	MGS	01-359/16:46:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/16:34:08
10712	MGS	01-359/16:46:11	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10713	MGS	01-359/16:46:12		: RTM, MRC, 01:18:35, S&E_2A, FALSE, 00:09:02	AEMRT	01-359/16:34:09
10714	MGS	01-359/16:46:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/16:34:09
10715	MGS	01-359/16:46:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/16:34:09
10716	MGS	01-359/16:46:12	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10717	MGS	01-359/16:46:16		NOTE: End fixed Sub-Reflector for Radio Science		01-359/16:34:13
10718	MGS	01-359/16:53:36		NOTE: Exit Solar Eclipse 12512		01-359/16:41:33
10719	MGS	01-359/17:09:16		NOTE: Periapsis 12513 ----------		01-359/16:57:12
10720	MGS	01-359/17:14:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/17:02:32
10721	MGS	01-359/17:14:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/17:02:32
10722	MGS	01-359/17:14:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/17:02:33
10723	MGS	01-359/17:14:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/17:02:33
10724	MGS	01-359/17:36:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/17:24:33
10725	MGS	01-359/17:36:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/17:24:33
10726	MGS	01-359/17:46:40		NOTE: Start Block (SSRMGR)		01-359/17:34:37
10727	MGS	01-359/17:46:40		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-359/17:34:37
10728	MGS	01-359/17:46:41		SSR 1A Data Enable	CSD1AE	01-359/17:34:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10729	MGS	01-359/17:46:41		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-359/17:34:38
10730	MGS	01-359/17:59:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/17:47:44
10731	MGS	01-359/18:01:05		NOTE: Start Block (MAP_PB_ODY)		01-359/17:49:02
10732	MGS	01-359/18:01:06		: 00:22:14, 01:38:13, FALSE, FALSE, FALSE, 00:01:15, 00:07:39, 01:21:57, 00:07:21	AEMINI	01-359/17:49:03
10733	MGS	01-359/18:01:06		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/17:49:03
10734	MGS	01-359/18:01:06		NOTE: Start EVP data return script		01-359/17:49:03
10735	MGS	01-359/18:01:07		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-359T18:30:11.000	AEMPBI	01-359/17:49:04
10736	MGS	01-359/18:04:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/17:52:44
10737	MGS	01-359/18:04:47		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8688000, DUR=00:18:06		01-359/17:52:44
10738	MGS	01-359/18:04:47		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-359/17:52:44
10739	MGS	01-359/18:04:47		: 00:09:01, FALSE	RDSCII	01-359/17:52:44
10740	MGS	01-359/18:04:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/17:52:44
10741	MGS	01-359/18:04:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/17:52:44
10742	MGS	01-359/18:04:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/17:52:44
10743	MGS	01-359/18:04:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/17:52:44
10744	MGS	01-359/18:04:47	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10745	MGS	01-359/18:04:47	63	NOTE: Carrier Only -- No Telemetry Modulation		
10746	MGS	01-359/18:06:50		NOTE: Enter Planetary Atmosphere 12513		01-359/17:54:47
10747	MGS	01-359/18:07:54		NOTE: Apoapsis 12513 -		01-359/17:55:51
10748	MGS	01-359/18:10:05		SSR 1B Data Disable	CSD1BX	01-359/17:58:02
10749	MGS	01-359/18:10:05		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-359/17:58:02
10750	MGS	01-359/18:10:06		NOTE: End Block (SSRMGR)		01-359/17:58:03
10751	MGS	01-359/18:11:06		NOTE: Enter Solar Eclipse 12513		01-359/17:59:03
10752	MGS	01-359/18:11:06		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/17:59:03
10753	MGS	01-359/18:13:05		NOTE: Enter Earth Occultation 12513		01-359/18:01:02
10754	MGS	01-359/18:13:05	63	NOTE: Loss Of X-Band Signal		
10755	MGS	01-359/18:13:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/18:01:45
10756	MGS	01-359/18:13:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/18:01:45
10757	MGS	01-359/18:13:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/18:01:45
10758	MGS	01-359/18:13:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/18:01:45
10759	MGS	01-359/18:13:49		NOTE: End EVP script		01-359/18:01:46
10760	MGS	01-359/18:13:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/18:01:46
10761	MGS	01-359/18:13:50		NOTE: End Block (MAP_RT)		01-359/18:01:47
10762	MGS	01-359/18:13:53		NOTE: End fixed Sub-Reflector for Radio Science		01-359/18:01:50
10763	MGS	01-359/18:33:21		: 01:38:13	RPAONX	01-359/18:21:17
10764	MGS	01-359/18:33:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/18:21:17
10765	MGS	01-359/18:35:06		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/18:23:02
10766	MGS	01-359/18:35:17		NOTE: Exit Earth Occultation 12513		01-359/18:23:14
10767	MGS	01-359/18:35:17	63	Acquisition Of X-Band Signal		
10768	MGS	01-359/18:35:17	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10769	MGS	01-359/18:35:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/18:23:33
10770	MGS	01-359/18:35:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/18:23:33
10771	MGS	01-359/18:35:41		Command the PSE with included data word: 3990	SWPSEL	01-359/18:23:37
10772	MGS	01-359/18:35:42		Set eclipse egress script address: 0158	SWSEES	01-359/18:23:38
10773	MGS	01-359/18:41:51		NOTE: Exit Planetary Atmosphere 12513		01-359/18:29:47
10774	MGS	01-359/18:42:15		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:18:40	AEMPB	01-359/18:30:11
10775	MGS	01-359/18:42:15		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-359/18:30:11
10776	MGS	01-359/18:42:15		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-359/18:30:11
10777	MGS	01-359/18:42:16		SSR 1B Data Enable	CSD1BE	01-359/18:30:12
10778	MGS	01-359/18:42:16		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-359/18:30:12
10779	MGS	01-359/18:42:16	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10780	MGS	01-359/18:51:19		NOTE: Exit Solar Eclipse 12513		01-359/18:39:16
10781	MGS	01-359/19:06:57		NOTE: Periapsis 12514 ----------		01-359/18:54:54
10782	MGS	01-359/19:16:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/19:04:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10783	MGS	01-359/19:16:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/19:04:15
10784	MGS	01-359/19:16:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/19:04:16
10785	MGS	01-359/19:16:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/19:04:16
10786	MGS	01-359/19:38:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/19:26:16
10787	MGS	01-359/19:38:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/19:26:16
10788	MGS	01-359/19:50:00	15	Begin Pre-Cal		
10789	MGS	01-359/19:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10790	MGS	01-359/19:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10791	MGS	01-359/19:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10792	MGS	01-359/19:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10793	MGS	01-359/19:50:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
10794	MGS	01-359/19:50:00	15	Config: TGC: DEST=37		
10795	MGS	01-359/19:50:00	15	Config: TGC: BAND=X, BR=40000.000000		
10796	MGS	01-359/19:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
10797	MGS	01-359/19:50:00	15	Config: RSR		
10798	MGS	01-359/19:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
10799	MGS	01-359/19:50:00	15	Config: BVR		
10800	MGS	01-359/19:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
10801	MGS	01-359/19:50:00	15	Config: MDA: SMPL=0.1		
10802	MGS	01-359/19:52:54		SSR 1B Data Disable	CSD1BX	01-359/19:40:50
10803	MGS	01-359/19:52:54		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-359/19:40:50
10804	MGS	01-359/19:52:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-359/19:40:50
10805	MGS	01-359/19:52:54	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10806	MGS	01-359/19:58:51		NOTE: Start Block (MAP_RT)		01-359/19:46:47
10807	MGS	01-359/19:58:52		: 00:22:27, 01:37:47, FALSE, TRUE, FALSE, 00:01:15, 00:09:13, 01:18:23, 00:08:55	AEMINI	01-359/19:46:48
10808	MGS	01-359/19:58:52		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/19:46:48
10809	MGS	01-359/19:58:52		NOTE: Start EVP data return script		01-359/19:46:48
10810	MGS	01-359/19:58:53		: SE_2A, RTM, 01:18:22, MRC, 2001-359T20:29:44.000	AEMRTI	01-359/19:46:49
10811	MGS	01-359/20:04:33		NOTE: Enter Planetary Atmosphere 12514		01-359/19:52:29
10812	MGS	01-359/20:05:46		NOTE: Apoapsis 12514 -		01-359/19:53:42
10813	MGS	01-359/20:08:52		NOTE: Enter Solar Eclipse 12514		01-359/19:56:48
10814	MGS	01-359/20:08:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/19:56:48
10815	MGS	01-359/20:10:47		NOTE: Enter Earth Occultation 12514		01-359/19:58:43
10816	MGS	01-359/20:10:47	63	NOTE: Loss Of X-Band Signal		
10817	MGS	01-359/20:11:34		NOTE: End EVP script		01-359/19:59:30
10818	MGS	01-359/20:11:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/19:59:30
10819	MGS	01-359/20:11:35		NOTE: End Block (MAP_PB_ODY)		01-359/19:59:31
10820	MGS	01-359/20:27:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/20:15:30
10821	MGS	01-359/20:31:19		: 01:37:47	RPAONX	01-359/20:19:15
10822	MGS	01-359/20:31:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/20:19:15
10823	MGS	01-359/20:32:34		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-359/20:20:30
10824	MGS	01-359/20:32:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/20:20:30
10825	MGS	01-359/20:32:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/20:20:30
10826	MGS	01-359/20:32:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/20:20:30
10827	MGS	01-359/20:32:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/20:20:30
10828	MGS	01-359/20:33:04		NOTE: Exit Earth Occultation 12514		01-359/20:21:00
10829	MGS	01-359/20:33:04	63	Acquisition Of X-Band Signal		
10830	MGS	01-359/20:33:04	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10831	MGS	01-359/20:33:04	63	NOTE: Carrier Only -- No Telemetry Modulation		
10832	MGS	01-359/20:33:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/20:21:16
10833	MGS	01-359/20:33:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/20:21:16
10834	MGS	01-359/20:33:25		Set eclipse egress script address: 019A	SWSEES	01-359/20:21:21
10835	MGS	01-359/20:39:36		NOTE: Exit Planetary Atmosphere 12514		01-359/20:27:32
10836	MGS	01-359/20:41:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/20:29:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10837	MGS	01-359/20:41:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/20:29:43
10838	MGS	01-359/20:41:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/20:29:43
10839	MGS	01-359/20:41:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/20:29:43
10840	MGS	01-359/20:41:47	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10841	MGS	01-359/20:41:48		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-359/20:29:44
10842	MGS	01-359/20:41:48		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/20:29:44
10843	MGS	01-359/20:41:48		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/20:29:44
10844	MGS	01-359/20:41:48	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10845	MGS	01-359/20:41:52		NOTE: End fixed Sub-Reflector for Radio Science		01-359/20:29:48
10846	MGS	01-359/20:49:05		NOTE: Exit Solar Eclipse 12514		01-359/20:37:01
10847	MGS	01-359/21:05:08		NOTE: Periapsis 12515 ----------		01-359/20:53:04
10848	MGS	01-359/21:10:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/20:58:00
10849	MGS	01-359/21:10:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/20:58:00
10850	MGS	01-359/21:10:05		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/20:58:01
10851	MGS	01-359/21:10:05		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/20:58:01
10852	MGS	01-359/21:20:00	15	Begin Tracking		
10853	MGS	01-359/21:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10854	MGS	01-359/21:32:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/21:20:01
10855	MGS	01-359/21:32:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/21:20:01
10856	MGS	01-359/21:34:11	63	NOTE: Below Uplink Interlock Limit		
10857	MGS	01-359/21:40:00	63	End Tracking		
10858	MGS	01-359/21:55:00	63	End Post-Cal		
10859	MGS	01-359/21:55:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/21:43:06
10860	MGS	01-359/21:56:39		NOTE: Start EVP data return script		01-359/21:44:35
10861	MGS	01-359/22:00:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/21:48:06
10862	MGS	01-359/22:00:10		: 00:08:55, FALSE	RDSCII	01-359/21:48:06
10863	MGS	01-359/22:00:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/21:48:06
10864	MGS	01-359/22:00:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/21:48:06
10865	MGS	01-359/22:00:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/21:48:06
10866	MGS	01-359/22:00:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/21:48:06
10867	MGS	01-359/22:00:10	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10868	MGS	01-359/22:00:10	15	NOTE: Carrier Only -- No Telemetry Modulation		
10869	MGS	01-359/22:02:18		NOTE: Enter Planetary Atmosphere 12515		01-359/21:50:14
10870	MGS	01-359/22:04:05		NOTE: Apoapsis 12515 -		01-359/21:52:01
10871	MGS	01-359/22:06:38		NOTE: Enter Solar Eclipse 12515		01-359/21:54:34
10872	MGS	01-359/22:06:39		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/21:54:35
10873	MGS	01-359/22:08:32		NOTE: Enter Earth Occultation 12515		01-359/21:56:28
10874	MGS	01-359/22:08:32	15	NOTE: Loss Of X-Band Signal		
10875	MGS	01-359/22:09:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/21:57:01
10876	MGS	01-359/22:09:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/21:57:01
10877	MGS	01-359/22:09:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/21:57:01
10878	MGS	01-359/22:09:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/21:57:01
10879	MGS	01-359/22:09:06		NOTE: End EVP script		01-359/21:57:02
10880	MGS	01-359/22:09:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/21:57:02
10881	MGS	01-359/22:09:10		NOTE: End fixed Sub-Reflector for Radio Science		01-359/21:57:06
10882	MGS	01-359/22:25:21		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/22:13:17
10883	MGS	01-359/22:29:06		: 01:37:47	RPAONX	01-359/22:17:02
10884	MGS	01-359/22:29:06		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-359/22:17:02
10885	MGS	01-359/22:30:21		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-359/22:18:17
10886	MGS	01-359/22:30:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/22:18:17
10887	MGS	01-359/22:30:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/22:18:17
10888	MGS	01-359/22:30:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/22:18:17
10889	MGS	01-359/22:30:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/22:18:17
10890	MGS	01-359/22:30:51		Disables autonomous command to send eclipse ingress script	SWEISX	01-359/22:18:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10891	MGS	01-359/22:30:51		NOTE: Exit Earth Occultation 12515		01-359/22:18:47
10892	MGS	01-359/22:30:51	15	Acquisition Of X-Band Signal		
10893	MGS	01-359/22:30:51	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10894	MGS	01-359/22:30:51	15	NOTE: Carrier Only -- No Telemetry Modulation		
10895	MGS	01-359/22:31:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-359/22:19:01
10896	MGS	01-359/22:31:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-359/22:19:01
10897	MGS	01-359/22:31:10		Set eclipse egress script address: 01DC	SWSEES	01-359/22:19:06
10898	MGS	01-359/22:37:23		NOTE: Exit Planetary Atmosphere 12515		01-359/22:25:19
10899	MGS	01-359/22:39:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/22:27:30
10900	MGS	01-359/22:39:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/22:27:30
10901	MGS	01-359/22:39:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/22:27:30
10902	MGS	01-359/22:39:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/22:27:30
10903	MGS	01-359/22:39:34	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10904	MGS	01-359/22:39:35		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-359/22:27:31
10905	MGS	01-359/22:39:35		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-359/22:27:31
10906	MGS	01-359/22:39:35		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-359/22:27:31
10907	MGS	01-359/22:39:35	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10908	MGS	01-359/22:39:39		NOTE: End fixed Sub-Reflector for Radio Science		01-359/22:27:35
10909	MGS	01-359/22:46:53		NOTE: Exit Solar Eclipse 12515		01-359/22:34:48
10910	MGS	01-359/23:03:18		NOTE: Periapsis 12516 ----------		01-359/22:51:14
10911	MGS	01-359/23:07:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-359/22:55:47
10912	MGS	01-359/23:07:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-359/22:55:47
10913	MGS	01-359/23:07:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-359/22:55:48
10914	MGS	01-359/23:07:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-359/22:55:48
10915	MGS	01-359/23:29:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-359/23:17:48
10916	MGS	01-359/23:29:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-359/23:17:48
10917	MGS	01-359/23:39:47		NOTE: Start Block (SSRMGR)		01-359/23:27:43
10918	MGS	01-359/23:39:47		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-359/23:27:43
10919	MGS	01-359/23:39:48		SSR 1B Data Enable	CSD1BE	01-359/23:27:44
10920	MGS	01-359/23:39:48		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-359/23:27:44
10921	MGS	01-359/23:40:00	43	Begin Pre-Cal		
10922	MGS	01-359/23:40:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10923	MGS	01-359/23:40:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10924	MGS	01-359/23:40:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10925	MGS	01-359/23:40:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10926	MGS	01-359/23:40:00	43	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
10927	MGS	01-359/23:40:00	43	Config: TGC: DEST=37		
10928	MGS	01-359/23:40:00	43	Config: TGC: BAND=X, BR=42666.666667		
10929	MGS	01-359/23:40:00	43	Config: FSS: CH=2, PRI_FL=10000		
10930	MGS	01-359/23:40:00	43	Config: RSR		
10931	MGS	01-359/23:40:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
10932	MGS	01-359/23:40:00	43	Config: BVR		
10933	MGS	01-359/23:40:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
10934	MGS	01-359/23:40:00	43	Config: MDA: SMPL=0.1		
10935	MGS	01-359/23:52:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-359/23:40:53
10936	MGS	01-359/23:54:24		NOTE: Start Block (MAP_PB_ODY)		01-359/23:42:20
10937	MGS	01-359/23:54:25		: 00:22:27, 01:37:48, FALSE, FALSE, FALSE, 00:01:15, 00:07:33, 01:21:44, 00:07:15	AEMINI	01-359/23:42:21
10938	MGS	01-359/23:54:25		Enable sending eclipse ingress script when array power disappears	SWEISE	01-359/23:42:21
10939	MGS	01-359/23:54:25		NOTE: Start EVP data return script		01-359/23:42:21
10940	MGS	01-359/23:54:26		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-360T00:23:37.000	AEMPBI	01-359/23:42:22
10941	MGS	01-359/23:57:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-359/23:45:53
10942	MGS	01-359/23:57:57		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8712000, DUR=00:18:09		01-359/23:45:53
10943	MGS	01-359/23:57:57		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-359/23:45:53
10944	MGS	01-359/23:57:57		: 00:08:55, FALSE	RDSCII	01-359/23:45:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10945	MGS	01-359/23:57:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-359/23:45:53
10946	MGS	01-359/23:57:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-359/23:45:53
10947	MGS	01-359/23:57:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-359/23:45:53
10948	MGS	01-359/23:57:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-359/23:45:53
10949	MGS	01-359/23:57:57	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
10950	MGS	01-359/23:57:57	15	NOTE: Carrier Only -- No Telemetry Modulation		
10951	MGS	01-360/00:00:00		Light Time: OWLT = 12:04, RTLT = 24:08		
10952	MGS	01-360/00:00:07		NOTE: Enter Planetary Atmosphere 12516		01-359/23:48:02
10953	MGS	01-360/00:02:12		NOTE: Apoapsis 12516 -		01-359/23:50:08
10954	MGS	01-360/00:03:25		SSR 1A Data Disable	CSD1AX	01-359/23:51:21
10955	MGS	01-360/00:03:25		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-359/23:51:21
10956	MGS	01-360/00:03:26		NOTE: End Block (SSRMGR)		01-359/23:51:22
10957	MGS	01-360/00:04:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-359/23:52:21
10958	MGS	01-360/00:04:26		NOTE: Enter Solar Eclipse 12516		01-359/23:52:21
10959	MGS	01-360/00:06:21		NOTE: Enter Earth Occultation 12516		01-359/23:54:17
10960	MGS	01-360/00:06:21	15	NOTE: Loss Of X-Band Signal		
10961	MGS	01-360/00:06:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-359/23:54:48
10962	MGS	01-360/00:06:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-359/23:54:48
10963	MGS	01-360/00:06:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-359/23:54:48
10964	MGS	01-360/00:06:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-359/23:54:48
10965	MGS	01-360/00:06:53		NOTE: End EVP script		01-359/23:54:49
10966	MGS	01-360/00:06:53		Turn off the MOT Exciter and RPA beam	STRPAF	01-359/23:54:49
10967	MGS	01-360/00:06:54		NOTE: End Block (MAP_RT)		01-359/23:54:50
10968	MGS	01-360/00:06:57		NOTE: End fixed Sub-Reflector for Radio Science		01-359/23:54:53
10969	MGS	01-360/00:10:00	34	Begin Pre-Cal		
10970	MGS	01-360/00:10:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
10971	MGS	01-360/00:10:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
10972	MGS	01-360/00:10:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
10973	MGS	01-360/00:10:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
10974	MGS	01-360/00:10:00	34	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
10975	MGS	01-360/00:10:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
10976	MGS	01-360/00:10:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
10977	MGS	01-360/00:10:00	34	Config: TGC: DEST=37		
10978	MGS	01-360/00:10:00	34	Config: TGC: BAND=X, BR=42666.666667		
10979	MGS	01-360/00:10:00	34	Config: FSS: CH=2, PRI_FL=10000		
10980	MGS	01-360/00:10:00	34	Config: RSR		
10981	MGS	01-360/00:10:00	34	Config: TXL		
10982	MGS	01-360/00:10:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
10983	MGS	01-360/00:10:00	34	Config: BVR		
10984	MGS	01-360/00:10:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
10985	MGS	01-360/00:10:00	34	Config: MDA: SMPL=0.1		
10986	MGS	01-360/00:10:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
10987	MGS	01-360/00:10:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
10988	MGS	01-360/00:10:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
10989	MGS	01-360/00:26:52		: 01:37:48	RPAONX	01-360/00:14:48
10990	MGS	01-360/00:26:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/00:14:48
10991	MGS	01-360/00:28:37		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/00:16:33
10992	MGS	01-360/00:28:39		NOTE: Exit Earth Occultation 12516		01-360/00:16:35
10993	MGS	01-360/00:28:39	15	Acquisition Of X-Band Signal		
10994	MGS	01-360/00:28:39	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
10995	MGS	01-360/00:28:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/00:16:48
10996	MGS	01-360/00:28:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/00:16:48
10997	MGS	01-360/00:28:56		Command the PSE with included data word: 3990	SWPSEL	01-360/00:16:52
10998	MGS	01-360/00:28:57		Set eclipse egress script address: 0158	SWSEES	01-360/00:16:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
10999	MGS	01-360/00:35:12		NOTE: Exit Planetary Atmosphere 12516		01-360/00:23:07
11000	MGS	01-360/00:35:40		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:18:21	AEMPB	01-360/00:23:36
11001	MGS	01-360/00:35:40		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-360/00:23:36
11002	MGS	01-360/00:35:40		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-360/00:23:36
11003	MGS	01-360/00:35:41		SSR 1A Data Enable	CSD1AE	01-360/00:23:37
11004	MGS	01-360/00:35:41		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-360/00:23:37
11005	MGS	01-360/00:35:41	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11006	MGS	01-360/00:44:40		NOTE: Exit Solar Eclipse 12516		01-360/00:32:36
11007	MGS	01-360/01:01:09		NOTE: Periapsis 12517 ----------		01-360/00:49:04
11008	MGS	01-360/01:09:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/00:57:35
11009	MGS	01-360/01:09:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/00:57:35
11010	MGS	01-360/01:09:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/00:57:36
11011	MGS	01-360/01:09:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/00:57:36
11012	MGS	01-360/01:10:00	43	Begin Tracking		
11013	MGS	01-360/01:10:00	34	Begin Tracking		
11014	MGS	01-360/01:10:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11015	MGS	01-360/01:10:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11016	MGS	01-360/01:10:39	43	NOTE: Above Uplink Interlock Limit		
11017	MGS	01-360/01:12:08	34	NOTE: Above Uplink Interlock Limit		
11018	MGS	01-360/01:20:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
11019	MGS	01-360/01:21:13	34	NOTE: Transmitter Off in 15 minutes		
11020	MGS	01-360/01:22:00	34	Range Modulation On: SUP=3.0dB		
11021	MGS	01-360/01:23:00	34	Begin Ranging Acquisition		
11022	MGS	01-360/01:30:00	15	End Tracking		
11023	MGS	01-360/01:31:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/01:19:36
11024	MGS	01-360/01:31:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/01:19:36
11025	MGS	01-360/01:34:14	34	Range Modulation Off		
11026	MGS	01-360/01:36:13	34	Transmitter Off		
11027	MGS	01-360/01:44:08	34	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11028	MGS	01-360/01:44:08	43	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11029	MGS	01-360/01:45:00	15	End Post-Cal		
11030	MGS	01-360/01:46:20		SSR 1A Data Disable	CSD1AX	01-360/01:34:15
11031	MGS	01-360/01:46:20		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-360/01:34:15
11032	MGS	01-360/01:46:20		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-360/01:34:15
11033	MGS	01-360/01:46:20	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11034	MGS	01-360/01:46:20	43	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11035	MGS	01-360/01:52:10		NOTE: Start Block (MAP_RT)		01-360/01:40:05
11036	MGS	01-360/01:52:11		: 00:22:27, 01:37:47, FALSE, TRUE, FALSE, 00:01:15, 00:09:13, 01:18:23, 00:08:55	AEMINI	01-360/01:40:06
11037	MGS	01-360/01:52:11		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/01:40:06
11038	MGS	01-360/01:52:11		NOTE: Start EVP data return script		01-360/01:40:06
11039	MGS	01-360/01:52:12		: SE_2A, RTM, 01:18:22, MRC, 2001-360T02:23:02.000	AEMRTI	01-360/01:40:07
11040	MGS	01-360/01:57:53		NOTE: Enter Planetary Atmosphere 12517		01-360/01:45:48
11041	MGS	01-360/01:59:47		NOTE: Apoapsis 12517 -		01-360/01:47:42
11042	MGS	01-360/02:00:22	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11043	MGS	01-360/02:00:22	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11044	MGS	01-360/02:02:10		NOTE: Enter Solar Eclipse 12517		01-360/01:50:06
11045	MGS	01-360/02:02:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/01:50:06
11046	MGS	01-360/02:04:07		NOTE: Enter Earth Occultation 12517		01-360/01:52:03
11047	MGS	01-360/02:04:07	34	NOTE: Loss Of X-Band Signal		
11048	MGS	01-360/02:04:07	43	NOTE: Loss Of X-Band Signal		
11049	MGS	01-360/02:04:41		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/01:52:36
11050	MGS	01-360/02:04:41		NOTE: End EVP script		01-360/01:52:36
11051	MGS	01-360/02:04:42		NOTE: End Block (MAP_PB_ODY)		01-360/01:52:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11052	MGS	01-360/02:06:01	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
11053	MGS	01-360/02:08:01	34	Range Modulation On: SUP=3.0dB		
11054	MGS	01-360/02:09:01	34	Begin Ranging Acquisition		
11055	MGS	01-360/02:20:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/02:08:48
11056	MGS	01-360/02:24:38		: 01:37:47	RPAONX	01-360/02:12:33
11057	MGS	01-360/02:24:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/02:12:33
11058	MGS	01-360/02:25:53		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/02:13:48
11059	MGS	01-360/02:25:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/02:13:48
11060	MGS	01-360/02:25:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/02:13:48
11061	MGS	01-360/02:25:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/02:13:48
11062	MGS	01-360/02:25:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/02:13:48
11063	MGS	01-360/02:26:25		NOTE: Exit Earth Occultation 12517		01-360/02:14:20
11064	MGS	01-360/02:26:25	34	Acquisition Of X-Band Signal		
11065	MGS	01-360/02:26:25	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11066	MGS	01-360/02:26:25	34	NOTE: Carrier Only -- No Telemetry Modulation		
11067	MGS	01-360/02:26:25	43	Acquisition Of X-Band Signal		
11068	MGS	01-360/02:26:25	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11069	MGS	01-360/02:26:25	43	NOTE: Carrier Only -- No Telemetry Modulation		
11070	MGS	01-360/02:26:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/02:14:36
11071	MGS	01-360/02:26:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/02:14:36
11072	MGS	01-360/02:26:46		Set eclipse egress script address: 019A	SWSEES	01-360/02:14:41
11073	MGS	01-360/02:32:58		NOTE: Exit Planetary Atmosphere 12517		01-360/02:20:54
11074	MGS	01-360/02:35:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/02:23:01
11075	MGS	01-360/02:35:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/02:23:01
11076	MGS	01-360/02:35:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/02:23:01
11077	MGS	01-360/02:35:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/02:23:01
11078	MGS	01-360/02:35:06	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11079	MGS	01-360/02:35:06	43	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11080	MGS	01-360/02:35:07		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/02:23:02
11081	MGS	01-360/02:35:07		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/02:23:02
11082	MGS	01-360/02:35:07		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/02:23:02
11083	MGS	01-360/02:35:07	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11084	MGS	01-360/02:35:07	43	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11085	MGS	01-360/02:35:10		NOTE: End fixed Sub-Reflector for Radio Science		01-360/02:23:06
11086	MGS	01-360/02:42:25		NOTE: Exit Solar Eclipse 12517		01-360/02:30:20
11087	MGS	01-360/02:58:32		NOTE: Periapsis 12518 ----------		01-360/02:46:28
11088	MGS	01-360/03:03:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/02:51:19
11089	MGS	01-360/03:03:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/02:51:19
11090	MGS	01-360/03:03:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/02:51:20
11091	MGS	01-360/03:03:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/02:51:20
11092	MGS	01-360/03:18:52	34	NOTE: Transmitter Off in 15 minutes		
11093	MGS	01-360/03:25:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/03:13:20
11094	MGS	01-360/03:25:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/03:13:20
11095	MGS	01-360/03:31:52	34	Range Modulation Off		
11096	MGS	01-360/03:33:52	34	Transmitter Off		
11097	MGS	01-360/03:48:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/03:36:24
11098	MGS	01-360/03:49:52		NOTE: Start EVP data return script		01-360/03:37:47
11099	MGS	01-360/03:53:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/03:41:24
11100	MGS	01-360/03:53:29		: 00:08:55, FALSE	RDSCII	01-360/03:41:24
11101	MGS	01-360/03:53:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/03:41:24
11102	MGS	01-360/03:53:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/03:41:24
11103	MGS	01-360/03:53:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/03:41:24
11104	MGS	01-360/03:53:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/03:41:24
11105	MGS	01-360/03:53:29	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11106	MGS	01-360/03:53:29	34	NOTE: Carrier Only -- No Telemetry Modulation		
11107	MGS	01-360/03:53:29	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11108	MGS	01-360/03:53:29	43	NOTE: Carrier Only -- No Telemetry Modulation		
11109	MGS	01-360/03:55:33		NOTE: Enter Planetary Atmosphere 12518		01-360/03:43:28
11110	MGS	01-360/03:57:06		NOTE: Apoapsis 12518 -		01-360/03:45:01
11111	MGS	01-360/03:59:51		NOTE: Enter Solar Eclipse 12518		01-360/03:47:46
11112	MGS	01-360/03:59:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/03:47:47
11113	MGS	01-360/04:01:46		NOTE: Enter Earth Occultation 12518		01-360/03:49:42
11114	MGS	01-360/04:01:46	34	NOTE: Loss Of X-Band Signal		
11115	MGS	01-360/04:01:46	43	NOTE: Loss Of X-Band Signal		
11116	MGS	01-360/04:02:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/03:50:19
11117	MGS	01-360/04:02:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/03:50:19
11118	MGS	01-360/04:02:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/03:50:19
11119	MGS	01-360/04:02:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/03:50:19
11120	MGS	01-360/04:02:25		NOTE: End EVP script		01-360/03:50:20
11121	MGS	01-360/04:02:25		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/03:50:20
11122	MGS	01-360/04:02:29		NOTE: End fixed Sub-Reflector for Radio Science		01-360/03:50:24
11123	MGS	01-360/04:03:43	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
11124	MGS	01-360/04:05:44	34	Range Modulation On: SUP=3.0dB		
11125	MGS	01-360/04:06:44	34	Begin Ranging Acquisition		
11126	MGS	01-360/04:18:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/04:06:29
11127	MGS	01-360/04:22:19		: 01:37:47	RPAONX	01-360/04:10:14
11128	MGS	01-360/04:22:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/04:10:14
11129	MGS	01-360/04:23:34		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/04:11:29
11130	MGS	01-360/04:23:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/04:11:29
11131	MGS	01-360/04:23:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/04:11:29
11132	MGS	01-360/04:23:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/04:11:29
11133	MGS	01-360/04:23:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/04:11:29
11134	MGS	01-360/04:24:04		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/04:11:59
11135	MGS	01-360/04:24:08		NOTE: Exit Earth Occultation 12518		01-360/04:12:03
11136	MGS	01-360/04:24:08	34	Acquisition Of X-Band Signal		
11137	MGS	01-360/04:24:08	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11138	MGS	01-360/04:24:08	34	NOTE: Carrier Only -- No Telemetry Modulation		
11139	MGS	01-360/04:24:08	43	Acquisition Of X-Band Signal		
11140	MGS	01-360/04:24:08	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11141	MGS	01-360/04:24:08	43	NOTE: Carrier Only -- No Telemetry Modulation		
11142	MGS	01-360/04:24:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/04:12:20
11143	MGS	01-360/04:24:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/04:12:20
11144	MGS	01-360/04:24:30		Set eclipse egress script address: 01DC	SWSEES	01-360/04:12:25
11145	MGS	01-360/04:30:40		NOTE: Exit Planetary Atmosphere 12518		01-360/04:18:35
11146	MGS	01-360/04:32:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/04:20:42
11147	MGS	01-360/04:32:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/04:20:42
11148	MGS	01-360/04:32:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/04:20:42
11149	MGS	01-360/04:32:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/04:20:42
11150	MGS	01-360/04:32:47	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11151	MGS	01-360/04:32:47	43	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11152	MGS	01-360/04:32:48		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/04:20:43
11153	MGS	01-360/04:32:48		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/04:20:43
11154	MGS	01-360/04:32:48		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/04:20:43
11155	MGS	01-360/04:32:48	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11156	MGS	01-360/04:32:48	43	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11157	MGS	01-360/04:32:52		NOTE: End fixed Sub-Reflector for Radio Science		01-360/04:20:47
11158	MGS	01-360/04:40:05		NOTE: Exit Solar Eclipse 12518		01-360/04:28:00
11159	MGS	01-360/04:55:57		NOTE: Periapsis 12519 ----------		01-360/04:43:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11160	MGS	01-360/05:01:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/04:48:59
11161	MGS	01-360/05:01:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/04:48:59
11162	MGS	01-360/05:01:05		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/04:49:00
11163	MGS	01-360/05:01:05		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/04:49:00
11164	MGS	01-360/05:16:30	34	NOTE: Transmitter Off in 15 minutes		
11165	MGS	01-360/05:23:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/05:11:00
11166	MGS	01-360/05:23:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/05:11:00
11167	MGS	01-360/05:29:30	34	Range Modulation Off		
11168	MGS	01-360/05:31:30	34	Transmitter Off		
11169	MGS	01-360/05:33:07		NOTE: Start Block (SSRMGR)		01-360/05:21:02
11170	MGS	01-360/05:33:07		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-360/05:21:02
11171	MGS	01-360/05:33:08		SSR 1A Data Enable	CSD1AE	01-360/05:21:03
11172	MGS	01-360/05:33:08		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-360/05:21:03
11173	MGS	01-360/05:46:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/05:34:05
11174	MGS	01-360/05:47:32		NOTE: Start Block (MAP_PB_ODY)		01-360/05:35:27
11175	MGS	01-360/05:47:33		: 00:22:27, 01:37:48, FALSE, FALSE, FALSE, 00:01:15, 00:07:33, 01:21:44, 00:07:15	AEMINI	01-360/05:35:28
11176	MGS	01-360/05:47:33		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/05:35:28
11177	MGS	01-360/05:47:33		NOTE: Start EVP data return script		01-360/05:35:28
11178	MGS	01-360/05:47:34		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-360T06:16:43.000	AEMPBI	01-360/05:35:29
11179	MGS	01-360/05:51:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/05:39:05
11180	MGS	01-360/05:51:10		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8656000, DUR=00:18:02		01-360/05:39:05
11181	MGS	01-360/05:51:10		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-360/05:39:05
11182	MGS	01-360/05:51:10		: 00:08:55, FALSE	RDSCII	01-360/05:39:05
11183	MGS	01-360/05:51:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/05:39:05
11184	MGS	01-360/05:51:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/05:39:05
11185	MGS	01-360/05:51:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/05:39:05
11186	MGS	01-360/05:51:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/05:39:05
11187	MGS	01-360/05:51:10	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11188	MGS	01-360/05:51:10	34	NOTE: Carrier Only -- No Telemetry Modulation		
11189	MGS	01-360/05:51:10	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11190	MGS	01-360/05:51:10	43	NOTE: Carrier Only -- No Telemetry Modulation		
11191	MGS	01-360/05:53:12		NOTE: Enter Planetary Atmosphere 12519		01-360/05:41:07
11192	MGS	01-360/05:54:50		NOTE: Apoapsis 12519 -		01-360/05:42:45
11193	MGS	01-360/05:56:32		SSR 1B Data Disable	CSD1BX	01-360/05:44:27
11194	MGS	01-360/05:56:32		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-360/05:44:27
11195	MGS	01-360/05:56:33		NOTE: End Block (SSRMGR)		01-360/05:44:28
11196	MGS	01-360/05:57:33		NOTE: Enter Solar Eclipse 12519		01-360/05:45:28
11197	MGS	01-360/05:57:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/05:45:28
11198	MGS	01-360/05:59:25		NOTE: Enter Earth Occultation 12519		01-360/05:47:20
11199	MGS	01-360/05:59:25	34	NOTE: Loss Of X-Band Signal		
11200	MGS	01-360/05:59:25	43	NOTE: Loss Of X-Band Signal		
11201	MGS	01-360/06:00:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/05:48:00
11202	MGS	01-360/06:00:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/05:48:00
11203	MGS	01-360/06:00:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/05:48:00
11204	MGS	01-360/06:00:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/05:48:00
11205	MGS	01-360/06:00:06		NOTE: End EVP script		01-360/05:48:01
11206	MGS	01-360/06:00:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/05:48:01
11207	MGS	01-360/06:00:07		NOTE: End Block (MAP_RT)		01-360/05:48:02
11208	MGS	01-360/06:00:10		NOTE: End fixed Sub-Reflector for Radio Science		01-360/05:48:05
11209	MGS	01-360/06:01:26	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
11210	MGS	01-360/06:03:26	34	Range Modulation On: SUP=3.0dB		
11211	MGS	01-360/06:04:26	34	Begin Ranging Acquisition		
11212	MGS	01-360/06:20:00		: 01:37:48	RPAONX	01-360/06:07:55
11213	MGS	01-360/06:20:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/06:07:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11214	MGS	01-360/06:21:45		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/06:09:40
11215	MGS	01-360/06:21:51		NOTE: Exit Earth Occultation 12519		01-360/06:09:46
11216	MGS	01-360/06:21:51	34	Acquisition Of X-Band Signal		
11217	MGS	01-360/06:21:51	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11218	MGS	01-360/06:21:51	43	Acquisition Of X-Band Signal		
11219	MGS	01-360/06:21:51	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11220	MGS	01-360/06:22:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/06:10:00
11221	MGS	01-360/06:22:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/06:10:00
11222	MGS	01-360/06:22:09		Command the PSE with included data word: 3990	SWPSEL	01-360/06:10:04
11223	MGS	01-360/06:22:10		Set eclipse egress script address: 0158	SWSEES	01-360/06:10:05
11224	MGS	01-360/06:25:36	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11225	MGS	01-360/06:25:36	43	Acquire D/L: X/16, 3-Way/34, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11226	MGS	01-360/06:28:21		NOTE: Exit Planetary Atmosphere 12519		01-360/06:16:16
11227	MGS	01-360/06:28:48		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:18:21	AEMPB	01-360/06:16:43
11228	MGS	01-360/06:28:48		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-360/06:16:43
11229	MGS	01-360/06:28:48		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-360/06:16:43
11230	MGS	01-360/06:28:49		SSR 1B Data Enable	CSD1BE	01-360/06:16:44
11231	MGS	01-360/06:28:49		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-360/06:16:44
11232	MGS	01-360/06:28:49	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11233	MGS	01-360/06:28:49	43	D/L Change: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11234	MGS	01-360/06:37:47		NOTE: Exit Solar Eclipse 12519		01-360/06:25:42
11235	MGS	01-360/06:53:40		NOTE: Periapsis 12520 ----------		01-360/06:41:35
11236	MGS	01-360/07:02:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/06:50:40
11237	MGS	01-360/07:02:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/06:50:40
11238	MGS	01-360/07:02:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/06:50:41
11239	MGS	01-360/07:02:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/06:50:41
11240	MGS	01-360/07:14:15	34	NOTE: Transmitter Off in 15 minutes		
11241	MGS	01-360/07:24:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/07:12:41
11242	MGS	01-360/07:24:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/07:12:41
11243	MGS	01-360/07:27:15	34	Range Modulation Off		
11244	MGS	01-360/07:29:15	34	Transmitter Off		
11245	MGS	01-360/07:39:28		SSR 1B Data Disable	CSD1BX	01-360/07:27:22
11246	MGS	01-360/07:39:28		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-360/07:27:22
11247	MGS	01-360/07:39:28		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-360/07:27:22
11248	MGS	01-360/07:39:28	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11249	MGS	01-360/07:39:28	43	D/L Change: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11250	MGS	01-360/07:45:19		NOTE: Start Block (MAP_RT)		01-360/07:33:13
11251	MGS	01-360/07:45:20		: 00:22:27, 01:37:47, FALSE, TRUE, FALSE, 00:01:15, 00:09:13, 01:18:23, 00:08:55	AEMINI	01-360/07:33:14
11252	MGS	01-360/07:45:20		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/07:33:14
11253	MGS	01-360/07:45:20		NOTE: Start EVP data return script		01-360/07:33:14
11254	MGS	01-360/07:45:21		: SE_2A, RTM, 01:18:22, MRC, 2001-360T08:16:10.000	AEMRTI	01-360/07:33:15
11255	MGS	01-360/07:50:59		NOTE: Enter Planetary Atmosphere 12520		01-360/07:38:54
11256	MGS	01-360/07:52:42		NOTE: Apoapsis 12520 -		01-360/07:40:37
11257	MGS	01-360/07:53:26	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11258	MGS	01-360/07:53:26	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11259	MGS	01-360/07:55:19		NOTE: Enter Solar Eclipse 12520		01-360/07:43:14
11260	MGS	01-360/07:55:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/07:43:14
11261	MGS	01-360/07:57:11		NOTE: Enter Earth Occultation 12520		01-360/07:45:05
11262	MGS	01-360/07:57:11	34	NOTE: Loss Of X-Band Signal		
11263	MGS	01-360/07:57:11	43	NOTE: Loss Of X-Band Signal		
11264	MGS	01-360/07:57:48		NOTE: End EVP script		01-360/07:45:43
11265	MGS	01-360/07:57:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/07:45:43
11266	MGS	01-360/07:57:49		NOTE: End Block (MAP_PB_ODY)		01-360/07:45:44
11267	MGS	01-360/07:59:11	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11268	MGS	01-360/08:01:12	34	Range Modulation On: SUP=3.0dB		
11269	MGS	01-360/08:02:12	34	Begin Ranging Acquisition		
11270	MGS	01-360/08:14:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/08:01:56
11271	MGS	01-360/08:17:47		: 01:37:47	RPAONX	01-360/08:05:41
11272	MGS	01-360/08:17:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/08:05:41
11273	MGS	01-360/08:19:02		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/08:06:56
11274	MGS	01-360/08:19:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/08:06:56
11275	MGS	01-360/08:19:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/08:06:56
11276	MGS	01-360/08:19:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/08:06:56
11277	MGS	01-360/08:19:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/08:06:56
11278	MGS	01-360/08:19:37		NOTE: Exit Earth Occultation 12520		01-360/08:07:31
11279	MGS	01-360/08:19:37	34	Acquisition Of X-Band Signal		
11280	MGS	01-360/08:19:37	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11281	MGS	01-360/08:19:37	34	NOTE: Carrier Only -- No Telemetry Modulation		
11282	MGS	01-360/08:19:37	43	Acquisition Of X-Band Signal		
11283	MGS	01-360/08:19:37	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11284	MGS	01-360/08:19:37	43	NOTE: Carrier Only -- No Telemetry Modulation		
11285	MGS	01-360/08:19:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/08:07:41
11286	MGS	01-360/08:19:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/08:07:41
11287	MGS	01-360/08:19:52		Set eclipse egress script address: 019A	SWSEES	01-360/08:07:46
11288	MGS	01-360/08:20:00	34	NOTE: Transmitter Off in 15 minutes		
11289	MGS	01-360/08:26:07		NOTE: Exit Planetary Atmosphere 12520		01-360/08:14:02
11290	MGS	01-360/08:28:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/08:16:09
11291	MGS	01-360/08:28:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/08:16:09
11292	MGS	01-360/08:28:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/08:16:09
11293	MGS	01-360/08:28:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/08:16:09
11294	MGS	01-360/08:28:15	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11295	MGS	01-360/08:28:15	43	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11296	MGS	01-360/08:28:16		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/08:16:10
11297	MGS	01-360/08:28:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/08:16:10
11298	MGS	01-360/08:28:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/08:16:10
11299	MGS	01-360/08:28:16	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11300	MGS	01-360/08:28:16	43	D/L Change: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11301	MGS	01-360/08:28:19		NOTE: End fixed Sub-Reflector for Radio Science		01-360/08:16:14
11302	MGS	01-360/08:33:00	34	Range Modulation Off		
11303	MGS	01-360/08:35:00	34	Transmitter Off		
11304	MGS	01-360/08:35:34		NOTE: Exit Solar Eclipse 12520		01-360/08:23:28
11305	MGS	01-360/08:40:00	34	End Tracking		
11306	MGS	01-360/08:51:34		NOTE: Periapsis 12521 ----------		01-360/08:39:29
11307	MGS	01-360/08:55:00	34	End Post-Cal		
11308	MGS	01-360/08:56:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/08:44:27
11309	MGS	01-360/08:56:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/08:44:27
11310	MGS	01-360/08:56:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/08:44:28
11311	MGS	01-360/08:56:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/08:44:28
11312	MGS	01-360/08:59:11	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11313	MGS	01-360/09:18:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/09:06:28
11314	MGS	01-360/09:18:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/09:06:28
11315	MGS	01-360/09:41:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/09:29:32
11316	MGS	01-360/09:43:07		NOTE: Start EVP data return script		01-360/09:31:01
11317	MGS	01-360/09:46:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/09:34:32
11318	MGS	01-360/09:46:38		: 00:08:55, FALSE	RDSCII	01-360/09:34:32
11319	MGS	01-360/09:46:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/09:34:32
11320	MGS	01-360/09:46:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/09:34:32
11321	MGS	01-360/09:46:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/09:34:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11322	MGS	01-360/09:46:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/09:34:32
11323	MGS	01-360/09:46:38	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11324	MGS	01-360/09:46:38	43	NOTE: Carrier Only -- No Telemetry Modulation		
11325	MGS	01-360/09:48:47		NOTE: Enter Planetary Atmosphere 12521		01-360/09:36:41
11326	MGS	01-360/09:50:25		NOTE: Apoapsis 12521 -		01-360/09:38:19
11327	MGS	01-360/09:53:07		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/09:41:01
11328	MGS	01-360/09:53:07		NOTE: Enter Solar Eclipse 12521		01-360/09:41:01
11329	MGS	01-360/09:54:58		NOTE: Enter Earth Occultation 12521		01-360/09:42:52
11330	MGS	01-360/09:54:58	43	NOTE: Loss Of X-Band Signal		
11331	MGS	01-360/09:55:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/09:43:27
11332	MGS	01-360/09:55:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/09:43:27
11333	MGS	01-360/09:55:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/09:43:27
11334	MGS	01-360/09:55:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/09:43:27
11335	MGS	01-360/09:55:34		NOTE: End EVP script		01-360/09:43:28
11336	MGS	01-360/09:55:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/09:43:28
11337	MGS	01-360/09:55:38		NOTE: End fixed Sub-Reflector for Radio Science		01-360/09:43:32
11338	MGS	01-360/10:11:49		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/09:59:43
11339	MGS	01-360/10:15:34		: 01:37:47	RPAONX	01-360/10:03:28
11340	MGS	01-360/10:15:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/10:03:28
11341	MGS	01-360/10:16:49		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/10:04:43
11342	MGS	01-360/10:16:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/10:04:43
11343	MGS	01-360/10:16:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/10:04:43
11344	MGS	01-360/10:16:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/10:04:43
11345	MGS	01-360/10:16:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/10:04:43
11346	MGS	01-360/10:17:19		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/10:05:13
11347	MGS	01-360/10:17:25		NOTE: Exit Earth Occultation 12521		01-360/10:05:19
11348	MGS	01-360/10:17:25	43	Acquisition Of X-Band Signal		
11349	MGS	01-360/10:17:25	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11350	MGS	01-360/10:17:25	43	NOTE: Carrier Only -- No Telemetry Modulation		
11351	MGS	01-360/10:17:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/10:05:28
11352	MGS	01-360/10:17:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/10:05:28
11353	MGS	01-360/10:17:39		Set eclipse egress script address: 01DC	SWSEES	01-360/10:05:33
11354	MGS	01-360/10:23:55		NOTE: Exit Planetary Atmosphere 12521		01-360/10:11:49
11355	MGS	01-360/10:26:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/10:13:56
11356	MGS	01-360/10:26:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/10:13:56
11357	MGS	01-360/10:26:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/10:13:56
11358	MGS	01-360/10:26:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/10:13:56
11359	MGS	01-360/10:26:02	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11360	MGS	01-360/10:26:03		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/10:13:57
11361	MGS	01-360/10:26:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/10:13:57
11362	MGS	01-360/10:26:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/10:13:57
11363	MGS	01-360/10:26:03	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11364	MGS	01-360/10:26:07		NOTE: End fixed Sub-Reflector for Radio Science		01-360/10:14:01
11365	MGS	01-360/10:33:21		NOTE: Exit Solar Eclipse 12521		01-360/10:21:15
11366	MGS	01-360/10:35:00	54	Begin Pre-Cal		
11367	MGS	01-360/10:35:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
11368	MGS	01-360/10:35:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
11369	MGS	01-360/10:35:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
11370	MGS	01-360/10:35:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
11371	MGS	01-360/10:35:00	54	Config: TGC: DEST=37		
11372	MGS	01-360/10:35:00	54	Config: TGC: BAND=X, BR=0.000000		
11373	MGS	01-360/10:35:00	54	Config: FSS: CH=2, PRI_FL=10000		
11374	MGS	01-360/10:35:00	54	Config: RSR		
11375	MGS	01-360/10:35:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11376	MGS	01-360/10:35:00	54	Config: BVR		
11377	MGS	01-360/10:35:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
11378	MGS	01-360/10:35:00	54	Config: MDA: SMPL=0.1		
11379	MGS	01-360/10:49:18		NOTE: Periapsis 12522 ----------		01-360/10:37:12
11380	MGS	01-360/10:54:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/10:42:14
11381	MGS	01-360/10:54:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/10:42:14
11382	MGS	01-360/10:54:21		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/10:42:15
11383	MGS	01-360/10:54:21		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/10:42:15
11384	MGS	01-360/11:16:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/11:04:15
11385	MGS	01-360/11:16:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/11:04:15
11386	MGS	01-360/11:26:16		NOTE: Start Block (SSRMGR)		01-360/11:14:10
11387	MGS	01-360/11:26:16		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-360/11:14:10
11388	MGS	01-360/11:26:17		SSR 1B Data Enable	CSD1BE	01-360/11:14:11
11389	MGS	01-360/11:26:17		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-360/11:14:11
11390	MGS	01-360/11:39:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/11:27:19
11391	MGS	01-360/11:40:52		NOTE: Start Block (MAP_PB_ODY)		01-360/11:28:46
11392	MGS	01-360/11:40:53		: 00:22:27, 01:37:48, FALSE, FALSE, FALSE, 00:01:15, 00:07:33, 01:21:44, 00:07:15	AEMINI	01-360/11:28:47
11393	MGS	01-360/11:40:53		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/11:28:47
11394	MGS	01-360/11:40:53		NOTE: Start EVP data return script		01-360/11:28:47
11395	MGS	01-360/11:40:54		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-360T12:10:03.000	AEMPBI	01-360/11:28:48
11396	MGS	01-360/11:44:25		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/11:32:19
11397	MGS	01-360/11:44:25		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8704000, DUR=00:18:08		01-360/11:32:19
11398	MGS	01-360/11:44:25		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-360/11:32:19
11399	MGS	01-360/11:44:25		: 00:08:55, FALSE	RDSCII	01-360/11:32:19
11400	MGS	01-360/11:44:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/11:32:19
11401	MGS	01-360/11:44:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/11:32:19
11402	MGS	01-360/11:44:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/11:32:19
11403	MGS	01-360/11:44:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/11:32:19
11404	MGS	01-360/11:44:25	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11405	MGS	01-360/11:44:25	43	NOTE: Carrier Only -- No Telemetry Modulation		
11406	MGS	01-360/11:46:32		NOTE: Enter Planetary Atmosphere 12522		01-360/11:34:26
11407	MGS	01-360/11:47:53		NOTE: Apoapsis 12522 -		01-360/11:35:47
11408	MGS	01-360/11:49:52		SSR 1A Data Disable	CSD1AX	01-360/11:37:46
11409	MGS	01-360/11:49:52		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-360/11:37:46
11410	MGS	01-360/11:49:53		NOTE: End Block (SSRMGR)		01-360/11:37:47
11411	MGS	01-360/11:50:53		NOTE: Enter Solar Eclipse 12522		01-360/11:38:47
11412	MGS	01-360/11:50:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/11:38:47
11413	MGS	01-360/11:52:43		NOTE: Enter Earth Occultation 12522		01-360/11:40:37
11414	MGS	01-360/11:52:43	43	NOTE: Loss Of X-Band Signal		
11415	MGS	01-360/11:53:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/11:41:14
11416	MGS	01-360/11:53:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/11:41:14
11417	MGS	01-360/11:53:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/11:41:14
11418	MGS	01-360/11:53:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/11:41:14
11419	MGS	01-360/11:53:21		NOTE: End EVP script		01-360/11:41:15
11420	MGS	01-360/11:53:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/11:41:15
11421	MGS	01-360/11:53:22		NOTE: End Block (MAP_RT)		01-360/11:41:16
11422	MGS	01-360/11:53:25		NOTE: End fixed Sub-Reflector for Radio Science		01-360/11:41:19
11423	MGS	01-360/12:05:00	54	Begin Tracking		
11424	MGS	01-360/12:12:05		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-360/11:59:59
11425	MGS	01-360/12:13:20		: 01:37:48	RPAONX	01-360/12:01:14
11426	MGS	01-360/12:13:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/12:01:14
11427	MGS	01-360/12:13:21	43	NOTE: Below Uplink Interlock Limit		
11428	MGS	01-360/12:15:05		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/12:02:59
11429	MGS	01-360/12:15:13		NOTE: Exit Earth Occultation 12522		01-360/12:03:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11430	MGS	01-360/12:15:13	43	Acquisition Of X-Band Signal		
11431	MGS	01-360/12:15:13	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11432	MGS	01-360/12:15:13	54	Acquisition Of X-Band Signal		
11433	MGS	01-360/12:15:13	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11434	MGS	01-360/12:15:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/12:03:15
11435	MGS	01-360/12:15:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/12:03:15
11436	MGS	01-360/12:15:25		Command the PSE with included data word: 3990	SWPSEL	01-360/12:03:19
11437	MGS	01-360/12:15:26		Set eclipse egress script address: 0158	SWSEES	01-360/12:03:20
11438	MGS	01-360/12:17:13	54	NOTE: Above Uplink Interlock Limit		
11439	MGS	01-360/12:21:42		NOTE: Exit Planetary Atmosphere 12522		01-360/12:09:36
11440	MGS	01-360/12:22:08		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:18:21	AEMPB	01-360/12:10:02
11441	MGS	01-360/12:22:08		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-360/12:10:02
11442	MGS	01-360/12:22:08		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-360/12:10:02
11443	MGS	01-360/12:22:09		SSR 1A Data Enable	CSD1AE	01-360/12:10:03
11444	MGS	01-360/12:22:09		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-360/12:10:03
11445	MGS	01-360/12:22:09	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11446	MGS	01-360/12:22:09	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11447	MGS	01-360/12:25:00	43	End Tracking		
11448	MGS	01-360/12:31:07		NOTE: Exit Solar Eclipse 12522		01-360/12:19:01
11449	MGS	01-360/12:40:00	43	End Post-Cal		
11450	MGS	01-360/12:47:02		NOTE: Periapsis 12523 ----------		01-360/12:34:56
11451	MGS	01-360/12:56:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/12:44:00
11452	MGS	01-360/12:56:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/12:44:00
11453	MGS	01-360/12:56:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/12:44:01
11454	MGS	01-360/12:56:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/12:44:01
11455	MGS	01-360/13:18:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/13:06:01
11456	MGS	01-360/13:18:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/13:06:01
11457	MGS	01-360/13:32:47		SSR 1A Data Disable	CSD1AX	01-360/13:20:41
11458	MGS	01-360/13:32:47		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-360/13:20:41
11459	MGS	01-360/13:32:47		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-360/13:20:41
11460	MGS	01-360/13:32:47	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11461	MGS	01-360/13:38:36		NOTE: Start Block (MAP_RT)		01-360/13:26:30
11462	MGS	01-360/13:38:37		: 00:22:27, 01:37:47, FALSE, TRUE, FALSE, 00:01:15, 00:09:13, 01:18:23, 00:08:55	AEMINI	01-360/13:26:31
11463	MGS	01-360/13:38:37		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/13:26:31
11464	MGS	01-360/13:38:37		NOTE: Start EVP data return script		01-360/13:26:31
11465	MGS	01-360/13:38:38		: SE_2A, RTM, 01:18:22, MRC, 2001-360T14:09:27.000	AEMRTI	01-360/13:26:32
11466	MGS	01-360/13:44:15		NOTE: Enter Planetary Atmosphere 12523		01-360/13:32:09
11467	MGS	01-360/13:45:30		NOTE: Apoapsis 12523 -		01-360/13:33:23
11468	MGS	01-360/13:48:37		NOTE: Enter Solar Eclipse 12523		01-360/13:36:31
11469	MGS	01-360/13:48:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/13:36:31
11470	MGS	01-360/13:50:26		NOTE: Enter Earth Occultation 12523		01-360/13:38:19
11471	MGS	01-360/13:50:26	54	NOTE: Loss Of X-Band Signal		
11472	MGS	01-360/13:51:08		NOTE: End EVP script		01-360/13:39:02
11473	MGS	01-360/13:51:08		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/13:39:02
11474	MGS	01-360/13:51:09		NOTE: End Block (MAP_PB_ODY)		01-360/13:39:03
11475	MGS	01-360/14:07:19		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/13:55:13
11476	MGS	01-360/14:11:04		: 01:37:47	RPAONX	01-360/13:58:58
11477	MGS	01-360/14:11:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/13:58:58
11478	MGS	01-360/14:12:20		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/14:00:13
11479	MGS	01-360/14:12:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/14:00:13
11480	MGS	01-360/14:12:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/14:00:13
11481	MGS	01-360/14:12:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/14:00:13
11482	MGS	01-360/14:12:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/14:00:13
11483	MGS	01-360/14:12:59		NOTE: Exit Earth Occultation 12523		01-360/14:00:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11484	MGS	01-360/14:12:59	54	Acquisition Of X-Band Signal		
11485	MGS	01-360/14:12:59	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11486	MGS	01-360/14:12:59	54	NOTE: Carrier Only -- No Telemetry Modulation		
11487	MGS	01-360/14:13:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/14:01:01
11488	MGS	01-360/14:13:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/14:01:01
11489	MGS	01-360/14:13:13		Set eclipse egress script address: 019A	SWSEES	01-360/14:01:06
11490	MGS	01-360/14:19:28		NOTE: Exit Planetary Atmosphere 12523		01-360/14:07:21
11491	MGS	01-360/14:21:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/14:09:26
11492	MGS	01-360/14:21:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/14:09:26
11493	MGS	01-360/14:21:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/14:09:26
11494	MGS	01-360/14:21:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/14:09:26
11495	MGS	01-360/14:21:33	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11496	MGS	01-360/14:21:34		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/14:09:27
11497	MGS	01-360/14:21:34		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/14:09:27
11498	MGS	01-360/14:21:34		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/14:09:27
11499	MGS	01-360/14:21:34	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11500	MGS	01-360/14:21:37		NOTE: End fixed Sub-Reflector for Radio Science		01-360/14:09:31
11501	MGS	01-360/14:28:51		NOTE: Exit Solar Eclipse 12523		01-360/14:16:45
11502	MGS	01-360/14:44:47		NOTE: Periapsis 12524 ----------		01-360/14:32:41
11503	MGS	01-360/14:49:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/14:37:44
11504	MGS	01-360/14:49:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/14:37:44
11505	MGS	01-360/14:49:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/14:37:45
11506	MGS	01-360/14:49:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/14:37:45
11507	MGS	01-360/15:11:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/14:59:45
11508	MGS	01-360/15:11:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/14:59:45
11509	MGS	01-360/15:34:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/15:22:49
11510	MGS	01-360/15:36:20		NOTE: Start EVP data return script		01-360/15:24:13
11511	MGS	01-360/15:39:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/15:27:49
11512	MGS	01-360/15:39:56		: 00:08:55, FALSE	RDSCII	01-360/15:27:49
11513	MGS	01-360/15:39:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/15:27:49
11514	MGS	01-360/15:39:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/15:27:49
11515	MGS	01-360/15:39:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/15:27:49
11516	MGS	01-360/15:39:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/15:27:49
11517	MGS	01-360/15:39:56	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11518	MGS	01-360/15:39:56	54	NOTE: Carrier Only -- No Telemetry Modulation		
11519	MGS	01-360/15:41:57		NOTE: Enter Planetary Atmosphere 12524		01-360/15:29:51
11520	MGS	01-360/15:43:25		NOTE: Apoapsis 12524 -		01-360/15:31:18
11521	MGS	01-360/15:46:19		NOTE: Enter Solar Eclipse 12524		01-360/15:34:13
11522	MGS	01-360/15:46:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/15:34:13
11523	MGS	01-360/15:48:08		NOTE: Enter Earth Occultation 12524		01-360/15:36:02
11524	MGS	01-360/15:48:08	54	NOTE: Loss Of X-Band Signal		
11525	MGS	01-360/15:48:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/15:36:44
11526	MGS	01-360/15:48:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/15:36:44
11527	MGS	01-360/15:48:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/15:36:44
11528	MGS	01-360/15:48:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/15:36:44
11529	MGS	01-360/15:48:51		NOTE: End EVP script		01-360/15:36:45
11530	MGS	01-360/15:48:52		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/15:36:45
11531	MGS	01-360/15:48:55		NOTE: End fixed Sub-Reflector for Radio Science		01-360/15:36:49
11532	MGS	01-360/16:05:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/15:52:55
11533	MGS	01-360/16:08:47		: 01:37:47	RPAONX	01-360/15:56:40
11534	MGS	01-360/16:08:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/15:56:40
11535	MGS	01-360/16:10:02		: 00:00:30, 00:09:13, FALSE	RDSCIE	01-360/15:57:55
11536	MGS	01-360/16:10:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/15:57:55
11537	MGS	01-360/16:10:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/15:57:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11538	MGS	01-360/16:10:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/15:57:55
11539	MGS	01-360/16:10:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/15:57:55
11540	MGS	01-360/16:10:32		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/15:58:25
11541	MGS	01-360/16:10:42		NOTE: Exit Earth Occultation 12524		01-360/15:58:35
11542	MGS	01-360/16:10:42	54	Acquisition Of X-Band Signal		
11543	MGS	01-360/16:10:42	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11544	MGS	01-360/16:10:42	54	NOTE: Carrier Only -- No Telemetry Modulation		
11545	MGS	01-360/16:10:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/15:58:45
11546	MGS	01-360/16:10:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/15:58:45
11547	MGS	01-360/16:10:57		Set eclipse egress script address: 01DC	SWSEES	01-360/15:58:50
11548	MGS	01-360/16:17:11		NOTE: Exit Planetary Atmosphere 12524		01-360/16:05:04
11549	MGS	01-360/16:19:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/16:07:08
11550	MGS	01-360/16:19:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/16:07:08
11551	MGS	01-360/16:19:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/16:07:08
11552	MGS	01-360/16:19:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/16:07:08
11553	MGS	01-360/16:19:15	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11554	MGS	01-360/16:19:16		: RTM, MRC, 01:18:22, S&E_2A, FALSE, 00:08:56	AEMRT	01-360/16:07:09
11555	MGS	01-360/16:19:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/16:07:09
11556	MGS	01-360/16:19:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/16:07:09
11557	MGS	01-360/16:19:16	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11558	MGS	01-360/16:19:20		NOTE: End fixed Sub-Reflector for Radio Science		01-360/16:07:13
11559	MGS	01-360/16:26:34		NOTE: Exit Solar Eclipse 12524		01-360/16:14:27
11560	MGS	01-360/16:42:21		NOTE: Periapsis 12525 ----------		01-360/16:30:14
11561	MGS	01-360/16:47:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/16:35:26
11562	MGS	01-360/16:47:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/16:35:26
11563	MGS	01-360/16:47:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/16:35:27
11564	MGS	01-360/16:47:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/16:35:27
11565	MGS	01-360/17:09:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/16:57:27
11566	MGS	01-360/17:09:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/16:57:27
11567	MGS	01-360/17:19:34		NOTE: Start Block (SSRMGR)		01-360/17:07:27
11568	MGS	01-360/17:19:34		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-360/17:07:27
11569	MGS	01-360/17:19:35		SSR 1A Data Enable	CSD1AE	01-360/17:07:28
11570	MGS	01-360/17:19:35		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-360/17:07:28
11571	MGS	01-360/17:32:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/17:20:31
11572	MGS	01-360/17:34:01		NOTE: Start Block (MAP_PB_ODY)		01-360/17:21:54
11573	MGS	01-360/17:34:02		: 00:22:27, 01:37:48, FALSE, FALSE, FALSE, 00:01:15, 00:07:33, 01:21:44, 00:07:15	AEMINI	01-360/17:21:55
11574	MGS	01-360/17:34:02		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/17:21:55
11575	MGS	01-360/17:34:02		NOTE: Start EVP data return script		01-360/17:21:55
11576	MGS	01-360/17:34:03		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-360T18:03:10.000	AEMPBI	01-360/17:21:56
11577	MGS	01-360/17:37:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/17:25:31
11578	MGS	01-360/17:37:38		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8664000, DUR=00:18:03		01-360/17:25:31
11579	MGS	01-360/17:37:38		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-360/17:25:31
11580	MGS	01-360/17:37:38		: 00:08:55, FALSE	RDSCII	01-360/17:25:31
11581	MGS	01-360/17:37:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/17:25:31
11582	MGS	01-360/17:37:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/17:25:31
11583	MGS	01-360/17:37:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/17:25:31
11584	MGS	01-360/17:37:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/17:25:31
11585	MGS	01-360/17:37:38	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11586	MGS	01-360/17:37:38	54	NOTE: Carrier Only -- No Telemetry Modulation		
11587	MGS	01-360/17:39:40		NOTE: Enter Planetary Atmosphere 12525		01-360/17:27:33
11588	MGS	01-360/17:40:55		NOTE: Apoapsis 12525 -		01-360/17:28:48
11589	MGS	01-360/17:43:01		SSR 1B Data Disable	CSD1BX	01-360/17:30:54
11590	MGS	01-360/17:43:01		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-360/17:30:54
11591	MGS	01-360/17:43:02		NOTE: End Block (SSRMGR)		01-360/17:30:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11592	MGS	01-360/17:44:02		NOTE: Enter Solar Eclipse 12525		01-360/17:31:55
11593	MGS	01-360/17:44:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/17:31:55
11594	MGS	01-360/17:45:51		NOTE: Enter Earth Occultation 12525		01-360/17:33:44
11595	MGS	01-360/17:45:51	54	NOTE: Loss Of X-Band Signal		
11596	MGS	01-360/17:46:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/17:34:26
11597	MGS	01-360/17:46:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/17:34:26
11598	MGS	01-360/17:46:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/17:34:26
11599	MGS	01-360/17:46:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/17:34:26
11600	MGS	01-360/17:46:34		NOTE: End EVP script		01-360/17:34:27
11601	MGS	01-360/17:46:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/17:34:27
11602	MGS	01-360/17:46:35		NOTE: End Block (MAP_RT)		01-360/17:34:28
11603	MGS	01-360/17:46:38		NOTE: End fixed Sub-Reflector for Radio Science		01-360/17:34:31
11604	MGS	01-360/18:06:29		: 01:37:48	RPAONX	01-360/17:54:22
11605	MGS	01-360/18:06:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/17:54:22
11606	MGS	01-360/18:08:14		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/17:56:07
11607	MGS	01-360/18:08:24		NOTE: Exit Earth Occultation 12525		01-360/17:56:17
11608	MGS	01-360/18:08:24	54	Acquisition Of X-Band Signal		
11609	MGS	01-360/18:08:24	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11610	MGS	01-360/18:08:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/17:56:27
11611	MGS	01-360/18:08:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/17:56:27
11612	MGS	01-360/18:08:38		Command the PSE with included data word: 3990	SWPSEL	01-360/17:56:31
11613	MGS	01-360/18:08:39		Set eclipse egress script address: 0158	SWSEES	01-360/17:56:32
11614	MGS	01-360/18:14:54		NOTE: Exit Planetary Atmosphere 12525		01-360/18:02:47
11615	MGS	01-360/18:15:17		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:18:21	AEMPB	01-360/18:03:10
11616	MGS	01-360/18:15:17		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-360/18:03:10
11617	MGS	01-360/18:15:17		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-360/18:03:10
11618	MGS	01-360/18:15:18		SSR 1B Data Enable	CSD1BE	01-360/18:03:11
11619	MGS	01-360/18:15:18		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-360/18:03:11
11620	MGS	01-360/18:15:18	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11621	MGS	01-360/18:24:16		NOTE: Exit Solar Eclipse 12525		01-360/18:12:09
11622	MGS	01-360/18:39:41		NOTE: Periapsis 12526 ----------		01-360/18:27:34
11623	MGS	01-360/18:49:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/18:37:08
11624	MGS	01-360/18:49:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/18:37:08
11625	MGS	01-360/18:49:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/18:37:09
11626	MGS	01-360/18:49:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/18:37:09
11627	MGS	01-360/19:11:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/18:59:09
11628	MGS	01-360/19:11:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/18:59:09
11629	MGS	01-360/19:25:56		SSR 1B Data Disable	CSD1BX	01-360/19:13:49
11630	MGS	01-360/19:25:56		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-360/19:13:49
11631	MGS	01-360/19:25:56		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-360/19:13:49
11632	MGS	01-360/19:25:56	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11633	MGS	01-360/19:31:45		NOTE: Start Block (MAP_RT)		01-360/19:19:38
11634	MGS	01-360/19:31:46		: 00:22:38, 01:37:24, FALSE, TRUE, FALSE, 00:01:15, 00:09:09, 01:18:09, 00:08:50	AEMINI	01-360/19:19:39
11635	MGS	01-360/19:31:46		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/19:19:39
11636	MGS	01-360/19:31:46		NOTE: Start EVP data return script		01-360/19:19:39
11637	MGS	01-360/19:31:47		: SE_2A, RTM, 01:18:08, MRC, 2001-360T20:02:42.000	AEMRTI	01-360/19:19:40
11638	MGS	01-360/19:37:23		NOTE: Enter Planetary Atmosphere 12526		01-360/19:25:16
11639	MGS	01-360/19:38:21		NOTE: Apoapsis 12526 -		01-360/19:26:13
11640	MGS	01-360/19:41:46		NOTE: Enter Solar Eclipse 12526		01-360/19:29:39
11641	MGS	01-360/19:41:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/19:29:39
11642	MGS	01-360/19:43:32		NOTE: Enter Earth Occultation 12526		01-360/19:31:25
11643	MGS	01-360/19:43:32	54	NOTE: Loss Of X-Band Signal		
11644	MGS	01-360/19:44:17		NOTE: End EVP script		01-360/19:32:10
11645	MGS	01-360/19:44:17		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/19:32:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11646	MGS	01-360/19:44:18		NOTE: End Block (MAP_PB_ODY)		01-360/19:32:11
11647	MGS	01-360/19:50:00	15	Begin Pre-Cal		
11648	MGS	01-360/19:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
11649	MGS	01-360/19:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
11650	MGS	01-360/19:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
11651	MGS	01-360/19:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
11652	MGS	01-360/19:50:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
11653	MGS	01-360/19:50:00	15	Config: TGC: DEST=37		
11654	MGS	01-360/19:50:00	15	Config: TGC: BAND=X, BR=40000.000000		
11655	MGS	01-360/19:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
11656	MGS	01-360/19:50:00	15	Config: RSR		
11657	MGS	01-360/19:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
11658	MGS	01-360/19:50:00	15	Config: BVR		
11659	MGS	01-360/19:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
11660	MGS	01-360/19:50:00	15	Config: MDA: SMPL=0.1		
11661	MGS	01-360/20:00:39		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/19:48:32
11662	MGS	01-360/20:04:24		: 01:37:24	RPAONX	01-360/19:52:17
11663	MGS	01-360/20:04:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/19:52:17
11664	MGS	01-360/20:05:39		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-360/19:53:32
11665	MGS	01-360/20:05:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/19:53:32
11666	MGS	01-360/20:05:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/19:53:32
11667	MGS	01-360/20:05:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/19:53:32
11668	MGS	01-360/20:05:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/19:53:32
11669	MGS	01-360/20:06:10		NOTE: Exit Earth Occultation 12526		01-360/19:54:02
11670	MGS	01-360/20:06:10	54	Acquisition Of X-Band Signal		
11671	MGS	01-360/20:06:10	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11672	MGS	01-360/20:06:10	54	NOTE: Carrier Only -- No Telemetry Modulation		
11673	MGS	01-360/20:06:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/19:54:09
11674	MGS	01-360/20:06:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/19:54:09
11675	MGS	01-360/20:06:21		Set eclipse egress script address: 019A	SWSEES	01-360/19:54:14
11676	MGS	01-360/20:12:37		NOTE: Exit Planetary Atmosphere 12526		01-360/20:00:30
11677	MGS	01-360/20:14:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/20:02:41
11678	MGS	01-360/20:14:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/20:02:41
11679	MGS	01-360/20:14:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/20:02:41
11680	MGS	01-360/20:14:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/20:02:41
11681	MGS	01-360/20:14:48	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11682	MGS	01-360/20:14:49		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-360/20:02:42
11683	MGS	01-360/20:14:49		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/20:02:42
11684	MGS	01-360/20:14:49		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/20:02:42
11685	MGS	01-360/20:14:49	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11686	MGS	01-360/20:14:53		NOTE: End fixed Sub-Reflector for Radio Science		01-360/20:02:46
11687	MGS	01-360/20:22:00		NOTE: Exit Solar Eclipse 12526		01-360/20:09:53
11688	MGS	01-360/20:37:37		NOTE: Periapsis 12527 ----------		01-360/20:25:30
11689	MGS	01-360/20:42:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/20:30:51
11690	MGS	01-360/20:42:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/20:30:51
11691	MGS	01-360/20:42:59		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/20:30:52
11692	MGS	01-360/20:42:59		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/20:30:52
11693	MGS	01-360/21:05:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/20:52:52
11694	MGS	01-360/21:05:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/20:52:52
11695	MGS	01-360/21:20:00	15	Begin Tracking		
11696	MGS	01-360/21:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11697	MGS	01-360/21:27:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/21:15:50
11698	MGS	01-360/21:29:33		NOTE: Start EVP data return script		01-360/21:17:25
11699	MGS	01-360/21:32:27	54	NOTE: Below Uplink Interlock Limit		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11700	MGS	01-360/21:32:58		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/21:20:50
11701	MGS	01-360/21:32:58		: 00:08:50, FALSE	RDSCII	01-360/21:20:50
11702	MGS	01-360/21:32:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/21:20:50
11703	MGS	01-360/21:32:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/21:20:50
11704	MGS	01-360/21:32:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/21:20:50
11705	MGS	01-360/21:32:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/21:20:50
11706	MGS	01-360/21:32:58	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11707	MGS	01-360/21:32:58	15	NOTE: Carrier Only -- No Telemetry Modulation		
11708	MGS	01-360/21:32:58	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11709	MGS	01-360/21:32:58	54	NOTE: Carrier Only -- No Telemetry Modulation		
11710	MGS	01-360/21:35:00	54	End Tracking		
11711	MGS	01-360/21:35:07		NOTE: Enter Planetary Atmosphere 12527		01-360/21:22:59
11712	MGS	01-360/21:36:27		NOTE: Apoapsis 12527 -		01-360/21:24:19
11713	MGS	01-360/21:39:32		NOTE: Enter Solar Eclipse 12527		01-360/21:27:24
11714	MGS	01-360/21:39:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/21:27:25
11715	MGS	01-360/21:41:15		NOTE: Enter Earth Occultation 12527		01-360/21:29:07
11716	MGS	01-360/21:41:15	15	NOTE: Loss Of X-Band Signal		
11717	MGS	01-360/21:41:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/21:29:40
11718	MGS	01-360/21:41:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/21:29:40
11719	MGS	01-360/21:41:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/21:29:40
11720	MGS	01-360/21:41:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/21:29:40
11721	MGS	01-360/21:41:48		NOTE: End EVP script		01-360/21:29:41
11722	MGS	01-360/21:41:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/21:29:41
11723	MGS	01-360/21:41:52		NOTE: End fixed Sub-Reflector for Radio Science		01-360/21:29:45
11724	MGS	01-360/21:50:00	54	End Post-Cal		
11725	MGS	01-360/21:58:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/21:46:18
11726	MGS	01-360/22:02:11		: 01:37:24	RPAONX	01-360/21:50:03
11727	MGS	01-360/22:02:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/21:50:03
11728	MGS	01-360/22:03:26		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-360/21:51:18
11729	MGS	01-360/22:03:26		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/21:51:18
11730	MGS	01-360/22:03:26		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/21:51:18
11731	MGS	01-360/22:03:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/21:51:18
11732	MGS	01-360/22:03:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/21:51:18
11733	MGS	01-360/22:03:56		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/21:51:48
11734	MGS	01-360/22:03:57		NOTE: Exit Earth Occultation 12527		01-360/21:51:49
11735	MGS	01-360/22:03:57	15	Acquisition Of X-Band Signal		
11736	MGS	01-360/22:03:57	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11737	MGS	01-360/22:03:57	15	NOTE: Carrier Only -- No Telemetry Modulation		
11738	MGS	01-360/22:04:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/21:51:52
11739	MGS	01-360/22:04:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/21:51:52
11740	MGS	01-360/22:04:05		Set eclipse egress script address: 01DC	SWSEES	01-360/21:51:57
11741	MGS	01-360/22:10:23		NOTE: Exit Planetary Atmosphere 12527		01-360/21:58:15
11742	MGS	01-360/22:12:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/22:00:27
11743	MGS	01-360/22:12:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/22:00:27
11744	MGS	01-360/22:12:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/22:00:27
11745	MGS	01-360/22:12:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/22:00:27
11746	MGS	01-360/22:12:35	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11747	MGS	01-360/22:12:36		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-360/22:00:28
11748	MGS	01-360/22:12:36		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-360/22:00:28
11749	MGS	01-360/22:12:36		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-360/22:00:28
11750	MGS	01-360/22:12:36	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11751	MGS	01-360/22:12:39		NOTE: End fixed Sub-Reflector for Radio Science		01-360/22:00:32
11752	MGS	01-360/22:19:46		NOTE: Exit Solar Eclipse 12527		01-360/22:07:39
11753	MGS	01-360/22:35:51		NOTE: Periapsis 12528 ----------		01-360/22:23:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11754	MGS	01-360/22:40:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-360/22:28:38
11755	MGS	01-360/22:40:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-360/22:28:38
11756	MGS	01-360/22:40:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-360/22:28:39
11757	MGS	01-360/22:40:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-360/22:28:39
11758	MGS	01-360/23:02:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-360/22:50:39
11759	MGS	01-360/23:02:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-360/22:50:39
11760	MGS	01-360/23:12:44		NOTE: Start Block (SSRMGR)		01-360/23:00:36
11761	MGS	01-360/23:12:44		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-360/23:00:36
11762	MGS	01-360/23:12:45		SSR 1B Data Enable	CSD1BE	01-360/23:00:37
11763	MGS	01-360/23:12:45		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-360/23:00:37
11764	MGS	01-360/23:25:43		NOTE: Begin fixed Sub-Reflector for Radio Science		01-360/23:13:36
11765	MGS	01-360/23:27:18		NOTE: Start Block (MAP_PB_ODY)		01-360/23:15:10
11766	MGS	01-360/23:27:19		: 00:22:38, 01:37:25, FALSE, FALSE, FALSE, 00:01:15, 00:07:29, 01:21:30, 00:07:10	AEMINI	01-360/23:15:11
11767	MGS	01-360/23:27:19		Enable sending eclipse ingress script when array power disappears	SWEISE	01-360/23:15:11
11768	MGS	01-360/23:27:19		NOTE: Start EVP data return script		01-360/23:15:11
11769	MGS	01-360/23:27:20		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-360T23:56:34.000	AEMPBI	01-360/23:15:12
11770	MGS	01-360/23:30:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-360/23:18:36
11771	MGS	01-360/23:30:44		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8632000, DUR=00:17:59		01-360/23:18:36
11772	MGS	01-360/23:30:44		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-360/23:18:36
11773	MGS	01-360/23:30:44		: 00:08:50, FALSE	RDSCII	01-360/23:18:36
11774	MGS	01-360/23:30:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-360/23:18:36
11775	MGS	01-360/23:30:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-360/23:18:36
11776	MGS	01-360/23:30:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-360/23:18:36
11777	MGS	01-360/23:30:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-360/23:18:36
11778	MGS	01-360/23:30:44	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11779	MGS	01-360/23:30:44	15	NOTE: Carrier Only -- No Telemetry Modulation		
11780	MGS	01-360/23:32:54		NOTE: Enter Planetary Atmosphere 12528		01-360/23:20:46
11781	MGS	01-360/23:34:46		NOTE: Apoapsis 12528 -		01-360/23:22:38
11782	MGS	01-360/23:36:19		SSR 1A Data Disable	CSD1AX	01-360/23:24:11
11783	MGS	01-360/23:36:19		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-360/23:24:11
11784	MGS	01-360/23:36:20		NOTE: End Block (SSRMGR)		01-360/23:24:12
11785	MGS	01-360/23:37:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-360/23:25:11
11786	MGS	01-360/23:37:19		NOTE: Enter Solar Eclipse 12528		01-360/23:25:11
11787	MGS	01-360/23:39:02		NOTE: Enter Earth Occultation 12528		01-360/23:26:54
11788	MGS	01-360/23:39:02	15	NOTE: Loss Of X-Band Signal		
11789	MGS	01-360/23:39:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-360/23:27:26
11790	MGS	01-360/23:39:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-360/23:27:26
11791	MGS	01-360/23:39:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-360/23:27:26
11792	MGS	01-360/23:39:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-360/23:27:26
11793	MGS	01-360/23:39:35		NOTE: End EVP script		01-360/23:27:27
11794	MGS	01-360/23:39:35		Turn off the MOT Exciter and RPA beam	STRPAF	01-360/23:27:27
11795	MGS	01-360/23:39:36		NOTE: End Block (MAP_RT)		01-360/23:27:28
11796	MGS	01-360/23:39:39		NOTE: End fixed Sub-Reflector for Radio Science		01-360/23:27:31
11797	MGS	01-360/23:59:57		: 01:37:25	RPAONX	01-360/23:47:49
11798	MGS	01-360/23:59:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-360/23:47:49
11799	MGS	01-361/00:00:00		Light Time: OWLT = 12:07, RTLT = 24:15		
11800	MGS	01-361/00:01:42		Disables autonomous command to send eclipse ingress script	SWEISX	01-360/23:49:34
11801	MGS	01-361/00:01:44		NOTE: Exit Earth Occultation 12528		01-360/23:49:37
11802	MGS	01-361/00:01:44	15	Acquisition Of X-Band Signal		
11803	MGS	01-361/00:01:44	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11804	MGS	01-361/00:01:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-360/23:49:39
11805	MGS	01-361/00:01:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-360/23:49:39
11806	MGS	01-361/00:01:51		Command the PSE with included data word: 3990	SWPSEL	01-360/23:49:43
11807	MGS	01-361/00:01:52		Set eclipse egress script address: 0158	SWSEES	01-360/23:49:44

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11808	MGS	01-361/00:08:10		NOTE: Exit Planetary Atmosphere 12528		01-360/23:56:03
11809	MGS	01-361/00:08:41		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:18:02	AEMPB	01-360/23:56:33
11810	MGS	01-361/00:08:41		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-360/23:56:33
11811	MGS	01-361/00:08:41		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-360/23:56:33
11812	MGS	01-361/00:08:42		SSR 1A Data Enable	CSD1AE	01-360/23:56:34
11813	MGS	01-361/00:08:42		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-360/23:56:34
11814	MGS	01-361/00:08:42	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11815	MGS	01-361/00:17:34		NOTE: Exit Solar Eclipse 12528		01-361/00:05:26
11816	MGS	01-361/00:33:55		NOTE: Periapsis 12529 ----------		01-361/00:21:47
11817	MGS	01-361/00:42:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/00:30:25
11818	MGS	01-361/00:42:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/00:30:25
11819	MGS	01-361/00:42:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/00:30:26
11820	MGS	01-361/00:42:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/00:30:26
11821	MGS	01-361/01:04:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/00:52:26
11822	MGS	01-361/01:04:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/00:52:26
11823	MGS	01-361/01:19:20		SSR 1A Data Disable	CSD1AX	01-361/01:07:12
11824	MGS	01-361/01:19:20		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-361/01:07:12
11825	MGS	01-361/01:19:20		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-361/01:07:12
11826	MGS	01-361/01:19:20	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11827	MGS	01-361/01:25:04		NOTE: Start Block (MAP_RT)		01-361/01:12:56
11828	MGS	01-361/01:25:05		: 00:22:38, 01:37:24, FALSE, TRUE, FALSE, 00:01:15, 00:09:09, 01:18:09, 00:08:50	AEMINI	01-361/01:12:57
11829	MGS	01-361/01:25:05		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/01:12:57
11830	MGS	01-361/01:25:05		NOTE: Start EVP data return script		01-361/01:12:57
11831	MGS	01-361/01:25:06		: SE_2A, RTM, 01:18:08, MRC, 2001-361T01:56:01.000	AEMRTI	01-361/01:12:58
11832	MGS	01-361/01:30:41		NOTE: Enter Planetary Atmosphere 12529		01-361/01:18:33
11833	MGS	01-361/01:32:39		NOTE: Apoapsis 12529 -		01-361/01:20:30
11834	MGS	01-361/01:35:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/01:22:57
11835	MGS	01-361/01:35:05		NOTE: Enter Solar Eclipse 12529		01-361/01:22:57
11836	MGS	01-361/01:36:50		NOTE: Enter Earth Occultation 12529		01-361/01:24:42
11837	MGS	01-361/01:36:50	15	NOTE: Loss Of X-Band Signal		
11838	MGS	01-361/01:37:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/01:25:14
11839	MGS	01-361/01:37:22		NOTE: End EVP script		01-361/01:25:14
11840	MGS	01-361/01:37:23		NOTE: End Block (MAP_PB_ODY)		01-361/01:25:15
11841	MGS	01-361/01:53:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/01:41:50
11842	MGS	01-361/01:57:43		: 01:37:24	RPAONX	01-361/01:45:35
11843	MGS	01-361/01:57:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/01:45:35
11844	MGS	01-361/01:58:58		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/01:46:50
11845	MGS	01-361/01:58:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/01:46:50
11846	MGS	01-361/01:58:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/01:46:50
11847	MGS	01-361/01:58:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/01:46:50
11848	MGS	01-361/01:58:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/01:46:50
11849	MGS	01-361/01:59:32		NOTE: Exit Earth Occultation 12529		01-361/01:47:23
11850	MGS	01-361/01:59:32	15	Acquisition Of X-Band Signal		
11851	MGS	01-361/01:59:32	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11852	MGS	01-361/01:59:32	15	NOTE: Carrier Only -- No Telemetry Modulation		
11853	MGS	01-361/01:59:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/01:47:26
11854	MGS	01-361/01:59:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/01:47:26
11855	MGS	01-361/01:59:39		Set eclipse egress script address: 019A	SWSEES	01-361/01:47:31
11856	MGS	01-361/02:05:59		NOTE: Exit Planetary Atmosphere 12529		01-361/01:53:50
11857	MGS	01-361/02:08:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/01:55:59
11858	MGS	01-361/02:08:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/01:55:59
11859	MGS	01-361/02:08:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/01:55:59
11860	MGS	01-361/02:08:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/01:55:59
11861	MGS	01-361/02:08:07	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11862	MGS	01-361/02:08:08		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/01:56:00
11863	MGS	01-361/02:08:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/01:56:00
11864	MGS	01-361/02:08:08		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/01:56:00
11865	MGS	01-361/02:08:08	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11866	MGS	01-361/02:08:13		NOTE: End fixed Sub-Reflector for Radio Science		01-361/01:56:04
11867	MGS	01-361/02:15:20		NOTE: Exit Solar Eclipse 12529		01-361/02:03:12
11868	MGS	01-361/02:31:31		NOTE: Periapsis 12530 ----------		01-361/02:19:23
11869	MGS	01-361/02:36:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/02:24:11
11870	MGS	01-361/02:36:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/02:24:11
11871	MGS	01-361/02:36:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/02:24:12
11872	MGS	01-361/02:36:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/02:24:12
11873	MGS	01-361/02:58:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/02:46:12
11874	MGS	01-361/02:58:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/02:46:12
11875	MGS	01-361/03:21:17		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/03:09:08
11876	MGS	01-361/03:22:49		NOTE: Start EVP data return script		01-361/03:10:40
11877	MGS	01-361/03:26:17		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/03:14:08
11878	MGS	01-361/03:26:17		: 00:08:50, FALSE	RDSCII	01-361/03:14:08
11879	MGS	01-361/03:26:17		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/03:14:08
11880	MGS	01-361/03:26:17		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/03:14:08
11881	MGS	01-361/03:26:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/03:14:08
11882	MGS	01-361/03:26:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/03:14:08
11883	MGS	01-361/03:26:17	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11884	MGS	01-361/03:26:17	15	NOTE: Carrier Only -- No Telemetry Modulation		
11885	MGS	01-361/03:28:25		NOTE: Enter Planetary Atmosphere 12530		01-361/03:16:17
11886	MGS	01-361/03:30:02		NOTE: Apoapsis 12530 -		01-361/03:17:53
11887	MGS	01-361/03:32:49		NOTE: Enter Solar Eclipse 12530		01-361/03:20:40
11888	MGS	01-361/03:32:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/03:20:40
11889	MGS	01-361/03:34:34		NOTE: Enter Earth Occultation 12530		01-361/03:22:25
11890	MGS	01-361/03:34:34	15	NOTE: Loss Of X-Band Signal		
11891	MGS	01-361/03:35:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/03:22:58
11892	MGS	01-361/03:35:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/03:22:58
11893	MGS	01-361/03:35:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/03:22:58
11894	MGS	01-361/03:35:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/03:22:58
11895	MGS	01-361/03:35:08		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/03:22:59
11896	MGS	01-361/03:35:08		NOTE: End EVP script		01-361/03:22:59
11897	MGS	01-361/03:35:12		NOTE: End fixed Sub-Reflector for Radio Science		01-361/03:23:03
11898	MGS	01-361/03:51:42		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/03:39:33
11899	MGS	01-361/03:55:27		: 01:37:24	RPAONX	01-361/03:43:18
11900	MGS	01-361/03:55:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/03:43:18
11901	MGS	01-361/03:56:42		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/03:44:33
11902	MGS	01-361/03:56:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/03:44:33
11903	MGS	01-361/03:56:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/03:44:33
11904	MGS	01-361/03:56:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/03:44:33
11905	MGS	01-361/03:56:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/03:44:33
11906	MGS	01-361/03:57:12		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/03:45:03
11907	MGS	01-361/03:57:16		NOTE: Exit Earth Occultation 12530		01-361/03:45:08
11908	MGS	01-361/03:57:16	15	Acquisition Of X-Band Signal		
11909	MGS	01-361/03:57:16	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11910	MGS	01-361/03:57:16	15	NOTE: Carrier Only -- No Telemetry Modulation		
11911	MGS	01-361/03:57:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/03:45:12
11912	MGS	01-361/03:57:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/03:45:12
11913	MGS	01-361/03:57:26		Set eclipse egress script address: 01DC	SWSEES	01-361/03:45:17
11914	MGS	01-361/04:03:43		NOTE: Exit Planetary Atmosphere 12530		01-361/03:51:35
11915	MGS	01-361/04:05:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/03:53:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11916	MGS	01-361/04:05:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/03:53:42
11917	MGS	01-361/04:05:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/03:53:42
11918	MGS	01-361/04:05:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/03:53:42
11919	MGS	01-361/04:05:51	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11920	MGS	01-361/04:05:52		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/03:53:43
11921	MGS	01-361/04:05:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/03:53:43
11922	MGS	01-361/04:05:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/03:53:43
11923	MGS	01-361/04:05:52	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11924	MGS	01-361/04:05:56		NOTE: End fixed Sub-Reflector for Radio Science		01-361/03:53:47
11925	MGS	01-361/04:13:03		NOTE: Exit Solar Eclipse 12530		01-361/04:00:55
11926	MGS	01-361/04:25:00	34	Begin Pre-Cal		
11927	MGS	01-361/04:25:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
11928	MGS	01-361/04:25:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
11929	MGS	01-361/04:25:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
11930	MGS	01-361/04:25:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
11931	MGS	01-361/04:25:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
11932	MGS	01-361/04:25:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
11933	MGS	01-361/04:25:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
11934	MGS	01-361/04:25:00	34	Config: TGC: DEST=37		
11935	MGS	01-361/04:25:00	34	Config: TGC: BAND=X, BR=40000.000000		
11936	MGS	01-361/04:25:00	34	Config: FSS: CH=2, PRI_FL=10000		
11937	MGS	01-361/04:25:00	34	Config: RSR		
11938	MGS	01-361/04:25:00	34	Config: TXL		
11939	MGS	01-361/04:25:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
11940	MGS	01-361/04:25:00	34	Config: BVR		
11941	MGS	01-361/04:25:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
11942	MGS	01-361/04:25:00	34	Config: MDA: SMPL=0.1		
11943	MGS	01-361/04:28:53		NOTE: Periapsis 12531 ----------		01-361/04:16:44
11944	MGS	01-361/04:34:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/04:21:53
11945	MGS	01-361/04:34:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/04:21:53
11946	MGS	01-361/04:34:03		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/04:21:54
11947	MGS	01-361/04:34:03		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/04:21:54
11948	MGS	01-361/04:56:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/04:43:54
11949	MGS	01-361/04:56:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/04:43:54
11950	MGS	01-361/05:06:04		NOTE: Start Block (SSRMGR)		01-361/04:53:55
11951	MGS	01-361/05:06:04		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-361/04:53:55
11952	MGS	01-361/05:06:05		SSR 1A Data Enable	CSD1AE	01-361/04:53:56
11953	MGS	01-361/05:06:05		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-361/04:53:56
11954	MGS	01-361/05:10:00	34	Begin Tracking		
11955	MGS	01-361/05:10:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
11956	MGS	01-361/05:11:39	15	NOTE: Below Uplink Interlock Limit		
11957	MGS	01-361/05:19:00		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/05:06:51
11958	MGS	01-361/05:20:28		NOTE: Start Block (MAP_PB_ODY)		01-361/05:08:19
11959	MGS	01-361/05:20:29		: 00:22:38, 01:37:25, FALSE, FALSE, FALSE, 00:01:15, 00:07:29, 01:21:30, 00:07:10	AEMINI	01-361/05:08:20
11960	MGS	01-361/05:20:29		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/05:08:20
11961	MGS	01-361/05:20:29		NOTE: Start EVP data return script		01-361/05:08:20
11962	MGS	01-361/05:20:30		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-361T05:49:43.000	AEMPBI	01-361/05:08:21
11963	MGS	01-361/05:24:00		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/05:11:51
11964	MGS	01-361/05:24:00		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8600000, DUR=00:17:55		01-361/05:11:51
11965	MGS	01-361/05:24:00		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-361/05:11:51
11966	MGS	01-361/05:24:00		: 00:08:50, FALSE	RDSCII	01-361/05:11:51
11967	MGS	01-361/05:24:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/05:11:51
11968	MGS	01-361/05:24:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/05:11:51
11969	MGS	01-361/05:24:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/05:11:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
11970	MGS	01-361/05:24:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/05:11:51
11971	MGS	01-361/05:24:00	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11972	MGS	01-361/05:24:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
11973	MGS	01-361/05:24:00	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
11974	MGS	01-361/05:24:00	34	NOTE: Carrier Only -- No Telemetry Modulation		
11975	MGS	01-361/05:25:00	15	End Tracking		
11976	MGS	01-361/05:26:04		NOTE: Enter Planetary Atmosphere 12531		01-361/05:13:55
11977	MGS	01-361/05:27:34		NOTE: Apoapsis 12531 -		01-361/05:15:25
11978	MGS	01-361/05:29:29		SSR 1B Data Disable	CSD1BX	01-361/05:17:20
11979	MGS	01-361/05:29:29		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-361/05:17:20
11980	MGS	01-361/05:29:30		NOTE: End Block (SSRMGR)		01-361/05:17:21
11981	MGS	01-361/05:30:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/05:18:20
11982	MGS	01-361/05:30:29		NOTE: Enter Solar Eclipse 12531		01-361/05:18:20
11983	MGS	01-361/05:32:11		NOTE: Enter Earth Occultation 12531		01-361/05:20:03
11984	MGS	01-361/05:32:11	34	NOTE: Loss Of X-Band Signal		
11985	MGS	01-361/05:32:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/05:20:41
11986	MGS	01-361/05:32:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/05:20:41
11987	MGS	01-361/05:32:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/05:20:41
11988	MGS	01-361/05:32:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/05:20:41
11989	MGS	01-361/05:32:51		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/05:20:42
11990	MGS	01-361/05:32:51		NOTE: End EVP script		01-361/05:20:42
11991	MGS	01-361/05:32:52		NOTE: End Block (MAP_RT)		01-361/05:20:43
11992	MGS	01-361/05:32:55		NOTE: End fixed Sub-Reflector for Radio Science		01-361/05:20:46
11993	MGS	01-361/05:34:26	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
11994	MGS	01-361/05:40:00	15	End Post-Cal		
11995	MGS	01-361/05:53:07		: 01:37:25	RPAONX	01-361/05:40:58
11996	MGS	01-361/05:53:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/05:40:58
11997	MGS	01-361/05:54:52		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/05:42:43
11998	MGS	01-361/05:54:59		NOTE: Exit Earth Occultation 12531		01-361/05:42:50
11999	MGS	01-361/05:54:59	34	Acquisition Of X-Band Signal		
12000	MGS	01-361/05:54:59	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12001	MGS	01-361/05:55:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/05:42:54
12002	MGS	01-361/05:55:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/05:42:54
12003	MGS	01-361/05:55:07		Command the PSE with included data word: 3990	SWPSEL	01-361/05:42:58
12004	MGS	01-361/05:55:08		Set eclipse egress script address: 0158	SWSEES	01-361/05:42:59
12005	MGS	01-361/05:58:44	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12006	MGS	01-361/06:01:24		NOTE: Exit Planetary Atmosphere 12531		01-361/05:49:15
12007	MGS	01-361/06:01:51		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:18:02	AEMPB	01-361/05:49:42
12008	MGS	01-361/06:01:51		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-361/05:49:42
12009	MGS	01-361/06:01:51		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-361/05:49:42
12010	MGS	01-361/06:01:52		SSR 1B Data Enable	CSD1BE	01-361/05:49:43
12011	MGS	01-361/06:01:52		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-361/05:49:43
12012	MGS	01-361/06:01:52	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12013	MGS	01-361/06:10:44		NOTE: Exit Solar Eclipse 12531		01-361/05:58:35
12014	MGS	01-361/06:26:27		NOTE: Periapsis 12532 ----------		01-361/06:14:18
12015	MGS	01-361/06:35:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/06:23:34
12016	MGS	01-361/06:35:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/06:23:34
12017	MGS	01-361/06:35:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/06:23:35
12018	MGS	01-361/06:35:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/06:23:35
12019	MGS	01-361/06:46:51	34	NOTE: Transmitter Off in 15 minutes		
12020	MGS	01-361/06:57:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/06:45:35
12021	MGS	01-361/06:57:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/06:45:35
12022	MGS	01-361/07:01:51	34	Transmitter Off		
12023	MGS	01-361/07:12:30		SSR 1B Data Disable	CSD1BX	01-361/07:00:21

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12024	MGS	01-361/07:12:30		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-361/07:00:21
12025	MGS	01-361/07:12:30		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-361/07:00:21
12026	MGS	01-361/07:12:30	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12027	MGS	01-361/07:18:12		NOTE: Start Block (MAP_RT)		01-361/07:06:03
12028	MGS	01-361/07:18:13		: 00:22:38, 01:37:24, FALSE, TRUE, FALSE, 00:01:15, 00:09:09, 01:18:09, 00:08:50	AEMINI	01-361/07:06:04
12029	MGS	01-361/07:18:13		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/07:06:04
12030	MGS	01-361/07:18:13		NOTE: Start EVP data return script		01-361/07:06:04
12031	MGS	01-361/07:18:14		: SE_2A, RTM, 01:18:08, MRC, 2001-361T07:49:08.000	AEMRTI	01-361/07:06:05
12032	MGS	01-361/07:23:48		NOTE: Enter Planetary Atmosphere 12532		01-361/07:11:39
12033	MGS	01-361/07:25:30		NOTE: Apoapsis 12532 -		01-361/07:13:21
12034	MGS	01-361/07:26:09	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12035	MGS	01-361/07:28:13		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/07:16:04
12036	MGS	01-361/07:28:14		NOTE: Enter Solar Eclipse 12532		01-361/07:16:05
12037	MGS	01-361/07:29:54		NOTE: Enter Earth Occultation 12532		01-361/07:17:45
12038	MGS	01-361/07:29:54	34	NOTE: Loss Of X-Band Signal		
12039	MGS	01-361/07:30:32		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/07:18:23
12040	MGS	01-361/07:30:33		NOTE: End EVP script		01-361/07:18:23
12041	MGS	01-361/07:30:34		NOTE: End Block (MAP_PB_ODY)		01-361/07:18:24
12042	MGS	01-361/07:32:10	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12043	MGS	01-361/07:47:07		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/07:34:58
12044	MGS	01-361/07:50:51		: 01:37:24	RPAONX	01-361/07:38:42
12045	MGS	01-361/07:50:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/07:38:42
12046	MGS	01-361/07:52:06		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/07:39:57
12047	MGS	01-361/07:52:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/07:39:57
12048	MGS	01-361/07:52:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/07:39:57
12049	MGS	01-361/07:52:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/07:39:57
12050	MGS	01-361/07:52:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/07:39:57
12051	MGS	01-361/07:52:43		NOTE: Exit Earth Occultation 12532		01-361/07:40:34
12052	MGS	01-361/07:52:43	34	Acquisition Of X-Band Signal		
12053	MGS	01-361/07:52:43	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12054	MGS	01-361/07:52:43	34	NOTE: Carrier Only -- No Telemetry Modulation		
12055	MGS	01-361/07:52:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/07:40:35
12056	MGS	01-361/07:52:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/07:40:35
12057	MGS	01-361/07:52:49		Set eclipse egress script address: 019A	SWSEES	01-361/07:40:40
12058	MGS	01-361/07:59:08		NOTE: Exit Planetary Atmosphere 12532		01-361/07:46:59
12059	MGS	01-361/08:01:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/07:49:06
12060	MGS	01-361/08:01:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/07:49:06
12061	MGS	01-361/08:01:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/07:49:06
12062	MGS	01-361/08:01:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/07:49:06
12063	MGS	01-361/08:01:15	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12064	MGS	01-361/08:01:16		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/07:49:07
12065	MGS	01-361/08:01:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/07:49:07
12066	MGS	01-361/08:01:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/07:49:07
12067	MGS	01-361/08:01:16	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12068	MGS	01-361/08:01:21		NOTE: End fixed Sub-Reflector for Radio Science		01-361/07:49:12
12069	MGS	01-361/08:08:28		NOTE: Exit Solar Eclipse 12532		01-361/07:56:19
12070	MGS	01-361/08:24:21		NOTE: Periapsis 12533 ----------		01-361/08:12:12
12071	MGS	01-361/08:29:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/08:17:18
12072	MGS	01-361/08:29:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/08:17:18
12073	MGS	01-361/08:29:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/08:17:19
12074	MGS	01-361/08:29:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/08:17:19
12075	MGS	01-361/08:44:38	34	NOTE: Transmitter Off in 15 minutes		
12076	MGS	01-361/08:51:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/08:39:19
12077	MGS	01-361/08:51:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/08:39:19

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12078	MGS	01-361/08:59:38	34	Transmitter Off		
12079	MGS	01-361/09:14:25		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/09:02:16
12080	MGS	01-361/09:16:00		NOTE: Start EVP data return script		01-361/09:03:51
12081	MGS	01-361/09:19:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/09:07:15
12082	MGS	01-361/09:19:24		: 00:08:50, FALSE	RDSCII	01-361/09:07:15
12083	MGS	01-361/09:19:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/09:07:15
12084	MGS	01-361/09:19:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/09:07:15
12085	MGS	01-361/09:19:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/09:07:15
12086	MGS	01-361/09:19:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/09:07:15
12087	MGS	01-361/09:19:24	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12088	MGS	01-361/09:19:24	34	NOTE: Carrier Only -- No Telemetry Modulation		
12089	MGS	01-361/09:21:35		NOTE: Enter Planetary Atmosphere 12533		01-361/09:09:26
12090	MGS	01-361/09:23:18		NOTE: Apoapsis 12533 -		01-361/09:11:09
12091	MGS	01-361/09:26:00		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/09:13:51
12092	MGS	01-361/09:26:01		NOTE: Enter Solar Eclipse 12533		01-361/09:13:52
12093	MGS	01-361/09:27:41		NOTE: Enter Earth Occultation 12533		01-361/09:15:32
12094	MGS	01-361/09:27:41	34	NOTE: Loss Of X-Band Signal		
12095	MGS	01-361/09:28:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/09:16:05
12096	MGS	01-361/09:28:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/09:16:05
12097	MGS	01-361/09:28:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/09:16:05
12098	MGS	01-361/09:28:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/09:16:05
12099	MGS	01-361/09:28:15		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/09:16:06
12100	MGS	01-361/09:28:16		NOTE: End EVP script		01-361/09:16:07
12101	MGS	01-361/09:28:20		NOTE: End fixed Sub-Reflector for Radio Science		01-361/09:16:11
12102	MGS	01-361/09:29:57	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12103	MGS	01-361/09:44:54		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/09:32:45
12104	MGS	01-361/09:48:38		: 01:37:24	RPAONX	01-361/09:36:29
12105	MGS	01-361/09:48:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/09:36:29
12106	MGS	01-361/09:49:53		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/09:37:44
12107	MGS	01-361/09:49:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/09:37:44
12108	MGS	01-361/09:49:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/09:37:44
12109	MGS	01-361/09:49:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/09:37:44
12110	MGS	01-361/09:49:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/09:37:44
12111	MGS	01-361/09:50:24		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/09:38:14
12112	MGS	01-361/09:50:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/09:38:19
12113	MGS	01-361/09:50:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/09:38:19
12114	MGS	01-361/09:50:31		NOTE: Exit Earth Occultation 12533		01-361/09:38:21
12115	MGS	01-361/09:50:31	34	Acquisition Of X-Band Signal		
12116	MGS	01-361/09:50:31	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12117	MGS	01-361/09:50:31	34	NOTE: Carrier Only -- No Telemetry Modulation		
12118	MGS	01-361/09:50:34		Set eclipse egress script address: 01DC	SWSEES	01-361/09:38:24
12119	MGS	01-361/09:56:55		NOTE: Exit Planetary Atmosphere 12533		01-361/09:44:46
12120	MGS	01-361/09:59:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/09:46:53
12121	MGS	01-361/09:59:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/09:46:53
12122	MGS	01-361/09:59:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/09:46:53
12123	MGS	01-361/09:59:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/09:46:53
12124	MGS	01-361/09:59:03	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12125	MGS	01-361/09:59:04		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/09:46:54
12126	MGS	01-361/09:59:04		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/09:46:54
12127	MGS	01-361/09:59:04		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/09:46:54
12128	MGS	01-361/09:59:04	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12129	MGS	01-361/09:59:08		NOTE: End fixed Sub-Reflector for Radio Science		01-361/09:46:59
12130	MGS	01-361/10:06:16		NOTE: Exit Solar Eclipse 12533		01-361/09:54:07
12131	MGS	01-361/10:22:12		NOTE: Periapsis 12534 ----------		01-361/10:10:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12132	MGS	01-361/10:27:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/10:15:06
12133	MGS	01-361/10:27:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/10:15:06
12134	MGS	01-361/10:27:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/10:15:07
12135	MGS	01-361/10:27:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/10:15:07
12136	MGS	01-361/10:30:00	54	Begin Pre-Cal		
12137	MGS	01-361/10:30:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
12138	MGS	01-361/10:30:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
12139	MGS	01-361/10:30:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
12140	MGS	01-361/10:30:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
12141	MGS	01-361/10:30:00	54	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
12142	MGS	01-361/10:30:00	54	Config: TGC: DEST=37		
12143	MGS	01-361/10:30:00	54	Config: TGC: BAND=X, BR=42666.666667		
12144	MGS	01-361/10:30:00	54	Config: FSS: CH=2, PRI_FL=10000		
12145	MGS	01-361/10:30:00	54	Config: RSR		
12146	MGS	01-361/10:30:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
12147	MGS	01-361/10:30:00	54	Config: BVR		
12148	MGS	01-361/10:30:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
12149	MGS	01-361/10:30:00	54	Config: MDA: SMPL=0.1		
12150	MGS	01-361/10:42:24	34	NOTE: Transmitter Off in 15 minutes		
12151	MGS	01-361/10:49:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/10:37:07
12152	MGS	01-361/10:49:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/10:37:07
12153	MGS	01-361/10:57:24	34	Transmitter Off		
12154	MGS	01-361/10:59:14		NOTE: Start Block (SSRMGR)		01-361/10:47:04
12155	MGS	01-361/10:59:14		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-361/10:47:04
12156	MGS	01-361/10:59:15		SSR 1B Data Enable	CSD1BE	01-361/10:47:05
12157	MGS	01-361/10:59:15		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-361/10:47:05
12158	MGS	01-361/11:12:12		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/11:00:03
12159	MGS	01-361/11:13:48		NOTE: Start Block (MAP_PB_ODY)		01-361/11:01:38
12160	MGS	01-361/11:13:49		: 00:22:38, 01:37:25, FALSE, FALSE, FALSE, 00:01:15, 00:07:29, 01:21:30, 00:07:10	AEMINI	01-361/11:01:39
12161	MGS	01-361/11:13:49		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/11:01:39
12162	MGS	01-361/11:13:49		NOTE: Start EVP data return script		01-361/11:01:39
12163	MGS	01-361/11:13:50		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-361T11:43:01.000	AEMPBI	01-361/11:01:40
12164	MGS	01-361/11:17:12		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/11:05:02
12165	MGS	01-361/11:17:12		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8616000, DUR=00:17:57		01-361/11:05:02
12166	MGS	01-361/11:17:12		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-361/11:05:02
12167	MGS	01-361/11:17:12		: 00:08:50, FALSE	RDSCII	01-361/11:05:02
12168	MGS	01-361/11:17:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/11:05:02
12169	MGS	01-361/11:17:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/11:05:02
12170	MGS	01-361/11:17:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/11:05:02
12171	MGS	01-361/11:17:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/11:05:02
12172	MGS	01-361/11:17:12	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12173	MGS	01-361/11:17:12	34	NOTE: Carrier Only -- No Telemetry Modulation		
12174	MGS	01-361/11:19:23		NOTE: Enter Planetary Atmosphere 12534		01-361/11:07:13
12175	MGS	01-361/11:20:54		NOTE: Apoapsis 12534 -		01-361/11:08:44
12176	MGS	01-361/11:22:49		SSR 1A Data Disable	CSD1AX	01-361/11:10:39
12177	MGS	01-361/11:22:49		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-361/11:10:39
12178	MGS	01-361/11:22:50		NOTE: End Block (SSRMGR)		01-361/11:10:40
12179	MGS	01-361/11:23:48		NOTE: Enter Solar Eclipse 12534		01-361/11:11:39
12180	MGS	01-361/11:23:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/11:11:39
12181	MGS	01-361/11:25:28		NOTE: Enter Earth Occultation 12534		01-361/11:13:18
12182	MGS	01-361/11:25:28	34	NOTE: Loss Of X-Band Signal		
12183	MGS	01-361/11:26:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/11:13:52
12184	MGS	01-361/11:26:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/11:13:52
12185	MGS	01-361/11:26:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/11:13:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12186	MGS	01-361/11:26:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/11:13:52
12187	MGS	01-361/11:26:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/11:13:53
12188	MGS	01-361/11:26:03		NOTE: End EVP script		01-361/11:13:54
12189	MGS	01-361/11:26:04		NOTE: End Block (MAP_RT)		01-361/11:13:55
12190	MGS	01-361/11:26:07		NOTE: End fixed Sub-Reflector for Radio Science		01-361/11:13:58
12191	MGS	01-361/11:27:45	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12192	MGS	01-361/11:40:00	34	NOTE: Transmitter Off in 15 minutes		
12193	MGS	01-361/11:46:27		: 01:37:25	RPAONX	01-361/11:34:17
12194	MGS	01-361/11:46:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/11:34:17
12195	MGS	01-361/11:48:12		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/11:36:02
12196	MGS	01-361/11:48:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/11:36:07
12197	MGS	01-361/11:48:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/11:36:07
12198	MGS	01-361/11:48:19		NOTE: Exit Earth Occultation 12534		01-361/11:36:09
12199	MGS	01-361/11:48:19	34	Acquisition Of X-Band Signal		
12200	MGS	01-361/11:48:19	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12201	MGS	01-361/11:48:21		Command the PSE with included data word: 3990	SWPSEL	01-361/11:36:11
12202	MGS	01-361/11:48:22		Set eclipse egress script address: 0158	SWSEES	01-361/11:36:12
12203	MGS	01-361/11:52:04	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12204	MGS	01-361/11:54:43		NOTE: Exit Planetary Atmosphere 12534		01-361/11:42:33
12205	MGS	01-361/11:55:00	34	Transmitter Off		
12206	MGS	01-361/11:55:11		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:18:02	AEMPB	01-361/11:43:01
12207	MGS	01-361/11:55:11		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-361/11:43:01
12208	MGS	01-361/11:55:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-361/11:43:01
12209	MGS	01-361/11:55:12		SSR 1A Data Enable	CSD1AE	01-361/11:43:02
12210	MGS	01-361/11:55:12		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-361/11:43:02
12211	MGS	01-361/11:55:12	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12212	MGS	01-361/12:00:00	54	Begin Tracking		
12213	MGS	01-361/12:00:00	54	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12214	MGS	01-361/12:04:03		NOTE: Exit Solar Eclipse 12534		01-361/11:51:54
12215	MGS	01-361/12:09:47	34	NOTE: Below Uplink Interlock Limit		
12216	MGS	01-361/12:12:09		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-361/11:59:59
12217	MGS	01-361/12:14:49	54	NOTE: Above Uplink Interlock Limit		
12218	MGS	01-361/12:19:19	34	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12219	MGS	01-361/12:19:19	54	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12220	MGS	01-361/12:19:53		NOTE: Periapsis 12535 ----------		01-361/12:07:44
12221	MGS	01-361/12:20:00	34	End Tracking		
12222	MGS	01-361/12:29:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/12:16:53
12223	MGS	01-361/12:29:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/12:16:53
12224	MGS	01-361/12:29:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/12:16:54
12225	MGS	01-361/12:29:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/12:16:54
12226	MGS	01-361/12:35:00	34	End Post-Cal		
12227	MGS	01-361/12:51:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/12:38:54
12228	MGS	01-361/12:51:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/12:38:54
12229	MGS	01-361/13:05:50		SSR 1A Data Disable	CSD1AX	01-361/12:53:40
12230	MGS	01-361/13:05:50		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-361/12:53:40
12231	MGS	01-361/13:05:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-361/12:53:40
12232	MGS	01-361/13:05:50	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12233	MGS	01-361/13:11:33		NOTE: Start Block (MAP_RT)		01-361/12:59:23
12234	MGS	01-361/13:11:34		: 00:22:38, 01:37:24, FALSE, TRUE, FALSE, 00:01:15, 00:09:09, 01:18:09, 00:08:50	AEMINI	01-361/12:59:24
12235	MGS	01-361/13:11:34		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/12:59:24
12236	MGS	01-361/13:11:34		NOTE: Start EVP data return script		01-361/12:59:24
12237	MGS	01-361/13:11:35		: SE_2A, RTM, 01:18:08, MRC, 2001-361T13:42:27.000	AEMRTI	01-361/12:59:25
12238	MGS	01-361/13:17:07		NOTE: Enter Planetary Atmosphere 12535		01-361/13:04:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12239	MGS	01-361/13:18:22		NOTE: Apoapsis 12535 -		01-361/13:06:12
12240	MGS	01-361/13:21:34		NOTE: Enter Solar Eclipse 12535		01-361/13:09:24
12241	MGS	01-361/13:21:34		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/13:09:24
12242	MGS	01-361/13:23:12		NOTE: Enter Earth Occultation 12535		01-361/13:11:02
12243	MGS	01-361/13:23:12	54	NOTE: Loss Of X-Band Signal		
12244	MGS	01-361/13:23:52		NOTE: End EVP script		01-361/13:11:42
12245	MGS	01-361/13:23:52		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/13:11:42
12246	MGS	01-361/13:23:53		NOTE: End Block (MAP_PB_ODY)		01-361/13:11:43
12247	MGS	01-361/13:40:27		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/13:28:17
12248	MGS	01-361/13:44:12		: 01:37:24	RPAONX	01-361/13:32:02
12249	MGS	01-361/13:44:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/13:32:02
12250	MGS	01-361/13:45:27		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/13:33:17
12251	MGS	01-361/13:45:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/13:33:17
12252	MGS	01-361/13:45:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/13:33:17
12253	MGS	01-361/13:45:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/13:33:17
12254	MGS	01-361/13:45:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/13:33:17
12255	MGS	01-361/13:46:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/13:33:54
12256	MGS	01-361/13:46:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/13:33:54
12257	MGS	01-361/13:46:06		NOTE: Exit Earth Occultation 12535		01-361/13:33:56
12258	MGS	01-361/13:46:06	54	Acquisition Of X-Band Signal		
12259	MGS	01-361/13:46:06	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12260	MGS	01-361/13:46:06	54	NOTE: Carrier Only -- No Telemetry Modulation		
12261	MGS	01-361/13:46:09		Set eclipse egress script address: 019A	SWSEES	01-361/13:33:59
12262	MGS	01-361/13:52:30		NOTE: Exit Planetary Atmosphere 12535		01-361/13:40:20
12263	MGS	01-361/13:54:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/13:42:26
12264	MGS	01-361/13:54:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/13:42:26
12265	MGS	01-361/13:54:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/13:42:26
12266	MGS	01-361/13:54:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/13:42:26
12267	MGS	01-361/13:54:36	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12268	MGS	01-361/13:54:37		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/13:42:27
12269	MGS	01-361/13:54:37		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/13:42:27
12270	MGS	01-361/13:54:37		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/13:42:27
12271	MGS	01-361/13:54:37	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12272	MGS	01-361/13:54:41		NOTE: End fixed Sub-Reflector for Radio Science		01-361/13:42:31
12273	MGS	01-361/14:01:49		NOTE: Exit Solar Eclipse 12535		01-361/13:49:39
12274	MGS	01-361/14:17:39		NOTE: Periapsis 12536 ----------		01-361/14:05:29
12275	MGS	01-361/14:22:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/14:10:38
12276	MGS	01-361/14:22:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/14:10:38
12277	MGS	01-361/14:22:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/14:10:39
12278	MGS	01-361/14:22:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/14:10:39
12279	MGS	01-361/14:44:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/14:32:39
12280	MGS	01-361/14:44:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/14:32:39
12281	MGS	01-361/15:07:45		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/14:55:35
12282	MGS	01-361/15:09:17		NOTE: Start EVP data return script		01-361/14:57:07
12283	MGS	01-361/15:12:45		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/15:00:35
12284	MGS	01-361/15:12:45		: 00:08:50, FALSE	RDSCII	01-361/15:00:35
12285	MGS	01-361/15:12:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/15:00:35
12286	MGS	01-361/15:12:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/15:00:35
12287	MGS	01-361/15:12:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/15:00:35
12288	MGS	01-361/15:12:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/15:00:35
12289	MGS	01-361/15:12:45	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12290	MGS	01-361/15:12:45	54	NOTE: Carrier Only -- No Telemetry Modulation		
12291	MGS	01-361/15:14:49		NOTE: Enter Planetary Atmosphere 12536		01-361/15:02:39
12292	MGS	01-361/15:16:10		NOTE: Apoapsis 12536 -		01-361/15:04:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12293	MGS	01-361/15:19:17		NOTE: Enter Solar Eclipse 12536		01-361/15:07:07
12294	MGS	01-361/15:19:17		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/15:07:07
12295	MGS	01-361/15:20:55		NOTE: Enter Earth Occultation 12536		01-361/15:08:44
12296	MGS	01-361/15:20:55	54	NOTE: Loss Of X-Band Signal		
12297	MGS	01-361/15:21:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/15:09:25
12298	MGS	01-361/15:21:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/15:09:25
12299	MGS	01-361/15:21:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/15:09:25
12300	MGS	01-361/15:21:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/15:09:25
12301	MGS	01-361/15:21:36		NOTE: End EVP script		01-361/15:09:26
12302	MGS	01-361/15:21:36		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/15:09:26
12303	MGS	01-361/15:21:40		NOTE: End fixed Sub-Reflector for Radio Science		01-361/15:09:30
12304	MGS	01-361/15:38:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/15:26:00
12305	MGS	01-361/15:41:55		: 01:37:24	RPAONX	01-361/15:29:45
12306	MGS	01-361/15:41:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/15:29:45
12307	MGS	01-361/15:43:10		: 00:00:30, 00:09:09, FALSE	RDSCIE	01-361/15:31:00
12308	MGS	01-361/15:43:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/15:31:00
12309	MGS	01-361/15:43:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/15:31:00
12310	MGS	01-361/15:43:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/15:31:00
12311	MGS	01-361/15:43:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/15:31:00
12312	MGS	01-361/15:43:40		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/15:31:30
12313	MGS	01-361/15:43:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/15:31:39
12314	MGS	01-361/15:43:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/15:31:39
12315	MGS	01-361/15:43:51		NOTE: Exit Earth Occultation 12536		01-361/15:31:41
12316	MGS	01-361/15:43:51	54	Acquisition Of X-Band Signal		
12317	MGS	01-361/15:43:51	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12318	MGS	01-361/15:43:51	54	NOTE: Carrier Only -- No Telemetry Modulation		
12319	MGS	01-361/15:43:54		Set eclipse egress script address: 01DC	SWSEES	01-361/15:31:44
12320	MGS	01-361/15:50:15		NOTE: Exit Planetary Atmosphere 12536		01-361/15:38:04
12321	MGS	01-361/15:52:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/15:40:09
12322	MGS	01-361/15:52:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/15:40:09
12323	MGS	01-361/15:52:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/15:40:09
12324	MGS	01-361/15:52:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/15:40:09
12325	MGS	01-361/15:52:19	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12326	MGS	01-361/15:52:20		: RTM, MRC, 01:18:08, S&E_2A, FALSE, 00:08:51	AEMRT	01-361/15:40:10
12327	MGS	01-361/15:52:20		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/15:40:10
12328	MGS	01-361/15:52:20		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/15:40:10
12329	MGS	01-361/15:52:20	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12330	MGS	01-361/15:52:24		NOTE: End fixed Sub-Reflector for Radio Science		01-361/15:40:14
12331	MGS	01-361/15:59:32		NOTE: Exit Solar Eclipse 12536		01-361/15:47:22
12332	MGS	01-361/16:15:22		NOTE: Periapsis 12537 ----------		01-361/16:03:11
12333	MGS	01-361/16:20:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/16:08:20
12334	MGS	01-361/16:20:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/16:08:20
12335	MGS	01-361/16:20:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/16:08:21
12336	MGS	01-361/16:20:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/16:08:21
12337	MGS	01-361/16:42:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/16:30:21
12338	MGS	01-361/16:42:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/16:30:21
12339	MGS	01-361/16:52:29		NOTE: Start Block (SSRMGR)		01-361/16:40:18
12340	MGS	01-361/16:52:29		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-361/16:40:18
12341	MGS	01-361/16:52:30		SSR 1A Data Enable	CSD1AE	01-361/16:40:19
12342	MGS	01-361/16:52:30		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-361/16:40:19
12343	MGS	01-361/17:05:28		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/16:53:18
12344	MGS	01-361/17:06:59		NOTE: Start Block (MAP_PB_ODY)		01-361/16:54:48
12345	MGS	01-361/17:07:00		: 00:22:38, 01:37:25, FALSE, FALSE, FALSE, 00:01:15, 00:07:29, 01:21:30, 00:07:10	AEMINI	01-361/16:54:49
12346	MGS	01-361/17:07:00		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/16:54:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12347	MGS	01-361/17:07:00		NOTE: Start EVP data return script		01-361/16:54:49
12348	MGS	01-361/17:07:01		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-361T17:36:11.000	AEMPBI	01-361/16:54:50
12349	MGS	01-361/17:10:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/16:58:18
12350	MGS	01-361/17:10:29		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8632000, DUR=00:17:59		01-361/16:58:18
12351	MGS	01-361/17:10:29		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-361/16:58:18
12352	MGS	01-361/17:10:29		: 00:08:50, FALSE	RDSCII	01-361/16:58:18
12353	MGS	01-361/17:10:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/16:58:18
12354	MGS	01-361/17:10:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/16:58:18
12355	MGS	01-361/17:10:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/16:58:18
12356	MGS	01-361/17:10:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/16:58:18
12357	MGS	01-361/17:10:29	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12358	MGS	01-361/17:10:29	54	NOTE: Carrier Only -- No Telemetry Modulation		
12359	MGS	01-361/17:12:32		NOTE: Enter Planetary Atmosphere 12537		01-361/17:00:22
12360	MGS	01-361/17:13:57		NOTE: Apoapsis 12537 -		01-361/17:01:46
12361	MGS	01-361/17:15:59		SSR 1B Data Disable	CSD1BX	01-361/17:03:48
12362	MGS	01-361/17:15:59		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-361/17:03:48
12363	MGS	01-361/17:16:00		NOTE: End Block (SSRMGR)		01-361/17:03:49
12364	MGS	01-361/17:16:59		NOTE: Enter Solar Eclipse 12537		01-361/17:04:49
12365	MGS	01-361/17:17:00		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/17:04:49
12366	MGS	01-361/17:18:37		NOTE: Enter Earth Occultation 12537		01-361/17:06:27
12367	MGS	01-361/17:18:37	54	NOTE: Loss Of X-Band Signal		
12368	MGS	01-361/17:19:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/17:07:08
12369	MGS	01-361/17:19:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/17:07:08
12370	MGS	01-361/17:19:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/17:07:08
12371	MGS	01-361/17:19:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/17:07:08
12372	MGS	01-361/17:19:19		NOTE: End EVP script		01-361/17:07:09
12373	MGS	01-361/17:19:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/17:07:09
12374	MGS	01-361/17:19:20		NOTE: End Block (MAP_RT)		01-361/17:07:10
12375	MGS	01-361/17:19:23		NOTE: End fixed Sub-Reflector for Radio Science		01-361/17:07:13
12376	MGS	01-361/17:39:38		: 01:37:25	RPAONX	01-361/17:27:27
12377	MGS	01-361/17:39:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/17:27:27
12378	MGS	01-361/17:41:23		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/17:29:12
12379	MGS	01-361/17:41:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/17:29:21
12380	MGS	01-361/17:41:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/17:29:21
12381	MGS	01-361/17:41:33		NOTE: Exit Earth Occultation 12537		01-361/17:29:23
12382	MGS	01-361/17:41:33	54	Acquisition Of X-Band Signal		
12383	MGS	01-361/17:41:33	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12384	MGS	01-361/17:41:36		Command the PSE with included data word: 3990	SWPSEL	01-361/17:29:25
12385	MGS	01-361/17:41:37		Set eclipse egress script address: 0158	SWSEES	01-361/17:29:26
12386	MGS	01-361/17:47:57		NOTE: Exit Planetary Atmosphere 12537		01-361/17:35:47
12387	MGS	01-361/17:48:22		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:18:02	AEMPB	01-361/17:36:11
12388	MGS	01-361/17:48:22		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-361/17:36:11
12389	MGS	01-361/17:48:22		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-361/17:36:11
12390	MGS	01-361/17:48:23		SSR 1B Data Enable	CSD1BE	01-361/17:36:12
12391	MGS	01-361/17:48:23		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-361/17:36:12
12392	MGS	01-361/17:48:23	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12393	MGS	01-361/17:57:14		NOTE: Exit Solar Eclipse 12537		01-361/17:45:03
12394	MGS	01-361/18:12:47		NOTE: Periapsis 12538 ----------		01-361/18:00:36
12395	MGS	01-361/18:22:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/18:10:02
12396	MGS	01-361/18:22:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/18:10:02
12397	MGS	01-361/18:22:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/18:10:03
12398	MGS	01-361/18:22:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/18:10:03
12399	MGS	01-361/18:44:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/18:32:03
12400	MGS	01-361/18:44:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/18:32:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12401	MGS	01-361/18:59:01		SSR 1B Data Disable	CSD1BX	01-361/18:46:50
12402	MGS	01-361/18:59:01		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-361/18:46:50
12403	MGS	01-361/18:59:01		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-361/18:46:50
12404	MGS	01-361/18:59:01	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12405	MGS	01-361/19:04:41		NOTE: Start Block (MAP_RT)		01-361/18:52:30
12406	MGS	01-361/19:04:42		: 00:22:49, 01:37:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:04, 01:17:57, 00:08:45	AEMINI	01-361/18:52:31
12407	MGS	01-361/19:04:42		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/18:52:31
12408	MGS	01-361/19:04:42		NOTE: Start EVP data return script		01-361/18:52:31
12409	MGS	01-361/19:04:43		: SE_2A, RTM, 01:17:56, MRC, 2001-361T19:35:41.000	AEMRTI	01-361/18:52:32
12410	MGS	01-361/19:10:15		NOTE: Enter Planetary Atmosphere 12538		01-361/18:58:05
12411	MGS	01-361/19:11:23		NOTE: Apoapsis 12538 -		01-361/18:59:12
12412	MGS	01-361/19:14:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/19:02:31
12413	MGS	01-361/19:14:42		NOTE: Enter Solar Eclipse 12538		01-361/19:02:31
12414	MGS	01-361/19:16:19		NOTE: Enter Earth Occultation 12538		01-361/19:04:08
12415	MGS	01-361/19:16:19	54	NOTE: Loss Of X-Band Signal		
12416	MGS	01-361/19:17:03		NOTE: End EVP script		01-361/19:04:52
12417	MGS	01-361/19:17:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/19:04:52
12418	MGS	01-361/19:17:04		NOTE: End Block (MAP_PB_ODY)		01-361/19:04:53
12419	MGS	01-361/19:33:46		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/19:21:35
12420	MGS	01-361/19:37:31		: 01:37:02	RPAONX	01-361/19:25:20
12421	MGS	01-361/19:37:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/19:25:20
12422	MGS	01-361/19:38:46		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-361/19:26:35
12423	MGS	01-361/19:38:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/19:26:35
12424	MGS	01-361/19:38:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/19:26:35
12425	MGS	01-361/19:38:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/19:26:35
12426	MGS	01-361/19:38:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/19:26:35
12427	MGS	01-361/19:39:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/19:27:03
12428	MGS	01-361/19:39:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/19:27:03
12429	MGS	01-361/19:39:17		NOTE: Exit Earth Occultation 12538		01-361/19:27:06
12430	MGS	01-361/19:39:17	54	Acquisition Of X-Band Signal		
12431	MGS	01-361/19:39:17	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12432	MGS	01-361/19:39:17	54	NOTE: Carrier Only -- No Telemetry Modulation		
12433	MGS	01-361/19:39:19		Set eclipse egress script address: 019A	SWSEES	01-361/19:27:08
12434	MGS	01-361/19:45:40		NOTE: Exit Planetary Atmosphere 12538		01-361/19:33:29
12435	MGS	01-361/19:47:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/19:35:39
12436	MGS	01-361/19:47:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/19:35:39
12437	MGS	01-361/19:47:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/19:35:39
12438	MGS	01-361/19:47:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/19:35:39
12439	MGS	01-361/19:47:50	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12440	MGS	01-361/19:47:51		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-361/19:35:40
12441	MGS	01-361/19:47:51		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/19:35:40
12442	MGS	01-361/19:47:51		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/19:35:40
12443	MGS	01-361/19:47:51	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12444	MGS	01-361/19:47:55		NOTE: End fixed Sub-Reflector for Radio Science		01-361/19:35:44
12445	MGS	01-361/19:50:00	25	Begin Pre-Cal		
12446	MGS	01-361/19:50:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
12447	MGS	01-361/19:50:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
12448	MGS	01-361/19:50:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
12449	MGS	01-361/19:50:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
12450	MGS	01-361/19:50:00	25	Config: TGC: DEST=37		
12451	MGS	01-361/19:50:00	25	Config: TGC: BAND=X, BR=0.000000		
12452	MGS	01-361/19:50:00	25	Config: FSS: CH=2, PRI_FL=10000		
12453	MGS	01-361/19:50:00	25	Config: RSR		
12454	MGS	01-361/19:50:00	25	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12455	MGS	01-361/19:50:00	25	Config: BVR		
12456	MGS	01-361/19:50:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
12457	MGS	01-361/19:50:00	25	Config: MDA: SMPL=0.1		
12458	MGS	01-361/19:54:57		NOTE: Exit Solar Eclipse 12538		01-361/19:42:46
12459	MGS	01-361/20:10:23		NOTE: Periapsis 12539 ----------		01-361/19:58:12
12460	MGS	01-361/20:15:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/20:03:45
12461	MGS	01-361/20:15:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/20:03:45
12462	MGS	01-361/20:15:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/20:03:46
12463	MGS	01-361/20:15:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/20:03:46
12464	MGS	01-361/20:37:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/20:25:46
12465	MGS	01-361/20:37:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/20:25:46
12466	MGS	01-361/21:00:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/20:48:36
12467	MGS	01-361/21:02:27		NOTE: Start EVP data return script		01-361/20:50:16
12468	MGS	01-361/21:05:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/20:53:36
12469	MGS	01-361/21:05:47		: 00:08:45, FALSE	RDSCII	01-361/20:53:36
12470	MGS	01-361/21:05:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/20:53:36
12471	MGS	01-361/21:05:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/20:53:36
12472	MGS	01-361/21:05:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/20:53:36
12473	MGS	01-361/21:05:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/20:53:36
12474	MGS	01-361/21:05:47	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12475	MGS	01-361/21:05:47	54	NOTE: Carrier Only -- No Telemetry Modulation		
12476	MGS	01-361/21:07:58		NOTE: Enter Planetary Atmosphere 12539		01-361/20:55:47
12477	MGS	01-361/21:09:09		NOTE: Apoapsis 12539 -		01-361/20:56:58
12478	MGS	01-361/21:12:27		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/21:00:16
12479	MGS	01-361/21:12:28		NOTE: Enter Solar Eclipse 12539		01-361/21:00:16
12480	MGS	01-361/21:14:01		NOTE: Enter Earth Occultation 12539		01-361/21:01:50
12481	MGS	01-361/21:14:01	54	NOTE: Loss Of X-Band Signal		
12482	MGS	01-361/21:14:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/21:02:21
12483	MGS	01-361/21:14:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/21:02:21
12484	MGS	01-361/21:14:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/21:02:21
12485	MGS	01-361/21:14:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/21:02:21
12486	MGS	01-361/21:14:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/21:02:22
12487	MGS	01-361/21:14:34		NOTE: End EVP script		01-361/21:02:22
12488	MGS	01-361/21:14:38		NOTE: End fixed Sub-Reflector for Radio Science		01-361/21:02:26
12489	MGS	01-361/21:20:00	25	Begin Tracking		
12490	MGS	01-361/21:31:32		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/21:19:20
12491	MGS	01-361/21:32:21	54	NOTE: Below Uplink Interlock Limit		
12492	MGS	01-361/21:35:16		: 01:37:02	RPAONX	01-361/21:23:05
12493	MGS	01-361/21:35:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/21:23:05
12494	MGS	01-361/21:36:31		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-361/21:24:20
12495	MGS	01-361/21:36:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/21:24:20
12496	MGS	01-361/21:36:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/21:24:20
12497	MGS	01-361/21:36:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/21:24:20
12498	MGS	01-361/21:36:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/21:24:20
12499	MGS	01-361/21:36:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/21:24:46
12500	MGS	01-361/21:36:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/21:24:46
12501	MGS	01-361/21:37:01		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/21:24:50
12502	MGS	01-361/21:37:02		Set eclipse egress script address: 01DC	SWSEES	01-361/21:24:51
12503	MGS	01-361/21:37:03		NOTE: Exit Earth Occultation 12539		01-361/21:24:52
12504	MGS	01-361/21:37:03	25	Acquisition Of X-Band Signal		
12505	MGS	01-361/21:37:03	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12506	MGS	01-361/21:37:03	25	NOTE: Carrier Only -- No Telemetry Modulation		
12507	MGS	01-361/21:37:03	54	Acquisition Of X-Band Signal		
12508	MGS	01-361/21:37:03	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12509	MGS	01-361/21:37:03	54	NOTE: Carrier Only -- No Telemetry Modulation		
12510	MGS	01-361/21:40:00	54	End Tracking		
12511	MGS	01-361/21:43:24		NOTE: Exit Planetary Atmosphere 12539		01-361/21:31:13
12512	MGS	01-361/21:45:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/21:33:24
12513	MGS	01-361/21:45:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/21:33:24
12514	MGS	01-361/21:45:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/21:33:24
12515	MGS	01-361/21:45:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/21:33:24
12516	MGS	01-361/21:45:35	25	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12517	MGS	01-361/21:45:36		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-361/21:33:25
12518	MGS	01-361/21:45:36		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-361/21:33:25
12519	MGS	01-361/21:45:36		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-361/21:33:25
12520	MGS	01-361/21:45:36	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12521	MGS	01-361/21:45:41		NOTE: End fixed Sub-Reflector for Radio Science		01-361/21:33:29
12522	MGS	01-361/21:52:42		NOTE: Exit Solar Eclipse 12539		01-361/21:40:31
12523	MGS	01-361/21:55:00	54	End Post-Cal		
12524	MGS	01-361/22:08:31		NOTE: Periapsis 12540 ----------		01-361/21:56:20
12525	MGS	01-361/22:13:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-361/22:01:30
12526	MGS	01-361/22:13:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-361/22:01:30
12527	MGS	01-361/22:13:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-361/22:01:31
12528	MGS	01-361/22:13:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-361/22:01:31
12529	MGS	01-361/22:35:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-361/22:23:31
12530	MGS	01-361/22:35:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-361/22:23:31
12531	MGS	01-361/22:45:43		NOTE: Start Block (SSRMGR)		01-361/22:33:32
12532	MGS	01-361/22:45:43		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-361/22:33:32
12533	MGS	01-361/22:45:44		SSR 1B Data Enable	CSD1BE	01-361/22:33:33
12534	MGS	01-361/22:45:44		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-361/22:33:33
12535	MGS	01-361/22:58:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-361/22:46:21
12536	MGS	01-361/23:00:14		NOTE: Start Block (MAP_PB_ODY)		01-361/22:48:02
12537	MGS	01-361/23:00:15		: 00:22:49, 01:37:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:24, 01:21:18, 00:07:05	AEMINI	01-361/22:48:03
12538	MGS	01-361/23:00:15		Enable sending eclipse ingress script when array power disappears	SWEISE	01-361/22:48:03
12539	MGS	01-361/23:00:15		NOTE: Start EVP data return script		01-361/22:48:03
12540	MGS	01-361/23:00:16		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-361T23:29:31.000	AEMPBI	01-361/22:48:04
12541	MGS	01-361/23:03:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-361/22:51:21
12542	MGS	01-361/23:03:33		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8544000, DUR=00:17:48		01-361/22:51:21
12543	MGS	01-361/23:03:33		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-361/22:51:21
12544	MGS	01-361/23:03:33		: 00:08:45, FALSE	RDSCII	01-361/22:51:21
12545	MGS	01-361/23:03:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-361/22:51:21
12546	MGS	01-361/23:03:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-361/22:51:21
12547	MGS	01-361/23:03:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-361/22:51:21
12548	MGS	01-361/23:03:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-361/22:51:21
12549	MGS	01-361/23:03:33	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12550	MGS	01-361/23:03:33	25	NOTE: Carrier Only -- No Telemetry Modulation		
12551	MGS	01-361/23:05:43		NOTE: Enter Planetary Atmosphere 12540		01-361/22:53:32
12552	MGS	01-361/23:07:26		NOTE: Apoapsis 12540 -		01-361/22:55:15
12553	MGS	01-361/23:09:14		SSR 1A Data Disable	CSD1AX	01-361/22:57:02
12554	MGS	01-361/23:09:14		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-361/22:57:02
12555	MGS	01-361/23:09:15		NOTE: End Block (SSRMGR)		01-361/22:57:03
12556	MGS	01-361/23:10:14		NOTE: Enter Solar Eclipse 12540		01-361/22:58:03
12557	MGS	01-361/23:10:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-361/22:58:03
12558	MGS	01-361/23:11:46		NOTE: Enter Earth Occultation 12540		01-361/22:59:34
12559	MGS	01-361/23:11:46	25	NOTE: Loss Of X-Band Signal		
12560	MGS	01-361/23:12:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-361/23:00:06
12561	MGS	01-361/23:12:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-361/23:00:06
12562	MGS	01-361/23:12:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-361/23:00:06

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12563	MGS	01-361/23:12:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-361/23:00:06
12564	MGS	01-361/23:12:19		Turn off the MOT Exciter and RPA beam	STRPAF	01-361/23:00:07
12565	MGS	01-361/23:12:19		NOTE: End EVP script		01-361/23:00:07
12566	MGS	01-361/23:12:20		NOTE: End Block (MAP_RT)		01-361/23:00:08
12567	MGS	01-361/23:12:23		NOTE: End fixed Sub-Reflector for Radio Science		01-361/23:00:11
12568	MGS	01-361/23:33:04		: 01:37:03	RPAONX	01-361/23:20:52
12569	MGS	01-361/23:33:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-361/23:20:52
12570	MGS	01-361/23:34:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-361/23:22:31
12571	MGS	01-361/23:34:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-361/23:22:31
12572	MGS	01-361/23:34:47		Command the PSE with included data word: 3990	SWPSEL	01-361/23:22:35
12573	MGS	01-361/23:34:48		Set eclipse egress script address: 0158	SWSEES	01-361/23:22:36
12574	MGS	01-361/23:34:49		Disables autonomous command to send eclipse ingress script	SWEISX	01-361/23:22:37
12575	MGS	01-361/23:34:51		NOTE: Exit Earth Occultation 12540		01-361/23:22:39
12576	MGS	01-361/23:34:51	25	Acquisition Of X-Band Signal		
12577	MGS	01-361/23:34:51	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12578	MGS	01-361/23:41:11		NOTE: Exit Planetary Atmosphere 12540		01-361/23:29:00
12579	MGS	01-361/23:41:43		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:17:45	AEMPB	01-361/23:29:31
12580	MGS	01-361/23:41:43		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-361/23:29:31
12581	MGS	01-361/23:41:43		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-361/23:29:31
12582	MGS	01-361/23:41:44		SSR 1A Data Enable	CSD1AE	01-361/23:29:32
12583	MGS	01-361/23:41:44		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-361/23:29:32
12584	MGS	01-361/23:41:44	25	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12585	MGS	01-361/23:50:30		NOTE: Exit Solar Eclipse 12540		01-361/23:38:18
12586	MGS	01-362/00:00:00		Light Time: OWLT = 12:11, RTLT = 24:23		
12587	MGS	01-362/00:06:43		NOTE: Periapsis 12541 ----------		01-361/23:54:32
12588	MGS	01-362/00:10:00	34	Begin Pre-Cal		
12589	MGS	01-362/00:10:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
12590	MGS	01-362/00:10:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
12591	MGS	01-362/00:10:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
12592	MGS	01-362/00:10:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
12593	MGS	01-362/00:10:00	34	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
12594	MGS	01-362/00:10:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
12595	MGS	01-362/00:10:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
12596	MGS	01-362/00:10:00	34	Config: TGC: DEST=37		
12597	MGS	01-362/00:10:00	34	Config: TGC: BAND=X, BR=8000.000000		
12598	MGS	01-362/00:10:00	34	Config: FSS: CH=2, PRI_FL=10000		
12599	MGS	01-362/00:10:00	34	Config: RSR		
12600	MGS	01-362/00:10:00	34	Config: TXL		
12601	MGS	01-362/00:10:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
12602	MGS	01-362/00:10:00	34	Config: BVR		
12603	MGS	01-362/00:10:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
12604	MGS	01-362/00:10:00	34	Config: MDA: SMPL=0.1		
12605	MGS	01-362/00:10:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
12606	MGS	01-362/00:10:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
12607	MGS	01-362/00:10:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
12608	MGS	01-362/00:15:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/00:03:17
12609	MGS	01-362/00:15:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/00:03:17
12610	MGS	01-362/00:15:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/00:03:18
12611	MGS	01-362/00:15:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/00:03:18
12612	MGS	01-362/00:37:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/00:25:18
12613	MGS	01-362/00:37:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/00:25:18
12614	MGS	01-362/00:52:22		SSR 1A Data Disable	CSD1AX	01-362/00:40:10
12615	MGS	01-362/00:52:22		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-362/00:40:10
12616	MGS	01-362/00:52:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-362/00:40:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12617	MGS	01-362/00:52:22	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12618	MGS	01-362/00:58:01		NOTE: Start Block (MAP_RT)		01-362/00:45:49
12619	MGS	01-362/00:58:02		: 00:22:49, 01:37:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:04, 01:17:57, 00:08:45	AEMINI	01-362/00:45:50
12620	MGS	01-362/00:58:02		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/00:45:50
12621	MGS	01-362/00:58:02		NOTE: Start EVP data return script		01-362/00:45:50
12622	MGS	01-362/00:58:03		: SE_2A, RTM, 01:17:56, MRC, 2001-362T01:29:00.000	AEMRTI	01-362/00:45:51
12623	MGS	01-362/01:03:31		NOTE: Enter Planetary Atmosphere 12541		01-362/00:51:20
12624	MGS	01-362/01:05:37		NOTE: Apoapsis 12541 -		01-362/00:53:25
12625	MGS	01-362/01:08:02		NOTE: Enter Solar Eclipse 12541		01-362/00:55:50
12626	MGS	01-362/01:08:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/00:55:50
12627	MGS	01-362/01:09:34		NOTE: Enter Earth Occultation 12541		01-362/00:57:22
12628	MGS	01-362/01:09:34	25	NOTE: Loss Of X-Band Signal		
12629	MGS	01-362/01:10:00	34	Begin Tracking		
12630	MGS	01-362/01:10:07		NOTE: End EVP script		01-362/00:57:55
12631	MGS	01-362/01:10:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/00:57:55
12632	MGS	01-362/01:10:08		NOTE: End Block (MAP_PB_ODY)		01-362/00:57:56
12633	MGS	01-362/01:11:19	34	NOTE: Above Uplink Interlock Limit		
12634	MGS	01-362/01:20:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12635	MGS	01-362/01:22:00	34	Range Modulation On: SUP=3.0dB		
12636	MGS	01-362/01:23:00	34	Begin Ranging Acquisition		
12637	MGS	01-362/01:27:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/01:14:54
12638	MGS	01-362/01:30:00	25	End Tracking		
12639	MGS	01-362/01:30:51		: 01:37:02	RPAONX	01-362/01:18:39
12640	MGS	01-362/01:30:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/01:18:39
12641	MGS	01-362/01:32:06		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/01:19:54
12642	MGS	01-362/01:32:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/01:19:54
12643	MGS	01-362/01:32:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/01:19:54
12644	MGS	01-362/01:32:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/01:19:54
12645	MGS	01-362/01:32:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/01:19:54
12646	MGS	01-362/01:32:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/01:20:18
12647	MGS	01-362/01:32:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/01:20:18
12648	MGS	01-362/01:32:35		Set eclipse egress script address: 019A	SWSEES	01-362/01:20:23
12649	MGS	01-362/01:32:39		NOTE: Exit Earth Occultation 12541		01-362/01:20:27
12650	MGS	01-362/01:32:39	34	Acquisition Of X-Band Signal		
12651	MGS	01-362/01:32:39	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12652	MGS	01-362/01:32:39	34	NOTE: Carrier Only -- No Telemetry Modulation		
12653	MGS	01-362/01:39:00		NOTE: Exit Planetary Atmosphere 12541		01-362/01:26:48
12654	MGS	01-362/01:41:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/01:28:58
12655	MGS	01-362/01:41:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/01:28:58
12656	MGS	01-362/01:41:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/01:28:58
12657	MGS	01-362/01:41:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/01:28:58
12658	MGS	01-362/01:41:10	34	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12659	MGS	01-362/01:41:11		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/01:28:59
12660	MGS	01-362/01:41:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/01:28:59
12661	MGS	01-362/01:41:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/01:28:59
12662	MGS	01-362/01:41:11	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12663	MGS	01-362/01:41:15		NOTE: End fixed Sub-Reflector for Radio Science		01-362/01:29:03
12664	MGS	01-362/01:44:23	34	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12665	MGS	01-362/01:45:00	25	End Post-Cal		
12666	MGS	01-362/01:48:17		NOTE: Exit Solar Eclipse 12541		01-362/01:36:05
12667	MGS	01-362/02:04:38		NOTE: Periapsis 12542 ----------		01-362/01:52:26
12668	MGS	01-362/02:09:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/01:57:04
12669	MGS	01-362/02:09:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/01:57:04
12670	MGS	01-362/02:09:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/01:57:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12671	MGS	01-362/02:09:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/01:57:05
12672	MGS	01-362/02:24:12	34	NOTE: Transmitter Off in 15 minutes		
12673	MGS	01-362/02:31:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/02:19:05
12674	MGS	01-362/02:31:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/02:19:05
12675	MGS	01-362/02:37:13	34	Range Modulation Off		
12676	MGS	01-362/02:39:12	34	Transmitter Off		
12677	MGS	01-362/02:54:07		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/02:41:55
12678	MGS	01-362/02:55:47		NOTE: Start EVP data return script		01-362/02:43:35
12679	MGS	01-362/02:59:07		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/02:46:55
12680	MGS	01-362/02:59:07		: 00:08:45, FALSE	RDSCII	01-362/02:46:55
12681	MGS	01-362/02:59:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/02:46:55
12682	MGS	01-362/02:59:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/02:46:55
12683	MGS	01-362/02:59:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/02:46:55
12684	MGS	01-362/02:59:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/02:46:55
12685	MGS	01-362/02:59:07	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12686	MGS	01-362/02:59:07	34	NOTE: Carrier Only -- No Telemetry Modulation		
12687	MGS	01-362/03:01:18		NOTE: Enter Planetary Atmosphere 12542		01-362/02:49:06
12688	MGS	01-362/03:03:17		NOTE: Apoapsis 12542 -		01-362/02:51:05
12689	MGS	01-362/03:05:47		NOTE: Enter Solar Eclipse 12542		01-362/02:53:35
12690	MGS	01-362/03:05:47		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/02:53:35
12691	MGS	01-362/03:07:21		NOTE: Enter Earth Occultation 12542		01-362/02:55:09
12692	MGS	01-362/03:07:21	34	NOTE: Loss Of X-Band Signal		
12693	MGS	01-362/03:07:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/02:55:40
12694	MGS	01-362/03:07:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/02:55:40
12695	MGS	01-362/03:07:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/02:55:40
12696	MGS	01-362/03:07:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/02:55:40
12697	MGS	01-362/03:07:53		NOTE: End EVP script		01-362/02:55:41
12698	MGS	01-362/03:07:53		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/02:55:41
12699	MGS	01-362/03:07:57		NOTE: End fixed Sub-Reflector for Radio Science		01-362/02:55:45
12700	MGS	01-362/03:09:46	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12701	MGS	01-362/03:11:47	34	Range Modulation On: SUP=3.0dB		
12702	MGS	01-362/03:12:47	34	Begin Ranging Acquisition		
12703	MGS	01-362/03:24:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/03:12:39
12704	MGS	01-362/03:28:36		: 01:37:02	RPAONX	01-362/03:16:24
12705	MGS	01-362/03:28:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/03:16:24
12706	MGS	01-362/03:29:51		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/03:17:39
12707	MGS	01-362/03:29:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/03:17:39
12708	MGS	01-362/03:29:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/03:17:39
12709	MGS	01-362/03:29:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/03:17:39
12710	MGS	01-362/03:29:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/03:17:39
12711	MGS	01-362/03:30:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/03:18:05
12712	MGS	01-362/03:30:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/03:18:05
12713	MGS	01-362/03:30:21		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/03:18:09
12714	MGS	01-362/03:30:22		Set eclipse egress script address: 01DC	SWSEES	01-362/03:18:10
12715	MGS	01-362/03:30:25		NOTE: Exit Earth Occultation 12542		01-362/03:18:13
12716	MGS	01-362/03:30:25	34	Acquisition Of X-Band Signal		
12717	MGS	01-362/03:30:25	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12718	MGS	01-362/03:30:25	34	NOTE: Carrier Only -- No Telemetry Modulation		
12719	MGS	01-362/03:36:47		NOTE: Exit Planetary Atmosphere 12542		01-362/03:24:35
12720	MGS	01-362/03:38:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/03:26:43
12721	MGS	01-362/03:38:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/03:26:43
12722	MGS	01-362/03:38:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/03:26:43
12723	MGS	01-362/03:38:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/03:26:43
12724	MGS	01-362/03:38:55	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12725	MGS	01-362/03:38:56		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/03:26:44
12726	MGS	01-362/03:38:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/03:26:44
12727	MGS	01-362/03:38:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/03:26:44
12728	MGS	01-362/03:38:56	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12729	MGS	01-362/03:39:00		NOTE: End fixed Sub-Reflector for Radio Science		01-362/03:26:48
12730	MGS	01-362/03:46:02		NOTE: Exit Solar Eclipse 12542		01-362/03:33:50
12731	MGS	01-362/04:02:05		NOTE: Periapsis 12543 ----------		01-362/03:49:52
12732	MGS	01-362/04:07:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/03:54:49
12733	MGS	01-362/04:07:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/03:54:49
12734	MGS	01-362/04:07:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/03:54:50
12735	MGS	01-362/04:07:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/03:54:50
12736	MGS	01-362/04:21:52	34	NOTE: Transmitter Off in 15 minutes		
12737	MGS	01-362/04:29:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/04:16:50
12738	MGS	01-362/04:29:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/04:16:50
12739	MGS	01-362/04:34:53	34	Range Modulation Off		
12740	MGS	01-362/04:36:52	34	Transmitter Off		
12741	MGS	01-362/04:38:58		NOTE: Start Block (SSRMGR)		01-362/04:26:46
12742	MGS	01-362/04:38:58		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-362/04:26:46
12743	MGS	01-362/04:38:59		SSR 1A Data Enable	CSD1AE	01-362/04:26:47
12744	MGS	01-362/04:38:59		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-362/04:26:47
12745	MGS	01-362/04:51:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/04:39:40
12746	MGS	01-362/04:53:27		NOTE: Start Block (MAP_PB_ODY)		01-362/04:41:15
12747	MGS	01-362/04:53:28		: 00:22:49, 01:37:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:24, 01:21:18, 00:07:05	AEMINI	01-362/04:41:16
12748	MGS	01-362/04:53:28		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/04:41:16
12749	MGS	01-362/04:53:28		NOTE: Start EVP data return script		01-362/04:41:16
12750	MGS	01-362/04:53:29		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-362T05:22:45.000	AEMPBI	01-362/04:41:17
12751	MGS	01-362/04:56:52		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/04:44:40
12752	MGS	01-362/04:56:52		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8584000, DUR=00:17:53		01-362/04:44:40
12753	MGS	01-362/04:56:52		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-362/04:44:40
12754	MGS	01-362/04:56:52		: 00:08:45, FALSE	RDSCII	01-362/04:44:40
12755	MGS	01-362/04:56:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/04:44:40
12756	MGS	01-362/04:56:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/04:44:40
12757	MGS	01-362/04:56:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/04:44:40
12758	MGS	01-362/04:56:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/04:44:40
12759	MGS	01-362/04:56:52	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12760	MGS	01-362/04:56:52	34	NOTE: Carrier Only -- No Telemetry Modulation		
12761	MGS	01-362/04:58:59		NOTE: Enter Planetary Atmosphere 12543		01-362/04:46:47
12762	MGS	01-362/05:00:36		NOTE: Apoapsis 12543 -		01-362/04:48:24
12763	MGS	01-362/05:02:28		SSR 1B Data Disable	CSD1BX	01-362/04:50:16
12764	MGS	01-362/05:02:28		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-362/04:50:16
12765	MGS	01-362/05:02:29		NOTE: End Block (SSRMGR)		01-362/04:50:17
12766	MGS	01-362/05:03:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/04:51:16
12767	MGS	01-362/05:03:28		NOTE: Enter Solar Eclipse 12543		01-362/04:51:16
12768	MGS	01-362/05:05:02		NOTE: Enter Earth Occultation 12543		01-362/04:52:49
12769	MGS	01-362/05:05:02	34	NOTE: Loss Of X-Band Signal		
12770	MGS	01-362/05:05:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/04:53:25
12771	MGS	01-362/05:05:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/04:53:25
12772	MGS	01-362/05:05:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/04:53:25
12773	MGS	01-362/05:05:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/04:53:25
12774	MGS	01-362/05:05:38		NOTE: End EVP script		01-362/04:53:26
12775	MGS	01-362/05:05:38		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/04:53:26
12776	MGS	01-362/05:05:39		NOTE: End Block (MAP_RT)		01-362/04:53:27
12777	MGS	01-362/05:05:42		NOTE: End fixed Sub-Reflector for Radio Science		01-362/04:53:30
12778	MGS	01-362/05:07:29	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12779	MGS	01-362/05:09:29	34	Range Modulation On: SUP=3.0dB		
12780	MGS	01-362/05:10:29	34	Begin Ranging Acquisition		
12781	MGS	01-362/05:26:17		: 01:37:03	RPAONX	01-362/05:14:05
12782	MGS	01-362/05:26:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/05:14:05
12783	MGS	01-362/05:28:03		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/05:15:50
12784	MGS	01-362/05:28:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/05:15:50
12785	MGS	01-362/05:28:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/05:15:50
12786	MGS	01-362/05:28:07		Command the PSE with included data word: 3990	SWPSEL	01-362/05:15:54
12787	MGS	01-362/05:28:08		Set eclipse egress script address: 0158	SWSEES	01-362/05:15:55
12788	MGS	01-362/05:28:09		NOTE: Exit Earth Occultation 12543		01-362/05:15:56
12789	MGS	01-362/05:28:09	34	Acquisition Of X-Band Signal		
12790	MGS	01-362/05:28:09	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12791	MGS	01-362/05:31:54	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12792	MGS	01-362/05:34:30		NOTE: Exit Planetary Atmosphere 12543		01-362/05:22:17
12793	MGS	01-362/05:34:57		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:17:45	AEMPB	01-362/05:22:44
12794	MGS	01-362/05:34:57		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-362/05:22:44
12795	MGS	01-362/05:34:57		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-362/05:22:44
12796	MGS	01-362/05:34:58		SSR 1B Data Enable	CSD1BE	01-362/05:22:45
12797	MGS	01-362/05:34:58		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-362/05:22:45
12798	MGS	01-362/05:34:58	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12799	MGS	01-362/05:43:44		NOTE: Exit Solar Eclipse 12543		01-362/05:31:31
12800	MGS	01-362/05:59:28		NOTE: Periapsis 12544 ----------		01-362/05:47:16
12801	MGS	01-362/06:08:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/05:56:30
12802	MGS	01-362/06:08:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/05:56:30
12803	MGS	01-362/06:08:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/05:56:31
12804	MGS	01-362/06:08:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/05:56:31
12805	MGS	01-362/06:19:30	34	NOTE: Transmitter Off in 15 minutes		
12806	MGS	01-362/06:30:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/06:18:31
12807	MGS	01-362/06:30:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/06:18:31
12808	MGS	01-362/06:32:30	34	Range Modulation Off		
12809	MGS	01-362/06:34:30	34	Transmitter Off		
12810	MGS	01-362/06:45:36		SSR 1B Data Disable	CSD1BX	01-362/06:33:23
12811	MGS	01-362/06:45:36		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-362/06:33:23
12812	MGS	01-362/06:45:36		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-362/06:33:23
12813	MGS	01-362/06:45:36	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12814	MGS	01-362/06:51:09		NOTE: Start Block (MAP_RT)		01-362/06:38:56
12815	MGS	01-362/06:51:10		: 00:22:49, 01:37:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:04, 01:17:57, 00:08:45	AEMINI	01-362/06:38:57
12816	MGS	01-362/06:51:10		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/06:38:57
12817	MGS	01-362/06:51:10		NOTE: Start EVP data return script		01-362/06:38:57
12818	MGS	01-362/06:51:11		: SE_2A, RTM, 01:17:56, MRC, 2001-362T07:22:07.000	AEMRTI	01-362/06:38:58
12819	MGS	01-362/06:56:39		NOTE: Enter Planetary Atmosphere 12544		01-362/06:44:26
12820	MGS	01-362/06:58:20		NOTE: Apoapsis 12544 -		01-362/06:46:08
12821	MGS	01-362/06:58:55	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12822	MGS	01-362/07:01:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/06:48:57
12823	MGS	01-362/07:01:10		NOTE: Enter Solar Eclipse 12544		01-362/06:48:57
12824	MGS	01-362/07:02:40		NOTE: Enter Earth Occultation 12544		01-362/06:50:28
12825	MGS	01-362/07:02:40	34	NOTE: Loss Of X-Band Signal		
12826	MGS	01-362/07:03:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/06:51:08
12827	MGS	01-362/07:03:21		NOTE: End EVP script		01-362/06:51:08
12828	MGS	01-362/07:03:22		NOTE: End Block (MAP_PB_ODY)		01-362/06:51:09
12829	MGS	01-362/07:05:11	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12830	MGS	01-362/07:07:11	34	Range Modulation On: SUP=3.0dB		
12831	MGS	01-362/07:08:11	34	Begin Ranging Acquisition		
12832	MGS	01-362/07:20:14		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/07:08:01

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12833	MGS	01-362/07:23:59		: 01:37:02	RPAONX	01-362/07:11:46
12834	MGS	01-362/07:23:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/07:11:46
12835	MGS	01-362/07:25:14		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/07:13:01
12836	MGS	01-362/07:25:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/07:13:01
12837	MGS	01-362/07:25:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/07:13:01
12838	MGS	01-362/07:25:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/07:13:01
12839	MGS	01-362/07:25:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/07:13:01
12840	MGS	01-362/07:25:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/07:13:31
12841	MGS	01-362/07:25:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/07:13:31
12842	MGS	01-362/07:25:49		Set eclipse egress script address: 019A	SWSEES	01-362/07:13:36
12843	MGS	01-362/07:25:51		NOTE: Exit Earth Occultation 12544		01-362/07:13:38
12844	MGS	01-362/07:25:51	34	Acquisition Of X-Band Signal		
12845	MGS	01-362/07:25:51	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12846	MGS	01-362/07:25:51	34	NOTE: Carrier Only -- No Telemetry Modulation		
12847	MGS	01-362/07:32:11		NOTE: Exit Planetary Atmosphere 12544		01-362/07:19:58
12848	MGS	01-362/07:34:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/07:22:05
12849	MGS	01-362/07:34:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/07:22:05
12850	MGS	01-362/07:34:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/07:22:05
12851	MGS	01-362/07:34:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/07:22:05
12852	MGS	01-362/07:34:18	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12853	MGS	01-362/07:34:19		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/07:22:06
12854	MGS	01-362/07:34:19		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/07:22:06
12855	MGS	01-362/07:34:19		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/07:22:06
12856	MGS	01-362/07:34:19	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12857	MGS	01-362/07:34:23		NOTE: End fixed Sub-Reflector for Radio Science		01-362/07:22:10
12858	MGS	01-362/07:41:25		NOTE: Exit Solar Eclipse 12544		01-362/07:29:12
12859	MGS	01-362/07:57:10		NOTE: Periapsis 12545 ----------		01-362/07:44:58
12860	MGS	01-362/08:02:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/07:50:11
12861	MGS	01-362/08:02:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/07:50:11
12862	MGS	01-362/08:02:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/07:50:12
12863	MGS	01-362/08:02:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/07:50:12
12864	MGS	01-362/08:17:15	34	NOTE: Transmitter Off in 15 minutes		
12865	MGS	01-362/08:24:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/08:12:12
12866	MGS	01-362/08:24:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/08:12:12
12867	MGS	01-362/08:30:15	34	Range Modulation Off		
12868	MGS	01-362/08:32:15	34	Transmitter Off		
12869	MGS	01-362/08:47:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/08:35:02
12870	MGS	01-362/08:48:56		NOTE: Start EVP data return script		01-362/08:36:43
12871	MGS	01-362/08:52:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/08:40:02
12872	MGS	01-362/08:52:15		: 00:08:45, FALSE	RDSCII	01-362/08:40:02
12873	MGS	01-362/08:52:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/08:40:02
12874	MGS	01-362/08:52:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/08:40:02
12875	MGS	01-362/08:52:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/08:40:02
12876	MGS	01-362/08:52:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/08:40:02
12877	MGS	01-362/08:52:15	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12878	MGS	01-362/08:52:15	34	NOTE: Carrier Only -- No Telemetry Modulation		
12879	MGS	01-362/08:54:25		NOTE: Enter Planetary Atmosphere 12545		01-362/08:42:12
12880	MGS	01-362/08:56:14		NOTE: Apoapsis 12545 -		01-362/08:44:01
12881	MGS	01-362/08:58:56		NOTE: Enter Solar Eclipse 12545		01-362/08:46:43
12882	MGS	01-362/08:58:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/08:46:43
12883	MGS	01-362/09:00:25		NOTE: Enter Earth Occultation 12545		01-362/08:48:12
12884	MGS	01-362/09:00:25	34	NOTE: Loss Of X-Band Signal		
12885	MGS	01-362/09:01:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/08:48:47
12886	MGS	01-362/09:01:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/08:48:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12887	MGS	01-362/09:01:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/08:48:47
12888	MGS	01-362/09:01:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/08:48:47
12889	MGS	01-362/09:01:01		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/08:48:48
12890	MGS	01-362/09:01:01		NOTE: End EVP script		01-362/08:48:48
12891	MGS	01-362/09:01:05		NOTE: End fixed Sub-Reflector for Radio Science		01-362/08:48:52
12892	MGS	01-362/09:02:56	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12893	MGS	01-362/09:04:57	34	Range Modulation On: SUP=3.0dB		
12894	MGS	01-362/09:05:57	34	Begin Ranging Acquisition		
12895	MGS	01-362/09:18:00		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/09:05:47
12896	MGS	01-362/09:21:45		: 01:37:02	RPAONX	01-362/09:09:32
12897	MGS	01-362/09:21:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/09:09:32
12898	MGS	01-362/09:23:00		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/09:10:47
12899	MGS	01-362/09:23:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/09:10:47
12900	MGS	01-362/09:23:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/09:10:47
12901	MGS	01-362/09:23:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/09:10:47
12902	MGS	01-362/09:23:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/09:10:47
12903	MGS	01-362/09:23:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/09:11:12
12904	MGS	01-362/09:23:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/09:11:12
12905	MGS	01-362/09:23:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/09:11:17
12906	MGS	01-362/09:23:30		Set eclipse egress script address: 01DC	SWSEES	01-362/09:11:17
12907	MGS	01-362/09:23:37		NOTE: Exit Earth Occultation 12545		01-362/09:11:24
12908	MGS	01-362/09:23:37	34	Acquisition Of X-Band Signal		
12909	MGS	01-362/09:23:37	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12910	MGS	01-362/09:23:37	34	NOTE: Carrier Only -- No Telemetry Modulation		
12911	MGS	01-362/09:29:56		NOTE: Exit Planetary Atmosphere 12545		01-362/09:17:43
12912	MGS	01-362/09:32:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/09:19:51
12913	MGS	01-362/09:32:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/09:19:51
12914	MGS	01-362/09:32:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/09:19:51
12915	MGS	01-362/09:32:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/09:19:51
12916	MGS	01-362/09:32:04	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12917	MGS	01-362/09:32:05		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/09:19:52
12918	MGS	01-362/09:32:05		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/09:19:52
12919	MGS	01-362/09:32:05		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/09:19:52
12920	MGS	01-362/09:32:05	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12921	MGS	01-362/09:32:09		NOTE: End fixed Sub-Reflector for Radio Science		01-362/09:19:56
12922	MGS	01-362/09:39:11		NOTE: Exit Solar Eclipse 12545		01-362/09:26:58
12923	MGS	01-362/09:55:05		NOTE: Periapsis 12546 ----------		01-362/09:42:52
12924	MGS	01-362/10:00:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/09:47:57
12925	MGS	01-362/10:00:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/09:47:57
12926	MGS	01-362/10:00:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/09:47:58
12927	MGS	01-362/10:00:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/09:47:58
12928	MGS	01-362/10:15:01	34	NOTE: Transmitter Off in 15 minutes		
12929	MGS	01-362/10:22:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/10:09:58
12930	MGS	01-362/10:22:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/10:09:58
12931	MGS	01-362/10:28:02	34	Range Modulation Off		
12932	MGS	01-362/10:30:00	63	Begin Pre-Cal		
12933	MGS	01-362/10:30:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
12934	MGS	01-362/10:30:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
12935	MGS	01-362/10:30:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
12936	MGS	01-362/10:30:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
12937	MGS	01-362/10:30:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
12938	MGS	01-362/10:30:00	63	Config: TGC: DEST=37		
12939	MGS	01-362/10:30:00	63	Config: TGC: BAND=X, BR=42666.666667		
12940	MGS	01-362/10:30:00	63	Config: FSS: CH=2, PRI_FL=10000		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12941	MGS	01-362/10:30:00	63	Config: RSR		
12942	MGS	01-362/10:30:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
12943	MGS	01-362/10:30:00	63	Config: BVR		
12944	MGS	01-362/10:30:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
12945	MGS	01-362/10:30:00	63	Config: MDA: SMPL=0.1		
12946	MGS	01-362/10:30:01	34	Transmitter Off		
12947	MGS	01-362/10:32:11		NOTE: Start Block (SSRMGR)		01-362/10:19:58
12948	MGS	01-362/10:32:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-362/10:19:58
12949	MGS	01-362/10:32:12		SSR 1B Data Enable	CSD1BE	01-362/10:19:59
12950	MGS	01-362/10:32:12		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-362/10:19:59
12951	MGS	01-362/10:45:02		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/10:32:48
12952	MGS	01-362/10:46:42		NOTE: Start Block (MAP_PB_ODY)		01-362/10:34:29
12953	MGS	01-362/10:46:43		: 00:22:49, 01:37:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:24, 01:21:18, 00:07:05	AEMINI	01-362/10:34:30
12954	MGS	01-362/10:46:43		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/10:34:30
12955	MGS	01-362/10:46:43		NOTE: Start EVP data return script		01-362/10:34:30
12956	MGS	01-362/10:46:44		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-362T11:15:59.000	AEMPBI	01-362/10:34:31
12957	MGS	01-362/10:50:01		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/10:37:48
12958	MGS	01-362/10:50:01		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8552000, DUR=00:17:49		01-362/10:37:48
12959	MGS	01-362/10:50:01		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-362/10:37:48
12960	MGS	01-362/10:50:01		: 00:08:45, FALSE	RDSCII	01-362/10:37:48
12961	MGS	01-362/10:50:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/10:37:48
12962	MGS	01-362/10:50:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/10:37:48
12963	MGS	01-362/10:50:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/10:37:48
12964	MGS	01-362/10:50:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/10:37:48
12965	MGS	01-362/10:50:01	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
12966	MGS	01-362/10:50:01	34	NOTE: Carrier Only -- No Telemetry Modulation		
12967	MGS	01-362/10:52:12		NOTE: Enter Planetary Atmosphere 12546		01-362/10:39:59
12968	MGS	01-362/10:53:57		NOTE: Apoapsis 12546 -		01-362/10:41:44
12969	MGS	01-362/10:55:43		SSR 1A Data Disable	CSD1AX	01-362/10:43:30
12970	MGS	01-362/10:55:43		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-362/10:43:30
12971	MGS	01-362/10:55:44		NOTE: End Block (SSRMGR)		01-362/10:43:31
12972	MGS	01-362/10:56:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/10:44:30
12973	MGS	01-362/10:56:43		NOTE: Enter Solar Eclipse 12546		01-362/10:44:30
12974	MGS	01-362/10:58:13		NOTE: Enter Earth Occultation 12546		01-362/10:45:59
12975	MGS	01-362/10:58:13	34	NOTE: Loss Of X-Band Signal		
12976	MGS	01-362/10:58:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/10:46:33
12977	MGS	01-362/10:58:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/10:46:33
12978	MGS	01-362/10:58:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/10:46:33
12979	MGS	01-362/10:58:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/10:46:33
12980	MGS	01-362/10:58:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/10:46:34
12981	MGS	01-362/10:58:48		NOTE: End EVP script		01-362/10:46:34
12982	MGS	01-362/10:58:49		NOTE: End Block (MAP_RT)		01-362/10:46:35
12983	MGS	01-362/10:58:52		NOTE: End fixed Sub-Reflector for Radio Science		01-362/10:46:38
12984	MGS	01-362/11:00:43	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
12985	MGS	01-362/11:02:44	34	Range Modulation On: SUP=3.0dB		
12986	MGS	01-362/11:03:44	34	Begin Ranging Acquisition		
12987	MGS	01-362/11:19:32		: 01:37:03	RPAONX	01-362/11:07:19
12988	MGS	01-362/11:19:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/11:07:19
12989	MGS	01-362/11:21:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/11:08:58
12990	MGS	01-362/11:21:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/11:08:58
12991	MGS	01-362/11:21:15		Command the PSE with included data word: 3990	SWPSEL	01-362/11:09:02
12992	MGS	01-362/11:21:16		Set eclipse egress script address: 0158	SWSEES	01-362/11:09:03
12993	MGS	01-362/11:21:17		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/11:09:04
12994	MGS	01-362/11:21:25		NOTE: Exit Earth Occultation 12546		01-362/11:09:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
12995	MGS	01-362/11:21:25	34	Acquisition Of X-Band Signal		
12996	MGS	01-362/11:21:25	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12997	MGS	01-362/11:25:10	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
12998	MGS	01-362/11:27:44		NOTE: Exit Planetary Atmosphere 12546		01-362/11:15:31
12999	MGS	01-362/11:28:11		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:17:45	AEMPB	01-362/11:15:58
13000	MGS	01-362/11:28:11		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-362/11:15:58
13001	MGS	01-362/11:28:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-362/11:15:58
13002	MGS	01-362/11:28:12		SSR 1A Data Enable	CSD1AE	01-362/11:15:59
13003	MGS	01-362/11:28:12		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-362/11:15:59
13004	MGS	01-362/11:28:12	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13005	MGS	01-362/11:36:59		NOTE: Exit Solar Eclipse 12546		01-362/11:24:46
13006	MGS	01-362/11:40:00	34	NOTE: Transmitter Off in 15 minutes		
13007	MGS	01-362/11:52:50		NOTE: Periapsis 12547 ----------		01-362/11:40:37
13008	MGS	01-362/11:53:00	34	Range Modulation Off		
13009	MGS	01-362/11:55:00	34	Transmitter Off		
13010	MGS	01-362/12:00:00	63	Begin Tracking		
13011	MGS	01-362/12:00:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13012	MGS	01-362/12:01:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/11:49:45
13013	MGS	01-362/12:01:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/11:49:45
13014	MGS	01-362/12:02:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/11:49:46
13015	MGS	01-362/12:02:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/11:49:46
13016	MGS	01-362/12:07:42	34	NOTE: Below Uplink Interlock Limit		
13017	MGS	01-362/12:10:44	63	NOTE: Above Uplink Interlock Limit		
13018	MGS	01-362/12:12:13		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-362/11:59:59
13019	MGS	01-362/12:19:26	34	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13020	MGS	01-362/12:19:26	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13021	MGS	01-362/12:20:00	34	End Tracking		
13022	MGS	01-362/12:24:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/12:11:46
13023	MGS	01-362/12:24:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/12:11:46
13024	MGS	01-362/12:35:00	34	End Post-Cal		
13025	MGS	01-362/12:38:51		SSR 1A Data Disable	CSD1AX	01-362/12:26:37
13026	MGS	01-362/12:38:51		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-362/12:26:37
13027	MGS	01-362/12:38:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-362/12:26:37
13028	MGS	01-362/12:38:51	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13029	MGS	01-362/12:44:29		NOTE: Start Block (MAP_RT)		01-362/12:32:15
13030	MGS	01-362/12:44:30		: 00:22:49, 01:37:02, FALSE, TRUE, FALSE, 00:01:15, 00:09:04, 01:17:57, 00:08:45	AEMINI	01-362/12:32:16
13031	MGS	01-362/12:44:30		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/12:32:16
13032	MGS	01-362/12:44:30		NOTE: Start EVP data return script		01-362/12:32:16
13033	MGS	01-362/12:44:31		: SE_2A, RTM, 01:17:56, MRC, 2001-362T13:15:26.000	AEMRTI	01-362/12:32:17
13034	MGS	01-362/12:49:58		NOTE: Enter Planetary Atmosphere 12547		01-362/12:37:45
13035	MGS	01-362/12:51:26		NOTE: Apoapsis 12547 -		01-362/12:39:12
13036	MGS	01-362/12:54:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/12:42:16
13037	MGS	01-362/12:54:30		NOTE: Enter Solar Eclipse 12547		01-362/12:42:16
13038	MGS	01-362/12:55:58		NOTE: Enter Earth Occultation 12547		01-362/12:43:45
13039	MGS	01-362/12:55:58	63	NOTE: Loss Of X-Band Signal		
13040	MGS	01-362/12:56:36		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/12:44:22
13041	MGS	01-362/12:56:36		NOTE: End EVP script		01-362/12:44:22
13042	MGS	01-362/12:56:37		NOTE: End Block (MAP_PB_ODY)		01-362/12:44:23
13043	MGS	01-362/13:13:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/13:01:20
13044	MGS	01-362/13:17:19		: 01:37:02	RPAONX	01-362/13:05:05
13045	MGS	01-362/13:17:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/13:05:05
13046	MGS	01-362/13:18:34		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/13:06:20
13047	MGS	01-362/13:18:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/13:06:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13048	MGS	01-362/13:18:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/13:06:20
13049	MGS	01-362/13:18:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/13:06:20
13050	MGS	01-362/13:18:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/13:06:20
13051	MGS	01-362/13:19:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/13:06:46
13052	MGS	01-362/13:19:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/13:06:46
13053	MGS	01-362/13:19:05		Set eclipse egress script address: 019A	SWSEES	01-362/13:06:51
13054	MGS	01-362/13:19:13		NOTE: Exit Earth Occultation 12547		01-362/13:06:59
13055	MGS	01-362/13:19:13	63	Acquisition Of X-Band Signal		
13056	MGS	01-362/13:19:13	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13057	MGS	01-362/13:19:13	63	NOTE: Carrier Only -- No Telemetry Modulation		
13058	MGS	01-362/13:25:31		NOTE: Exit Planetary Atmosphere 12547		01-362/13:13:18
13059	MGS	01-362/13:27:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/13:15:24
13060	MGS	01-362/13:27:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/13:15:24
13061	MGS	01-362/13:27:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/13:15:24
13062	MGS	01-362/13:27:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/13:15:24
13063	MGS	01-362/13:27:38	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13064	MGS	01-362/13:27:39		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/13:15:25
13065	MGS	01-362/13:27:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/13:15:25
13066	MGS	01-362/13:27:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/13:15:25
13067	MGS	01-362/13:27:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13068	MGS	01-362/13:27:43		NOTE: End fixed Sub-Reflector for Radio Science		01-362/13:15:29
13069	MGS	01-362/13:34:46		NOTE: Exit Solar Eclipse 12547		01-362/13:22:32
13070	MGS	01-362/13:50:32		NOTE: Periapsis 12548 ----------		01-362/13:38:19
13071	MGS	01-362/13:55:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/13:43:31
13072	MGS	01-362/13:55:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/13:43:31
13073	MGS	01-362/13:55:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/13:43:32
13074	MGS	01-362/13:55:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/13:43:32
13075	MGS	01-362/14:17:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/14:05:32
13076	MGS	01-362/14:17:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/14:05:32
13077	MGS	01-362/14:40:35		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/14:28:21
13078	MGS	01-362/14:42:14		NOTE: Start EVP data return script		01-362/14:30:00
13079	MGS	01-362/14:45:35		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/14:33:21
13080	MGS	01-362/14:45:35		: 00:08:45, FALSE	RDSCII	01-362/14:33:21
13081	MGS	01-362/14:45:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/14:33:21
13082	MGS	01-362/14:45:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/14:33:21
13083	MGS	01-362/14:45:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/14:33:21
13084	MGS	01-362/14:45:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/14:33:21
13085	MGS	01-362/14:45:35	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13086	MGS	01-362/14:45:35	63	NOTE: Carrier Only -- No Telemetry Modulation		
13087	MGS	01-362/14:47:41		NOTE: Enter Planetary Atmosphere 12548		01-362/14:35:28
13088	MGS	01-362/14:48:58		NOTE: Apoapsis 12548 -		01-362/14:36:44
13089	MGS	01-362/14:52:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/14:40:00
13090	MGS	01-362/14:52:14		NOTE: Enter Solar Eclipse 12548		01-362/14:40:00
13091	MGS	01-362/14:53:41		NOTE: Enter Earth Occultation 12548		01-362/14:41:27
13092	MGS	01-362/14:53:41	63	NOTE: Loss Of X-Band Signal		
13093	MGS	01-362/14:54:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/14:42:06
13094	MGS	01-362/14:54:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/14:42:06
13095	MGS	01-362/14:54:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/14:42:06
13096	MGS	01-362/14:54:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/14:42:06
13097	MGS	01-362/14:54:21		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/14:42:07
13098	MGS	01-362/14:54:21		NOTE: End EVP script		01-362/14:42:07
13099	MGS	01-362/14:54:25		NOTE: End fixed Sub-Reflector for Radio Science		01-362/14:42:11
13100	MGS	01-362/15:11:18		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/14:59:04
13101	MGS	01-362/15:15:03		: 01:37:02	RPAONX	01-362/15:02:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13102	MGS	01-362/15:15:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/15:02:49
13103	MGS	01-362/15:16:18		: 00:00:30, 00:09:04, FALSE	RDSCIE	01-362/15:04:04
13104	MGS	01-362/15:16:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/15:04:04
13105	MGS	01-362/15:16:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/15:04:04
13106	MGS	01-362/15:16:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/15:04:04
13107	MGS	01-362/15:16:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/15:04:04
13108	MGS	01-362/15:16:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/15:04:32
13109	MGS	01-362/15:16:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/15:04:32
13110	MGS	01-362/15:16:48		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/15:04:34
13111	MGS	01-362/15:16:51		Set eclipse egress script address: 01DC	SWSEES	01-362/15:04:37
13112	MGS	01-362/15:16:59		NOTE: Exit Earth Occultation 12548		01-362/15:04:45
13113	MGS	01-362/15:16:59	63	Acquisition Of X-Band Signal		
13114	MGS	01-362/15:16:59	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13115	MGS	01-362/15:16:59	63	NOTE: Carrier Only -- No Telemetry Modulation		
13116	MGS	01-362/15:23:17		NOTE: Exit Planetary Atmosphere 12548		01-362/15:11:03
13117	MGS	01-362/15:25:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/15:13:08
13118	MGS	01-362/15:25:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/15:13:08
13119	MGS	01-362/15:25:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/15:13:08
13120	MGS	01-362/15:25:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/15:13:08
13121	MGS	01-362/15:25:22	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13122	MGS	01-362/15:25:23		: RTM, MRC, 01:17:56, S&E_2A, FALSE, 00:08:46	AEMRT	01-362/15:13:09
13123	MGS	01-362/15:25:23		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/15:13:09
13124	MGS	01-362/15:25:23		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/15:13:09
13125	MGS	01-362/15:25:23	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13126	MGS	01-362/15:25:27		NOTE: End fixed Sub-Reflector for Radio Science		01-362/15:13:13
13127	MGS	01-362/15:32:30		NOTE: Exit Solar Eclipse 12548		01-362/15:20:16
13128	MGS	01-362/15:48:17		NOTE: Periapsis 12549 ----------		01-362/15:36:03
13129	MGS	01-362/15:53:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/15:41:15
13130	MGS	01-362/15:53:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/15:41:15
13131	MGS	01-362/15:53:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/15:41:16
13132	MGS	01-362/15:53:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/15:41:16
13133	MGS	01-362/16:15:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/16:03:16
13134	MGS	01-362/16:15:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/16:03:16
13135	MGS	01-362/16:25:23		NOTE: Start Block (SSRMGR)		01-362/16:13:09
13136	MGS	01-362/16:25:23		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-362/16:13:09
13137	MGS	01-362/16:25:24		SSR 1A Data Enable	CSD1AE	01-362/16:13:10
13138	MGS	01-362/16:25:24		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-362/16:13:10
13139	MGS	01-362/16:38:20		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/16:26:05
13140	MGS	01-362/16:39:55		NOTE: Start Block (MAP_PB_ODY)		01-362/16:27:41
13141	MGS	01-362/16:39:56		: 00:22:49, 01:37:03, FALSE, FALSE, FALSE, 00:01:15, 00:07:24, 01:21:18, 00:07:05	AEMINI	01-362/16:27:42
13142	MGS	01-362/16:39:56		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/16:27:42
13143	MGS	01-362/16:39:56		NOTE: Start EVP data return script		01-362/16:27:42
13144	MGS	01-362/16:39:57		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-362T17:09:11.000	AEMPBI	01-362/16:27:43
13145	MGS	01-362/16:43:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/16:31:05
13146	MGS	01-362/16:43:19		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8600000, DUR=00:17:55		01-362/16:31:05
13147	MGS	01-362/16:43:19		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-362/16:31:05
13148	MGS	01-362/16:43:19		: 00:08:45, FALSE	RDSCII	01-362/16:31:05
13149	MGS	01-362/16:43:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/16:31:05
13150	MGS	01-362/16:43:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/16:31:05
13151	MGS	01-362/16:43:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/16:31:05
13152	MGS	01-362/16:43:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/16:31:05
13153	MGS	01-362/16:43:19	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13154	MGS	01-362/16:43:19	63	NOTE: Carrier Only -- No Telemetry Modulation		
13155	MGS	01-362/16:45:24		NOTE: Enter Planetary Atmosphere 12549		01-362/16:33:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13156	MGS	01-362/16:46:53		NOTE: Apoapsis 12549 -		01-362/16:34:39
13157	MGS	01-362/16:48:56		SSR 1B Data Disable	CSD1BX	01-362/16:36:42
13158	MGS	01-362/16:48:56		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-362/16:36:42
13159	MGS	01-362/16:48:57		NOTE: End Block (SSRMGR)		01-362/16:36:43
13160	MGS	01-362/16:49:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/16:37:42
13161	MGS	01-362/16:49:57		NOTE: Enter Solar Eclipse 12549		01-362/16:37:43
13162	MGS	01-362/16:51:24		NOTE: Enter Earth Occultation 12549		01-362/16:39:09
13163	MGS	01-362/16:51:24	63	NOTE: Loss Of X-Band Signal		
13164	MGS	01-362/16:52:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/16:39:50
13165	MGS	01-362/16:52:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/16:39:50
13166	MGS	01-362/16:52:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/16:39:50
13167	MGS	01-362/16:52:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/16:39:50
13168	MGS	01-362/16:52:05		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/16:39:51
13169	MGS	01-362/16:52:06		NOTE: End EVP script		01-362/16:39:51
13170	MGS	01-362/16:52:07		NOTE: End Block (MAP_RT)		01-362/16:39:52
13171	MGS	01-362/16:52:10		NOTE: End fixed Sub-Reflector for Radio Science		01-362/16:39:55
13172	MGS	01-362/17:12:45		: 01:37:03	RPAONX	01-362/17:00:31
13173	MGS	01-362/17:12:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/17:00:31
13174	MGS	01-362/17:14:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/17:02:16
13175	MGS	01-362/17:14:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/17:02:16
13176	MGS	01-362/17:14:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/17:02:16
13177	MGS	01-362/17:14:34		Command the PSE with included data word: 3990	SWPSEL	01-362/17:02:20
13178	MGS	01-362/17:14:35		Set eclipse egress script address: 0158	SWSEES	01-362/17:02:21
13179	MGS	01-362/17:14:42		NOTE: Exit Earth Occultation 12549		01-362/17:02:28
13180	MGS	01-362/17:14:42	63	Acquisition Of X-Band Signal		
13181	MGS	01-362/17:14:42	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13182	MGS	01-362/17:21:01		NOTE: Exit Planetary Atmosphere 12549		01-362/17:08:46
13183	MGS	01-362/17:21:24		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:17:45	AEMPB	01-362/17:09:10
13184	MGS	01-362/17:21:24		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-362/17:09:10
13185	MGS	01-362/17:21:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-362/17:09:10
13186	MGS	01-362/17:21:25		SSR 1B Data Enable	CSD1BE	01-362/17:09:11
13187	MGS	01-362/17:21:25		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-362/17:09:11
13188	MGS	01-362/17:21:25	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13189	MGS	01-362/17:30:12		NOTE: Exit Solar Eclipse 12549		01-362/17:17:58
13190	MGS	01-362/17:45:54		NOTE: Periapsis 12550 ----------		01-362/17:33:39
13191	MGS	01-362/17:55:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/17:42:57
13192	MGS	01-362/17:55:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/17:42:57
13193	MGS	01-362/17:55:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/17:42:58
13194	MGS	01-362/17:55:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/17:42:58
13195	MGS	01-362/18:17:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/18:04:58
13196	MGS	01-362/18:17:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/18:04:58
13197	MGS	01-362/18:30:00	15	Begin Pre-Cal		
13198	MGS	01-362/18:30:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
13199	MGS	01-362/18:30:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
13200	MGS	01-362/18:30:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
13201	MGS	01-362/18:30:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
13202	MGS	01-362/18:30:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
13203	MGS	01-362/18:30:00	15	Config: TGC: DEST=37		
13204	MGS	01-362/18:30:00	15	Config: TGC: BAND=X, BR=40000.000000		
13205	MGS	01-362/18:30:00	15	Config: FSS: CH=2, PRI_FL=10000		
13206	MGS	01-362/18:30:00	15	Config: RSR		
13207	MGS	01-362/18:30:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
13208	MGS	01-362/18:30:00	15	Config: BVR		
13209	MGS	01-362/18:30:00	15	Config: Doppler Extractor: BIAS=+1MHZ		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13210	MGS	01-362/18:30:00	15	Config: MDA: SMPL=0.1		
13211	MGS	01-362/18:32:04		SSR 1B Data Disable	CSD1BX	01-362/18:19:49
13212	MGS	01-362/18:32:04		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-362/18:19:49
13213	MGS	01-362/18:32:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-362/18:19:49
13214	MGS	01-362/18:32:04	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13215	MGS	01-362/18:37:38		NOTE: Start Block (MAP_RT)		01-362/18:25:23
13216	MGS	01-362/18:37:39		: 00:23:00, 01:36:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:58, 01:17:46, 00:08:40	AEMINI	01-362/18:25:24
13217	MGS	01-362/18:37:39		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/18:25:24
13218	MGS	01-362/18:37:39		NOTE: Start EVP data return script		01-362/18:25:24
13219	MGS	01-362/18:37:40		: SE_2A, RTM, 01:17:45, MRC, 2001-362T19:08:39.000	AEMRTI	01-362/18:25:25
13220	MGS	01-362/18:43:07		NOTE: Enter Planetary Atmosphere 12550		01-362/18:30:52
13221	MGS	01-362/18:44:26		NOTE: Apoapsis 12550 -		01-362/18:32:12
13222	MGS	01-362/18:47:39		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/18:35:24
13223	MGS	01-362/18:47:39		NOTE: Enter Solar Eclipse 12550		01-362/18:35:24
13224	MGS	01-362/18:49:06		NOTE: Enter Earth Occultation 12550		01-362/18:36:52
13225	MGS	01-362/18:49:06	63	NOTE: Loss Of X-Band Signal		
13226	MGS	01-362/18:49:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/18:37:34
13227	MGS	01-362/18:49:49		NOTE: End EVP script		01-362/18:37:35
13228	MGS	01-362/18:49:50		NOTE: End Block (MAP_PB_ODY)		01-362/18:37:36
13229	MGS	01-362/19:06:54		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/18:54:39
13230	MGS	01-362/19:10:39		: 01:36:40	RPAONX	01-362/18:58:24
13231	MGS	01-362/19:10:39		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/18:58:24
13232	MGS	01-362/19:11:54		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-362/18:59:39
13233	MGS	01-362/19:11:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/18:59:39
13234	MGS	01-362/19:11:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/18:59:39
13235	MGS	01-362/19:11:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/18:59:39
13236	MGS	01-362/19:11:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/18:59:39
13237	MGS	01-362/19:12:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/18:59:58
13238	MGS	01-362/19:12:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/18:59:58
13239	MGS	01-362/19:12:18		Set eclipse egress script address: 019A	SWSEES	01-362/19:00:03
13240	MGS	01-362/19:12:25		NOTE: Exit Earth Occultation 12550		01-362/19:00:10
13241	MGS	01-362/19:12:25	63	Acquisition Of X-Band Signal		
13242	MGS	01-362/19:12:25	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13243	MGS	01-362/19:12:25	63	NOTE: Carrier Only -- No Telemetry Modulation		
13244	MGS	01-362/19:18:43		NOTE: Exit Planetary Atmosphere 12550		01-362/19:06:29
13245	MGS	01-362/19:20:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/19:08:37
13246	MGS	01-362/19:20:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/19:08:37
13247	MGS	01-362/19:20:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/19:08:37
13248	MGS	01-362/19:20:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/19:08:37
13249	MGS	01-362/19:20:52	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13250	MGS	01-362/19:20:53		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-362/19:08:38
13251	MGS	01-362/19:20:53		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/19:08:38
13252	MGS	01-362/19:20:53		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/19:08:38
13253	MGS	01-362/19:20:53	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13254	MGS	01-362/19:20:57		NOTE: End fixed Sub-Reflector for Radio Science		01-362/19:08:42
13255	MGS	01-362/19:27:54		NOTE: Exit Solar Eclipse 12550		01-362/19:15:40
13256	MGS	01-362/19:43:14		NOTE: Periapsis 12551 ----------		01-362/19:30:59
13257	MGS	01-362/19:48:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/19:36:38
13258	MGS	01-362/19:48:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/19:36:38
13259	MGS	01-362/19:48:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/19:36:39
13260	MGS	01-362/19:48:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/19:36:39
13261	MGS	01-362/20:00:00	15	Begin Tracking		
13262	MGS	01-362/20:00:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13263	MGS	01-362/20:10:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/19:58:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13264	MGS	01-362/20:10:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/19:58:39
13265	MGS	01-362/20:20:00	63	End Tracking		
13266	MGS	01-362/20:33:38		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/20:21:23
13267	MGS	01-362/20:35:00	63	End Post-Cal		
13268	MGS	01-362/20:35:22		NOTE: Start EVP data return script		01-362/20:23:07
13269	MGS	01-362/20:38:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/20:26:23
13270	MGS	01-362/20:38:38		: 00:08:40, FALSE	RDSCII	01-362/20:26:23
13271	MGS	01-362/20:38:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/20:26:23
13272	MGS	01-362/20:38:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/20:26:23
13273	MGS	01-362/20:38:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/20:26:23
13274	MGS	01-362/20:38:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/20:26:23
13275	MGS	01-362/20:38:38	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13276	MGS	01-362/20:38:38	15	NOTE: Carrier Only -- No Telemetry Modulation		
13277	MGS	01-362/20:40:49		NOTE: Enter Planetary Atmosphere 12551		01-362/20:28:35
13278	MGS	01-362/20:41:53		NOTE: Apoapsis 12551 -		01-362/20:29:38
13279	MGS	01-362/20:45:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/20:33:07
13280	MGS	01-362/20:45:23		NOTE: Enter Solar Eclipse 12551		01-362/20:33:08
13281	MGS	01-362/20:46:48		NOTE: Enter Earth Occultation 12551		01-362/20:34:33
13282	MGS	01-362/20:46:48	15	NOTE: Loss Of X-Band Signal		
13283	MGS	01-362/20:47:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/20:35:03
13284	MGS	01-362/20:47:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/20:35:03
13285	MGS	01-362/20:47:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/20:35:03
13286	MGS	01-362/20:47:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/20:35:03
13287	MGS	01-362/20:47:19		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/20:35:04
13288	MGS	01-362/20:47:19		NOTE: End EVP script		01-362/20:35:04
13289	MGS	01-362/20:47:23		NOTE: End fixed Sub-Reflector for Radio Science		01-362/20:35:08
13290	MGS	01-362/21:04:37		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/20:52:22
13291	MGS	01-362/21:08:22		: 01:36:40	RPAONX	01-362/20:56:07
13292	MGS	01-362/21:08:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/20:56:07
13293	MGS	01-362/21:09:37		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-362/20:57:22
13294	MGS	01-362/21:09:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/20:57:22
13295	MGS	01-362/21:09:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/20:57:22
13296	MGS	01-362/21:09:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/20:57:22
13297	MGS	01-362/21:09:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/20:57:22
13298	MGS	01-362/21:09:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/20:57:39
13299	MGS	01-362/21:09:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/20:57:39
13300	MGS	01-362/21:09:59		Set eclipse egress script address: 01DC	SWSEES	01-362/20:57:44
13301	MGS	01-362/21:10:07		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/20:57:52
13302	MGS	01-362/21:10:10		NOTE: Exit Earth Occultation 12551		01-362/20:57:55
13303	MGS	01-362/21:10:10	15	Acquisition Of X-Band Signal		
13304	MGS	01-362/21:10:10	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13305	MGS	01-362/21:10:10	15	NOTE: Carrier Only -- No Telemetry Modulation		
13306	MGS	01-362/21:16:26		NOTE: Exit Planetary Atmosphere 12551		01-362/21:04:11
13307	MGS	01-362/21:18:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/21:06:20
13308	MGS	01-362/21:18:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/21:06:20
13309	MGS	01-362/21:18:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/21:06:20
13310	MGS	01-362/21:18:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/21:06:20
13311	MGS	01-362/21:18:35	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13312	MGS	01-362/21:18:36		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-362/21:06:21
13313	MGS	01-362/21:18:36		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-362/21:06:21
13314	MGS	01-362/21:18:36		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-362/21:06:21
13315	MGS	01-362/21:18:36	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13316	MGS	01-362/21:18:40		NOTE: End fixed Sub-Reflector for Radio Science		01-362/21:06:25
13317	MGS	01-362/21:25:38		NOTE: Exit Solar Eclipse 12551		01-362/21:13:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13318	MGS	01-362/21:41:06		NOTE: Periapsis 12552 ----------		01-362/21:28:51
13319	MGS	01-362/21:46:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/21:34:22
13320	MGS	01-362/21:46:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/21:34:22
13321	MGS	01-362/21:46:38		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/21:34:23
13322	MGS	01-362/21:46:38		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/21:34:23
13323	MGS	01-362/22:08:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/21:56:23
13324	MGS	01-362/22:08:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/21:56:23
13325	MGS	01-362/22:18:40		NOTE: Start Block (SSRMGR)		01-362/22:06:25
13326	MGS	01-362/22:18:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-362/22:06:25
13327	MGS	01-362/22:18:41		SSR 1B Data Enable	CSD1BE	01-362/22:06:26
13328	MGS	01-362/22:18:41		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-362/22:06:26
13329	MGS	01-362/22:31:21		NOTE: Begin fixed Sub-Reflector for Radio Science		01-362/22:19:06
13330	MGS	01-362/22:33:07		NOTE: Start Block (MAP_PB_ODY)		01-362/22:20:52
13331	MGS	01-362/22:33:08		: 00:23:00, 01:36:41, FALSE, FALSE, FALSE, 00:01:15, 00:07:18, 01:21:07, 00:07:00	AEMINI	01-362/22:20:53
13332	MGS	01-362/22:33:08		Enable sending eclipse ingress script when array power disappears	SWEISE	01-362/22:20:53
13333	MGS	01-362/22:33:08		NOTE: Start EVP data return script		01-362/22:20:53
13334	MGS	01-362/22:33:09		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-362T23:02:27.000	AEMPBI	01-362/22:20:54
13335	MGS	01-362/22:36:21		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-362/22:24:06
13336	MGS	01-362/22:36:21		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8480000, DUR=00:17:40		01-362/22:24:06
13337	MGS	01-362/22:36:21		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-362/22:24:06
13338	MGS	01-362/22:36:21		: 00:08:40, FALSE	RDSCII	01-362/22:24:06
13339	MGS	01-362/22:36:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-362/22:24:06
13340	MGS	01-362/22:36:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-362/22:24:06
13341	MGS	01-362/22:36:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-362/22:24:06
13342	MGS	01-362/22:36:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-362/22:24:06
13343	MGS	01-362/22:36:21	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13344	MGS	01-362/22:36:21	15	NOTE: Carrier Only -- No Telemetry Modulation		
13345	MGS	01-362/22:38:33		NOTE: Enter Planetary Atmosphere 12552		01-362/22:26:18
13346	MGS	01-362/22:39:55		NOTE: Apoapsis 12552 -		01-362/22:27:39
13347	MGS	01-362/22:42:08		SSR 1A Data Disable	CSD1AX	01-362/22:29:53
13348	MGS	01-362/22:42:08		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-362/22:29:53
13349	MGS	01-362/22:42:09		NOTE: End Block (SSRMGR)		01-362/22:29:54
13350	MGS	01-362/22:43:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-362/22:30:53
13351	MGS	01-362/22:43:08		NOTE: Enter Solar Eclipse 12552		01-362/22:30:53
13352	MGS	01-362/22:44:30		NOTE: Enter Earth Occultation 12552		01-362/22:32:15
13353	MGS	01-362/22:44:30	15	NOTE: Loss Of X-Band Signal		
13354	MGS	01-362/22:45:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-362/22:32:46
13355	MGS	01-362/22:45:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-362/22:32:46
13356	MGS	01-362/22:45:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-362/22:32:46
13357	MGS	01-362/22:45:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-362/22:32:46
13358	MGS	01-362/22:45:02		Turn off the MOT Exciter and RPA beam	STRPAF	01-362/22:32:47
13359	MGS	01-362/22:45:03		NOTE: End EVP script		01-362/22:32:47
13360	MGS	01-362/22:45:04		NOTE: End Block (MAP_RT)		01-362/22:32:48
13361	MGS	01-362/22:45:07		NOTE: End fixed Sub-Reflector for Radio Science		01-362/22:32:51
13362	MGS	01-362/23:06:08		: 01:36:41	RPAONX	01-362/22:53:53
13363	MGS	01-362/23:06:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-362/22:53:53
13364	MGS	01-362/23:07:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-362/22:55:23
13365	MGS	01-362/23:07:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-362/22:55:23
13366	MGS	01-362/23:07:42		Command the PSE with included data word: 3990	SWPSEL	01-362/22:55:27
13367	MGS	01-362/23:07:43		Set eclipse egress script address: 0158	SWSEES	01-362/22:55:28
13368	MGS	01-362/23:07:53		Disables autonomous command to send eclipse ingress script	SWEISX	01-362/22:55:38
13369	MGS	01-362/23:07:56		NOTE: Exit Earth Occultation 12552		01-362/22:55:41
13370	MGS	01-362/23:07:56	15	Acquisition Of X-Band Signal		
13371	MGS	01-362/23:07:56	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13372	MGS	01-362/23:14:11		NOTE: Exit Planetary Atmosphere 12552		01-362/23:01:56
13373	MGS	01-362/23:14:41		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:17:29	AEMPB	01-362/23:02:26
13374	MGS	01-362/23:14:41		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-362/23:02:26
13375	MGS	01-362/23:14:41		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-362/23:02:26
13376	MGS	01-362/23:14:42		SSR 1A Data Enable	CSD1AE	01-362/23:02:27
13377	MGS	01-362/23:14:42		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-362/23:02:27
13378	MGS	01-362/23:14:42	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13379	MGS	01-362/23:23:24		NOTE: Exit Solar Eclipse 12552		01-362/23:11:09
13380	MGS	01-362/23:39:19		NOTE: Periapsis 12553 ----------		01-362/23:27:04
13381	MGS	01-362/23:48:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-362/23:36:08
13382	MGS	01-362/23:48:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-362/23:36:08
13383	MGS	01-362/23:48:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-362/23:36:09
13384	MGS	01-362/23:48:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-362/23:36:09
13385	MGS	01-362/23:55:00	43	Begin Pre-Cal		
13386	MGS	01-362/23:55:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
13387	MGS	01-362/23:55:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
13388	MGS	01-362/23:55:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
13389	MGS	01-362/23:55:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
13390	MGS	01-362/23:55:00	43	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
13391	MGS	01-362/23:55:00	43	Config: TGC: DEST=37		
13392	MGS	01-362/23:55:00	43	Config: TGC: BAND=X, BR=40000.000000		
13393	MGS	01-362/23:55:00	43	Config: FSS: CH=2, PRI_FL=10000		
13394	MGS	01-362/23:55:00	43	Config: RSR		
13395	MGS	01-362/23:55:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
13396	MGS	01-362/23:55:00	43	Config: BVR		
13397	MGS	01-362/23:55:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
13398	MGS	01-362/23:55:00	43	Config: MDA: SMPL=0.1		
13399	MGS	01-363/00:00:00		Light Time: OWLT = 12:15, RTLT = 24:30		
13400	MGS	01-363/00:10:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-362/23:58:09
13401	MGS	01-363/00:10:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-362/23:58:09
13402	MGS	01-363/00:25:20		SSR 1A Data Disable	CSD1AX	01-363/00:13:05
13403	MGS	01-363/00:25:20		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-363/00:13:05
13404	MGS	01-363/00:25:20		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-363/00:13:05
13405	MGS	01-363/00:25:20	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13406	MGS	01-363/00:30:54		NOTE: Start Block (MAP_RT)		01-363/00:18:39
13407	MGS	01-363/00:30:55		: 00:23:00, 01:36:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:58, 01:17:46, 00:08:40	AEMINI	01-363/00:18:40
13408	MGS	01-363/00:30:55		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/00:18:40
13409	MGS	01-363/00:30:55		NOTE: Start EVP data return script		01-363/00:18:40
13410	MGS	01-363/00:30:56		: SE_2A, RTM, 01:17:45, MRC, 2001-363T01:01:54.000	AEMRTI	01-363/00:18:41
13411	MGS	01-363/00:36:19		NOTE: Enter Planetary Atmosphere 12553		01-363/00:24:04
13412	MGS	01-363/00:38:15		NOTE: Apoapsis 12553 -		01-363/00:25:59
13413	MGS	01-363/00:40:55		NOTE: Enter Solar Eclipse 12553		01-363/00:28:40
13414	MGS	01-363/00:40:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/00:28:40
13415	MGS	01-363/00:42:17		NOTE: Enter Earth Occultation 12553		01-363/00:30:01
13416	MGS	01-363/00:42:17	15	NOTE: Loss Of X-Band Signal		
13417	MGS	01-363/00:42:49		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/00:30:34
13418	MGS	01-363/00:42:50		NOTE: End EVP script		01-363/00:30:34
13419	MGS	01-363/00:42:51		NOTE: End Block (MAP_PB_ODY)		01-363/00:30:35
13420	MGS	01-363/01:00:10		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/00:47:55
13421	MGS	01-363/01:03:55		: 01:36:40	RPAONX	01-363/00:51:40
13422	MGS	01-363/01:03:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/00:51:40
13423	MGS	01-363/01:05:11		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/00:52:55
13424	MGS	01-363/01:05:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/00:52:55
13425	MGS	01-363/01:05:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/00:52:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13426	MGS	01-363/01:05:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/00:52:55
13427	MGS	01-363/01:05:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/00:52:55
13428	MGS	01-363/01:05:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/00:53:09
13429	MGS	01-363/01:05:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/00:53:09
13430	MGS	01-363/01:05:30		Set eclipse egress script address: 019A	SWSEES	01-363/00:53:14
13431	MGS	01-363/01:05:44		NOTE: Exit Earth Occultation 12553		01-363/00:53:28
13432	MGS	01-363/01:05:44	15	Acquisition Of X-Band Signal		
13433	MGS	01-363/01:05:44	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13434	MGS	01-363/01:05:44	15	NOTE: Carrier Only -- No Telemetry Modulation		
13435	MGS	01-363/01:11:59		NOTE: Exit Planetary Atmosphere 12553		01-363/00:59:43
13436	MGS	01-363/01:14:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/01:01:53
13437	MGS	01-363/01:14:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/01:01:53
13438	MGS	01-363/01:14:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/01:01:53
13439	MGS	01-363/01:14:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/01:01:53
13440	MGS	01-363/01:14:09	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13441	MGS	01-363/01:14:10		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/01:01:54
13442	MGS	01-363/01:14:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/01:01:54
13443	MGS	01-363/01:14:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/01:01:54
13444	MGS	01-363/01:14:10	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13445	MGS	01-363/01:14:13		NOTE: End fixed Sub-Reflector for Radio Science		01-363/01:01:58
13446	MGS	01-363/01:21:11		NOTE: Exit Solar Eclipse 12553		01-363/01:08:56
13447	MGS	01-363/01:25:00	43	Begin Tracking		
13448	MGS	01-363/01:25:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13449	MGS	01-363/01:37:25		NOTE: Periapsis 12554 ----------		01-363/01:25:09
13450	MGS	01-363/01:42:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/01:29:55
13451	MGS	01-363/01:42:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/01:29:55
13452	MGS	01-363/01:42:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/01:29:56
13453	MGS	01-363/01:42:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/01:29:56
13454	MGS	01-363/01:45:00	15	End Tracking		
13455	MGS	01-363/02:00:00	15	End Post-Cal		
13456	MGS	01-363/02:04:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/01:51:56
13457	MGS	01-363/02:04:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/01:51:56
13458	MGS	01-363/02:26:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/02:14:39
13459	MGS	01-363/02:28:42		NOTE: Start EVP data return script		01-363/02:16:26
13460	MGS	01-363/02:31:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/02:19:39
13461	MGS	01-363/02:31:55		: 00:08:40, FALSE	RDSCII	01-363/02:19:39
13462	MGS	01-363/02:31:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/02:19:39
13463	MGS	01-363/02:31:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/02:19:39
13464	MGS	01-363/02:31:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/02:19:39
13465	MGS	01-363/02:31:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/02:19:39
13466	MGS	01-363/02:31:55	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13467	MGS	01-363/02:31:55	43	NOTE: Carrier Only -- No Telemetry Modulation		
13468	MGS	01-363/02:34:07		NOTE: Enter Planetary Atmosphere 12554		01-363/02:21:51
13469	MGS	01-363/02:36:11		NOTE: Apoapsis 12554 -		01-363/02:23:55
13470	MGS	01-363/02:38:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/02:26:26
13471	MGS	01-363/02:38:42		NOTE: Enter Solar Eclipse 12554		01-363/02:26:26
13472	MGS	01-363/02:40:05		NOTE: Enter Earth Occultation 12554		01-363/02:27:49
13473	MGS	01-363/02:40:05	43	NOTE: Loss Of X-Band Signal		
13474	MGS	01-363/02:40:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/02:28:19
13475	MGS	01-363/02:40:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/02:28:19
13476	MGS	01-363/02:40:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/02:28:19
13477	MGS	01-363/02:40:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/02:28:19
13478	MGS	01-363/02:40:36		NOTE: End EVP script		01-363/02:28:20
13479	MGS	01-363/02:40:36		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/02:28:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13480	MGS	01-363/02:40:40		NOTE: End fixed Sub-Reflector for Radio Science		01-363/02:28:24
13481	MGS	01-363/02:57:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/02:45:41
13482	MGS	01-363/03:01:42		: 01:36:40	RPAONX	01-363/02:49:26
13483	MGS	01-363/03:01:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/02:49:26
13484	MGS	01-363/03:02:57		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/02:50:41
13485	MGS	01-363/03:02:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/02:50:41
13486	MGS	01-363/03:02:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/02:50:41
13487	MGS	01-363/03:02:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/02:50:41
13488	MGS	01-363/03:02:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/02:50:41
13489	MGS	01-363/03:03:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/02:50:56
13490	MGS	01-363/03:03:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/02:50:56
13491	MGS	01-363/03:03:17		Set eclipse egress script address: 01DC	SWSEES	01-363/02:51:01
13492	MGS	01-363/03:03:27		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/02:51:11
13493	MGS	01-363/03:03:31		NOTE: Exit Earth Occultation 12554		01-363/02:51:15
13494	MGS	01-363/03:03:31	43	Acquisition Of X-Band Signal		
13495	MGS	01-363/03:03:31	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13496	MGS	01-363/03:03:31	43	NOTE: Carrier Only -- No Telemetry Modulation		
13497	MGS	01-363/03:09:47		NOTE: Exit Planetary Atmosphere 12554		01-363/02:57:31
13498	MGS	01-363/03:11:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/02:59:39
13499	MGS	01-363/03:11:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/02:59:39
13500	MGS	01-363/03:11:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/02:59:39
13501	MGS	01-363/03:11:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/02:59:39
13502	MGS	01-363/03:11:55	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13503	MGS	01-363/03:11:56		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/02:59:40
13504	MGS	01-363/03:11:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/02:59:40
13505	MGS	01-363/03:11:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/02:59:40
13506	MGS	01-363/03:11:56	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13507	MGS	01-363/03:12:00		NOTE: End fixed Sub-Reflector for Radio Science		01-363/02:59:44
13508	MGS	01-363/03:18:58		NOTE: Exit Solar Eclipse 12554		01-363/03:06:42
13509	MGS	01-363/03:20:00	45	Begin Pre-Cal		
13510	MGS	01-363/03:20:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
13511	MGS	01-363/03:20:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
13512	MGS	01-363/03:20:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
13513	MGS	01-363/03:20:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
13514	MGS	01-363/03:20:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
13515	MGS	01-363/03:20:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
13516	MGS	01-363/03:20:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
13517	MGS	01-363/03:20:00	45	Config: TGC: DEST=37		
13518	MGS	01-363/03:20:00	45	Config: TGC: BAND=X, BR=40000.000000		
13519	MGS	01-363/03:20:00	45	Config: FSS: CH=2, PRI_FL=10000		
13520	MGS	01-363/03:20:00	45	Config: RSR		
13521	MGS	01-363/03:20:00	45	Config: TXL		
13522	MGS	01-363/03:20:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
13523	MGS	01-363/03:20:00	45	Config: BVR		
13524	MGS	01-363/03:20:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
13525	MGS	01-363/03:20:00	45	Config: MDA: SMPL=0.1		
13526	MGS	01-363/03:20:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
13527	MGS	01-363/03:20:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
13528	MGS	01-363/03:20:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
13529	MGS	01-363/03:35:05		NOTE: Periapsis 12555 ----------		01-363/03:22:49
13530	MGS	01-363/03:39:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/03:27:41
13531	MGS	01-363/03:39:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/03:27:41
13532	MGS	01-363/03:39:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/03:27:42
13533	MGS	01-363/03:39:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/03:27:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13534	MGS	01-363/04:01:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/03:49:42
13535	MGS	01-363/04:01:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/03:49:42
13536	MGS	01-363/04:11:51		NOTE: Start Block (SSRMGR)		01-363/03:59:35
13537	MGS	01-363/04:11:51		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-363/03:59:35
13538	MGS	01-363/04:11:52		SSR 1A Data Enable	CSD1AE	01-363/03:59:36
13539	MGS	01-363/04:11:52		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-363/03:59:36
13540	MGS	01-363/04:20:00	45	Begin Tracking		
13541	MGS	01-363/04:20:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13542	MGS	01-363/04:24:41		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/04:12:25
13543	MGS	01-363/04:26:24		NOTE: Start Block (MAP_PB_ODY)		01-363/04:14:08
13544	MGS	01-363/04:26:25		: 00:23:00, 01:36:41, FALSE, FALSE, FALSE, 00:01:15, 00:07:18, 01:21:07, 00:07:00	AEMINI	01-363/04:14:09
13545	MGS	01-363/04:26:25		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/04:14:09
13546	MGS	01-363/04:26:25		NOTE: Start EVP data return script		01-363/04:14:09
13547	MGS	01-363/04:26:26		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-363T04:55:43.000	AEMPBI	01-363/04:14:10
13548	MGS	01-363/04:29:41		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/04:17:25
13549	MGS	01-363/04:29:41		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8552000, DUR=00:17:49		01-363/04:17:25
13550	MGS	01-363/04:29:41		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-363/04:17:25
13551	MGS	01-363/04:29:41		: 00:08:40, FALSE	RDSCII	01-363/04:17:25
13552	MGS	01-363/04:29:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/04:17:25
13553	MGS	01-363/04:29:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/04:17:25
13554	MGS	01-363/04:29:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/04:17:25
13555	MGS	01-363/04:29:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/04:17:25
13556	MGS	01-363/04:29:41	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13557	MGS	01-363/04:29:41	43	NOTE: Carrier Only -- No Telemetry Modulation		
13558	MGS	01-363/04:29:41	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13559	MGS	01-363/04:29:41	45	NOTE: Carrier Only -- No Telemetry Modulation		
13560	MGS	01-363/04:31:51		NOTE: Enter Planetary Atmosphere 12555		01-363/04:19:35
13561	MGS	01-363/04:33:37		NOTE: Apoapsis 12555 -		01-363/04:21:21
13562	MGS	01-363/04:35:25		SSR 1B Data Disable	CSD1BX	01-363/04:23:09
13563	MGS	01-363/04:35:25		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-363/04:23:09
13564	MGS	01-363/04:35:26		NOTE: End Block (SSRMGR)		01-363/04:23:10
13565	MGS	01-363/04:36:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/04:24:09
13566	MGS	01-363/04:36:25		NOTE: Enter Solar Eclipse 12555		01-363/04:24:09
13567	MGS	01-363/04:37:49		NOTE: Enter Earth Occultation 12555		01-363/04:25:33
13568	MGS	01-363/04:37:49	43	NOTE: Loss Of X-Band Signal		
13569	MGS	01-363/04:37:49	45	NOTE: Loss Of X-Band Signal		
13570	MGS	01-363/04:38:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/04:26:05
13571	MGS	01-363/04:38:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/04:26:05
13572	MGS	01-363/04:38:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/04:26:05
13573	MGS	01-363/04:38:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/04:26:05
13574	MGS	01-363/04:38:22		NOTE: End EVP script		01-363/04:26:06
13575	MGS	01-363/04:38:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/04:26:06
13576	MGS	01-363/04:38:23		NOTE: End Block (MAP_RT)		01-363/04:26:07
13577	MGS	01-363/04:38:26		NOTE: End fixed Sub-Reflector for Radio Science		01-363/04:26:10
13578	MGS	01-363/04:40:29	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
13579	MGS	01-363/04:42:29	45	Range Modulation On: SUP=3.0dB		
13580	MGS	01-363/04:43:29	45	Begin Ranging Acquisition		
13581	MGS	01-363/04:59:25		: 01:36:41	RPAONX	01-363/04:47:09
13582	MGS	01-363/04:59:25		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/04:47:09
13583	MGS	01-363/05:00:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/04:48:42
13584	MGS	01-363/05:00:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/04:48:42
13585	MGS	01-363/05:01:02		Command the PSE with included data word: 3990	SWPSEL	01-363/04:48:46
13586	MGS	01-363/05:01:03		Set eclipse egress script address: 0158	SWSEES	01-363/04:48:47
13587	MGS	01-363/05:01:10		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/04:48:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13588	MGS	01-363/05:01:16		NOTE: Exit Earth Occultation 12555		01-363/04:49:00
13589	MGS	01-363/05:01:16	43	Acquisition Of X-Band Signal		
13590	MGS	01-363/05:01:16	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13591	MGS	01-363/05:01:16	45	Acquisition Of X-Band Signal		
13592	MGS	01-363/05:01:16	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13593	MGS	01-363/05:05:01	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13594	MGS	01-363/05:05:01	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13595	MGS	01-363/05:07:32		NOTE: Exit Planetary Atmosphere 12555		01-363/04:55:16
13596	MGS	01-363/05:07:58		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:17:29	AEMPB	01-363/04:55:42
13597	MGS	01-363/05:07:58		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-363/04:55:42
13598	MGS	01-363/05:07:58		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-363/04:55:42
13599	MGS	01-363/05:07:59		SSR 1B Data Enable	CSD1BE	01-363/04:55:43
13600	MGS	01-363/05:07:59		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-363/04:55:43
13601	MGS	01-363/05:07:59	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13602	MGS	01-363/05:07:59	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13603	MGS	01-363/05:16:41		NOTE: Exit Solar Eclipse 12555		01-363/05:04:25
13604	MGS	01-363/05:32:26		NOTE: Periapsis 12556 ----------		01-363/05:20:10
13605	MGS	01-363/05:41:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/05:29:24
13606	MGS	01-363/05:41:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/05:29:24
13607	MGS	01-363/05:41:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/05:29:25
13608	MGS	01-363/05:41:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/05:29:25
13609	MGS	01-363/05:52:10	45	NOTE: Transmitter Off in 15 minutes		
13610	MGS	01-363/06:03:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/05:51:25
13611	MGS	01-363/06:03:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/05:51:25
13612	MGS	01-363/06:05:10	45	Range Modulation Off		
13613	MGS	01-363/06:07:10	45	Transmitter Off		
13614	MGS	01-363/06:18:37		SSR 1B Data Disable	CSD1BX	01-363/06:06:21
13615	MGS	01-363/06:18:37		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-363/06:06:21
13616	MGS	01-363/06:18:37		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-363/06:06:21
13617	MGS	01-363/06:18:37	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13618	MGS	01-363/06:18:37	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13619	MGS	01-363/06:24:04		NOTE: Start Block (MAP_RT)		01-363/06:11:48
13620	MGS	01-363/06:24:05		: 00:23:00, 01:36:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:58, 01:17:46, 00:08:40	AEMINI	01-363/06:11:49
13621	MGS	01-363/06:24:05		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/06:11:49
13622	MGS	01-363/06:24:05		NOTE: Start EVP data return script		01-363/06:11:49
13623	MGS	01-363/06:24:06		: SE_2A, RTM, 01:17:45, MRC, 2001-363T06:55:04.000	AEMRTI	01-363/06:11:50
13624	MGS	01-363/06:29:30		NOTE: Enter Planetary Atmosphere 12556		01-363/06:17:14
13625	MGS	01-363/06:31:03		NOTE: Apoapsis 12556 -		01-363/06:18:47
13626	MGS	01-363/06:31:42	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13627	MGS	01-363/06:31:42	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13628	MGS	01-363/06:34:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/06:21:49
13629	MGS	01-363/06:34:06		NOTE: Enter Solar Eclipse 12556		01-363/06:21:50
13630	MGS	01-363/06:35:27		NOTE: Enter Earth Occultation 12556		01-363/06:23:11
13631	MGS	01-363/06:35:27	43	NOTE: Loss Of X-Band Signal		
13632	MGS	01-363/06:35:27	45	NOTE: Loss Of X-Band Signal		
13633	MGS	01-363/06:36:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/06:23:50
13634	MGS	01-363/06:36:07		NOTE: End EVP script		01-363/06:23:50
13635	MGS	01-363/06:36:08		NOTE: End Block (MAP_PB_ODY)		01-363/06:23:51
13636	MGS	01-363/06:38:11	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
13637	MGS	01-363/06:40:11	45	Range Modulation On: SUP=3.0dB		
13638	MGS	01-363/06:41:11	45	Begin Ranging Acquisition		
13639	MGS	01-363/06:53:21		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/06:41:05
13640	MGS	01-363/06:57:05		: 01:36:40	RPAONX	01-363/06:44:49
13641	MGS	01-363/06:57:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/06:44:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13642	MGS	01-363/06:58:20		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/06:46:04
13643	MGS	01-363/06:58:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/06:46:04
13644	MGS	01-363/06:58:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/06:46:04
13645	MGS	01-363/06:58:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/06:46:04
13646	MGS	01-363/06:58:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/06:46:04
13647	MGS	01-363/06:58:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/06:46:25
13648	MGS	01-363/06:58:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/06:46:25
13649	MGS	01-363/06:58:46		Set eclipse egress script address: 019A	SWSEES	01-363/06:46:30
13650	MGS	01-363/06:58:58		NOTE: Exit Earth Occultation 12556		01-363/06:46:42
13651	MGS	01-363/06:58:58	43	Acquisition Of X-Band Signal		
13652	MGS	01-363/06:58:58	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13653	MGS	01-363/06:58:58	43	NOTE: Carrier Only -- No Telemetry Modulation		
13654	MGS	01-363/06:58:58	45	Acquisition Of X-Band Signal		
13655	MGS	01-363/06:58:58	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13656	MGS	01-363/06:58:58	45	NOTE: Carrier Only -- No Telemetry Modulation		
13657	MGS	01-363/07:05:13		NOTE: Exit Planetary Atmosphere 12556		01-363/06:52:57
13658	MGS	01-363/07:07:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/06:55:02
13659	MGS	01-363/07:07:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/06:55:02
13660	MGS	01-363/07:07:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/06:55:02
13661	MGS	01-363/07:07:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/06:55:02
13662	MGS	01-363/07:07:18	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13663	MGS	01-363/07:07:18	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13664	MGS	01-363/07:07:19		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/06:55:03
13665	MGS	01-363/07:07:19		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/06:55:03
13666	MGS	01-363/07:07:19		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/06:55:03
13667	MGS	01-363/07:07:19	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13668	MGS	01-363/07:07:19	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13669	MGS	01-363/07:07:24		NOTE: End fixed Sub-Reflector for Radio Science		01-363/06:55:08
13670	MGS	01-363/07:14:21		NOTE: Exit Solar Eclipse 12556		01-363/07:02:05
13671	MGS	01-363/07:29:56		NOTE: Periapsis 12557 ----------		01-363/07:17:40
13672	MGS	01-363/07:35:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/07:23:04
13673	MGS	01-363/07:35:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/07:23:04
13674	MGS	01-363/07:35:21		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/07:23:05
13675	MGS	01-363/07:35:21		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/07:23:05
13676	MGS	01-363/07:49:51	45	NOTE: Transmitter Off in 15 minutes		
13677	MGS	01-363/07:57:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/07:45:05
13678	MGS	01-363/07:57:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/07:45:05
13679	MGS	01-363/08:02:51	45	Range Modulation Off		
13680	MGS	01-363/08:04:51	45	Transmitter Off		
13681	MGS	01-363/08:20:05		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/08:07:49
13682	MGS	01-363/08:21:49		NOTE: Start EVP data return script		01-363/08:09:32
13683	MGS	01-363/08:25:05		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/08:12:48
13684	MGS	01-363/08:25:05		: 00:08:40, FALSE	RDSCII	01-363/08:12:48
13685	MGS	01-363/08:25:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/08:12:48
13686	MGS	01-363/08:25:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/08:12:48
13687	MGS	01-363/08:25:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/08:12:48
13688	MGS	01-363/08:25:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/08:12:48
13689	MGS	01-363/08:25:05	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13690	MGS	01-363/08:25:05	43	NOTE: Carrier Only -- No Telemetry Modulation		
13691	MGS	01-363/08:25:05	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13692	MGS	01-363/08:25:05	45	NOTE: Carrier Only -- No Telemetry Modulation		
13693	MGS	01-363/08:27:13		NOTE: Enter Planetary Atmosphere 12557		01-363/08:14:56
13694	MGS	01-363/08:28:57		NOTE: Apoapsis 12557 -		01-363/08:16:40
13695	MGS	01-363/08:31:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/08:19:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13696	MGS	01-363/08:31:49		NOTE: Enter Solar Eclipse 12557		01-363/08:19:33
13697	MGS	01-363/08:33:09		NOTE: Enter Earth Occultation 12557		01-363/08:20:52
13698	MGS	01-363/08:33:09	43	NOTE: Loss Of X-Band Signal		
13699	MGS	01-363/08:33:09	45	NOTE: Loss Of X-Band Signal		
13700	MGS	01-363/08:33:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/08:21:28
13701	MGS	01-363/08:33:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/08:21:28
13702	MGS	01-363/08:33:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/08:21:28
13703	MGS	01-363/08:33:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/08:21:28
13704	MGS	01-363/08:33:46		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/08:21:29
13705	MGS	01-363/08:33:46		NOTE: End EVP script		01-363/08:21:30
13706	MGS	01-363/08:33:50		NOTE: End fixed Sub-Reflector for Radio Science		01-363/08:21:34
13707	MGS	01-363/08:35:54	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
13708	MGS	01-363/08:37:54	45	Range Modulation On: SUP=3.0dB		
13709	MGS	01-363/08:38:54	45	Begin Ranging Acquisition		
13710	MGS	01-363/08:51:04		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/08:38:48
13711	MGS	01-363/08:54:49		: 01:36:40	RPAONX	01-363/08:42:32
13712	MGS	01-363/08:54:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/08:42:32
13713	MGS	01-363/08:56:04		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/08:43:47
13714	MGS	01-363/08:56:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/08:43:47
13715	MGS	01-363/08:56:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/08:43:47
13716	MGS	01-363/08:56:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/08:43:47
13717	MGS	01-363/08:56:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/08:43:47
13718	MGS	01-363/08:56:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/08:44:05
13719	MGS	01-363/08:56:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/08:44:05
13720	MGS	01-363/08:56:27		Set eclipse egress script address: 01DC	SWSEES	01-363/08:44:10
13721	MGS	01-363/08:56:34		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/08:44:17
13722	MGS	01-363/08:56:42		NOTE: Exit Earth Occultation 12557		01-363/08:44:25
13723	MGS	01-363/08:56:42	43	Acquisition Of X-Band Signal		
13724	MGS	01-363/08:56:42	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13725	MGS	01-363/08:56:42	43	NOTE: Carrier Only -- No Telemetry Modulation		
13726	MGS	01-363/08:56:42	45	Acquisition Of X-Band Signal		
13727	MGS	01-363/08:56:42	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13728	MGS	01-363/08:56:42	45	NOTE: Carrier Only -- No Telemetry Modulation		
13729	MGS	01-363/09:02:56		NOTE: Exit Planetary Atmosphere 12557		01-363/08:50:39
13730	MGS	01-363/09:05:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/08:52:45
13731	MGS	01-363/09:05:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/08:52:45
13732	MGS	01-363/09:05:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/08:52:45
13733	MGS	01-363/09:05:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/08:52:45
13734	MGS	01-363/09:05:02	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13735	MGS	01-363/09:05:02	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13736	MGS	01-363/09:05:03		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/08:52:46
13737	MGS	01-363/09:05:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/08:52:46
13738	MGS	01-363/09:05:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/08:52:46
13739	MGS	01-363/09:05:03	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13740	MGS	01-363/09:05:03	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13741	MGS	01-363/09:05:07		NOTE: End fixed Sub-Reflector for Radio Science		01-363/08:52:51
13742	MGS	01-363/09:12:05		NOTE: Exit Solar Eclipse 12557		01-363/08:59:48
13743	MGS	01-363/09:27:49		NOTE: Periapsis 12558 ----------		01-363/09:15:32
13744	MGS	01-363/09:33:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/09:20:47
13745	MGS	01-363/09:33:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/09:20:47
13746	MGS	01-363/09:33:05		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/09:20:48
13747	MGS	01-363/09:33:05		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/09:20:48
13748	MGS	01-363/09:47:37	45	NOTE: Transmitter Off in 15 minutes		
13749	MGS	01-363/09:55:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/09:42:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13750	MGS	01-363/09:55:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/09:42:48
13751	MGS	01-363/10:00:37	45	Range Modulation Off		
13752	MGS	01-363/10:02:37	45	Transmitter Off		
13753	MGS	01-363/10:05:07		NOTE: Start Block (SSRMGR)		01-363/09:52:50
13754	MGS	01-363/10:05:07		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-363/09:52:50
13755	MGS	01-363/10:05:08		SSR 1B Data Enable	CSD1BE	01-363/09:52:51
13756	MGS	01-363/10:05:08		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-363/09:52:51
13757	MGS	01-363/10:17:48		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/10:05:32
13758	MGS	01-363/10:19:36		NOTE: Start Block (MAP_PB_ODY)		01-363/10:07:19
13759	MGS	01-363/10:19:37		: 00:23:00, 01:36:41, FALSE, FALSE, FALSE, 00:01:15, 00:07:18, 01:21:07, 00:07:00	AEMINI	01-363/10:07:20
13760	MGS	01-363/10:19:37		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/10:07:20
13761	MGS	01-363/10:19:37		NOTE: Start EVP data return script		01-363/10:07:20
13762	MGS	01-363/10:19:38		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-363T10:48:53.000	AEMPBI	01-363/10:07:21
13763	MGS	01-363/10:22:48		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/10:10:31
13764	MGS	01-363/10:22:48		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8480000, DUR=00:17:40		01-363/10:10:31
13765	MGS	01-363/10:22:48		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-363/10:10:31
13766	MGS	01-363/10:22:48		: 00:08:40, FALSE	RDSCII	01-363/10:10:31
13767	MGS	01-363/10:22:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/10:10:31
13768	MGS	01-363/10:22:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/10:10:31
13769	MGS	01-363/10:22:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/10:10:31
13770	MGS	01-363/10:22:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/10:10:31
13771	MGS	01-363/10:22:48	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13772	MGS	01-363/10:22:48	43	NOTE: Carrier Only -- No Telemetry Modulation		
13773	MGS	01-363/10:22:48	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13774	MGS	01-363/10:22:48	45	NOTE: Carrier Only -- No Telemetry Modulation		
13775	MGS	01-363/10:25:00	63	Begin Pre-Cal		
13776	MGS	01-363/10:25:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
13777	MGS	01-363/10:25:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
13778	MGS	01-363/10:25:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
13779	MGS	01-363/10:25:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
13780	MGS	01-363/10:25:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
13781	MGS	01-363/10:25:00	63	Config: TGC: DEST=37		
13782	MGS	01-363/10:25:00	63	Config: TGC: BAND=X, BR=42666.666667		
13783	MGS	01-363/10:25:00	63	Config: FSS: CH=2, PRI_FL=10000		
13784	MGS	01-363/10:25:00	63	Config: RSR		
13785	MGS	01-363/10:25:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
13786	MGS	01-363/10:25:00	63	Config: BVR		
13787	MGS	01-363/10:25:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
13788	MGS	01-363/10:25:00	63	Config: MDA: SMPL=0.1		
13789	MGS	01-363/10:25:00		NOTE: Enter Planetary Atmosphere 12558		01-363/10:12:43
13790	MGS	01-363/10:26:47		NOTE: Apoapsis 12558 -		01-363/10:14:30
13791	MGS	01-363/10:28:36		SSR 1A Data Disable	CSD1AX	01-363/10:16:19
13792	MGS	01-363/10:28:36		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-363/10:16:19
13793	MGS	01-363/10:28:37		NOTE: End Block (SSRMGR)		01-363/10:16:20
13794	MGS	01-363/10:29:36		NOTE: Enter Solar Eclipse 12558		01-363/10:17:20
13795	MGS	01-363/10:29:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/10:17:20
13796	MGS	01-363/10:30:56		NOTE: Enter Earth Occultation 12558		01-363/10:18:39
13797	MGS	01-363/10:30:56	43	NOTE: Loss Of X-Band Signal		
13798	MGS	01-363/10:30:56	45	NOTE: Loss Of X-Band Signal		
13799	MGS	01-363/10:31:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/10:19:11
13800	MGS	01-363/10:31:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/10:19:11
13801	MGS	01-363/10:31:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/10:19:11
13802	MGS	01-363/10:31:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/10:19:11
13803	MGS	01-363/10:31:29		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/10:19:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13804	MGS	01-363/10:31:29		NOTE: End EVP script		01-363/10:19:13
13805	MGS	01-363/10:31:30		NOTE: End Block (MAP_RT)		01-363/10:19:14
13806	MGS	01-363/10:31:33		NOTE: End fixed Sub-Reflector for Radio Science		01-363/10:19:17
13807	MGS	01-363/10:33:40	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
13808	MGS	01-363/10:35:41	45	Range Modulation On: SUP=3.0dB		
13809	MGS	01-363/10:36:41	45	Begin Ranging Acquisition		
13810	MGS	01-363/10:52:37		: 01:36:41	RPAONX	01-363/10:40:20
13811	MGS	01-363/10:52:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/10:40:20
13812	MGS	01-363/10:54:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/10:41:48
13813	MGS	01-363/10:54:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/10:41:48
13814	MGS	01-363/10:54:09		Command the PSE with included data word: 3990	SWPSEL	01-363/10:41:52
13815	MGS	01-363/10:54:10		Set eclipse egress script address: 0158	SWSEES	01-363/10:41:53
13816	MGS	01-363/10:54:22		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/10:42:05
13817	MGS	01-363/10:54:29		NOTE: Exit Earth Occultation 12558		01-363/10:42:12
13818	MGS	01-363/10:54:29	43	Acquisition Of X-Band Signal		
13819	MGS	01-363/10:54:29	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13820	MGS	01-363/10:54:29	45	Acquisition Of X-Band Signal		
13821	MGS	01-363/10:54:29	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13822	MGS	01-363/10:58:14	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13823	MGS	01-363/10:58:14	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13824	MGS	01-363/11:00:00	45	NOTE: Transmitter Off in 15 minutes		
13825	MGS	01-363/11:00:43		NOTE: Exit Planetary Atmosphere 12558		01-363/10:48:26
13826	MGS	01-363/11:01:10		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:17:29	AEMPB	01-363/10:48:53
13827	MGS	01-363/11:01:10		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-363/10:48:53
13828	MGS	01-363/11:01:10		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-363/10:48:53
13829	MGS	01-363/11:01:11		SSR 1A Data Enable	CSD1AE	01-363/10:48:54
13830	MGS	01-363/11:01:11		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-363/10:48:54
13831	MGS	01-363/11:01:11	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13832	MGS	01-363/11:01:11	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13833	MGS	01-363/11:09:53		NOTE: Exit Solar Eclipse 12558		01-363/10:57:36
13834	MGS	01-363/11:13:00	45	Range Modulation Off		
13835	MGS	01-363/11:15:00	45	Transmitter Off		
13836	MGS	01-363/11:15:00	54	Begin Pre-Cal		
13837	MGS	01-363/11:15:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
13838	MGS	01-363/11:15:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
13839	MGS	01-363/11:15:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
13840	MGS	01-363/11:15:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
13841	MGS	01-363/11:15:00	54	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
13842	MGS	01-363/11:15:00	54	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
13843	MGS	01-363/11:15:00	54	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
13844	MGS	01-363/11:15:00	54	Config: TGC: DEST=37		
13845	MGS	01-363/11:15:00	54	Config: TGC: BAND=X, BR=8000.000000		
13846	MGS	01-363/11:15:00	54	Config: FSS: CH=2, PRI_FL=10000		
13847	MGS	01-363/11:15:00	54	Config: RSR		
13848	MGS	01-363/11:15:00	54	Config: TXL		
13849	MGS	01-363/11:15:00	54	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
13850	MGS	01-363/11:15:00	54	Config: BVR		
13851	MGS	01-363/11:15:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
13852	MGS	01-363/11:15:00	54	Config: MDA: SMPL=0.1		
13853	MGS	01-363/11:15:00	54	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
13854	MGS	01-363/11:15:00	54	Config: SRA: HIGH=4, LOW=14, SERV=D		
13855	MGS	01-363/11:15:00	54	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
13856	MGS	01-363/11:20:00	45	End Tracking		
13857	MGS	01-363/11:25:41		NOTE: Periapsis 12559 ----------		01-363/11:13:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13858	MGS	01-363/11:34:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/11:22:35
13859	MGS	01-363/11:34:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/11:22:35
13860	MGS	01-363/11:34:53		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/11:22:36
13861	MGS	01-363/11:34:53		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/11:22:36
13862	MGS	01-363/11:35:00	45	End Post-Cal		
13863	MGS	01-363/11:39:33	43	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13864	MGS	01-363/11:55:00	63	Begin Tracking		
13865	MGS	01-363/11:55:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13866	MGS	01-363/11:56:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/11:44:36
13867	MGS	01-363/11:56:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/11:44:36
13868	MGS	01-363/12:07:05	43	NOTE: Below Uplink Interlock Limit		
13869	MGS	01-363/12:08:21	63	NOTE: Above Uplink Interlock Limit		
13870	MGS	01-363/12:11:49		SSR 1A Data Disable	CSD1AX	01-363/11:59:32
13871	MGS	01-363/12:11:49		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-363/11:59:32
13872	MGS	01-363/12:11:49		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-363/11:59:32
13873	MGS	01-363/12:11:49	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13874	MGS	01-363/12:11:49	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13875	MGS	01-363/12:12:16		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-363/11:59:59
13876	MGS	01-363/12:15:00	43	End Tracking		
13877	MGS	01-363/12:15:00	54	Begin Tracking		
13878	MGS	01-363/12:15:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13879	MGS	01-363/12:17:23		NOTE: Start Block (MAP_RT)		01-363/12:05:06
13880	MGS	01-363/12:17:24		: 00:23:00, 01:36:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:58, 01:17:46, 00:08:40	AEMINI	01-363/12:05:07
13881	MGS	01-363/12:17:24		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/12:05:07
13882	MGS	01-363/12:17:24		NOTE: Start EVP data return script		01-363/12:05:07
13883	MGS	01-363/12:17:25		: SE_2A, RTM, 01:17:45, MRC, 2001-363T12:48:21.000	AEMRTI	01-363/12:05:08
13884	MGS	01-363/12:22:48		NOTE: Enter Planetary Atmosphere 12559		01-363/12:10:30
13885	MGS	01-363/12:24:25		NOTE: Apoapsis 12559 -		01-363/12:12:08
13886	MGS	01-363/12:27:24		NOTE: Enter Solar Eclipse 12559		01-363/12:15:07
13887	MGS	01-363/12:27:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/12:15:07
13888	MGS	01-363/12:28:42		NOTE: Enter Earth Occultation 12559		01-363/12:16:25
13889	MGS	01-363/12:28:42	54	NOTE: Loss Of X-Band Signal		
13890	MGS	01-363/12:28:42	63	NOTE: Loss Of X-Band Signal		
13891	MGS	01-363/12:29:18		NOTE: End EVP script		01-363/12:17:01
13892	MGS	01-363/12:29:18		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/12:17:01
13893	MGS	01-363/12:29:19		NOTE: End Block (MAP_PB_ODY)		01-363/12:17:02
13894	MGS	01-363/12:30:00	43	End Post-Cal		
13895	MGS	01-363/12:31:28	54	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
13896	MGS	01-363/12:33:28	54	Range Modulation On: SUP=3.0dB		
13897	MGS	01-363/12:34:28	54	Begin Ranging Acquisition		
13898	MGS	01-363/12:46:39		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/12:34:22
13899	MGS	01-363/12:50:24		: 01:36:40	RPAONX	01-363/12:38:07
13900	MGS	01-363/12:50:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/12:38:07
13901	MGS	01-363/12:51:39		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/12:39:22
13902	MGS	01-363/12:51:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/12:39:22
13903	MGS	01-363/12:51:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/12:39:22
13904	MGS	01-363/12:51:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/12:39:22
13905	MGS	01-363/12:51:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/12:39:22
13906	MGS	01-363/12:51:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/12:39:36
13907	MGS	01-363/12:51:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/12:39:36
13908	MGS	01-363/12:51:58		Set eclipse egress script address: 019A	SWSEES	01-363/12:39:41
13909	MGS	01-363/12:52:17		NOTE: Exit Earth Occultation 12559		01-363/12:40:00
13910	MGS	01-363/12:52:17	54	Acquisition Of X-Band Signal		
13911	MGS	01-363/12:52:17	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13912	MGS	01-363/12:52:17	54	NOTE: Carrier Only -- No Telemetry Modulation		
13913	MGS	01-363/12:52:17	63	Acquisition Of X-Band Signal		
13914	MGS	01-363/12:52:17	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13915	MGS	01-363/12:52:17	63	NOTE: Carrier Only -- No Telemetry Modulation		
13916	MGS	01-363/12:58:31		NOTE: Exit Planetary Atmosphere 12559		01-363/12:46:13
13917	MGS	01-363/13:00:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/12:48:20
13918	MGS	01-363/13:00:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/12:48:20
13919	MGS	01-363/13:00:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/12:48:20
13920	MGS	01-363/13:00:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/12:48:20
13921	MGS	01-363/13:00:37	54	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13922	MGS	01-363/13:00:37	63	Acquire D/L: X/16, 3-Way/54, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13923	MGS	01-363/13:00:38		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/12:48:21
13924	MGS	01-363/13:00:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/12:48:21
13925	MGS	01-363/13:00:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/12:48:21
13926	MGS	01-363/13:00:38	54	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13927	MGS	01-363/13:00:38	63	D/L Change: X/16, 3-Way/54, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13928	MGS	01-363/13:00:42		NOTE: End fixed Sub-Reflector for Radio Science		01-363/12:48:25
13929	MGS	01-363/13:07:40		NOTE: Exit Solar Eclipse 12559		01-363/12:55:23
13930	MGS	01-363/13:23:22		NOTE: Periapsis 12560 ----------		01-363/13:11:05
13931	MGS	01-363/13:28:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/13:16:22
13932	MGS	01-363/13:28:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/13:16:22
13933	MGS	01-363/13:28:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/13:16:23
13934	MGS	01-363/13:28:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/13:16:23
13935	MGS	01-363/13:43:07	54	NOTE: Transmitter Off in 15 minutes		
13936	MGS	01-363/13:50:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/13:38:23
13937	MGS	01-363/13:50:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/13:38:23
13938	MGS	01-363/13:56:08	54	Range Modulation Off		
13939	MGS	01-363/13:58:07	54	Transmitter Off		
13940	MGS	01-363/14:13:23		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/14:01:06
13941	MGS	01-363/14:15:10		NOTE: Start EVP data return script		01-363/14:02:52
13942	MGS	01-363/14:18:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/14:06:06
13943	MGS	01-363/14:18:24		: 00:08:40, FALSE	RDSCII	01-363/14:06:06
13944	MGS	01-363/14:18:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/14:06:06
13945	MGS	01-363/14:18:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/14:06:06
13946	MGS	01-363/14:18:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/14:06:06
13947	MGS	01-363/14:18:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/14:06:06
13948	MGS	01-363/14:18:24	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13949	MGS	01-363/14:18:24	54	NOTE: Carrier Only -- No Telemetry Modulation		
13950	MGS	01-363/14:18:24	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13951	MGS	01-363/14:18:24	63	NOTE: Carrier Only -- No Telemetry Modulation		
13952	MGS	01-363/14:20:32		NOTE: Enter Planetary Atmosphere 12560		01-363/14:08:15
13953	MGS	01-363/14:21:52		NOTE: Apoapsis 12560 -		01-363/14:09:35
13954	MGS	01-363/14:25:10		NOTE: Enter Solar Eclipse 12560		01-363/14:12:52
13955	MGS	01-363/14:25:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/14:12:52
13956	MGS	01-363/14:26:27		NOTE: Enter Earth Occultation 12560		01-363/14:14:10
13957	MGS	01-363/14:26:27	54	NOTE: Loss Of X-Band Signal		
13958	MGS	01-363/14:26:27	63	NOTE: Loss Of X-Band Signal		
13959	MGS	01-363/14:27:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/14:14:46
13960	MGS	01-363/14:27:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/14:14:46
13961	MGS	01-363/14:27:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/14:14:46
13962	MGS	01-363/14:27:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/14:14:46
13963	MGS	01-363/14:27:04		NOTE: End EVP script		01-363/14:14:47
13964	MGS	01-363/14:27:05		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/14:14:47
13965	MGS	01-363/14:27:08		NOTE: End fixed Sub-Reflector for Radio Science		01-363/14:14:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
13966	MGS	01-363/14:29:14	54	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
13967	MGS	01-363/14:31:15	54	Range Modulation On: SUP=3.0dB		
13968	MGS	01-363/14:32:15	54	Begin Ranging Acquisition		
13969	MGS	01-363/14:44:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/14:32:07
13970	MGS	01-363/14:48:10		: 01:36:40	RPAONX	01-363/14:35:52
13971	MGS	01-363/14:48:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/14:35:52
13972	MGS	01-363/14:49:25		: 00:00:30, 00:08:58, FALSE	RDSCIE	01-363/14:37:07
13973	MGS	01-363/14:49:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/14:37:07
13974	MGS	01-363/14:49:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/14:37:07
13975	MGS	01-363/14:49:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/14:37:07
13976	MGS	01-363/14:49:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/14:37:07
13977	MGS	01-363/14:49:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/14:37:23
13978	MGS	01-363/14:49:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/14:37:23
13979	MGS	01-363/14:49:46		Set eclipse egress script address: 01DC	SWSEES	01-363/14:37:28
13980	MGS	01-363/14:49:55		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/14:37:37
13981	MGS	01-363/14:50:04		NOTE: Exit Earth Occultation 12560		01-363/14:37:47
13982	MGS	01-363/14:50:04	54	Acquisition Of X-Band Signal		
13983	MGS	01-363/14:50:04	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13984	MGS	01-363/14:50:04	54	NOTE: Carrier Only -- No Telemetry Modulation		
13985	MGS	01-363/14:50:04	63	Acquisition Of X-Band Signal		
13986	MGS	01-363/14:50:04	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
13987	MGS	01-363/14:50:04	63	NOTE: Carrier Only -- No Telemetry Modulation		
13988	MGS	01-363/14:56:18		NOTE: Exit Planetary Atmosphere 12560		01-363/14:44:00
13989	MGS	01-363/14:58:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/14:46:05
13990	MGS	01-363/14:58:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/14:46:05
13991	MGS	01-363/14:58:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/14:46:05
13992	MGS	01-363/14:58:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/14:46:05
13993	MGS	01-363/14:58:23	54	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13994	MGS	01-363/14:58:23	63	Acquire D/L: X/16, 3-Way/54, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13995	MGS	01-363/14:58:24		: RTM, MRC, 01:17:45, S&E_2A, FALSE, 00:08:41	AEMRT	01-363/14:46:06
13996	MGS	01-363/14:58:24		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/14:46:06
13997	MGS	01-363/14:58:24		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/14:46:06
13998	MGS	01-363/14:58:24	54	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
13999	MGS	01-363/14:58:24	63	D/L Change: X/16, 3-Way/54, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14000	MGS	01-363/14:58:27		NOTE: End fixed Sub-Reflector for Radio Science		01-363/14:46:10
14001	MGS	01-363/15:05:26		NOTE: Exit Solar Eclipse 12560		01-363/14:53:08
14002	MGS	01-363/15:21:09		NOTE: Periapsis 12561 ----------		01-363/15:08:51
14003	MGS	01-363/15:26:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/15:14:07
14004	MGS	01-363/15:26:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/15:14:07
14005	MGS	01-363/15:26:26		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/15:14:08
14006	MGS	01-363/15:26:26		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/15:14:08
14007	MGS	01-363/15:40:49	54	NOTE: Transmitter Off in 15 minutes		
14008	MGS	01-363/15:48:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/15:36:08
14009	MGS	01-363/15:48:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/15:36:08
14010	MGS	01-363/15:53:50	54	Range Modulation Off		
14011	MGS	01-363/15:55:49	54	Transmitter Off		
14012	MGS	01-363/15:58:18		NOTE: Start Block (SSRMGR)		01-363/15:46:00
14013	MGS	01-363/15:58:18		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-363/15:46:00
14014	MGS	01-363/15:58:19		SSR 1A Data Enable	CSD1AE	01-363/15:46:01
14015	MGS	01-363/15:58:19		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-363/15:46:01
14016	MGS	01-363/16:11:08		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/15:58:51
14017	MGS	01-363/16:12:52		NOTE: Start Block (MAP_PB_ODY)		01-363/16:00:34
14018	MGS	01-363/16:12:53		: 00:23:00, 01:36:41, FALSE, FALSE, FALSE, 00:01:15, 00:07:18, 01:21:07, 00:07:00	AEMINI	01-363/16:00:35
14019	MGS	01-363/16:12:53		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/16:00:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14020	MGS	01-363/16:12:53		NOTE: Start EVP data return script		01-363/16:00:35
14021	MGS	01-363/16:12:54		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-363T16:42:09.000	AEMPBI	01-363/16:00:36
14022	MGS	01-363/16:16:09		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/16:03:51
14023	MGS	01-363/16:16:09		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8560000, DUR=00:17:50		01-363/16:03:51
14024	MGS	01-363/16:16:09		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-363/16:03:51
14025	MGS	01-363/16:16:09		: 00:08:40, FALSE	RDSCII	01-363/16:03:51
14026	MGS	01-363/16:16:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/16:03:51
14027	MGS	01-363/16:16:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/16:03:51
14028	MGS	01-363/16:16:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/16:03:51
14029	MGS	01-363/16:16:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/16:03:51
14030	MGS	01-363/16:16:09	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14031	MGS	01-363/16:16:09	54	NOTE: Carrier Only -- No Telemetry Modulation		
14032	MGS	01-363/16:16:09	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14033	MGS	01-363/16:16:09	63	NOTE: Carrier Only -- No Telemetry Modulation		
14034	MGS	01-363/16:18:15		NOTE: Enter Planetary Atmosphere 12561		01-363/16:05:57
14035	MGS	01-363/16:19:38		NOTE: Apoapsis 12561 -		01-363/16:07:20
14036	MGS	01-363/16:21:52		SSR 1B Data Disable	CSD1BX	01-363/16:09:34
14037	MGS	01-363/16:21:52		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-363/16:09:34
14038	MGS	01-363/16:21:53		NOTE: End Block (SSRMGR)		01-363/16:09:35
14039	MGS	01-363/16:22:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/16:10:35
14040	MGS	01-363/16:22:53		NOTE: Enter Solar Eclipse 12561		01-363/16:10:35
14041	MGS	01-363/16:24:10		NOTE: Enter Earth Occultation 12561		01-363/16:11:52
14042	MGS	01-363/16:24:10	54	NOTE: Loss Of X-Band Signal		
14043	MGS	01-363/16:24:10	63	NOTE: Loss Of X-Band Signal		
14044	MGS	01-363/16:24:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/16:12:31
14045	MGS	01-363/16:24:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/16:12:31
14046	MGS	01-363/16:24:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/16:12:31
14047	MGS	01-363/16:24:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/16:12:31
14048	MGS	01-363/16:24:49		NOTE: End EVP script		01-363/16:12:32
14049	MGS	01-363/16:24:50		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/16:12:32
14050	MGS	01-363/16:24:50		NOTE: End Block (MAP_RT)		01-363/16:12:33
14051	MGS	01-363/16:24:53		NOTE: End fixed Sub-Reflector for Radio Science		01-363/16:12:36
14052	MGS	01-363/16:26:59	54	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14053	MGS	01-363/16:28:59	54	Range Modulation On: SUP=3.0dB		
14054	MGS	01-363/16:29:59	54	Begin Ranging Acquisition		
14055	MGS	01-363/16:45:53		: 01:36:41	RPAONX	01-363/16:33:35
14056	MGS	01-363/16:45:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/16:33:35
14057	MGS	01-363/16:47:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/16:35:08
14058	MGS	01-363/16:47:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/16:35:08
14059	MGS	01-363/16:47:30		Command the PSE with included data word: 3990	SWPSEL	01-363/16:35:12
14060	MGS	01-363/16:47:31		Set eclipse egress script address: 0158	SWSEES	01-363/16:35:13
14061	MGS	01-363/16:47:38		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/16:35:20
14062	MGS	01-363/16:47:49		NOTE: Exit Earth Occultation 12561		01-363/16:35:31
14063	MGS	01-363/16:47:49	54	Acquisition Of X-Band Signal		
14064	MGS	01-363/16:47:49	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14065	MGS	01-363/16:47:49	63	Acquisition Of X-Band Signal		
14066	MGS	01-363/16:47:49	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14067	MGS	01-363/16:51:34	54	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14068	MGS	01-363/16:51:34	63	Acquire D/L: X/16, 3-Way/54, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14069	MGS	01-363/16:54:02		NOTE: Exit Planetary Atmosphere 12561		01-363/16:41:45
14070	MGS	01-363/16:54:26		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:17:29	AEMPB	01-363/16:42:08
14071	MGS	01-363/16:54:26		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-363/16:42:08
14072	MGS	01-363/16:54:26		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-363/16:42:08
14073	MGS	01-363/16:54:27		SSR 1B Data Enable	CSD1BE	01-363/16:42:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14074	MGS	01-363/16:54:27		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-363/16:42:09
14075	MGS	01-363/16:54:27	54	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14076	MGS	01-363/16:54:27	63	D/L Change: X/16, 3-Way/54, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14077	MGS	01-363/16:55:00	54	NOTE: Transmitter Off in 15 minutes		
14078	MGS	01-363/17:03:09		NOTE: Exit Solar Eclipse 12561		01-363/16:50:51
14079	MGS	01-363/17:08:00	54	Range Modulation Off		
14080	MGS	01-363/17:10:00	54	Transmitter Off		
14081	MGS	01-363/17:15:00	54	End Tracking		
14082	MGS	01-363/17:18:52		NOTE: Periapsis 12562 ----------		01-363/17:06:34
14083	MGS	01-363/17:28:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/17:15:50
14084	MGS	01-363/17:28:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/17:15:50
14085	MGS	01-363/17:28:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/17:15:51
14086	MGS	01-363/17:28:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/17:15:51
14087	MGS	01-363/17:30:00	54	End Post-Cal		
14088	MGS	01-363/17:34:35	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14089	MGS	01-363/17:50:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/17:37:51
14090	MGS	01-363/17:50:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/17:37:51
14091	MGS	01-363/18:05:05		SSR 1B Data Disable	CSD1BX	01-363/17:52:47
14092	MGS	01-363/18:05:05		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-363/17:52:47
14093	MGS	01-363/18:05:05		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-363/17:52:47
14094	MGS	01-363/18:05:05	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14095	MGS	01-363/18:10:34		NOTE: Start Block (MAP_RT)		01-363/17:58:16
14096	MGS	01-363/18:10:35		: 00:23:11, 01:36:18, FALSE, TRUE, FALSE, 00:01:15, 00:08:53, 01:17:35, 00:08:34	AEMINI	01-363/17:58:17
14097	MGS	01-363/18:10:35		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/17:58:17
14098	MGS	01-363/18:10:35		NOTE: Start EVP data return script		01-363/17:58:17
14099	MGS	01-363/18:10:36		: SE_2A, RTM, 01:17:34, MRC, 2001-363T18:41:38.000	AEMRTI	01-363/17:58:18
14100	MGS	01-363/18:15:58		NOTE: Enter Planetary Atmosphere 12562		01-363/18:03:40
14101	MGS	01-363/18:17:28		NOTE: Apoapsis 12562 -		01-363/18:05:10
14102	MGS	01-363/18:20:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/18:08:17
14103	MGS	01-363/18:20:35		NOTE: Enter Solar Eclipse 12562		01-363/18:08:17
14104	MGS	01-363/18:21:53		NOTE: Enter Earth Occultation 12562		01-363/18:09:35
14105	MGS	01-363/18:21:53	63	NOTE: Loss Of X-Band Signal		
14106	MGS	01-363/18:22:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/18:10:16
14107	MGS	01-363/18:22:34		NOTE: End EVP script		01-363/18:10:16
14108	MGS	01-363/18:22:35		NOTE: End Block (MAP_PB_ODY)		01-363/18:10:17
14109	MGS	01-363/18:40:01		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/18:27:43
14110	MGS	01-363/18:43:46		: 01:36:18	RPAONX	01-363/18:31:28
14111	MGS	01-363/18:43:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/18:31:28
14112	MGS	01-363/18:45:01		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-363/18:32:43
14113	MGS	01-363/18:45:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/18:32:43
14114	MGS	01-363/18:45:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/18:32:43
14115	MGS	01-363/18:45:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/18:32:43
14116	MGS	01-363/18:45:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/18:32:43
14117	MGS	01-363/18:45:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/18:32:51
14118	MGS	01-363/18:45:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/18:32:51
14119	MGS	01-363/18:45:14		Set eclipse egress script address: 019A	SWSEES	01-363/18:32:56
14120	MGS	01-363/18:45:32		NOTE: Exit Earth Occultation 12562		01-363/18:33:14
14121	MGS	01-363/18:45:32	63	Acquisition Of X-Band Signal		
14122	MGS	01-363/18:45:32	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14123	MGS	01-363/18:45:32	63	NOTE: Carrier Only -- No Telemetry Modulation		
14124	MGS	01-363/18:51:45		NOTE: Exit Planetary Atmosphere 12562		01-363/18:39:27
14125	MGS	01-363/18:53:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/18:41:36
14126	MGS	01-363/18:53:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/18:41:36
14127	MGS	01-363/18:53:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/18:41:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14128	MGS	01-363/18:53:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/18:41:36
14129	MGS	01-363/18:53:54	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14130	MGS	01-363/18:53:55		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-363/18:41:37
14131	MGS	01-363/18:53:55		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/18:41:37
14132	MGS	01-363/18:53:55		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/18:41:37
14133	MGS	01-363/18:53:55	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14134	MGS	01-363/18:53:59		NOTE: End fixed Sub-Reflector for Radio Science		01-363/18:41:41
14135	MGS	01-363/19:00:51		NOTE: Exit Solar Eclipse 12562		01-363/18:48:33
14136	MGS	01-363/19:16:21		NOTE: Periapsis 12563 ----------		01-363/19:04:03
14137	MGS	01-363/19:21:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/19:09:32
14138	MGS	01-363/19:21:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/19:09:32
14139	MGS	01-363/19:21:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/19:09:33
14140	MGS	01-363/19:21:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/19:09:33
14141	MGS	01-363/19:40:00	15	Begin Pre-Cal		
14142	MGS	01-363/19:40:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
14143	MGS	01-363/19:40:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
14144	MGS	01-363/19:40:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
14145	MGS	01-363/19:40:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
14146	MGS	01-363/19:40:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
14147	MGS	01-363/19:40:00	15	Config: TGC: DEST=37		
14148	MGS	01-363/19:40:00	15	Config: TGC: BAND=X, BR=40000.000000		
14149	MGS	01-363/19:40:00	15	Config: FSS: CH=2, PRI_FL=10000		
14150	MGS	01-363/19:40:00	15	Config: RSR		
14151	MGS	01-363/19:40:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
14152	MGS	01-363/19:40:00	15	Config: BVR		
14153	MGS	01-363/19:40:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
14154	MGS	01-363/19:40:00	15	Config: MDA: SMPL=0.1		
14155	MGS	01-363/19:43:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/19:31:33
14156	MGS	01-363/19:43:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/19:31:33
14157	MGS	01-363/20:06:29		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/19:54:11
14158	MGS	01-363/20:08:18		NOTE: Start EVP data return script		01-363/19:56:00
14159	MGS	01-363/20:11:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/19:59:11
14160	MGS	01-363/20:11:29		: 00:08:34, FALSE	RDSCII	01-363/19:59:11
14161	MGS	01-363/20:11:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/19:59:11
14162	MGS	01-363/20:11:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/19:59:11
14163	MGS	01-363/20:11:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/19:59:11
14164	MGS	01-363/20:11:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/19:59:11
14165	MGS	01-363/20:11:29	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14166	MGS	01-363/20:11:29	63	NOTE: Carrier Only -- No Telemetry Modulation		
14167	MGS	01-363/20:13:41		NOTE: Enter Planetary Atmosphere 12563		01-363/20:01:23
14168	MGS	01-363/20:14:56		NOTE: Apoapsis 12563 -		01-363/20:02:38
14169	MGS	01-363/20:18:18		NOTE: Enter Solar Eclipse 12563		01-363/20:06:00
14170	MGS	01-363/20:18:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/20:06:00
14171	MGS	01-363/20:19:35		NOTE: Enter Earth Occultation 12563		01-363/20:07:16
14172	MGS	01-363/20:19:35	63	NOTE: Loss Of X-Band Signal		
14173	MGS	01-363/20:20:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/20:07:45
14174	MGS	01-363/20:20:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/20:07:45
14175	MGS	01-363/20:20:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/20:07:45
14176	MGS	01-363/20:20:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/20:07:45
14177	MGS	01-363/20:20:04		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/20:07:46
14178	MGS	01-363/20:20:04		NOTE: End EVP script		01-363/20:07:46
14179	MGS	01-363/20:20:08		NOTE: End fixed Sub-Reflector for Radio Science		01-363/20:07:50
14180	MGS	01-363/20:37:45		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/20:25:26
14181	MGS	01-363/20:41:30		: 01:36:18	RPAONX	01-363/20:29:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14182	MGS	01-363/20:41:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/20:29:11
14183	MGS	01-363/20:42:45		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-363/20:30:26
14184	MGS	01-363/20:42:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/20:30:26
14185	MGS	01-363/20:42:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/20:30:26
14186	MGS	01-363/20:42:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/20:30:26
14187	MGS	01-363/20:42:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/20:30:26
14188	MGS	01-363/20:42:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/20:30:33
14189	MGS	01-363/20:42:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/20:30:33
14190	MGS	01-363/20:42:57		Set eclipse egress script address: 01DC	SWSEES	01-363/20:30:38
14191	MGS	01-363/20:43:15		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/20:30:56
14192	MGS	01-363/20:43:15		NOTE: Exit Earth Occultation 12563		01-363/20:30:57
14193	MGS	01-363/20:43:15	63	Acquisition Of X-Band Signal		
14194	MGS	01-363/20:43:15	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14195	MGS	01-363/20:43:15	63	NOTE: Carrier Only -- No Telemetry Modulation		
14196	MGS	01-363/20:49:27		NOTE: Exit Planetary Atmosphere 12563		01-363/20:37:09
14197	MGS	01-363/20:51:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/20:39:19
14198	MGS	01-363/20:51:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/20:39:19
14199	MGS	01-363/20:51:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/20:39:19
14200	MGS	01-363/20:51:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/20:39:19
14201	MGS	01-363/20:51:38	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14202	MGS	01-363/20:51:39		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-363/20:39:20
14203	MGS	01-363/20:51:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-363/20:39:20
14204	MGS	01-363/20:51:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-363/20:39:20
14205	MGS	01-363/20:51:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14206	MGS	01-363/20:51:43		NOTE: End fixed Sub-Reflector for Radio Science		01-363/20:39:24
14207	MGS	01-363/20:58:34		NOTE: Exit Solar Eclipse 12563		01-363/20:46:15
14208	MGS	01-363/21:10:00	15	Begin Tracking		
14209	MGS	01-363/21:10:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14210	MGS	01-363/21:13:51		NOTE: Periapsis 12564 ----------		01-363/21:01:32
14211	MGS	01-363/21:19:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/21:07:14
14212	MGS	01-363/21:19:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/21:07:14
14213	MGS	01-363/21:19:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/21:07:15
14214	MGS	01-363/21:19:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/21:07:15
14215	MGS	01-363/21:30:00	63	End Tracking		
14216	MGS	01-363/21:41:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/21:29:15
14217	MGS	01-363/21:41:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/21:29:15
14218	MGS	01-363/21:45:00	63	End Post-Cal		
14219	MGS	01-363/21:51:37		NOTE: Start Block (SSRMGR)		01-363/21:39:18
14220	MGS	01-363/21:51:37		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-363/21:39:18
14221	MGS	01-363/21:51:38		SSR 1B Data Enable	CSD1BE	01-363/21:39:19
14222	MGS	01-363/21:51:38		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-363/21:39:19
14223	MGS	01-363/22:04:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-363/21:51:54
14224	MGS	01-363/22:06:02		NOTE: Start Block (MAP_PB_ODY)		01-363/21:53:43
14225	MGS	01-363/22:06:03		: 00:23:11, 01:36:19, FALSE, FALSE, FALSE, 00:01:15, 00:07:13, 01:20:56, 00:06:54	AEMINI	01-363/21:53:44
14226	MGS	01-363/22:06:03		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/21:53:44
14227	MGS	01-363/22:06:03		NOTE: Start EVP data return script		01-363/21:53:44
14228	MGS	01-363/22:06:04		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-363T22:35:24.000	AEMPBI	01-363/21:53:45
14229	MGS	01-363/22:09:13		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-363/21:56:54
14230	MGS	01-363/22:09:13		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8440000, DUR=00:17:35		01-363/21:56:54
14231	MGS	01-363/22:09:13		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-363/21:56:54
14232	MGS	01-363/22:09:13		: 00:08:34, FALSE	RDSCII	01-363/21:56:54
14233	MGS	01-363/22:09:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-363/21:56:54
14234	MGS	01-363/22:09:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-363/21:56:54
14235	MGS	01-363/22:09:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-363/21:56:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14236	MGS	01-363/22:09:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-363/21:56:54
14237	MGS	01-363/22:09:13	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14238	MGS	01-363/22:09:13	15	NOTE: Carrier Only -- No Telemetry Modulation		
14239	MGS	01-363/22:11:24		NOTE: Enter Planetary Atmosphere 12564		01-363/21:59:05
14240	MGS	01-363/22:12:34		NOTE: Apoapsis 12564 -		01-363/22:00:16
14241	MGS	01-363/22:15:03		SSR 1A Data Disable	CSD1AX	01-363/22:02:44
14242	MGS	01-363/22:15:03		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-363/22:02:44
14243	MGS	01-363/22:15:04		NOTE: End Block (SSRMGR)		01-363/22:02:45
14244	MGS	01-363/22:16:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-363/22:03:44
14245	MGS	01-363/22:16:03		NOTE: Enter Solar Eclipse 12564		01-363/22:03:44
14246	MGS	01-363/22:17:16		NOTE: Enter Earth Occultation 12564		01-363/22:04:57
14247	MGS	01-363/22:17:16	15	NOTE: Loss Of X-Band Signal		
14248	MGS	01-363/22:17:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-363/22:05:28
14249	MGS	01-363/22:17:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-363/22:05:28
14250	MGS	01-363/22:17:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-363/22:05:28
14251	MGS	01-363/22:17:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-363/22:05:28
14252	MGS	01-363/22:17:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-363/22:05:29
14253	MGS	01-363/22:17:48		NOTE: End EVP script		01-363/22:05:29
14254	MGS	01-363/22:17:49		NOTE: End Block (MAP_RT)		01-363/22:05:30
14255	MGS	01-363/22:17:52		NOTE: End fixed Sub-Reflector for Radio Science		01-363/22:05:33
14256	MGS	01-363/22:39:14		: 01:36:19	RPAONX	01-363/22:26:55
14257	MGS	01-363/22:39:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-363/22:26:55
14258	MGS	01-363/22:40:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-363/22:28:15
14259	MGS	01-363/22:40:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-363/22:28:15
14260	MGS	01-363/22:40:38		Command the PSE with included data word: 3990	SWPSEL	01-363/22:28:19
14261	MGS	01-363/22:40:39		Set eclipse egress script address: 0158	SWSEES	01-363/22:28:20
14262	MGS	01-363/22:40:59		Disables autonomous command to send eclipse ingress script	SWEISX	01-363/22:28:40
14263	MGS	01-363/22:41:01		NOTE: Exit Earth Occultation 12564		01-363/22:28:42
14264	MGS	01-363/22:41:01	15	Acquisition Of X-Band Signal		
14265	MGS	01-363/22:41:01	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14266	MGS	01-363/22:47:12		NOTE: Exit Planetary Atmosphere 12564		01-363/22:34:53
14267	MGS	01-363/22:47:42		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:17:12	AEMPB	01-363/22:35:23
14268	MGS	01-363/22:47:42		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-363/22:35:23
14269	MGS	01-363/22:47:42		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-363/22:35:23
14270	MGS	01-363/22:47:43		SSR 1A Data Enable	CSD1AE	01-363/22:35:24
14271	MGS	01-363/22:47:43		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-363/22:35:24
14272	MGS	01-363/22:47:43	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14273	MGS	01-363/22:56:19		NOTE: Exit Solar Eclipse 12564		01-363/22:44:00
14274	MGS	01-363/23:11:55		NOTE: Periapsis 12565 ----------		01-363/22:59:37
14275	MGS	01-363/23:21:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-363/23:08:59
14276	MGS	01-363/23:21:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-363/23:08:59
14277	MGS	01-363/23:21:19		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-363/23:09:00
14278	MGS	01-363/23:21:19		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-363/23:09:00
14279	MGS	01-363/23:43:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-363/23:31:00
14280	MGS	01-363/23:43:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-363/23:31:00
14281	MGS	01-363/23:58:21		SSR 1A Data Disable	CSD1AX	01-363/23:46:02
14282	MGS	01-363/23:58:21		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-363/23:46:02
14283	MGS	01-363/23:58:21		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-363/23:46:02
14284	MGS	01-363/23:58:21	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14285	MGS	01-364/00:00:00		Light Time: OWLT = 12:18, RTLT = 24:37		
14286	MGS	01-364/00:03:48		NOTE: Start Block (MAP_RT)		01-363/23:51:29
14287	MGS	01-364/00:03:49		: 00:23:11, 01:36:18, FALSE, TRUE, FALSE, 00:01:15, 00:08:53, 01:17:35, 00:08:34	AEMINI	01-363/23:51:30
14288	MGS	01-364/00:03:49		Enable sending eclipse ingress script when array power disappears	SWEISE	01-363/23:51:30
14289	MGS	01-364/00:03:49		NOTE: Start EVP data return script		01-363/23:51:30

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14290	MGS	01-364/00:03:50		: SE_2A, RTM, 01:17:34, MRC, 2001-364T00:34:51.000	AEMRTI	01-363/23:51:31
14291	MGS	01-364/00:09:08		NOTE: Enter Planetary Atmosphere 12565		01-363/23:56:49
14292	MGS	01-364/00:10:48		NOTE: Apoapsis 12565 -		01-363/23:58:29
14293	MGS	01-364/00:13:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/00:01:30
14294	MGS	01-364/00:13:49		NOTE: Enter Solar Eclipse 12565		01-364/00:01:30
14295	MGS	01-364/00:15:01		NOTE: Enter Earth Occultation 12565		01-364/00:02:42
14296	MGS	01-364/00:15:01	15	NOTE: Loss Of X-Band Signal		
14297	MGS	01-364/00:15:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/00:03:14
14298	MGS	01-364/00:15:33		NOTE: End EVP script		01-364/00:03:14
14299	MGS	01-364/00:15:34		NOTE: End Block (MAP_PB_ODY)		01-364/00:03:15
14300	MGS	01-364/00:33:16		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/00:20:56
14301	MGS	01-364/00:37:00		: 01:36:18	RPAONX	01-364/00:24:41
14302	MGS	01-364/00:37:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/00:24:41
14303	MGS	01-364/00:38:15		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/00:25:56
14304	MGS	01-364/00:38:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/00:25:56
14305	MGS	01-364/00:38:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/00:25:56
14306	MGS	01-364/00:38:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/00:25:56
14307	MGS	01-364/00:38:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/00:25:56
14308	MGS	01-364/00:38:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/00:26:00
14309	MGS	01-364/00:38:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/00:26:00
14310	MGS	01-364/00:38:24		Set eclipse egress script address: 019A	SWSEES	01-364/00:26:05
14311	MGS	01-364/00:38:48		NOTE: Exit Earth Occultation 12565		01-364/00:26:29
14312	MGS	01-364/00:38:48	15	Acquisition Of X-Band Signal		
14313	MGS	01-364/00:38:48	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14314	MGS	01-364/00:38:48	15	NOTE: Carrier Only -- No Telemetry Modulation		
14315	MGS	01-364/00:44:58		NOTE: Exit Planetary Atmosphere 12565		01-364/00:32:39
14316	MGS	01-364/00:47:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/00:34:49
14317	MGS	01-364/00:47:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/00:34:49
14318	MGS	01-364/00:47:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/00:34:49
14319	MGS	01-364/00:47:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/00:34:49
14320	MGS	01-364/00:47:08	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14321	MGS	01-364/00:47:09		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/00:34:50
14322	MGS	01-364/00:47:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/00:34:50
14323	MGS	01-364/00:47:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/00:34:50
14324	MGS	01-364/00:47:09	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14325	MGS	01-364/00:47:14		NOTE: End fixed Sub-Reflector for Radio Science		01-364/00:34:54
14326	MGS	01-364/00:54:06		NOTE: Exit Solar Eclipse 12565		01-364/00:41:47
14327	MGS	01-364/01:10:08		NOTE: Periapsis 12566 ----------		01-364/00:57:49
14328	MGS	01-364/01:15:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/01:02:46
14329	MGS	01-364/01:15:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/01:02:46
14330	MGS	01-364/01:15:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/01:02:47
14331	MGS	01-364/01:15:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/01:02:47
14332	MGS	01-364/01:37:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/01:24:47
14333	MGS	01-364/01:37:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/01:24:47
14334	MGS	01-364/01:59:44		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/01:47:24
14335	MGS	01-364/02:01:36		NOTE: Start EVP data return script		01-364/01:49:17
14336	MGS	01-364/02:04:43		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/01:52:24
14337	MGS	01-364/02:04:43		: 00:08:34, FALSE	RDSCII	01-364/01:52:24
14338	MGS	01-364/02:04:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/01:52:24
14339	MGS	01-364/02:04:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/01:52:24
14340	MGS	01-364/02:04:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/01:52:24
14341	MGS	01-364/02:04:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/01:52:24
14342	MGS	01-364/02:04:43	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14343	MGS	01-364/02:04:43	15	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14344	MGS	01-364/02:06:56		NOTE: Enter Planetary Atmosphere 12566		01-364/01:54:37
14345	MGS	01-364/02:09:02		NOTE: Apoapsis 12566 -		01-364/01:56:43
14346	MGS	01-364/02:11:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/01:59:17
14347	MGS	01-364/02:11:37		NOTE: Enter Solar Eclipse 12566		01-364/01:59:18
14348	MGS	01-364/02:12:49		NOTE: Enter Earth Occultation 12566		01-364/02:00:30
14349	MGS	01-364/02:12:49	15	NOTE: Loss Of X-Band Signal		
14350	MGS	01-364/02:13:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/02:00:58
14351	MGS	01-364/02:13:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/02:00:58
14352	MGS	01-364/02:13:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/02:00:58
14353	MGS	01-364/02:13:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/02:00:58
14354	MGS	01-364/02:13:18		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/02:00:59
14355	MGS	01-364/02:13:19		NOTE: End EVP script		01-364/02:00:59
14356	MGS	01-364/02:13:23		NOTE: End fixed Sub-Reflector for Radio Science		01-364/02:01:03
14357	MGS	01-364/02:31:03		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/02:18:43
14358	MGS	01-364/02:34:47		: 01:36:18	RPAONX	01-364/02:22:28
14359	MGS	01-364/02:34:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/02:22:28
14360	MGS	01-364/02:36:02		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/02:23:43
14361	MGS	01-364/02:36:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/02:23:43
14362	MGS	01-364/02:36:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/02:23:43
14363	MGS	01-364/02:36:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/02:23:43
14364	MGS	01-364/02:36:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/02:23:43
14365	MGS	01-364/02:36:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/02:23:47
14366	MGS	01-364/02:36:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/02:23:47
14367	MGS	01-364/02:36:11		Set eclipse egress script address: 01DC	SWSEES	01-364/02:23:52
14368	MGS	01-364/02:36:32		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/02:24:13
14369	MGS	01-364/02:36:36		NOTE: Exit Earth Occultation 12566		01-364/02:24:17
14370	MGS	01-364/02:36:36	15	Acquisition Of X-Band Signal		
14371	MGS	01-364/02:36:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14372	MGS	01-364/02:36:36	15	NOTE: Carrier Only -- No Telemetry Modulation		
14373	MGS	01-364/02:42:47		NOTE: Exit Planetary Atmosphere 12566		01-364/02:30:27
14374	MGS	01-364/02:44:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/02:32:36
14375	MGS	01-364/02:44:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/02:32:36
14376	MGS	01-364/02:44:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/02:32:36
14377	MGS	01-364/02:44:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/02:32:36
14378	MGS	01-364/02:44:55	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14379	MGS	01-364/02:44:56		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/02:32:37
14380	MGS	01-364/02:44:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/02:32:37
14381	MGS	01-364/02:44:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/02:32:37
14382	MGS	01-364/02:44:56	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14383	MGS	01-364/02:45:01		NOTE: End fixed Sub-Reflector for Radio Science		01-364/02:32:41
14384	MGS	01-364/02:51:54		NOTE: Exit Solar Eclipse 12566		01-364/02:39:34
14385	MGS	01-364/03:08:07		NOTE: Periapsis 12567 ----------		01-364/02:55:48
14386	MGS	01-364/03:12:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/03:00:33
14387	MGS	01-364/03:12:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/03:00:33
14388	MGS	01-364/03:12:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/03:00:34
14389	MGS	01-364/03:12:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/03:00:34
14390	MGS	01-364/03:34:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/03:22:34
14391	MGS	01-364/03:34:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/03:22:34
14392	MGS	01-364/03:44:46		NOTE: Start Block (SSRMGR)		01-364/03:32:26
14393	MGS	01-364/03:44:46		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-364/03:32:26
14394	MGS	01-364/03:44:47		SSR 1A Data Enable	CSD1AE	01-364/03:32:27
14395	MGS	01-364/03:44:47		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-364/03:32:27
14396	MGS	01-364/03:57:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/03:45:11
14397	MGS	01-364/03:59:22		NOTE: Start Block (MAP_PB_ODY)		01-364/03:47:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14398	MGS	01-364/03:59:23		: 00:23:11, 01:36:19, FALSE, FALSE, FALSE, 00:01:15, 00:07:13, 01:20:56, 00:06:54	AEMINI	01-364/03:47:03
14399	MGS	01-364/03:59:23		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/03:47:03
14400	MGS	01-364/03:59:23		NOTE: Start EVP data return script		01-364/03:47:03
14401	MGS	01-364/03:59:24		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-364T04:28:42.000	AEMPBI	01-364/03:47:04
14402	MGS	01-364/04:00:00	34	Begin Pre-Cal		
14403	MGS	01-364/04:00:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
14404	MGS	01-364/04:00:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
14405	MGS	01-364/04:00:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
14406	MGS	01-364/04:00:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
14407	MGS	01-364/04:00:00	34	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
14408	MGS	01-364/04:00:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
14409	MGS	01-364/04:00:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
14410	MGS	01-364/04:00:00	34	Config: TGC: DEST=37		
14411	MGS	01-364/04:00:00	34	Config: TGC: BAND=X, BR=42666.666667		
14412	MGS	01-364/04:00:00	34	Config: FSS: CH=2, PRI_FL=10000		
14413	MGS	01-364/04:00:00	34	Config: RSR		
14414	MGS	01-364/04:00:00	34	Config: TXL		
14415	MGS	01-364/04:00:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
14416	MGS	01-364/04:00:00	34	Config: BVR		
14417	MGS	01-364/04:00:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
14418	MGS	01-364/04:00:00	34	Config: MDA: SMPL=0.1		
14419	MGS	01-364/04:00:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
14420	MGS	01-364/04:00:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
14421	MGS	01-364/04:00:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
14422	MGS	01-364/04:02:31		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/03:50:11
14423	MGS	01-364/04:02:31		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8512000, DUR=00:17:44		01-364/03:50:11
14424	MGS	01-364/04:02:31		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-364/03:50:11
14425	MGS	01-364/04:02:31		: 00:08:34, FALSE	RDSCII	01-364/03:50:11
14426	MGS	01-364/04:02:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/03:50:11
14427	MGS	01-364/04:02:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/03:50:11
14428	MGS	01-364/04:02:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/03:50:11
14429	MGS	01-364/04:02:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/03:50:11
14430	MGS	01-364/04:02:31	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14431	MGS	01-364/04:02:31	15	NOTE: Carrier Only -- No Telemetry Modulation		
14432	MGS	01-364/04:04:43		NOTE: Enter Planetary Atmosphere 12567		01-364/03:52:24
14433	MGS	01-364/04:06:47		NOTE: Apoapsis 12567 -		01-364/03:54:28
14434	MGS	01-364/04:08:22		SSR 1B Data Disable	CSD1BX	01-364/03:56:02
14435	MGS	01-364/04:08:22		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-364/03:56:02
14436	MGS	01-364/04:08:23		NOTE: End Block (SSRMGR)		01-364/03:56:03
14437	MGS	01-364/04:09:22		NOTE: Enter Solar Eclipse 12567		01-364/03:57:03
14438	MGS	01-364/04:09:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/03:57:03
14439	MGS	01-364/04:10:36		NOTE: Enter Earth Occultation 12567		01-364/03:58:16
14440	MGS	01-364/04:10:36	15	NOTE: Loss Of X-Band Signal		
14441	MGS	01-364/04:11:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/03:58:45
14442	MGS	01-364/04:11:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/03:58:45
14443	MGS	01-364/04:11:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/03:58:45
14444	MGS	01-364/04:11:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/03:58:45
14445	MGS	01-364/04:11:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/03:58:46
14446	MGS	01-364/04:11:06		NOTE: End EVP script		01-364/03:58:46
14447	MGS	01-364/04:11:07		NOTE: End Block (MAP_RT)		01-364/03:58:47
14448	MGS	01-364/04:11:10		NOTE: End fixed Sub-Reflector for Radio Science		01-364/03:58:50
14449	MGS	01-364/04:32:34		: 01:36:19	RPAONX	01-364/04:20:14
14450	MGS	01-364/04:32:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/04:20:14
14451	MGS	01-364/04:33:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/04:21:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14452	MGS	01-364/04:33:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/04:21:34
14453	MGS	01-364/04:33:58		Command the PSE with included data word: 3990	SWPSEL	01-364/04:21:38
14454	MGS	01-364/04:33:59		Set eclipse egress script address: 0158	SWSEES	01-364/04:21:39
14455	MGS	01-364/04:34:19		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/04:21:59
14456	MGS	01-364/04:34:23		NOTE: Exit Earth Occultation 12567		01-364/04:22:03
14457	MGS	01-364/04:34:23	15	Acquisition Of X-Band Signal		
14458	MGS	01-364/04:34:23	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14459	MGS	01-364/04:40:34		NOTE: Exit Planetary Atmosphere 12567		01-364/04:28:14
14460	MGS	01-364/04:41:02		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:17:12	AEMPB	01-364/04:28:42
14461	MGS	01-364/04:41:02		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-364/04:28:42
14462	MGS	01-364/04:41:02		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-364/04:28:42
14463	MGS	01-364/04:41:03		SSR 1B Data Enable	CSD1BE	01-364/04:28:43
14464	MGS	01-364/04:41:03		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-364/04:28:43
14465	MGS	01-364/04:41:03	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14466	MGS	01-364/04:49:39		NOTE: Exit Solar Eclipse 12567		01-364/04:37:19
14467	MGS	01-364/05:00:00	34	Begin Tracking		
14468	MGS	01-364/05:00:00	34	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14469	MGS	01-364/05:05:36		NOTE: Periapsis 12568 ----------		01-364/04:53:17
14470	MGS	01-364/05:10:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14471	MGS	01-364/05:10:44	15	NOTE: Below Uplink Interlock Limit		
14472	MGS	01-364/05:12:00	34	Range Modulation On: SUP=3.0dB		
14473	MGS	01-364/05:13:00	34	Begin Ranging Acquisition		
14474	MGS	01-364/05:14:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/05:02:18
14475	MGS	01-364/05:14:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/05:02:18
14476	MGS	01-364/05:14:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/05:02:19
14477	MGS	01-364/05:14:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/05:02:19
14478	MGS	01-364/05:20:00	15	End Tracking		
14479	MGS	01-364/05:24:53	34	NOTE: Transmitter Off in 15 minutes		
14480	MGS	01-364/05:34:39	34	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14481	MGS	01-364/05:35:00	15	End Post-Cal		
14482	MGS	01-364/05:36:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/05:24:19
14483	MGS	01-364/05:36:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/05:24:19
14484	MGS	01-364/05:37:53	34	Range Modulation Off		
14485	MGS	01-364/05:39:53	34	Transmitter Off		
14486	MGS	01-364/05:51:41		SSR 1B Data Disable	CSD1BX	01-364/05:39:21
14487	MGS	01-364/05:51:41		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-364/05:39:21
14488	MGS	01-364/05:51:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-364/05:39:21
14489	MGS	01-364/05:51:41	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14490	MGS	01-364/05:57:03		NOTE: Start Block (MAP_RT)		01-364/05:44:43
14491	MGS	01-364/05:57:04		: 00:23:11, 01:36:18, FALSE, TRUE, FALSE, 00:01:15, 00:08:53, 01:17:35, 00:08:34	AEMINI	01-364/05:44:44
14492	MGS	01-364/05:57:04		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/05:44:44
14493	MGS	01-364/05:57:04		NOTE: Start EVP data return script		01-364/05:44:44
14494	MGS	01-364/05:57:05		: SE_2A, RTM, 01:17:34, MRC, 2001-364T06:28:05.000	AEMRTI	01-364/05:44:45
14495	MGS	01-364/06:02:25		NOTE: Enter Planetary Atmosphere 12568		01-364/05:50:05
14496	MGS	01-364/06:04:07		NOTE: Apoapsis 12568 -		01-364/05:51:47
14497	MGS	01-364/06:04:33	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14498	MGS	01-364/06:07:04		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/05:54:44
14499	MGS	01-364/06:07:04		NOTE: Enter Solar Eclipse 12568		01-364/05:54:45
14500	MGS	01-364/06:08:18		NOTE: Enter Earth Occultation 12568		01-364/05:55:58
14501	MGS	01-364/06:08:18	34	NOTE: Loss Of X-Band Signal		
14502	MGS	01-364/06:08:53		NOTE: End EVP script		01-364/05:56:33
14503	MGS	01-364/06:08:53		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/05:56:33
14504	MGS	01-364/06:08:54		NOTE: End Block (MAP_PB_ODY)		01-364/05:56:34
14505	MGS	01-364/06:11:12	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14506	MGS	01-364/06:13:12	34	Range Modulation On: SUP=3.0dB		
14507	MGS	01-364/06:14:12	34	Begin Ranging Acquisition		
14508	MGS	01-364/06:26:30		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/06:14:11
14509	MGS	01-364/06:30:15		: 01:36:18	RPAONX	01-364/06:17:55
14510	MGS	01-364/06:30:15		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/06:17:55
14511	MGS	01-364/06:31:30		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/06:19:10
14512	MGS	01-364/06:31:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/06:19:10
14513	MGS	01-364/06:31:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/06:19:10
14514	MGS	01-364/06:31:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/06:19:10
14515	MGS	01-364/06:31:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/06:19:10
14516	MGS	01-364/06:31:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/06:19:19
14517	MGS	01-364/06:31:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/06:19:19
14518	MGS	01-364/06:31:44		Set eclipse egress script address: 019A	SWSEES	01-364/06:19:24
14519	MGS	01-364/06:32:07		NOTE: Exit Earth Occultation 12568		01-364/06:19:47
14520	MGS	01-364/06:32:07	34	Acquisition Of X-Band Signal		
14521	MGS	01-364/06:32:07	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14522	MGS	01-364/06:32:07	34	NOTE: Carrier Only -- No Telemetry Modulation		
14523	MGS	01-364/06:38:17		NOTE: Exit Planetary Atmosphere 12568		01-364/06:25:57
14524	MGS	01-364/06:40:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/06:28:03
14525	MGS	01-364/06:40:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/06:28:03
14526	MGS	01-364/06:40:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/06:28:03
14527	MGS	01-364/06:40:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/06:28:03
14528	MGS	01-364/06:40:23	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14529	MGS	01-364/06:40:24		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/06:28:04
14530	MGS	01-364/06:40:24		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/06:28:04
14531	MGS	01-364/06:40:24		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/06:28:04
14532	MGS	01-364/06:40:24	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14533	MGS	01-364/06:40:29		NOTE: End fixed Sub-Reflector for Radio Science		01-364/06:28:09
14534	MGS	01-364/06:47:21		NOTE: Exit Solar Eclipse 12568		01-364/06:35:01
14535	MGS	01-364/07:02:59		NOTE: Periapsis 12569 ----------		01-364/06:50:39
14536	MGS	01-364/07:08:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/06:56:00
14537	MGS	01-364/07:08:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/06:56:00
14538	MGS	01-364/07:08:21		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/06:56:01
14539	MGS	01-364/07:08:21		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/06:56:01
14540	MGS	01-364/07:22:31	34	NOTE: Transmitter Off in 15 minutes		
14541	MGS	01-364/07:30:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/07:18:01
14542	MGS	01-364/07:30:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/07:18:01
14543	MGS	01-364/07:35:31	34	Range Modulation Off		
14544	MGS	01-364/07:37:31	34	Transmitter Off		
14545	MGS	01-364/07:52:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/07:40:39
14546	MGS	01-364/07:54:45		NOTE: Start EVP data return script		01-364/07:42:25
14547	MGS	01-364/07:57:58		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/07:45:38
14548	MGS	01-364/07:57:58		: 00:08:34, FALSE	RDSCII	01-364/07:45:38
14549	MGS	01-364/07:57:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/07:45:38
14550	MGS	01-364/07:57:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/07:45:38
14551	MGS	01-364/07:57:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/07:45:38
14552	MGS	01-364/07:57:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/07:45:38
14553	MGS	01-364/07:57:58	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14554	MGS	01-364/07:57:58	34	NOTE: Carrier Only -- No Telemetry Modulation		
14555	MGS	01-364/08:00:04		NOTE: Enter Planetary Atmosphere 12569		01-364/07:47:44
14556	MGS	01-364/08:01:52		NOTE: Apoapsis 12569 -		01-364/07:49:31
14557	MGS	01-364/08:04:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/07:52:25
14558	MGS	01-364/08:04:45		NOTE: Enter Solar Eclipse 12569		01-364/07:52:25
14559	MGS	01-364/08:05:56		NOTE: Enter Earth Occultation 12569		01-364/07:53:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14560	MGS	01-364/08:05:56	34	NOTE: Loss Of X-Band Signal		
14561	MGS	01-364/08:06:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/07:54:12
14562	MGS	01-364/08:06:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/07:54:12
14563	MGS	01-364/08:06:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/07:54:12
14564	MGS	01-364/08:06:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/07:54:12
14565	MGS	01-364/08:06:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/07:54:13
14566	MGS	01-364/08:06:34		NOTE: End EVP script		01-364/07:54:14
14567	MGS	01-364/08:06:38		NOTE: End fixed Sub-Reflector for Radio Science		01-364/07:54:18
14568	MGS	01-364/08:08:53	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14569	MGS	01-364/08:10:54	34	Range Modulation On: SUP=3.0dB		
14570	MGS	01-364/08:11:54	34	Begin Ranging Acquisition		
14571	MGS	01-364/08:24:12		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/08:11:52
14572	MGS	01-364/08:27:56		: 01:36:18	RPAONX	01-364/08:15:36
14573	MGS	01-364/08:27:56		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/08:15:36
14574	MGS	01-364/08:29:11		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/08:16:51
14575	MGS	01-364/08:29:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/08:16:51
14576	MGS	01-364/08:29:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/08:16:51
14577	MGS	01-364/08:29:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/08:16:51
14578	MGS	01-364/08:29:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/08:16:51
14579	MGS	01-364/08:29:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/08:17:01
14580	MGS	01-364/08:29:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/08:17:01
14581	MGS	01-364/08:29:26		Set eclipse egress script address: 01DC	SWSEES	01-364/08:17:06
14582	MGS	01-364/08:29:41		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/08:17:21
14583	MGS	01-364/08:29:49		NOTE: Exit Earth Occultation 12569		01-364/08:17:28
14584	MGS	01-364/08:29:49	34	Acquisition Of X-Band Signal		
14585	MGS	01-364/08:29:49	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14586	MGS	01-364/08:29:49	34	NOTE: Carrier Only -- No Telemetry Modulation		
14587	MGS	01-364/08:35:58		NOTE: Exit Planetary Atmosphere 12569		01-364/08:23:38
14588	MGS	01-364/08:38:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/08:25:44
14589	MGS	01-364/08:38:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/08:25:44
14590	MGS	01-364/08:38:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/08:25:44
14591	MGS	01-364/08:38:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/08:25:44
14592	MGS	01-364/08:38:04	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14593	MGS	01-364/08:38:05		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/08:25:45
14594	MGS	01-364/08:38:05		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/08:25:45
14595	MGS	01-364/08:38:05		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/08:25:45
14596	MGS	01-364/08:38:05	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14597	MGS	01-364/08:38:10		NOTE: End fixed Sub-Reflector for Radio Science		01-364/08:25:50
14598	MGS	01-364/08:45:02		NOTE: Exit Solar Eclipse 12569		01-364/08:32:41
14599	MGS	01-364/09:00:41		NOTE: Periapsis 12570 ----------		01-364/08:48:21
14600	MGS	01-364/09:06:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/08:53:40
14601	MGS	01-364/09:06:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/08:53:40
14602	MGS	01-364/09:06:01		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/08:53:41
14603	MGS	01-364/09:06:01		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/08:53:41
14604	MGS	01-364/09:20:15	34	NOTE: Transmitter Off in 15 minutes		
14605	MGS	01-364/09:28:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/09:15:41
14606	MGS	01-364/09:28:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/09:15:41
14607	MGS	01-364/09:33:15	34	Range Modulation Off		
14608	MGS	01-364/09:35:15	34	Transmitter Off		
14609	MGS	01-364/09:38:04		NOTE: Start Block (SSRMGR)		01-364/09:25:44
14610	MGS	01-364/09:38:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-364/09:25:44
14611	MGS	01-364/09:38:05		SSR 1B Data Enable	CSD1BE	01-364/09:25:45
14612	MGS	01-364/09:38:05		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-364/09:25:45
14613	MGS	01-364/09:50:40		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/09:38:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14614	MGS	01-364/09:52:31		NOTE: Start Block (MAP_PB_ODY)		01-364/09:40:10
14615	MGS	01-364/09:52:32		: 00:23:11, 01:36:19, FALSE, FALSE, FALSE, 00:01:15, 00:07:13, 01:20:56, 00:06:54	AEMINI	01-364/09:40:11
14616	MGS	01-364/09:52:32		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/09:40:11
14617	MGS	01-364/09:52:32		NOTE: Start EVP data return script		01-364/09:40:11
14618	MGS	01-364/09:52:33		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-364T10:21:50.000	AEMPBI	01-364/09:40:12
14619	MGS	01-364/09:55:40		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/09:43:19
14620	MGS	01-364/09:55:40		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8432000, DUR=00:17:34		01-364/09:43:19
14621	MGS	01-364/09:55:40		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-364/09:43:19
14622	MGS	01-364/09:55:40		: 00:08:34, FALSE	RDSCII	01-364/09:43:19
14623	MGS	01-364/09:55:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/09:43:19
14624	MGS	01-364/09:55:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/09:43:19
14625	MGS	01-364/09:55:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/09:43:19
14626	MGS	01-364/09:55:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/09:43:19
14627	MGS	01-364/09:55:40	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14628	MGS	01-364/09:55:40	34	NOTE: Carrier Only -- No Telemetry Modulation		
14629	MGS	01-364/09:57:50		NOTE: Enter Planetary Atmosphere 12570		01-364/09:45:29
14630	MGS	01-364/09:59:46		NOTE: Apoapsis 12570 -		01-364/09:47:25
14631	MGS	01-364/10:01:31		SSR 1A Data Disable	CSD1AX	01-364/09:49:10
14632	MGS	01-364/10:01:31		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-364/09:49:10
14633	MGS	01-364/10:01:32		NOTE: End Block (SSRMGR)		01-364/09:49:11
14634	MGS	01-364/10:02:31		NOTE: Enter Solar Eclipse 12570		01-364/09:50:11
14635	MGS	01-364/10:02:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/09:50:11
14636	MGS	01-364/10:03:41		NOTE: Enter Earth Occultation 12570		01-364/09:51:20
14637	MGS	01-364/10:03:41	34	NOTE: Loss Of X-Band Signal		
14638	MGS	01-364/10:04:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/09:51:53
14639	MGS	01-364/10:04:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/09:51:53
14640	MGS	01-364/10:04:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/09:51:53
14641	MGS	01-364/10:04:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/09:51:53
14642	MGS	01-364/10:04:15		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/09:51:54
14643	MGS	01-364/10:04:15		NOTE: End EVP script		01-364/09:51:55
14644	MGS	01-364/10:04:16		NOTE: End Block (MAP_RT)		01-364/09:51:56
14645	MGS	01-364/10:04:19		NOTE: End fixed Sub-Reflector for Radio Science		01-364/09:51:59
14646	MGS	01-364/10:06:38	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14647	MGS	01-364/10:08:39	34	Range Modulation On: SUP=3.0dB		
14648	MGS	01-364/10:09:39	34	Begin Ranging Acquisition		
14649	MGS	01-364/10:25:00	63	Begin Pre-Cal		
14650	MGS	01-364/10:25:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
14651	MGS	01-364/10:25:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
14652	MGS	01-364/10:25:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
14653	MGS	01-364/10:25:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
14654	MGS	01-364/10:25:00	63	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
14655	MGS	01-364/10:25:00	63	Config: TGC: DEST=37		
14656	MGS	01-364/10:25:00	63	Config: TGC: BAND=X, BR=8000.000000		
14657	MGS	01-364/10:25:00	63	Config: FSS: CH=2, PRI_FL=10000		
14658	MGS	01-364/10:25:00	63	Config: RSR		
14659	MGS	01-364/10:25:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
14660	MGS	01-364/10:25:00	63	Config: BVR		
14661	MGS	01-364/10:25:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
14662	MGS	01-364/10:25:00	63	Config: MDA: SMPL=0.1		
14663	MGS	01-364/10:25:43		: 01:36:19	RPAONX	01-364/10:13:22
14664	MGS	01-364/10:25:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/10:13:22
14665	MGS	01-364/10:27:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/10:14:41
14666	MGS	01-364/10:27:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/10:14:41
14667	MGS	01-364/10:27:06		Command the PSE with included data word: 3990	SWPSEL	01-364/10:14:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14668	MGS	01-364/10:27:07		Set eclipse egress script address: 0158	SWSEES	01-364/10:14:46
14669	MGS	01-364/10:27:28		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/10:15:07
14670	MGS	01-364/10:27:34		NOTE: Exit Earth Occultation 12570		01-364/10:15:14
14671	MGS	01-364/10:27:34	34	Acquisition Of X-Band Signal		
14672	MGS	01-364/10:27:34	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14673	MGS	01-364/10:31:19	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14674	MGS	01-364/10:33:43		NOTE: Exit Planetary Atmosphere 12570		01-364/10:21:22
14675	MGS	01-364/10:34:11		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:17:12	AEMPB	01-364/10:21:50
14676	MGS	01-364/10:34:11		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-364/10:21:50
14677	MGS	01-364/10:34:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-364/10:21:50
14678	MGS	01-364/10:34:12		SSR 1A Data Enable	CSD1AE	01-364/10:21:51
14679	MGS	01-364/10:34:12		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-364/10:21:51
14680	MGS	01-364/10:34:12	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14681	MGS	01-364/10:42:48		NOTE: Exit Solar Eclipse 12570		01-364/10:30:27
14682	MGS	01-364/10:58:36		NOTE: Periapsis 12571 ----------		01-364/10:46:15
14683	MGS	01-364/11:07:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/10:55:26
14684	MGS	01-364/11:07:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/10:55:26
14685	MGS	01-364/11:07:48		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/10:55:27
14686	MGS	01-364/11:07:48		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/10:55:27
14687	MGS	01-364/11:18:01	34	NOTE: Transmitter Off in 15 minutes		
14688	MGS	01-364/11:29:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/11:17:27
14689	MGS	01-364/11:29:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/11:17:27
14690	MGS	01-364/11:31:02	34	Range Modulation Off		
14691	MGS	01-364/11:33:01	34	Transmitter Off		
14692	MGS	01-364/11:44:50		SSR 1A Data Disable	CSD1AX	01-364/11:32:29
14693	MGS	01-364/11:44:50		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-364/11:32:29
14694	MGS	01-364/11:44:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-364/11:32:29
14695	MGS	01-364/11:44:50	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14696	MGS	01-364/11:50:18		NOTE: Start Block (MAP_RT)		01-364/11:37:57
14697	MGS	01-364/11:50:19		: 00:23:11, 01:36:18, FALSE, TRUE, FALSE, 00:01:15, 00:08:53, 01:17:35, 00:08:34	AEMINI	01-364/11:37:58
14698	MGS	01-364/11:50:19		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/11:37:58
14699	MGS	01-364/11:50:19		NOTE: Start EVP data return script		01-364/11:37:58
14700	MGS	01-364/11:50:20		: SE_2A, RTM, 01:17:34, MRC, 2001-364T12:21:18.000	AEMRTI	01-364/11:37:59
14701	MGS	01-364/11:55:00	63	Begin Tracking		
14702	MGS	01-364/11:55:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14703	MGS	01-364/11:55:38		NOTE: Enter Planetary Atmosphere 12571		01-364/11:43:17
14704	MGS	01-364/11:57:30		NOTE: Apoapsis 12571 -		01-364/11:45:10
14705	MGS	01-364/11:57:43	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14706	MGS	01-364/11:57:43	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14707	MGS	01-364/12:00:19		NOTE: Enter Solar Eclipse 12571		01-364/11:47:58
14708	MGS	01-364/12:00:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/11:47:58
14709	MGS	01-364/12:01:28		NOTE: Enter Earth Occultation 12571		01-364/11:49:07
14710	MGS	01-364/12:01:28	34	NOTE: Loss Of X-Band Signal		
14711	MGS	01-364/12:01:28	63	NOTE: Loss Of X-Band Signal		
14712	MGS	01-364/12:02:01		NOTE: End EVP script		01-364/11:49:41
14713	MGS	01-364/12:02:02		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/11:49:41
14714	MGS	01-364/12:02:02		NOTE: End Block (MAP_PB_ODY)		01-364/11:49:42
14715	MGS	01-364/12:03:30	34	NOTE: Below Uplink Interlock Limit		
14716	MGS	01-364/12:05:58	63	NOTE: Above Uplink Interlock Limit		
14717	MGS	01-364/12:12:20		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-364/11:59:59
14718	MGS	01-364/12:15:00	34	End Tracking		
14719	MGS	01-364/12:19:45		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/12:07:24
14720	MGS	01-364/12:23:30		: 01:36:18	RPAONX	01-364/12:11:09
14721	MGS	01-364/12:23:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/12:11:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14722	MGS	01-364/12:24:45		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/12:12:24
14723	MGS	01-364/12:24:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/12:12:24
14724	MGS	01-364/12:24:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/12:12:24
14725	MGS	01-364/12:24:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/12:12:24
14726	MGS	01-364/12:24:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/12:12:24
14727	MGS	01-364/12:24:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/12:12:27
14728	MGS	01-364/12:24:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/12:12:27
14729	MGS	01-364/12:24:53		Set eclipse egress script address: 019A	SWSEES	01-364/12:12:32
14730	MGS	01-364/12:25:22		NOTE: Exit Earth Occultation 12571		01-364/12:13:01
14731	MGS	01-364/12:25:22	63	Acquisition Of X-Band Signal		
14732	MGS	01-364/12:25:22	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14733	MGS	01-364/12:25:22	63	NOTE: Carrier Only -- No Telemetry Modulation		
14734	MGS	01-364/12:30:00	34	End Post-Cal		
14735	MGS	01-364/12:31:31		NOTE: Exit Planetary Atmosphere 12571		01-364/12:19:10
14736	MGS	01-364/12:33:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/12:21:17
14737	MGS	01-364/12:33:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/12:21:17
14738	MGS	01-364/12:33:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/12:21:17
14739	MGS	01-364/12:33:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/12:21:17
14740	MGS	01-364/12:33:38	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14741	MGS	01-364/12:33:39		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/12:21:18
14742	MGS	01-364/12:33:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/12:21:18
14743	MGS	01-364/12:33:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/12:21:18
14744	MGS	01-364/12:33:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14745	MGS	01-364/12:33:43		NOTE: End fixed Sub-Reflector for Radio Science		01-364/12:21:22
14746	MGS	01-364/12:40:35		NOTE: Exit Solar Eclipse 12571		01-364/12:28:15
14747	MGS	01-364/12:56:23		NOTE: Periapsis 12572 ----------		01-364/12:44:02
14748	MGS	01-364/13:01:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/12:49:14
14749	MGS	01-364/13:01:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/12:49:14
14750	MGS	01-364/13:01:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/12:49:15
14751	MGS	01-364/13:01:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/12:49:15
14752	MGS	01-364/13:23:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/13:11:15
14753	MGS	01-364/13:23:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/13:11:15
14754	MGS	01-364/13:46:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/13:33:52
14755	MGS	01-364/13:48:05		NOTE: Start EVP data return script		01-364/13:35:44
14756	MGS	01-364/13:51:13		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/13:38:52
14757	MGS	01-364/13:51:13		: 00:08:34, FALSE	RDSCII	01-364/13:38:52
14758	MGS	01-364/13:51:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/13:38:52
14759	MGS	01-364/13:51:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/13:38:52
14760	MGS	01-364/13:51:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/13:38:52
14761	MGS	01-364/13:51:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/13:38:52
14762	MGS	01-364/13:51:13	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14763	MGS	01-364/13:51:13	63	NOTE: Carrier Only -- No Telemetry Modulation		
14764	MGS	01-364/13:53:24		NOTE: Enter Planetary Atmosphere 12572		01-364/13:41:03
14765	MGS	01-364/13:55:00		NOTE: Apoapsis 12572 -		01-364/13:42:39
14766	MGS	01-364/13:58:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/13:45:44
14767	MGS	01-364/13:58:05		NOTE: Enter Solar Eclipse 12572		01-364/13:45:44
14768	MGS	01-364/13:59:14		NOTE: Enter Earth Occultation 12572		01-364/13:46:53
14769	MGS	01-364/13:59:14	63	NOTE: Loss Of X-Band Signal		
14770	MGS	01-364/13:59:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/13:47:26
14771	MGS	01-364/13:59:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/13:47:26
14772	MGS	01-364/13:59:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/13:47:26
14773	MGS	01-364/13:59:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/13:47:26
14774	MGS	01-364/13:59:48		NOTE: End EVP script		01-364/13:47:27
14775	MGS	01-364/13:59:48		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/13:47:27

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14776	MGS	01-364/13:59:52		NOTE: End fixed Sub-Reflector for Radio Science		01-364/13:47:31
14777	MGS	01-364/14:17:31		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/14:05:10
14778	MGS	01-364/14:21:16		: 01:36:18	RPAONX	01-364/14:08:55
14779	MGS	01-364/14:21:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/14:08:55
14780	MGS	01-364/14:22:31		: 00:00:30, 00:08:53, FALSE	RDSCIE	01-364/14:10:10
14781	MGS	01-364/14:22:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/14:10:10
14782	MGS	01-364/14:22:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/14:10:10
14783	MGS	01-364/14:22:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/14:10:10
14784	MGS	01-364/14:22:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/14:10:10
14785	MGS	01-364/14:22:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/14:10:15
14786	MGS	01-364/14:22:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/14:10:15
14787	MGS	01-364/14:22:41		Set eclipse egress script address: 01DC	SWSEES	01-364/14:10:20
14788	MGS	01-364/14:23:01		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/14:10:40
14789	MGS	01-364/14:23:10		NOTE: Exit Earth Occultation 12572		01-364/14:10:49
14790	MGS	01-364/14:23:10	63	Acquisition Of X-Band Signal		
14791	MGS	01-364/14:23:10	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14792	MGS	01-364/14:23:10	63	NOTE: Carrier Only -- No Telemetry Modulation		
14793	MGS	01-364/14:29:18		NOTE: Exit Planetary Atmosphere 12572		01-364/14:16:57
14794	MGS	01-364/14:31:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/14:19:03
14795	MGS	01-364/14:31:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/14:19:03
14796	MGS	01-364/14:31:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/14:19:03
14797	MGS	01-364/14:31:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/14:19:03
14798	MGS	01-364/14:31:24	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14799	MGS	01-364/14:31:25		: RTM, MRC, 01:17:34, S&E_2A, FALSE, 00:08:35	AEMRT	01-364/14:19:04
14800	MGS	01-364/14:31:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/14:19:04
14801	MGS	01-364/14:31:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/14:19:04
14802	MGS	01-364/14:31:25	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14803	MGS	01-364/14:31:29		NOTE: End fixed Sub-Reflector for Radio Science		01-364/14:19:08
14804	MGS	01-364/14:38:22		NOTE: Exit Solar Eclipse 12572		01-364/14:26:01
14805	MGS	01-364/14:54:04		NOTE: Periapsis 12573 ----------		01-364/14:41:42
14806	MGS	01-364/14:59:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/14:47:00
14807	MGS	01-364/14:59:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/14:47:00
14808	MGS	01-364/14:59:22		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/14:47:01
14809	MGS	01-364/14:59:22		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/14:47:01
14810	MGS	01-364/15:21:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/15:09:01
14811	MGS	01-364/15:21:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/15:09:01
14812	MGS	01-364/15:31:12		NOTE: Start Block (SSRMGR)		01-364/15:18:51
14813	MGS	01-364/15:31:12		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-364/15:18:51
14814	MGS	01-364/15:31:13		SSR 1A Data Enable	CSD1AE	01-364/15:18:52
14815	MGS	01-364/15:31:13		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-364/15:18:52
14816	MGS	01-364/15:43:59		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/15:31:38
14817	MGS	01-364/15:45:48		NOTE: Start Block (MAP_PB_ODY)		01-364/15:33:27
14818	MGS	01-364/15:45:49		: 00:23:11, 01:36:19, FALSE, FALSE, FALSE, 00:01:15, 00:07:13, 01:20:56, 00:06:54	AEMINI	01-364/15:33:28
14819	MGS	01-364/15:45:49		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/15:33:28
14820	MGS	01-364/15:45:49		NOTE: Start EVP data return script		01-364/15:33:28
14821	MGS	01-364/15:45:50		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-364T16:15:08.000	AEMPBI	01-364/15:33:29
14822	MGS	01-364/15:48:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/15:36:38
14823	MGS	01-364/15:48:59		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8528000, DUR=00:17:46		01-364/15:36:38
14824	MGS	01-364/15:48:59		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-364/15:36:38
14825	MGS	01-364/15:48:59		: 00:08:34, FALSE	RDSCII	01-364/15:36:38
14826	MGS	01-364/15:48:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/15:36:38
14827	MGS	01-364/15:48:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/15:36:38
14828	MGS	01-364/15:48:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/15:36:38
14829	MGS	01-364/15:48:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/15:36:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14830	MGS	01-364/15:48:59	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14831	MGS	01-364/15:48:59	63	NOTE: Carrier Only -- No Telemetry Modulation		
14832	MGS	01-364/15:51:07		NOTE: Enter Planetary Atmosphere 12573		01-364/15:38:46
14833	MGS	01-364/15:52:30		NOTE: Apoapsis 12573 -		01-364/15:40:09
14834	MGS	01-364/15:54:49		SSR 1B Data Disable	CSD1BX	01-364/15:42:28
14835	MGS	01-364/15:54:49		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-364/15:42:28
14836	MGS	01-364/15:54:50		NOTE: End Block (SSRMGR)		01-364/15:42:29
14837	MGS	01-364/15:55:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/15:43:28
14838	MGS	01-364/15:55:50		NOTE: Enter Solar Eclipse 12573		01-364/15:43:28
14839	MGS	01-364/15:56:57		NOTE: Enter Earth Occultation 12573		01-364/15:44:36
14840	MGS	01-364/15:56:57	63	NOTE: Loss Of X-Band Signal		
14841	MGS	01-364/15:57:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/15:45:12
14842	MGS	01-364/15:57:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/15:45:12
14843	MGS	01-364/15:57:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/15:45:12
14844	MGS	01-364/15:57:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/15:45:12
14845	MGS	01-364/15:57:34		NOTE: End EVP script		01-364/15:45:13
14846	MGS	01-364/15:57:34		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/15:45:13
14847	MGS	01-364/15:57:35		NOTE: End Block (MAP_RT)		01-364/15:45:14
14848	MGS	01-364/15:57:38		NOTE: End fixed Sub-Reflector for Radio Science		01-364/15:45:17
14849	MGS	01-364/16:19:01		: 01:36:19	RPAONX	01-364/16:06:39
14850	MGS	01-364/16:19:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/16:06:39
14851	MGS	01-364/16:20:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/16:08:01
14852	MGS	01-364/16:20:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/16:08:01
14853	MGS	01-364/16:20:27		Command the PSE with included data word: 3990	SWPSEL	01-364/16:08:05
14854	MGS	01-364/16:20:28		Set eclipse egress script address: 0158	SWSEES	01-364/16:08:06
14855	MGS	01-364/16:20:46		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/16:08:24
14856	MGS	01-364/16:20:56		NOTE: Exit Earth Occultation 12573		01-364/16:08:35
14857	MGS	01-364/16:20:56	63	Acquisition Of X-Band Signal		
14858	MGS	01-364/16:20:56	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14859	MGS	01-364/16:27:04		NOTE: Exit Planetary Atmosphere 12573		01-364/16:14:43
14860	MGS	01-364/16:27:29		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:17:12	AEMPB	01-364/16:15:07
14861	MGS	01-364/16:27:29		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-364/16:15:07
14862	MGS	01-364/16:27:29		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-364/16:15:07
14863	MGS	01-364/16:27:30		SSR 1B Data Enable	CSD1BE	01-364/16:15:08
14864	MGS	01-364/16:27:30		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-364/16:15:08
14865	MGS	01-364/16:27:30	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14866	MGS	01-364/16:36:06		NOTE: Exit Solar Eclipse 12573		01-364/16:23:45
14867	MGS	01-364/16:45:00	54	Begin Pre-Cal		
14868	MGS	01-364/16:45:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
14869	MGS	01-364/16:45:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
14870	MGS	01-364/16:45:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
14871	MGS	01-364/16:45:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
14872	MGS	01-364/16:45:00	54	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
14873	MGS	01-364/16:45:00	54	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
14874	MGS	01-364/16:45:00	54	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
14875	MGS	01-364/16:45:00	54	Config: TGC: DEST=37		
14876	MGS	01-364/16:45:00	54	Config: TGC: BAND=X, BR=42666.666667		
14877	MGS	01-364/16:45:00	54	Config: FSS: CH=2, PRI_FL=10000		
14878	MGS	01-364/16:45:00	54	Config: RSR		
14879	MGS	01-364/16:45:00	54	Config: TXL		
14880	MGS	01-364/16:45:00	54	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
14881	MGS	01-364/16:45:00	54	Config: BVR		
14882	MGS	01-364/16:45:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
14883	MGS	01-364/16:45:00	54	Config: MDA: SMPL=0.1		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14884	MGS	01-364/16:51:48		NOTE: Periapsis 12574 ----------		01-364/16:39:27
14885	MGS	01-364/17:01:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/16:48:44
14886	MGS	01-364/17:01:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/16:48:44
14887	MGS	01-364/17:01:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/16:48:45
14888	MGS	01-364/17:01:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/16:48:45
14889	MGS	01-364/17:23:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/17:10:45
14890	MGS	01-364/17:23:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/17:10:45
14891	MGS	01-364/17:30:00	54	Begin Tracking		
14892	MGS	01-364/17:30:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14893	MGS	01-364/17:38:08		SSR 1B Data Disable	CSD1BX	01-364/17:25:46
14894	MGS	01-364/17:38:08		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-364/17:25:46
14895	MGS	01-364/17:38:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-364/17:25:46
14896	MGS	01-364/17:38:08	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14897	MGS	01-364/17:38:08	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14898	MGS	01-364/17:43:32		NOTE: Start Block (MAP_RT)		01-364/17:31:10
14899	MGS	01-364/17:43:33		: 00:23:21, 01:36:01, FALSE, TRUE, FALSE, 00:01:15, 00:08:48, 01:17:27, 00:08:30	AEMINI	01-364/17:31:11
14900	MGS	01-364/17:43:33		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/17:31:11
14901	MGS	01-364/17:43:33		NOTE: Start EVP data return script		01-364/17:31:11
14902	MGS	01-364/17:43:34		: SE_2A, RTM, 01:17:26, MRC, 2001-364T18:14:36.000	AEMRTI	01-364/17:31:12
14903	MGS	01-364/17:48:50		NOTE: Enter Planetary Atmosphere 12574		01-364/17:36:28
14904	MGS	01-364/17:50:23		NOTE: Apoapsis 12574 -		01-364/17:38:02
14905	MGS	01-364/17:53:32		NOTE: Enter Solar Eclipse 12574		01-364/17:41:11
14906	MGS	01-364/17:53:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/17:41:11
14907	MGS	01-364/17:54:40		NOTE: Enter Earth Occultation 12574		01-364/17:42:18
14908	MGS	01-364/17:54:40	54	NOTE: Loss Of X-Band Signal		
14909	MGS	01-364/17:54:40	63	NOTE: Loss Of X-Band Signal		
14910	MGS	01-364/17:55:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/17:42:58
14911	MGS	01-364/17:55:20		NOTE: End EVP script		01-364/17:42:58
14912	MGS	01-364/17:55:21		NOTE: End Block (MAP_PB_ODY)		01-364/17:42:59
14913	MGS	01-364/17:57:41	54	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14914	MGS	01-364/18:13:09		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/18:00:47
14915	MGS	01-364/18:16:54		: 01:36:01	RPAONX	01-364/18:04:32
14916	MGS	01-364/18:16:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/18:04:32
14917	MGS	01-364/18:18:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/18:05:45
14918	MGS	01-364/18:18:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/18:05:45
14919	MGS	01-364/18:18:09		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-364/18:05:47
14920	MGS	01-364/18:18:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/18:05:47
14921	MGS	01-364/18:18:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/18:05:47
14922	MGS	01-364/18:18:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/18:05:47
14923	MGS	01-364/18:18:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/18:05:47
14924	MGS	01-364/18:18:12		Set eclipse egress script address: 019A	SWSEES	01-364/18:05:50
14925	MGS	01-364/18:18:40		NOTE: Exit Earth Occultation 12574		01-364/18:06:18
14926	MGS	01-364/18:18:40	54	Acquisition Of X-Band Signal		
14927	MGS	01-364/18:18:40	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14928	MGS	01-364/18:18:40	54	NOTE: Carrier Only -- No Telemetry Modulation		
14929	MGS	01-364/18:18:40	63	Acquisition Of X-Band Signal		
14930	MGS	01-364/18:18:40	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14931	MGS	01-364/18:18:40	63	NOTE: Carrier Only -- No Telemetry Modulation		
14932	MGS	01-364/18:24:48		NOTE: Exit Planetary Atmosphere 12574		01-364/18:12:26
14933	MGS	01-364/18:26:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/18:14:35
14934	MGS	01-364/18:26:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/18:14:35
14935	MGS	01-364/18:26:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/18:14:35
14936	MGS	01-364/18:26:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/18:14:35
14937	MGS	01-364/18:26:57	54	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14938	MGS	01-364/18:26:57	63	Acquire D/L: X/16, 3-Way/54, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14939	MGS	01-364/18:26:58		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-364/18:14:36
14940	MGS	01-364/18:26:58		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/18:14:36
14941	MGS	01-364/18:26:58		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/18:14:36
14942	MGS	01-364/18:26:58	54	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14943	MGS	01-364/18:26:58	63	D/L Change: X/16, 3-Way/54, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
14944	MGS	01-364/18:27:02		NOTE: End fixed Sub-Reflector for Radio Science		01-364/18:14:40
14945	MGS	01-364/18:33:49		NOTE: Exit Solar Eclipse 12574		01-364/18:21:27
14946	MGS	01-364/18:49:28		NOTE: Periapsis 12575 ----------		01-364/18:37:06
14947	MGS	01-364/18:54:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/18:42:26
14948	MGS	01-364/18:54:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/18:42:26
14949	MGS	01-364/18:54:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/18:42:27
14950	MGS	01-364/18:54:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/18:42:27
14951	MGS	01-364/19:08:53	54	NOTE: Transmitter Off in 15 minutes		
14952	MGS	01-364/19:16:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/19:04:27
14953	MGS	01-364/19:16:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/19:04:27
14954	MGS	01-364/19:23:53	54	Transmitter Off		
14955	MGS	01-364/19:39:24		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/19:27:02
14956	MGS	01-364/19:40:00	15	Begin Pre-Cal		
14957	MGS	01-364/19:40:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
14958	MGS	01-364/19:40:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
14959	MGS	01-364/19:40:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
14960	MGS	01-364/19:40:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
14961	MGS	01-364/19:40:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
14962	MGS	01-364/19:40:00	15	Config: TGC: DEST=37		
14963	MGS	01-364/19:40:00	15	Config: TGC: BAND=X, BR=40000.000000		
14964	MGS	01-364/19:40:00	15	Config: FSS: CH=2, PRI_FL=10000		
14965	MGS	01-364/19:40:00	15	Config: RSR		
14966	MGS	01-364/19:40:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
14967	MGS	01-364/19:40:00	15	Config: BVR		
14968	MGS	01-364/19:40:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
14969	MGS	01-364/19:40:00	15	Config: MDA: SMPL=0.1		
14970	MGS	01-364/19:41:15		NOTE: Start EVP data return script		01-364/19:28:53
14971	MGS	01-364/19:44:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/19:32:02
14972	MGS	01-364/19:44:24		: 00:08:30, FALSE	RDSCII	01-364/19:32:02
14973	MGS	01-364/19:44:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/19:32:02
14974	MGS	01-364/19:44:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/19:32:02
14975	MGS	01-364/19:44:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/19:32:02
14976	MGS	01-364/19:44:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/19:32:02
14977	MGS	01-364/19:44:24	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14978	MGS	01-364/19:44:24	54	NOTE: Carrier Only -- No Telemetry Modulation		
14979	MGS	01-364/19:44:24	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
14980	MGS	01-364/19:44:24	63	NOTE: Carrier Only -- No Telemetry Modulation		
14981	MGS	01-364/19:46:32		NOTE: Enter Planetary Atmosphere 12575		01-364/19:34:10
14982	MGS	01-364/19:48:01		NOTE: Apoapsis 12575 -		01-364/19:35:39
14983	MGS	01-364/19:51:15		NOTE: Enter Solar Eclipse 12575		01-364/19:38:53
14984	MGS	01-364/19:51:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/19:38:53
14985	MGS	01-364/19:52:22		NOTE: Enter Earth Occultation 12575		01-364/19:40:00
14986	MGS	01-364/19:52:22	54	NOTE: Loss Of X-Band Signal		
14987	MGS	01-364/19:52:22	63	NOTE: Loss Of X-Band Signal		
14988	MGS	01-364/19:52:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/19:40:32
14989	MGS	01-364/19:52:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/19:40:32
14990	MGS	01-364/19:52:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/19:40:32
14991	MGS	01-364/19:52:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/19:40:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
14992	MGS	01-364/19:52:55		NOTE: End EVP script		01-364/19:40:33
14993	MGS	01-364/19:52:55		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/19:40:33
14994	MGS	01-364/19:52:59		NOTE: End fixed Sub-Reflector for Radio Science		01-364/19:40:37
14995	MGS	01-364/19:55:23	54	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
14996	MGS	01-364/20:10:51		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/19:58:29
14997	MGS	01-364/20:14:36		: 01:36:01	RPAONX	01-364/20:02:14
14998	MGS	01-364/20:14:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/20:02:14
14999	MGS	01-364/20:15:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/20:03:27
15000	MGS	01-364/20:15:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/20:03:27
15001	MGS	01-364/20:15:51		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-364/20:03:29
15002	MGS	01-364/20:15:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/20:03:29
15003	MGS	01-364/20:15:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/20:03:29
15004	MGS	01-364/20:15:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/20:03:29
15005	MGS	01-364/20:15:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/20:03:29
15006	MGS	01-364/20:15:54		Set eclipse egress script address: 01DC	SWSEES	01-364/20:03:32
15007	MGS	01-364/20:16:21		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/20:03:59
15008	MGS	01-364/20:16:22		NOTE: Exit Earth Occultation 12575		01-364/20:04:00
15009	MGS	01-364/20:16:22	54	Acquisition Of X-Band Signal		
15010	MGS	01-364/20:16:22	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15011	MGS	01-364/20:16:22	54	NOTE: Carrier Only -- No Telemetry Modulation		
15012	MGS	01-364/20:16:22	63	Acquisition Of X-Band Signal		
15013	MGS	01-364/20:16:22	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15014	MGS	01-364/20:16:22	63	NOTE: Carrier Only -- No Telemetry Modulation		
15015	MGS	01-364/20:22:30		NOTE: Exit Planetary Atmosphere 12575		01-364/20:10:08
15016	MGS	01-364/20:24:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/20:12:17
15017	MGS	01-364/20:24:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/20:12:17
15018	MGS	01-364/20:24:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/20:12:17
15019	MGS	01-364/20:24:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/20:12:17
15020	MGS	01-364/20:24:39	54	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15021	MGS	01-364/20:24:39	63	Acquire D/L: X/16, 3-Way/54, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15022	MGS	01-364/20:24:40		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-364/20:12:18
15023	MGS	01-364/20:24:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-364/20:12:18
15024	MGS	01-364/20:24:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-364/20:12:18
15025	MGS	01-364/20:24:40	54	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15026	MGS	01-364/20:24:40	63	D/L Change: X/16, 3-Way/54, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15027	MGS	01-364/20:24:44		NOTE: End fixed Sub-Reflector for Radio Science		01-364/20:12:22
15028	MGS	01-364/20:31:31		NOTE: Exit Solar Eclipse 12575		01-364/20:19:09
15029	MGS	01-364/20:46:49		NOTE: Periapsis 12576 ----------		01-364/20:34:27
15030	MGS	01-364/20:52:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/20:40:08
15031	MGS	01-364/20:52:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/20:40:08
15032	MGS	01-364/20:52:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/20:40:09
15033	MGS	01-364/20:52:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/20:40:09
15034	MGS	01-364/21:05:00	54	NOTE: Transmitter Off in 15 minutes		
15035	MGS	01-364/21:10:00	15	Begin Tracking		
15036	MGS	01-364/21:10:00	15	Acquire D/L: X/16, 3-Way/54, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15037	MGS	01-364/21:14:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/21:02:09
15038	MGS	01-364/21:14:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/21:02:09
15039	MGS	01-364/21:20:00	54	Transmitter Off		
15040	MGS	01-364/21:24:32		NOTE: Start Block (SSRMGR)		01-364/21:12:10
15041	MGS	01-364/21:24:32		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-364/21:12:10
15042	MGS	01-364/21:24:33		SSR 1B Data Enable	CSD1BE	01-364/21:12:11
15043	MGS	01-364/21:24:33		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-364/21:12:11
15044	MGS	01-364/21:30:00	63	End Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15045	MGS	01-364/21:30:00	54	End Tracking		
15046	MGS	01-364/21:37:06		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/21:24:44
15047	MGS	01-364/21:38:57		NOTE: Start Block (MAP_PB_ODY)		01-364/21:26:35
15048	MGS	01-364/21:38:58		: 00:23:21, 01:36:02, FALSE, FALSE, FALSE, 00:01:15, 00:07:08, 01:20:48, 00:06:50	AEMINI	01-364/21:26:36
15049	MGS	01-364/21:38:58		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/21:26:36
15050	MGS	01-364/21:38:58		NOTE: Start EVP data return script		01-364/21:26:36
15051	MGS	01-364/21:38:59		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-364T22:08:20.000	AEMPBI	01-364/21:26:37
15052	MGS	01-364/21:42:06		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-364/21:29:44
15053	MGS	01-364/21:42:06		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8424000, DUR=00:17:33		01-364/21:29:44
15054	MGS	01-364/21:42:06		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-364/21:29:44
15055	MGS	01-364/21:42:06		: 00:08:30, FALSE	RDSCII	01-364/21:29:44
15056	MGS	01-364/21:42:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/21:29:44
15057	MGS	01-364/21:42:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/21:29:44
15058	MGS	01-364/21:42:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/21:29:44
15059	MGS	01-364/21:42:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/21:29:44
15060	MGS	01-364/21:42:06	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15061	MGS	01-364/21:42:06	15	NOTE: Carrier Only -- No Telemetry Modulation		
15062	MGS	01-364/21:44:15		NOTE: Enter Planetary Atmosphere 12576		01-364/21:31:53
15063	MGS	01-364/21:45:00	63	End Post-Cal		
15064	MGS	01-364/21:45:00	54	End Post-Cal		
15065	MGS	01-364/21:45:28		NOTE: Apoapsis 12576 -		01-364/21:33:06
15066	MGS	01-364/21:47:57		SSR 1A Data Disable	CSD1AX	01-364/21:35:35
15067	MGS	01-364/21:47:57		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-364/21:35:35
15068	MGS	01-364/21:47:58		NOTE: End Block (SSRMGR)		01-364/21:35:36
15069	MGS	01-364/21:48:58		NOTE: Enter Solar Eclipse 12576		01-364/21:36:36
15070	MGS	01-364/21:48:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/21:36:36
15071	MGS	01-364/21:50:04		NOTE: Enter Earth Occultation 12576		01-364/21:37:41
15072	MGS	01-364/21:50:04	15	NOTE: Loss Of X-Band Signal		
15073	MGS	01-364/21:50:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-364/21:38:14
15074	MGS	01-364/21:50:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-364/21:38:14
15075	MGS	01-364/21:50:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-364/21:38:14
15076	MGS	01-364/21:50:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-364/21:38:14
15077	MGS	01-364/21:50:37		NOTE: End EVP script		01-364/21:38:15
15078	MGS	01-364/21:50:37		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/21:38:15
15079	MGS	01-364/21:50:38		NOTE: End Block (MAP_RT)		01-364/21:38:16
15080	MGS	01-364/21:50:41		NOTE: End fixed Sub-Reflector for Radio Science		01-364/21:38:19
15081	MGS	01-364/22:12:19		: 01:36:02	RPAONX	01-364/21:59:57
15082	MGS	01-364/22:12:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/21:59:57
15083	MGS	01-364/22:13:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/22:01:09
15084	MGS	01-364/22:13:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/22:01:09
15085	MGS	01-364/22:13:35		Command the PSE with included data word: 3990	SWPSEL	01-364/22:01:13
15086	MGS	01-364/22:13:36		Set eclipse egress script address: 0158	SWSEES	01-364/22:01:14
15087	MGS	01-364/22:14:04		Disables autonomous command to send eclipse ingress script	SWEISX	01-364/22:01:42
15088	MGS	01-364/22:14:06		NOTE: Exit Earth Occultation 12576		01-364/22:01:44
15089	MGS	01-364/22:14:06	15	Acquisition Of X-Band Signal		
15090	MGS	01-364/22:14:06	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15091	MGS	01-364/22:20:13		NOTE: Exit Planetary Atmosphere 12576		01-364/22:07:51
15092	MGS	01-364/22:20:42		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:17:00	AEMPB	01-364/22:08:20
15093	MGS	01-364/22:20:42		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-364/22:08:20
15094	MGS	01-364/22:20:42		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-364/22:08:20
15095	MGS	01-364/22:20:43		SSR 1A Data Enable	CSD1AE	01-364/22:08:21
15096	MGS	01-364/22:20:43		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-364/22:08:21
15097	MGS	01-364/22:20:43	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15098	MGS	01-364/22:29:14		NOTE: Exit Solar Eclipse 12576		01-364/22:16:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15099	MGS	01-364/22:44:37		NOTE: Periapsis 12577 ----------		01-364/22:32:14
15100	MGS	01-364/22:54:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-364/22:41:51
15101	MGS	01-364/22:54:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-364/22:41:51
15102	MGS	01-364/22:54:15		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-364/22:41:52
15103	MGS	01-364/22:54:15		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-364/22:41:52
15104	MGS	01-364/23:16:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-364/23:03:52
15105	MGS	01-364/23:16:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-364/23:03:52
15106	MGS	01-364/23:31:22		SSR 1A Data Disable	CSD1AX	01-364/23:18:59
15107	MGS	01-364/23:31:22		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-364/23:18:59
15108	MGS	01-364/23:31:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-364/23:18:59
15109	MGS	01-364/23:31:22	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15110	MGS	01-364/23:36:43		NOTE: Start Block (MAP_RT)		01-364/23:24:20
15111	MGS	01-364/23:36:44		: 00:23:21, 01:36:01, FALSE, TRUE, FALSE, 00:01:15, 00:08:48, 01:17:27, 00:08:30	AEMINI	01-364/23:24:21
15112	MGS	01-364/23:36:44		Enable sending eclipse ingress script when array power disappears	SWEISE	01-364/23:24:21
15113	MGS	01-364/23:36:44		NOTE: Start EVP data return script		01-364/23:24:21
15114	MGS	01-364/23:36:45		: SE_2A, RTM, 01:17:26, MRC, 2001-365T00:07:46.000	AEMRTI	01-364/23:24:22
15115	MGS	01-364/23:41:58		NOTE: Enter Planetary Atmosphere 12577		01-364/23:29:36
15116	MGS	01-364/23:43:26		NOTE: Apoapsis 12577 -		01-364/23:31:03
15117	MGS	01-364/23:46:43		NOTE: Enter Solar Eclipse 12577		01-364/23:34:21
15118	MGS	01-364/23:46:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-364/23:34:21
15119	MGS	01-364/23:47:46		NOTE: Enter Earth Occultation 12577		01-364/23:35:23
15120	MGS	01-364/23:47:46	15	NOTE: Loss Of X-Band Signal		
15121	MGS	01-364/23:48:21		NOTE: End EVP script		01-364/23:35:59
15122	MGS	01-364/23:48:22		Turn off the MOT Exciter and RPA beam	STRPAF	01-364/23:35:59
15123	MGS	01-364/23:48:22		NOTE: End Block (MAP_PB_ODY)		01-364/23:36:00
15124	MGS	01-365/00:00:00		Light Time: OWLT = 12:22, RTLT = 24:45		
15125	MGS	01-365/00:06:20		NOTE: Begin fixed Sub-Reflector for Radio Science		01-364/23:53:57
15126	MGS	01-365/00:10:05		: 01:36:01	RPAONX	01-364/23:57:42
15127	MGS	01-365/00:10:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-364/23:57:42
15128	MGS	01-365/00:11:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-364/23:58:52
15129	MGS	01-365/00:11:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-364/23:58:52
15130	MGS	01-365/00:11:20		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-364/23:58:57
15131	MGS	01-365/00:11:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-364/23:58:57
15132	MGS	01-365/00:11:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-364/23:58:57
15133	MGS	01-365/00:11:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-364/23:58:57
15134	MGS	01-365/00:11:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-364/23:58:57
15135	MGS	01-365/00:11:20		Set eclipse egress script address: 019A	SWSEES	01-364/23:58:57
15136	MGS	01-365/00:11:53		NOTE: Exit Earth Occultation 12577		01-364/23:59:30
15137	MGS	01-365/00:11:53	15	Acquisition Of X-Band Signal		
15138	MGS	01-365/00:11:53	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15139	MGS	01-365/00:11:53	15	NOTE: Carrier Only -- No Telemetry Modulation		
15140	MGS	01-365/00:17:58		NOTE: Exit Planetary Atmosphere 12577		01-365/00:05:35
15141	MGS	01-365/00:20:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/00:07:45
15142	MGS	01-365/00:20:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/00:07:45
15143	MGS	01-365/00:20:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/00:07:45
15144	MGS	01-365/00:20:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/00:07:45
15145	MGS	01-365/00:20:08	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15146	MGS	01-365/00:20:09		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/00:07:46
15147	MGS	01-365/00:20:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/00:07:46
15148	MGS	01-365/00:20:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/00:07:46
15149	MGS	01-365/00:20:09	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15150	MGS	01-365/00:20:13		NOTE: End fixed Sub-Reflector for Radio Science		01-365/00:07:50
15151	MGS	01-365/00:27:00		NOTE: Exit Solar Eclipse 12577		01-365/00:14:37
15152	MGS	01-365/00:42:49		NOTE: Periapsis 12578 ----------		01-365/00:30:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15153	MGS	01-365/00:47:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/00:35:36
15154	MGS	01-365/00:47:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/00:35:36
15155	MGS	01-365/00:48:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/00:35:37
15156	MGS	01-365/00:48:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/00:35:37
15157	MGS	01-365/01:10:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/00:57:37
15158	MGS	01-365/01:10:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/00:57:37
15159	MGS	01-365/01:32:35		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/01:20:12
15160	MGS	01-365/01:34:31		NOTE: Start EVP data return script		01-365/01:22:08
15161	MGS	01-365/01:37:35		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/01:25:12
15162	MGS	01-365/01:37:35		: 00:08:30, FALSE	RDSCII	01-365/01:25:12
15163	MGS	01-365/01:37:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/01:25:12
15164	MGS	01-365/01:37:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/01:25:12
15165	MGS	01-365/01:37:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/01:25:12
15166	MGS	01-365/01:37:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/01:25:12
15167	MGS	01-365/01:37:35	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15168	MGS	01-365/01:37:35	15	NOTE: Carrier Only -- No Telemetry Modulation		
15169	MGS	01-365/01:39:44		NOTE: Enter Planetary Atmosphere 12578		01-365/01:27:21
15170	MGS	01-365/01:41:46		NOTE: Apoapsis 12578 -		01-365/01:29:23
15171	MGS	01-365/01:44:30		NOTE: Enter Solar Eclipse 12578		01-365/01:32:07
15172	MGS	01-365/01:44:31		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/01:32:08
15173	MGS	01-365/01:45:32		NOTE: Enter Earth Occultation 12578		01-365/01:33:09
15174	MGS	01-365/01:45:32	15	NOTE: Loss Of X-Band Signal		
15175	MGS	01-365/01:46:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/01:33:42
15176	MGS	01-365/01:46:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/01:33:42
15177	MGS	01-365/01:46:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/01:33:42
15178	MGS	01-365/01:46:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/01:33:42
15179	MGS	01-365/01:46:06		NOTE: End EVP script		01-365/01:33:43
15180	MGS	01-365/01:46:06		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/01:33:43
15181	MGS	01-365/01:46:10		NOTE: End fixed Sub-Reflector for Radio Science		01-365/01:33:47
15182	MGS	01-365/02:04:07		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/01:51:44
15183	MGS	01-365/02:07:52		: 01:36:01	RPAONX	01-365/01:55:29
15184	MGS	01-365/02:07:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/01:55:29
15185	MGS	01-365/02:09:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/01:56:37
15186	MGS	01-365/02:09:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/01:56:37
15187	MGS	01-365/02:09:05		Set eclipse egress script address: 01DC	SWSEES	01-365/01:56:42
15188	MGS	01-365/02:09:07		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-365/01:56:44
15189	MGS	01-365/02:09:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/01:56:44
15190	MGS	01-365/02:09:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/01:56:44
15191	MGS	01-365/02:09:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/01:56:44
15192	MGS	01-365/02:09:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/01:56:44
15193	MGS	01-365/02:09:37		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/01:57:14
15194	MGS	01-365/02:09:40		NOTE: Exit Earth Occultation 12578		01-365/01:57:17
15195	MGS	01-365/02:09:40	15	Acquisition Of X-Band Signal		
15196	MGS	01-365/02:09:40	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15197	MGS	01-365/02:09:40	15	NOTE: Carrier Only -- No Telemetry Modulation		
15198	MGS	01-365/02:15:45		NOTE: Exit Planetary Atmosphere 12578		01-365/02:03:22
15199	MGS	01-365/02:17:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/02:05:32
15200	MGS	01-365/02:17:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/02:05:32
15201	MGS	01-365/02:17:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/02:05:32
15202	MGS	01-365/02:17:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/02:05:32
15203	MGS	01-365/02:17:55	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15204	MGS	01-365/02:17:56		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/02:05:33
15205	MGS	01-365/02:17:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/02:05:33
15206	MGS	01-365/02:17:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/02:05:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15207	MGS	01-365/02:17:56	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15208	MGS	01-365/02:18:00		NOTE: End fixed Sub-Reflector for Radio Science		01-365/02:05:37
15209	MGS	01-365/02:24:47		NOTE: Exit Solar Eclipse 12578		01-365/02:12:24
15210	MGS	01-365/02:40:57		NOTE: Periapsis 12579 ----------		01-365/02:28:34
15211	MGS	01-365/02:45:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/02:33:23
15212	MGS	01-365/02:45:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/02:33:23
15213	MGS	01-365/02:45:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/02:33:24
15214	MGS	01-365/02:45:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/02:33:24
15215	MGS	01-365/03:07:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/02:55:24
15216	MGS	01-365/03:07:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/02:55:24
15217	MGS	01-365/03:17:39		NOTE: Start Block (SSRMGR)		01-365/03:05:16
15218	MGS	01-365/03:17:39		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	01-365/03:05:16
15219	MGS	01-365/03:17:40		SSR 1A Data Enable	CSD1AE	01-365/03:05:17
15220	MGS	01-365/03:17:40		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-365/03:05:17
15221	MGS	01-365/03:30:00	43	Begin Pre-Cal		
15222	MGS	01-365/03:30:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
15223	MGS	01-365/03:30:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
15224	MGS	01-365/03:30:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
15225	MGS	01-365/03:30:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
15226	MGS	01-365/03:30:00	43	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
15227	MGS	01-365/03:30:00	43	Config: TGC: DEST=37		
15228	MGS	01-365/03:30:00	43	Config: TGC: BAND=X, BR=42666.666667		
15229	MGS	01-365/03:30:00	43	Config: FSS: CH=2, PRI_FL=10000		
15230	MGS	01-365/03:30:00	43	Config: RSR		
15231	MGS	01-365/03:30:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
15232	MGS	01-365/03:30:00	43	Config: BVR		
15233	MGS	01-365/03:30:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
15234	MGS	01-365/03:30:00	43	Config: MDA: SMPL=0.1		
15235	MGS	01-365/03:30:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/03:17:59
15236	MGS	01-365/03:32:16		NOTE: Start Block (MAP_PB_ODY)		01-365/03:19:53
15237	MGS	01-365/03:32:17		: 00:23:21, 01:36:02, FALSE, FALSE, FALSE, 00:01:15, 00:07:08, 01:20:48, 00:06:50	AEMINI	01-365/03:19:54
15238	MGS	01-365/03:32:17		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/03:19:54
15239	MGS	01-365/03:32:17		NOTE: Start EVP data return script		01-365/03:19:54
15240	MGS	01-365/03:32:18		: SSR_1B, F42KHZ, PART1, SE_1A, 2001-365T04:01:38.000	AEMPBI	01-365/03:19:55
15241	MGS	01-365/03:35:22		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/03:22:59
15242	MGS	01-365/03:35:22		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8496000, DUR=00:17:42		01-365/03:22:59
15243	MGS	01-365/03:35:22		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-365/03:22:59
15244	MGS	01-365/03:35:22		: 00:08:30, FALSE	RDSCII	01-365/03:22:59
15245	MGS	01-365/03:35:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/03:22:59
15246	MGS	01-365/03:35:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/03:22:59
15247	MGS	01-365/03:35:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/03:22:59
15248	MGS	01-365/03:35:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/03:22:59
15249	MGS	01-365/03:35:22	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15250	MGS	01-365/03:35:22	15	NOTE: Carrier Only -- No Telemetry Modulation		
15251	MGS	01-365/03:37:32		NOTE: Enter Planetary Atmosphere 12579		01-365/03:25:09
15252	MGS	01-365/03:39:48		NOTE: Apoapsis 12579 -		01-365/03:27:24
15253	MGS	01-365/03:41:17		SSR 1B Data Disable	CSD1BX	01-365/03:28:54
15254	MGS	01-365/03:41:17		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-365/03:28:54
15255	MGS	01-365/03:41:18		NOTE: End Block (SSRMGR)		01-365/03:28:55
15256	MGS	01-365/03:42:17		NOTE: Enter Solar Eclipse 12579		01-365/03:29:54
15257	MGS	01-365/03:42:17		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/03:29:54
15258	MGS	01-365/03:43:20		NOTE: Enter Earth Occultation 12579		01-365/03:30:57
15259	MGS	01-365/03:43:20	15	NOTE: Loss Of X-Band Signal		
15260	MGS	01-365/03:43:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/03:31:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15261	MGS	01-365/03:43:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/03:31:29
15262	MGS	01-365/03:43:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/03:31:29
15263	MGS	01-365/03:43:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/03:31:29
15264	MGS	01-365/03:43:53		NOTE: End EVP script		01-365/03:31:30
15265	MGS	01-365/03:43:53		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/03:31:30
15266	MGS	01-365/03:43:54		NOTE: End Block (MAP_RT)		01-365/03:31:31
15267	MGS	01-365/03:43:57		NOTE: End fixed Sub-Reflector for Radio Science		01-365/03:31:34
15268	MGS	01-365/04:05:38		: 01:36:02	RPAONX	01-365/03:53:15
15269	MGS	01-365/04:05:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/03:53:15
15270	MGS	01-365/04:06:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/03:54:24
15271	MGS	01-365/04:06:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/03:54:24
15272	MGS	01-365/04:06:51		Command the PSE with included data word: 3990	SWPSEL	01-365/03:54:28
15273	MGS	01-365/04:06:52		Set eclipse egress script address: 0158	SWSEES	01-365/03:54:29
15274	MGS	01-365/04:07:23		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/03:55:00
15275	MGS	01-365/04:07:28		NOTE: Exit Earth Occultation 12579		01-365/03:55:04
15276	MGS	01-365/04:07:28	15	Acquisition Of X-Band Signal		
15277	MGS	01-365/04:07:28	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15278	MGS	01-365/04:13:34		NOTE: Exit Planetary Atmosphere 12579		01-365/04:01:10
15279	MGS	01-365/04:14:01		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:17:00	AEMPB	01-365/04:01:38
15280	MGS	01-365/04:14:01		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-365/04:01:38
15281	MGS	01-365/04:14:01		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	01-365/04:01:38
15282	MGS	01-365/04:14:02		SSR 1B Data Enable	CSD1BE	01-365/04:01:39
15283	MGS	01-365/04:14:02		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		01-365/04:01:39
15284	MGS	01-365/04:14:02	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15285	MGS	01-365/04:22:35		NOTE: Exit Solar Eclipse 12579		01-365/04:10:11
15286	MGS	01-365/04:38:42		NOTE: Periapsis 12580 ----------		01-365/04:26:18
15287	MGS	01-365/04:47:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/04:35:10
15288	MGS	01-365/04:47:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/04:35:10
15289	MGS	01-365/04:47:34		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/04:35:11
15290	MGS	01-365/04:47:34		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/04:35:11
15291	MGS	01-365/05:00:00	43	Begin Tracking		
15292	MGS	01-365/05:00:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15293	MGS	01-365/05:09:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/04:57:11
15294	MGS	01-365/05:09:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/04:57:11
15295	MGS	01-365/05:10:25	15	NOTE: Below Uplink Interlock Limit		
15296	MGS	01-365/05:20:00	15	End Tracking		
15297	MGS	01-365/05:24:41		SSR 1B Data Disable	CSD1BX	01-365/05:12:17
15298	MGS	01-365/05:24:41		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-365/05:12:17
15299	MGS	01-365/05:24:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-365/05:12:17
15300	MGS	01-365/05:24:41	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15301	MGS	01-365/05:30:00		NOTE: Start Block (MAP_RT)		01-365/05:17:36
15302	MGS	01-365/05:30:01		: 00:23:21, 01:36:01, FALSE, TRUE, FALSE, 00:01:15, 00:08:48, 01:17:27, 00:08:30	AEMINI	01-365/05:17:37
15303	MGS	01-365/05:30:01		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/05:17:37
15304	MGS	01-365/05:30:01		NOTE: Start EVP data return script		01-365/05:17:37
15305	MGS	01-365/05:30:02		: SE_2A, RTM, 01:17:26, MRC, 2001-365T06:01:03.000	AEMRTI	01-365/05:17:38
15306	MGS	01-365/05:35:00	15	End Post-Cal		
15307	MGS	01-365/05:35:17		NOTE: Enter Planetary Atmosphere 12580		01-365/05:22:54
15308	MGS	01-365/05:37:16		NOTE: Apoapsis 12580 -		01-365/05:24:52
15309	MGS	01-365/05:40:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/05:27:37
15310	MGS	01-365/05:40:01		NOTE: Enter Solar Eclipse 12580		01-365/05:27:38
15311	MGS	01-365/05:41:06		NOTE: Enter Earth Occultation 12580		01-365/05:28:42
15312	MGS	01-365/05:41:06	43	NOTE: Loss Of X-Band Signal		
15313	MGS	01-365/05:41:40		NOTE: End EVP script		01-365/05:29:17
15314	MGS	01-365/05:41:41		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/05:29:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15315	MGS	01-365/05:41:41		NOTE: End Block (MAP_PB_ODY)		01-365/05:29:18
15316	MGS	01-365/05:59:37		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/05:47:14
15317	MGS	01-365/06:03:22		: 01:36:01	RPAONX	01-365/05:50:58
15318	MGS	01-365/06:03:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/05:50:58
15319	MGS	01-365/06:04:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/05:52:11
15320	MGS	01-365/06:04:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/05:52:11
15321	MGS	01-365/06:04:37		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-365/05:52:13
15322	MGS	01-365/06:04:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/05:52:13
15323	MGS	01-365/06:04:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/05:52:13
15324	MGS	01-365/06:04:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/05:52:13
15325	MGS	01-365/06:04:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/05:52:13
15326	MGS	01-365/06:04:40		Set eclipse egress script address: 019A	SWSEES	01-365/05:52:16
15327	MGS	01-365/06:05:13		NOTE: Exit Earth Occultation 12580		01-365/05:52:49
15328	MGS	01-365/06:05:13	43	Acquisition Of X-Band Signal		
15329	MGS	01-365/06:05:13	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15330	MGS	01-365/06:05:13	43	NOTE: Carrier Only -- No Telemetry Modulation		
15331	MGS	01-365/06:11:19		NOTE: Exit Planetary Atmosphere 12580		01-365/05:58:56
15332	MGS	01-365/06:13:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/06:01:01
15333	MGS	01-365/06:13:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/06:01:01
15334	MGS	01-365/06:13:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/06:01:01
15335	MGS	01-365/06:13:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/06:01:01
15336	MGS	01-365/06:13:25	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15337	MGS	01-365/06:13:26		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/06:01:02
15338	MGS	01-365/06:13:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/06:01:02
15339	MGS	01-365/06:13:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/06:01:02
15340	MGS	01-365/06:13:26	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15341	MGS	01-365/06:13:30		NOTE: End fixed Sub-Reflector for Radio Science		01-365/06:01:07
15342	MGS	01-365/06:20:18		NOTE: Exit Solar Eclipse 12580		01-365/06:07:55
15343	MGS	01-365/06:36:03		NOTE: Periapsis 12581 ----------		01-365/06:23:39
15344	MGS	01-365/06:41:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/06:28:53
15345	MGS	01-365/06:41:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/06:28:53
15346	MGS	01-365/06:41:18		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/06:28:54
15347	MGS	01-365/06:41:18		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/06:28:54
15348	MGS	01-365/07:03:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/06:50:54
15349	MGS	01-365/07:03:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/06:50:54
15350	MGS	01-365/07:25:52		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/07:13:29
15351	MGS	01-365/07:27:41		NOTE: Start EVP data return script		01-365/07:15:17
15352	MGS	01-365/07:30:52		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/07:18:28
15353	MGS	01-365/07:30:52		: 00:08:30, FALSE	RDSCII	01-365/07:18:28
15354	MGS	01-365/07:30:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/07:18:28
15355	MGS	01-365/07:30:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/07:18:28
15356	MGS	01-365/07:30:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/07:18:28
15357	MGS	01-365/07:30:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/07:18:28
15358	MGS	01-365/07:30:52	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15359	MGS	01-365/07:30:52	43	NOTE: Carrier Only -- No Telemetry Modulation		
15360	MGS	01-365/07:32:57		NOTE: Enter Planetary Atmosphere 12581		01-365/07:20:33
15361	MGS	01-365/07:34:39		NOTE: Apoapsis 12581 -		01-365/07:22:15
15362	MGS	01-365/07:37:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/07:25:17
15363	MGS	01-365/07:37:41		NOTE: Enter Solar Eclipse 12581		01-365/07:25:18
15364	MGS	01-365/07:38:44		NOTE: Enter Earth Occultation 12581		01-365/07:26:20
15365	MGS	01-365/07:38:44	43	NOTE: Loss Of X-Band Signal		
15366	MGS	01-365/07:39:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/07:26:58
15367	MGS	01-365/07:39:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/07:26:58
15368	MGS	01-365/07:39:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/07:26:58

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15369	MGS	01-365/07:39:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/07:26:58
15370	MGS	01-365/07:39:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/07:26:59
15371	MGS	01-365/07:39:23		NOTE: End EVP script		01-365/07:27:00
15372	MGS	01-365/07:39:27		NOTE: End fixed Sub-Reflector for Radio Science		01-365/07:27:04
15373	MGS	01-365/07:57:17		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/07:44:54
15374	MGS	01-365/08:01:02		: 01:36:01	RPAONX	01-365/07:48:38
15375	MGS	01-365/08:01:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/07:48:38
15376	MGS	01-365/08:02:17		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-365/07:49:53
15377	MGS	01-365/08:02:17		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/07:49:53
15378	MGS	01-365/08:02:17		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/07:49:53
15379	MGS	01-365/08:02:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/07:49:53
15380	MGS	01-365/08:02:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/07:49:53
15381	MGS	01-365/08:02:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/07:49:54
15382	MGS	01-365/08:02:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/07:49:54
15383	MGS	01-365/08:02:23		Set eclipse egress script address: 01DC	SWSEES	01-365/07:49:59
15384	MGS	01-365/08:02:47		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/07:50:23
15385	MGS	01-365/08:02:55		NOTE: Exit Earth Occultation 12581		01-365/07:50:31
15386	MGS	01-365/08:02:55	43	Acquisition Of X-Band Signal		
15387	MGS	01-365/08:02:55	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15388	MGS	01-365/08:02:55	43	NOTE: Carrier Only -- No Telemetry Modulation		
15389	MGS	01-365/08:09:00		NOTE: Exit Planetary Atmosphere 12581		01-365/07:56:36
15390	MGS	01-365/08:11:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/07:58:41
15391	MGS	01-365/08:11:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/07:58:41
15392	MGS	01-365/08:11:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/07:58:41
15393	MGS	01-365/08:11:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/07:58:41
15394	MGS	01-365/08:11:05	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15395	MGS	01-365/08:11:06		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/07:58:42
15396	MGS	01-365/08:11:06		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/07:58:42
15397	MGS	01-365/08:11:06		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/07:58:42
15398	MGS	01-365/08:11:06	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15399	MGS	01-365/08:11:10		NOTE: End fixed Sub-Reflector for Radio Science		01-365/07:58:47
15400	MGS	01-365/08:17:58		NOTE: Exit Solar Eclipse 12581		01-365/08:05:34
15401	MGS	01-365/08:33:31		NOTE: Periapsis 12582 ----------		01-365/08:21:07
15402	MGS	01-365/08:38:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/08:26:33
15403	MGS	01-365/08:38:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/08:26:33
15404	MGS	01-365/08:38:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/08:26:34
15405	MGS	01-365/08:38:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/08:26:34
15406	MGS	01-365/09:00:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/08:48:34
15407	MGS	01-365/09:00:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/08:48:34
15408	MGS	01-365/09:10:59		NOTE: Start Block (SSRMGR)		01-365/08:58:35
15409	MGS	01-365/09:10:59		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	01-365/08:58:35
15410	MGS	01-365/09:11:00		SSR 1B Data Enable	CSD1BE	01-365/08:58:36
15411	MGS	01-365/09:11:00		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		01-365/08:58:36
15412	MGS	01-365/09:23:33		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/09:11:09
15413	MGS	01-365/09:25:23		NOTE: Start Block (MAP_PB_ODY)		01-365/09:12:59
15414	MGS	01-365/09:25:24		: 00:23:21, 01:36:02, FALSE, FALSE, FALSE, 00:01:15, 00:07:08, 01:20:48, 00:06:50	AEMINI	01-365/09:13:00
15415	MGS	01-365/09:25:24		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/09:13:00
15416	MGS	01-365/09:25:24		NOTE: Start EVP data return script		01-365/09:13:00
15417	MGS	01-365/09:25:25		: SSR_1A, F42KHZ, PART2, SE_1A, 2001-365T09:54:44.000	AEMPBI	01-365/09:13:01
15418	MGS	01-365/09:28:32		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/09:16:08
15419	MGS	01-365/09:28:32		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8416000, DUR=00:17:32		01-365/09:16:08
15420	MGS	01-365/09:28:32		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		01-365/09:16:08
15421	MGS	01-365/09:28:32		: 00:08:30, FALSE	RDSCII	01-365/09:16:08
15422	MGS	01-365/09:28:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/09:16:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15423	MGS	01-365/09:28:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/09:16:08
15424	MGS	01-365/09:28:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/09:16:08
15425	MGS	01-365/09:28:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/09:16:08
15426	MGS	01-365/09:28:32	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15427	MGS	01-365/09:28:32	43	NOTE: Carrier Only -- No Telemetry Modulation		
15428	MGS	01-365/09:30:38		NOTE: Enter Planetary Atmosphere 12582		01-365/09:18:14
15429	MGS	01-365/09:32:27		NOTE: Apoapsis 12582 -		01-365/09:20:03
15430	MGS	01-365/09:34:24		SSR 1A Data Disable	CSD1AX	01-365/09:22:00
15431	MGS	01-365/09:34:24		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-365/09:22:00
15432	MGS	01-365/09:34:25		NOTE: End Block (SSRMGR)		01-365/09:22:01
15433	MGS	01-365/09:35:24		NOTE: Enter Solar Eclipse 12582		01-365/09:23:00
15434	MGS	01-365/09:35:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/09:23:00
15435	MGS	01-365/09:36:24		NOTE: Enter Earth Occultation 12582		01-365/09:24:00
15436	MGS	01-365/09:36:24	43	NOTE: Loss Of X-Band Signal		
15437	MGS	01-365/09:37:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/09:24:38
15438	MGS	01-365/09:37:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/09:24:38
15439	MGS	01-365/09:37:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/09:24:38
15440	MGS	01-365/09:37:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/09:24:38
15441	MGS	01-365/09:37:03		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/09:24:39
15442	MGS	01-365/09:37:04		NOTE: End EVP script		01-365/09:24:40
15443	MGS	01-365/09:37:05		NOTE: End Block (MAP_RT)		01-365/09:24:41
15444	MGS	01-365/09:37:08		NOTE: End fixed Sub-Reflector for Radio Science		01-365/09:24:44
15445	MGS	01-365/09:58:45		: 01:36:02	RPAONX	01-365/09:46:21
15446	MGS	01-365/09:58:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/09:46:21
15447	MGS	01-365/09:59:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/09:47:34
15448	MGS	01-365/09:59:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/09:47:34
15449	MGS	01-365/10:00:02		Command the PSE with included data word: 3990	SWPSEL	01-365/09:47:38
15450	MGS	01-365/10:00:03		Set eclipse egress script address: 0158	SWSEES	01-365/09:47:39
15451	MGS	01-365/10:00:30		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/09:48:06
15452	MGS	01-365/10:00:38		NOTE: Exit Earth Occultation 12582		01-365/09:48:14
15453	MGS	01-365/10:00:38	43	Acquisition Of X-Band Signal		
15454	MGS	01-365/10:00:38	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15455	MGS	01-365/10:06:42		NOTE: Exit Planetary Atmosphere 12582		01-365/09:54:18
15456	MGS	01-365/10:07:08		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:17:00	AEMPB	01-365/09:54:44
15457	MGS	01-365/10:07:08		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-365/09:54:44
15458	MGS	01-365/10:07:08		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	01-365/09:54:44
15459	MGS	01-365/10:07:09		SSR 1A Data Enable	CSD1AE	01-365/09:54:45
15460	MGS	01-365/10:07:09		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		01-365/09:54:45
15461	MGS	01-365/10:07:09	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15462	MGS	01-365/10:15:41		NOTE: Exit Solar Eclipse 12582		01-365/10:03:17
15463	MGS	01-365/10:25:00	63	Begin Pre-Cal		
15464	MGS	01-365/10:25:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
15465	MGS	01-365/10:25:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
15466	MGS	01-365/10:25:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
15467	MGS	01-365/10:25:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
15468	MGS	01-365/10:25:00	63	Config: TGC: DEST=37		
15469	MGS	01-365/10:25:00	63	Config: TGC: BAND=X, BR=8000.000000		
15470	MGS	01-365/10:25:00	63	Config: FSS: CH=2, PRI_FL=10000		
15471	MGS	01-365/10:25:00	63	Config: RSR		
15472	MGS	01-365/10:25:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
15473	MGS	01-365/10:25:00	63	Config: BVR		
15474	MGS	01-365/10:25:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
15475	MGS	01-365/10:25:00	63	Config: MDA: SMPL=0.1		
15476	MGS	01-365/10:31:18		NOTE: Periapsis 12583 ----------		01-365/10:18:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15477	MGS	01-365/10:40:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/10:28:16
15478	MGS	01-365/10:40:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/10:28:16
15479	MGS	01-365/10:40:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/10:28:17
15480	MGS	01-365/10:40:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/10:28:17
15481	MGS	01-365/11:02:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/10:50:17
15482	MGS	01-365/11:02:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/10:50:17
15483	MGS	01-365/11:17:47		SSR 1A Data Disable	CSD1AX	01-365/11:05:23
15484	MGS	01-365/11:17:47		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-365/11:05:23
15485	MGS	01-365/11:17:47		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-365/11:05:23
15486	MGS	01-365/11:17:47	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15487	MGS	01-365/11:23:09		NOTE: Start Block (MAP_RT)		01-365/11:10:45
15488	MGS	01-365/11:23:10		: 00:23:21, 01:36:01, FALSE, TRUE, FALSE, 00:01:15, 00:08:48, 01:17:27, 00:08:30	AEMINI	01-365/11:10:46
15489	MGS	01-365/11:23:10		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/11:10:46
15490	MGS	01-365/11:23:10		NOTE: Start EVP data return script		01-365/11:10:46
15491	MGS	01-365/11:23:11		: SE_2A, RTM, 01:17:26, MRC, 2001-365T11:54:12.000	AEMRTI	01-365/11:10:47
15492	MGS	01-365/11:28:25		NOTE: Enter Planetary Atmosphere 12583		01-365/11:16:00
15493	MGS	01-365/11:30:19		NOTE: Apoapsis 12583 -		01-365/11:17:55
15494	MGS	01-365/11:33:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/11:20:46
15495	MGS	01-365/11:33:11		NOTE: Enter Solar Eclipse 12583		01-365/11:20:46
15496	MGS	01-365/11:34:10		NOTE: Enter Earth Occultation 12583		01-365/11:21:46
15497	MGS	01-365/11:34:10	43	NOTE: Loss Of X-Band Signal		
15498	MGS	01-365/11:34:47		NOTE: End EVP script		01-365/11:22:23
15499	MGS	01-365/11:34:47		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/11:22:23
15500	MGS	01-365/11:34:48		NOTE: End Block (MAP_PB_ODY)		01-365/11:22:24
15501	MGS	01-365/11:52:47		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/11:40:22
15502	MGS	01-365/11:55:00	63	Begin Tracking		
15503	MGS	01-365/11:56:32		: 01:36:01	RPAONX	01-365/11:44:07
15504	MGS	01-365/11:56:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/11:44:07
15505	MGS	01-365/11:57:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/11:45:17
15506	MGS	01-365/11:57:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/11:45:17
15507	MGS	01-365/11:57:47		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-365/11:45:22
15508	MGS	01-365/11:57:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/11:45:22
15509	MGS	01-365/11:57:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/11:45:22
15510	MGS	01-365/11:57:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/11:45:22
15511	MGS	01-365/11:57:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/11:45:22
15512	MGS	01-365/11:57:47		Set eclipse egress script address: 019A	SWSEES	01-365/11:45:22
15513	MGS	01-365/11:58:25		NOTE: Exit Earth Occultation 12583		01-365/11:46:00
15514	MGS	01-365/11:58:25	43	Acquisition Of X-Band Signal		
15515	MGS	01-365/11:58:25	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15516	MGS	01-365/11:58:25	43	NOTE: Carrier Only -- No Telemetry Modulation		
15517	MGS	01-365/11:58:25	63	Acquisition Of X-Band Signal		
15518	MGS	01-365/11:58:25	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15519	MGS	01-365/11:58:25	63	NOTE: Carrier Only -- No Telemetry Modulation		
15520	MGS	01-365/12:02:52	43	NOTE: Below Uplink Interlock Limit		
15521	MGS	01-365/12:03:34	63	NOTE: Above Uplink Interlock Limit		
15522	MGS	01-365/12:04:28		NOTE: Exit Planetary Atmosphere 12583		01-365/11:52:04
15523	MGS	01-365/12:06:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/11:54:10
15524	MGS	01-365/12:06:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/11:54:10
15525	MGS	01-365/12:06:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/11:54:10
15526	MGS	01-365/12:06:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/11:54:10
15527	MGS	01-365/12:06:35	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15528	MGS	01-365/12:06:35	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15529	MGS	01-365/12:06:36		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/11:54:11
15530	MGS	01-365/12:06:36		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/11:54:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15531	MGS	01-365/12:06:36		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/11:54:11
15532	MGS	01-365/12:06:36	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15533	MGS	01-365/12:06:36	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15534	MGS	01-365/12:06:40		NOTE: End fixed Sub-Reflector for Radio Science		01-365/11:54:15
15535	MGS	01-365/12:12:24		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	01-365/11:59:59
15536	MGS	01-365/12:13:28		NOTE: Exit Solar Eclipse 12583		01-365/12:01:03
15537	MGS	01-365/12:15:00	43	End Tracking		
15538	MGS	01-365/12:29:12		NOTE: Periapsis 12584 ----------		01-365/12:16:47
15539	MGS	01-365/12:30:00	43	End Post-Cal		
15540	MGS	01-365/12:34:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/12:22:02
15541	MGS	01-365/12:34:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/12:22:02
15542	MGS	01-365/12:34:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/12:22:03
15543	MGS	01-365/12:34:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/12:22:03
15544	MGS	01-365/12:56:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/12:44:03
15545	MGS	01-365/12:56:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/12:44:03
15546	MGS	01-365/13:19:02		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/13:06:37
15547	MGS	01-365/13:20:58		NOTE: Start EVP data return script		01-365/13:08:33
15548	MGS	01-365/13:24:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/13:11:37
15549	MGS	01-365/13:24:02		: 00:08:30, FALSE	RDSCII	01-365/13:11:37
15550	MGS	01-365/13:24:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/13:11:37
15551	MGS	01-365/13:24:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/13:11:37
15552	MGS	01-365/13:24:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/13:11:37
15553	MGS	01-365/13:24:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/13:11:37
15554	MGS	01-365/13:24:02	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15555	MGS	01-365/13:24:02	63	NOTE: Carrier Only -- No Telemetry Modulation		
15556	MGS	01-365/13:26:12		NOTE: Enter Planetary Atmosphere 12584		01-365/13:13:47
15557	MGS	01-365/13:27:59		NOTE: Apoapsis 12584 -		01-365/13:15:34
15558	MGS	01-365/13:30:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/13:18:33
15559	MGS	01-365/13:30:58		NOTE: Enter Solar Eclipse 12584		01-365/13:18:33
15560	MGS	01-365/13:31:58		NOTE: Enter Earth Occultation 12584		01-365/13:19:33
15561	MGS	01-365/13:31:58	63	NOTE: Loss Of X-Band Signal		
15562	MGS	01-365/13:32:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/13:20:07
15563	MGS	01-365/13:32:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/13:20:07
15564	MGS	01-365/13:32:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/13:20:07
15565	MGS	01-365/13:32:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/13:20:07
15566	MGS	01-365/13:32:33		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/13:20:08
15567	MGS	01-365/13:32:33		NOTE: End EVP script		01-365/13:20:08
15568	MGS	01-365/13:32:37		NOTE: End fixed Sub-Reflector for Radio Science		01-365/13:20:12
15569	MGS	01-365/13:50:34		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/13:38:09
15570	MGS	01-365/13:54:19		: 01:36:01	RPAONX	01-365/13:41:54
15571	MGS	01-365/13:54:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/13:41:54
15572	MGS	01-365/13:55:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/13:43:03
15573	MGS	01-365/13:55:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/13:43:03
15574	MGS	01-365/13:55:33		Set eclipse egress script address: 01DC	SWSEES	01-365/13:43:08
15575	MGS	01-365/13:55:34		: 00:00:30, 00:08:48, FALSE	RDSCIE	01-365/13:43:09
15576	MGS	01-365/13:55:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/13:43:09
15577	MGS	01-365/13:55:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/13:43:09
15578	MGS	01-365/13:55:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/13:43:09
15579	MGS	01-365/13:55:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/13:43:09
15580	MGS	01-365/13:56:04		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/13:43:39
15581	MGS	01-365/13:56:13		NOTE: Exit Earth Occultation 12584		01-365/13:43:48
15582	MGS	01-365/13:56:13	63	Acquisition Of X-Band Signal		
15583	MGS	01-365/13:56:13	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15584	MGS	01-365/13:56:13	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15585	MGS	01-365/14:02:16		NOTE: Exit Planetary Atmosphere 12584		01-365/13:49:52
15586	MGS	01-365/14:04:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/13:51:57
15587	MGS	01-365/14:04:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/13:51:57
15588	MGS	01-365/14:04:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/13:51:57
15589	MGS	01-365/14:04:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/13:51:57
15590	MGS	01-365/14:04:22	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15591	MGS	01-365/14:04:23		: RTM, MRC, 01:17:26, S&E_2A, FALSE, 00:08:31	AEMRT	01-365/13:51:58
15592	MGS	01-365/14:04:23		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/13:51:58
15593	MGS	01-365/14:04:23		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/13:51:58
15594	MGS	01-365/14:04:23	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15595	MGS	01-365/14:04:27		NOTE: End fixed Sub-Reflector for Radio Science		01-365/13:52:02
15596	MGS	01-365/14:11:16		NOTE: Exit Solar Eclipse 12584		01-365/13:58:51
15597	MGS	01-365/14:26:54		NOTE: Periapsis 12585 ----------		01-365/14:14:29
15598	MGS	01-365/14:32:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/14:19:50
15599	MGS	01-365/14:32:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/14:19:50
15600	MGS	01-365/14:32:16		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/14:19:51
15601	MGS	01-365/14:32:16		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/14:19:51
15602	MGS	01-365/14:54:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/14:41:51
15603	MGS	01-365/14:54:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/14:41:51
15604	MGS	01-365/15:04:07		NOTE: Start Block (SSRMGR)		01-365/14:51:42
15605	MGS	01-365/15:04:07		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	01-365/14:51:42
15606	MGS	01-365/15:04:08		SSR 1A Data Enable	CSD1AE	01-365/14:51:43
15607	MGS	01-365/15:04:08		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-365/14:51:43
15608	MGS	01-365/15:16:49		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/15:04:24
15609	MGS	01-365/15:18:43		NOTE: Start Block (MAP_PB_ODY)		01-365/15:06:18
15610	MGS	01-365/15:18:44		: 00:23:21, 01:36:02, FALSE, FALSE, FALSE, 00:01:15, 00:07:08, 01:20:48, 00:06:50	AEMINI	01-365/15:06:19
15611	MGS	01-365/15:18:44		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/15:06:19
15612	MGS	01-365/15:18:44		NOTE: Start EVP data return script		01-365/15:06:19
15613	MGS	01-365/15:18:45		: SSR_1B, F42KHZ, PART2, SE_1A, 2001-365T15:48:04.000	AEMPBI	01-365/15:06:20
15614	MGS	01-365/15:21:49		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/15:09:24
15615	MGS	01-365/15:21:49		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8488000, DUR=00:17:41		01-365/15:09:24
15616	MGS	01-365/15:21:49		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-365/15:09:24
15617	MGS	01-365/15:21:49		: 00:08:30, FALSE	RDSCII	01-365/15:09:24
15618	MGS	01-365/15:21:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/15:09:24
15619	MGS	01-365/15:21:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/15:09:24
15620	MGS	01-365/15:21:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/15:09:24
15621	MGS	01-365/15:21:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/15:09:24
15622	MGS	01-365/15:21:49	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15623	MGS	01-365/15:21:49	63	NOTE: Carrier Only -- No Telemetry Modulation		
15624	MGS	01-365/15:23:57		NOTE: Enter Planetary Atmosphere 12585		01-365/15:11:32
15625	MGS	01-365/15:25:27		NOTE: Apoapsis 12585 -		01-365/15:13:02
15626	MGS	01-365/15:27:44		SSR 1B Data Disable	CSD1BX	01-365/15:15:19
15627	MGS	01-365/15:27:44		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		01-365/15:15:19
15628	MGS	01-365/15:27:45		NOTE: End Block (SSRMGR)		01-365/15:15:20
15629	MGS	01-365/15:28:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/15:16:19
15630	MGS	01-365/15:28:44		NOTE: Enter Solar Eclipse 12585		01-365/15:16:19
15631	MGS	01-365/15:29:43		NOTE: Enter Earth Occultation 12585		01-365/15:17:17
15632	MGS	01-365/15:29:43	63	NOTE: Loss Of X-Band Signal		
15633	MGS	01-365/15:30:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/15:17:54
15634	MGS	01-365/15:30:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/15:17:54
15635	MGS	01-365/15:30:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/15:17:54
15636	MGS	01-365/15:30:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/15:17:54
15637	MGS	01-365/15:30:20		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/15:17:55
15638	MGS	01-365/15:30:20		NOTE: End EVP script		01-365/15:17:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15639	MGS	01-365/15:30:21		NOTE: End Block (MAP_RT)		01-365/15:17:56
15640	MGS	01-365/15:30:24		NOTE: End fixed Sub-Reflector for Radio Science		01-365/15:17:59
15641	MGS	01-365/15:52:05		: 01:36:02	RPAONX	01-365/15:39:40
15642	MGS	01-365/15:52:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/15:39:40
15643	MGS	01-365/15:53:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/15:40:51
15644	MGS	01-365/15:53:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/15:40:51
15645	MGS	01-365/15:53:20		Command the PSE with included data word: 3990	SWPSEL	01-365/15:40:55
15646	MGS	01-365/15:53:21		Set eclipse egress script address: 0158	SWSEES	01-365/15:40:56
15647	MGS	01-365/15:53:50		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/15:41:25
15648	MGS	01-365/15:54:00		NOTE: Exit Earth Occultation 12585		01-365/15:41:35
15649	MGS	01-365/15:54:00	63	Acquisition Of X-Band Signal		
15650	MGS	01-365/15:54:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15651	MGS	01-365/16:00:03		NOTE: Exit Planetary Atmosphere 12585		01-365/15:47:38
15652	MGS	01-365/16:00:28		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:17:00	AEMPB	01-365/15:48:03
15653	MGS	01-365/16:00:28		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	01-365/15:48:03
15654	MGS	01-365/16:00:28		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	01-365/15:48:03
15655	MGS	01-365/16:00:29		SSR 1B Data Enable	CSD1BE	01-365/15:48:04
15656	MGS	01-365/16:00:29		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		01-365/15:48:04
15657	MGS	01-365/16:00:29	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15658	MGS	01-365/16:09:01		NOTE: Exit Solar Eclipse 12585		01-365/15:56:36
15659	MGS	01-365/16:24:40		NOTE: Periapsis 12586 ----------		01-365/16:12:15
15660	MGS	01-365/16:34:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/16:21:35
15661	MGS	01-365/16:34:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/16:21:35
15662	MGS	01-365/16:34:01		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/16:21:36
15663	MGS	01-365/16:34:01		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/16:21:36
15664	MGS	01-365/16:56:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/16:43:36
15665	MGS	01-365/16:56:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/16:43:36
15666	MGS	01-365/17:11:07		SSR 1B Data Disable	CSD1BX	01-365/16:58:42
15667	MGS	01-365/17:11:07		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		01-365/16:58:42
15668	MGS	01-365/17:11:07		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-365/16:58:42
15669	MGS	01-365/17:11:07	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15670	MGS	01-365/17:16:26		NOTE: Start Block (MAP_RT)		01-365/17:04:01
15671	MGS	01-365/17:16:27		: 00:23:30, 01:35:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:44, 01:17:18, 00:08:25	AEMINI	01-365/17:04:02
15672	MGS	01-365/17:16:27		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/17:04:02
15673	MGS	01-365/17:16:27		NOTE: Start EVP data return script		01-365/17:04:02
15674	MGS	01-365/17:16:28		: SE_2A, RTM, 01:17:17, MRC, 2001-365T17:47:33.000	AEMRTI	01-365/17:04:03
15675	MGS	01-365/17:21:40		NOTE: Enter Planetary Atmosphere 12586		01-365/17:09:15
15676	MGS	01-365/17:23:09		NOTE: Apoapsis 12586 -		01-365/17:10:44
15677	MGS	01-365/17:26:27		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/17:14:02
15678	MGS	01-365/17:26:28		NOTE: Enter Solar Eclipse 12586		01-365/17:14:02
15679	MGS	01-365/17:27:26		NOTE: Enter Earth Occultation 12586		01-365/17:15:00
15680	MGS	01-365/17:27:26	63	NOTE: Loss Of X-Band Signal		
15681	MGS	01-365/17:28:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/17:15:42
15682	MGS	01-365/17:28:07		NOTE: End EVP script		01-365/17:15:42
15683	MGS	01-365/17:28:08		NOTE: End Block (MAP_PB_ODY)		01-365/17:15:43
15684	MGS	01-365/17:46:13		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/17:33:47
15685	MGS	01-365/17:49:57		: 01:35:43	RPAONX	01-365/17:37:32
15686	MGS	01-365/17:49:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/17:37:32
15687	MGS	01-365/17:50:00	15	Begin Pre-Cal		
15688	MGS	01-365/17:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
15689	MGS	01-365/17:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
15690	MGS	01-365/17:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
15691	MGS	01-365/17:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
15692	MGS	01-365/17:50:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15693	MGS	01-365/17:50:00	15	Config: TGC: DEST=37		
15694	MGS	01-365/17:50:00	15	Config: TGC: BAND=X, BR=0.000000		
15695	MGS	01-365/17:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
15696	MGS	01-365/17:50:00	15	Config: RSR		
15697	MGS	01-365/17:50:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
15698	MGS	01-365/17:50:00	15	Config: BVR		
15699	MGS	01-365/17:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
15700	MGS	01-365/17:50:00	15	Config: MDA: SMPL=0.1		
15701	MGS	01-365/17:51:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/17:38:36
15702	MGS	01-365/17:51:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/17:38:36
15703	MGS	01-365/17:51:06		Set eclipse egress script address: 019A	SWSEES	01-365/17:38:41
15704	MGS	01-365/17:51:12		: 00:00:30, 00:08:44, FALSE	RDSCIE	01-365/17:38:47
15705	MGS	01-365/17:51:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/17:38:47
15706	MGS	01-365/17:51:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/17:38:47
15707	MGS	01-365/17:51:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/17:38:47
15708	MGS	01-365/17:51:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/17:38:47
15709	MGS	01-365/17:51:45		NOTE: Exit Earth Occultation 12586		01-365/17:39:20
15710	MGS	01-365/17:51:45	63	Acquisition Of X-Band Signal		
15711	MGS	01-365/17:51:45	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15712	MGS	01-365/17:51:45	63	NOTE: Carrier Only -- No Telemetry Modulation		
15713	MGS	01-365/17:57:49		NOTE: Exit Planetary Atmosphere 12586		01-365/17:45:23
15714	MGS	01-365/17:59:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/17:47:31
15715	MGS	01-365/17:59:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/17:47:31
15716	MGS	01-365/17:59:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/17:47:31
15717	MGS	01-365/17:59:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/17:47:31
15718	MGS	01-365/17:59:56	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15719	MGS	01-365/17:59:57		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	01-365/17:47:32
15720	MGS	01-365/17:59:57		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/17:47:32
15721	MGS	01-365/17:59:57		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/17:47:32
15722	MGS	01-365/17:59:57	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15723	MGS	01-365/18:00:02		NOTE: End fixed Sub-Reflector for Radio Science		01-365/17:47:36
15724	MGS	01-365/18:06:45		NOTE: Exit Solar Eclipse 12586		01-365/17:54:20
15725	MGS	01-365/18:22:24		NOTE: Periapsis 12587 ----------		01-365/18:09:59
15726	MGS	01-365/18:27:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/18:15:18
15727	MGS	01-365/18:27:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/18:15:18
15728	MGS	01-365/18:27:45		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/18:15:19
15729	MGS	01-365/18:27:45		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/18:15:19
15730	MGS	01-365/18:49:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/18:37:19
15731	MGS	01-365/18:49:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/18:37:19
15732	MGS	01-365/19:12:15		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/18:59:49
15733	MGS	01-365/19:14:10		NOTE: Start EVP data return script		01-365/19:01:44
15734	MGS	01-365/19:17:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/19:04:49
15735	MGS	01-365/19:17:15		: 00:08:25, FALSE	RDSCII	01-365/19:04:49
15736	MGS	01-365/19:17:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/19:04:49
15737	MGS	01-365/19:17:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/19:04:49
15738	MGS	01-365/19:17:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/19:04:49
15739	MGS	01-365/19:17:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/19:04:49
15740	MGS	01-365/19:17:15	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15741	MGS	01-365/19:17:15	63	NOTE: Carrier Only -- No Telemetry Modulation		
15742	MGS	01-365/19:19:23		NOTE: Enter Planetary Atmosphere 12587		01-365/19:06:57
15743	MGS	01-365/19:20:00	15	Begin Tracking		
15744	MGS	01-365/19:20:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15745	MGS	01-365/19:20:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
15746	MGS	01-365/19:21:02		NOTE: Apoapsis 12587 -		01-365/19:08:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15747	MGS	01-365/19:24:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/19:11:44
15748	MGS	01-365/19:24:10		NOTE: Enter Solar Eclipse 12587		01-365/19:11:44
15749	MGS	01-365/19:25:08		NOTE: Enter Earth Occultation 12587		01-365/19:12:43
15750	MGS	01-365/19:25:08	15	NOTE: Loss Of X-Band Signal		
15751	MGS	01-365/19:25:08	63	NOTE: Loss Of X-Band Signal		
15752	MGS	01-365/19:25:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/19:13:14
15753	MGS	01-365/19:25:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/19:13:14
15754	MGS	01-365/19:25:40		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/19:13:14
15755	MGS	01-365/19:25:40		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/19:13:14
15756	MGS	01-365/19:25:41		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/19:13:15
15757	MGS	01-365/19:25:41		NOTE: End EVP script		01-365/19:13:15
15758	MGS	01-365/19:25:45		NOTE: End fixed Sub-Reflector for Radio Science		01-365/19:13:19
15759	MGS	01-365/19:27:14	15	NOTE: Above Uplink Interlock Limit		
15760	MGS	01-365/19:40:00	63	End Tracking		
15761	MGS	01-365/19:43:55		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/19:31:29
15762	MGS	01-365/19:47:40		: 01:35:43	RPAONX	01-365/19:35:14
15763	MGS	01-365/19:47:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/19:35:14
15764	MGS	01-365/19:48:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/19:36:19
15765	MGS	01-365/19:48:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/19:36:19
15766	MGS	01-365/19:48:50		Set eclipse egress script address: 01DC	SWSEES	01-365/19:36:24
15767	MGS	01-365/19:48:55		: 00:00:30, 00:08:44, FALSE	RDSCIE	01-365/19:36:29
15768	MGS	01-365/19:48:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/19:36:29
15769	MGS	01-365/19:48:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/19:36:29
15770	MGS	01-365/19:48:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/19:36:29
15771	MGS	01-365/19:48:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/19:36:29
15772	MGS	01-365/19:49:25		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/19:36:59
15773	MGS	01-365/19:49:28		NOTE: Exit Earth Occultation 12587		01-365/19:37:02
15774	MGS	01-365/19:49:28	15	Acquisition Of X-Band Signal		
15775	MGS	01-365/19:49:28	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15776	MGS	01-365/19:49:28	15	NOTE: Carrier Only -- No Telemetry Modulation		
15777	MGS	01-365/19:55:00	63	End Post-Cal		
15778	MGS	01-365/19:55:32		NOTE: Exit Planetary Atmosphere 12587		01-365/19:43:06
15779	MGS	01-365/19:57:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/19:45:13
15780	MGS	01-365/19:57:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/19:45:13
15781	MGS	01-365/19:57:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/19:45:13
15782	MGS	01-365/19:57:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/19:45:13
15783	MGS	01-365/19:57:39	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15784	MGS	01-365/19:57:40		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	01-365/19:45:14
15785	MGS	01-365/19:57:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/19:45:14
15786	MGS	01-365/19:57:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/19:45:14
15787	MGS	01-365/19:57:40	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15788	MGS	01-365/19:57:44		NOTE: End fixed Sub-Reflector for Radio Science		01-365/19:45:18
15789	MGS	01-365/20:04:27		NOTE: Exit Solar Eclipse 12587		01-365/19:52:01
15790	MGS	01-365/20:19:56		NOTE: Periapsis 12588 ----------		01-365/20:07:30
15791	MGS	01-365/20:25:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/20:13:00
15792	MGS	01-365/20:25:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/20:13:00
15793	MGS	01-365/20:25:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/20:13:01
15794	MGS	01-365/20:25:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/20:13:01
15795	MGS	01-365/20:47:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/20:35:01
15796	MGS	01-365/20:47:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/20:35:01
15797	MGS	01-365/20:57:25		NOTE: Start Block (SSRMGR)		01-365/20:44:59
15798	MGS	01-365/20:57:25		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	01-365/20:44:59
15799	MGS	01-365/20:57:26		SSR 1B Data Enable	CSD1BE	01-365/20:45:00
15800	MGS	01-365/20:57:26		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		01-365/20:45:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15801	MGS	01-365/21:09:57		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/20:57:31
15802	MGS	01-365/21:11:52		NOTE: Start Block (MAP_PB_ODY)		01-365/20:59:26
15803	MGS	01-365/21:11:53		: 00:23:30, 01:35:44, FALSE, FALSE, FALSE, 00:01:15, 00:07:04, 01:20:39, 00:06:45	AEMINI	01-365/20:59:27
15804	MGS	01-365/21:11:53		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/20:59:27
15805	MGS	01-365/21:11:53		NOTE: Start EVP data return script		01-365/20:59:27
15806	MGS	01-365/21:11:54		: SSR_1A, F42KHZ, PART1, SE_1A, 2001-365T21:41:16.000	AEMPBI	01-365/20:59:28
15807	MGS	01-365/21:14:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	01-365/21:02:31
15808	MGS	01-365/21:14:57		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8408000, DUR=00:17:31		01-365/21:02:31
15809	MGS	01-365/21:14:57		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		01-365/21:02:31
15810	MGS	01-365/21:14:57		: 00:08:25, FALSE	RDSCII	01-365/21:02:31
15811	MGS	01-365/21:14:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/21:02:31
15812	MGS	01-365/21:14:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/21:02:31
15813	MGS	01-365/21:14:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/21:02:31
15814	MGS	01-365/21:14:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/21:02:31
15815	MGS	01-365/21:14:57	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15816	MGS	01-365/21:14:57	15	NOTE: Carrier Only -- No Telemetry Modulation		
15817	MGS	01-365/21:17:06		NOTE: Enter Planetary Atmosphere 12588		01-365/21:04:40
15818	MGS	01-365/21:18:31		NOTE: Apoapsis 12588 -		01-365/21:06:05
15819	MGS	01-365/21:20:52		SSR 1A Data Disable	CSD1AX	01-365/21:08:26
15820	MGS	01-365/21:20:52		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		01-365/21:08:26
15821	MGS	01-365/21:20:53		NOTE: End Block (SSRMGR)		01-365/21:08:27
15822	MGS	01-365/21:21:53		NOTE: Enter Solar Eclipse 12588		01-365/21:09:27
15823	MGS	01-365/21:21:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/21:09:27
15824	MGS	01-365/21:22:50		NOTE: Enter Earth Occultation 12588		01-365/21:10:25
15825	MGS	01-365/21:22:50	15	NOTE: Loss Of X-Band Signal		
15826	MGS	01-365/21:23:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/21:10:56
15827	MGS	01-365/21:23:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/21:10:56
15828	MGS	01-365/21:23:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/21:10:56
15829	MGS	01-365/21:23:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/21:10:56
15830	MGS	01-365/21:23:23		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/21:10:57
15831	MGS	01-365/21:23:23		NOTE: End EVP script		01-365/21:10:57
15832	MGS	01-365/21:23:24		NOTE: End Block (MAP_RT)		01-365/21:10:58
15833	MGS	01-365/21:23:27		NOTE: End fixed Sub-Reflector for Radio Science		01-365/21:11:01
15834	MGS	01-365/21:45:23		: 01:35:44	RPAONX	01-365/21:32:57
15835	MGS	01-365/21:45:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/21:32:57
15836	MGS	01-365/21:46:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/21:34:01
15837	MGS	01-365/21:46:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/21:34:01
15838	MGS	01-365/21:46:31		Command the PSE with included data word: 3990	SWPSEL	01-365/21:34:05
15839	MGS	01-365/21:46:32		Set eclipse egress script address: 0158	SWSEES	01-365/21:34:06
15840	MGS	01-365/21:47:08		Disables autonomous command to send eclipse ingress script	SWEISX	01-365/21:34:42
15841	MGS	01-365/21:47:11		NOTE: Exit Earth Occultation 12588		01-365/21:34:45
15842	MGS	01-365/21:47:11	15	Acquisition Of X-Band Signal		
15843	MGS	01-365/21:47:11	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15844	MGS	01-365/21:53:14		NOTE: Exit Planetary Atmosphere 12588		01-365/21:40:48
15845	MGS	01-365/21:53:42		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:16:46	AEMPB	01-365/21:41:16
15846	MGS	01-365/21:53:42		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	01-365/21:41:16
15847	MGS	01-365/21:53:42		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	01-365/21:41:16
15848	MGS	01-365/21:53:43		SSR 1A Data Enable	CSD1AE	01-365/21:41:17
15849	MGS	01-365/21:53:43		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		01-365/21:41:17
15850	MGS	01-365/21:53:43	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15851	MGS	01-365/22:02:09		NOTE: Exit Solar Eclipse 12588		01-365/21:49:43
15852	MGS	01-365/22:17:20		NOTE: Periapsis 12589 ----------		01-365/22:04:54
15853	MGS	01-365/22:27:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	01-365/22:14:42
15854	MGS	01-365/22:27:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	01-365/22:14:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15855	MGS	01-365/22:27:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	01-365/22:14:43
15856	MGS	01-365/22:27:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	01-365/22:14:43
15857	MGS	01-365/22:49:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	01-365/22:36:43
15858	MGS	01-365/22:49:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	01-365/22:36:43
15859	MGS	01-365/23:04:21		SSR 1A Data Disable	CSD1AX	01-365/22:51:55
15860	MGS	01-365/23:04:21		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		01-365/22:51:55
15861	MGS	01-365/23:04:21		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	01-365/22:51:55
15862	MGS	01-365/23:04:21	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15863	MGS	01-365/23:09:36		NOTE: Start Block (MAP_RT)		01-365/22:57:10
15864	MGS	01-365/23:09:37		: 00:23:30, 01:35:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:44, 01:17:18, 00:08:25	AEMINI	01-365/22:57:11
15865	MGS	01-365/23:09:37		Enable sending eclipse ingress script when array power disappears	SWEISE	01-365/22:57:11
15866	MGS	01-365/23:09:37		NOTE: Start EVP data return script		01-365/22:57:11
15867	MGS	01-365/23:09:38		: SE_2A, RTM, 01:17:17, MRC, 2001-365T23:40:41.000	AEMRTI	01-365/22:57:12
15868	MGS	01-365/23:14:49		NOTE: Enter Planetary Atmosphere 12589		01-365/23:02:22
15869	MGS	01-365/23:16:02		NOTE: Apoapsis 12589 -		01-365/23:03:36
15870	MGS	01-365/23:19:37		NOTE: Enter Solar Eclipse 12589		01-365/23:07:11
15871	MGS	01-365/23:19:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	01-365/23:07:11
15872	MGS	01-365/23:20:32		NOTE: Enter Earth Occultation 12589		01-365/23:08:06
15873	MGS	01-365/23:20:32	15	NOTE: Loss Of X-Band Signal		
15874	MGS	01-365/23:21:07		NOTE: End EVP script		01-365/23:08:41
15875	MGS	01-365/23:21:07		Turn off the MOT Exciter and RPA beam	STRPAF	01-365/23:08:41
15876	MGS	01-365/23:21:08		NOTE: End Block (MAP_PB_ODY)		01-365/23:08:42
15877	MGS	01-365/23:39:22		NOTE: Begin fixed Sub-Reflector for Radio Science		01-365/23:26:56
15878	MGS	01-365/23:43:07		: 01:35:43	RPAONX	01-365/23:30:41
15879	MGS	01-365/23:43:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	01-365/23:30:41
15880	MGS	01-365/23:44:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	01-365/23:31:43
15881	MGS	01-365/23:44:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	01-365/23:31:43
15882	MGS	01-365/23:44:14		Set eclipse egress script address: 019A	SWSEES	01-365/23:31:48
15883	MGS	01-365/23:44:22		: 00:00:30, 00:08:44, FALSE	RDSCIE	01-365/23:31:56
15884	MGS	01-365/23:44:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	01-365/23:31:56
15885	MGS	01-365/23:44:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	01-365/23:31:56
15886	MGS	01-365/23:44:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	01-365/23:31:56
15887	MGS	01-365/23:44:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	01-365/23:31:56
15888	MGS	01-365/23:44:56		NOTE: Exit Earth Occultation 12589		01-365/23:32:30
15889	MGS	01-365/23:44:56	15	Acquisition Of X-Band Signal		
15890	MGS	01-365/23:44:56	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15891	MGS	01-365/23:44:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
15892	MGS	01-365/23:45:00	43	Begin Pre-Cal		
15893	MGS	01-365/23:45:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
15894	MGS	01-365/23:45:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
15895	MGS	01-365/23:45:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
15896	MGS	01-365/23:45:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
15897	MGS	01-365/23:45:00	43	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
15898	MGS	01-365/23:45:00	43	Config: TGC: DEST=37		
15899	MGS	01-365/23:45:00	43	Config: TGC: BAND=X, BR=0.000000		
15900	MGS	01-365/23:45:00	43	Config: FSS: CH=2, PRI_FL=10000		
15901	MGS	01-365/23:45:00	43	Config: RSR		
15902	MGS	01-365/23:45:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
15903	MGS	01-365/23:45:00	43	Config: BVR		
15904	MGS	01-365/23:45:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
15905	MGS	01-365/23:45:00	43	Config: MDA: SMPL=0.1		
15906	MGS	01-365/23:50:57		NOTE: Exit Planetary Atmosphere 12589		01-365/23:38:31
15907	MGS	01-365/23:53:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	01-365/23:40:40
15908	MGS	01-365/23:53:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	01-365/23:40:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15909	MGS	01-365/23:53:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	01-365/23:40:40
15910	MGS	01-365/23:53:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	01-365/23:40:40
15911	MGS	01-365/23:53:06	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15912	MGS	01-365/23:53:07		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	01-365/23:40:41
15913	MGS	01-365/23:53:07		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	01-365/23:40:41
15914	MGS	01-365/23:53:07		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	01-365/23:40:41
15915	MGS	01-365/23:53:07	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15916	MGS	01-365/23:53:11		NOTE: End fixed Sub-Reflector for Radio Science		01-365/23:40:45
15917	MGS	01-365/23:59:54		NOTE: Exit Solar Eclipse 12589		01-365/23:47:28
15918	MGS	02-001/00:00:00		Light Time: OWLT = 12:26, RTLT = 24:52		
15919	MGS	02-001/00:15:21		NOTE: Periapsis 12590 ----------		02-001/00:02:54
15920	MGS	02-001/00:20:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/00:08:27
15921	MGS	02-001/00:20:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/00:08:27
15922	MGS	02-001/00:20:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/00:08:28
15923	MGS	02-001/00:20:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/00:08:28
15924	MGS	02-001/00:42:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/00:30:28
15925	MGS	02-001/00:42:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/00:30:28
15926	MGS	02-001/01:05:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/00:52:58
15927	MGS	02-001/01:07:24		NOTE: Start EVP data return script		02-001/00:54:57
15928	MGS	02-001/01:10:25		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/00:57:58
15929	MGS	02-001/01:10:25		: 00:08:25, FALSE	RDSCII	02-001/00:57:58
15930	MGS	02-001/01:10:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/00:57:58
15931	MGS	02-001/01:10:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/00:57:58
15932	MGS	02-001/01:10:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/00:57:58
15933	MGS	02-001/01:10:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/00:57:58
15934	MGS	02-001/01:10:25	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15935	MGS	02-001/01:10:25	15	NOTE: Carrier Only -- No Telemetry Modulation		
15936	MGS	02-001/01:12:33		NOTE: Enter Planetary Atmosphere 12590		02-001/01:00:07
15937	MGS	02-001/01:14:13		NOTE: Apoapsis 12590 -		02-001/01:01:46
15938	MGS	02-001/01:15:00	43	Begin Tracking		
15939	MGS	02-001/01:15:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15940	MGS	02-001/01:15:00	43	NOTE: Carrier Only -- No Telemetry Modulation		
15941	MGS	02-001/01:17:23		NOTE: Enter Solar Eclipse 12590		02-001/01:04:57
15942	MGS	02-001/01:17:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/01:04:57
15943	MGS	02-001/01:18:16		NOTE: Enter Earth Occultation 12590		02-001/01:05:50
15944	MGS	02-001/01:18:16	15	NOTE: Loss Of X-Band Signal		
15945	MGS	02-001/01:18:16	43	NOTE: Loss Of X-Band Signal		
15946	MGS	02-001/01:18:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/01:06:23
15947	MGS	02-001/01:18:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/01:06:23
15948	MGS	02-001/01:18:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/01:06:23
15949	MGS	02-001/01:18:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/01:06:23
15950	MGS	02-001/01:18:50		NOTE: End EVP script		02-001/01:06:24
15951	MGS	02-001/01:18:51		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/01:06:24
15952	MGS	02-001/01:18:54		NOTE: End fixed Sub-Reflector for Radio Science		02-001/01:06:28
15953	MGS	02-001/01:35:00	15	End Tracking		
15954	MGS	02-001/01:37:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/01:24:42
15955	MGS	02-001/01:40:54		: 01:35:43	RPAONX	02-001/01:28:27
15956	MGS	02-001/01:40:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/01:28:27
15957	MGS	02-001/01:41:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/01:29:28
15958	MGS	02-001/01:41:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/01:29:28
15959	MGS	02-001/01:42:00		Set eclipse egress script address: 01DC	SWSEES	02-001/01:29:33
15960	MGS	02-001/01:42:09		: 00:00:30, 00:08:44, FALSE	RDSCIE	02-001/01:29:42
15961	MGS	02-001/01:42:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/01:29:42
15962	MGS	02-001/01:42:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/01:29:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
15963	MGS	02-001/01:42:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/01:29:42
15964	MGS	02-001/01:42:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/01:29:42
15965	MGS	02-001/01:42:39		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/01:30:12
15966	MGS	02-001/01:42:43		NOTE: Exit Earth Occultation 12590		02-001/01:30:17
15967	MGS	02-001/01:42:43	43	Acquisition Of X-Band Signal		
15968	MGS	02-001/01:42:43	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
15969	MGS	02-001/01:42:43	43	NOTE: Carrier Only -- No Telemetry Modulation		
15970	MGS	02-001/01:48:44		NOTE: Exit Planetary Atmosphere 12590		02-001/01:36:17
15971	MGS	02-001/01:50:00	15	End Post-Cal		
15972	MGS	02-001/01:50:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/01:38:26
15973	MGS	02-001/01:50:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/01:38:26
15974	MGS	02-001/01:50:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/01:38:26
15975	MGS	02-001/01:50:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/01:38:26
15976	MGS	02-001/01:50:53	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15977	MGS	02-001/01:50:54		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	02-001/01:38:27
15978	MGS	02-001/01:50:54		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/01:38:27
15979	MGS	02-001/01:50:54		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/01:38:27
15980	MGS	02-001/01:50:54	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
15981	MGS	02-001/01:50:58		NOTE: End fixed Sub-Reflector for Radio Science		02-001/01:38:31
15982	MGS	02-001/01:57:41		NOTE: Exit Solar Eclipse 12590		02-001/01:45:14
15983	MGS	02-001/02:13:35		NOTE: Periapsis 12591 ----------		02-001/02:01:08
15984	MGS	02-001/02:18:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/02:06:13
15985	MGS	02-001/02:18:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/02:06:13
15986	MGS	02-001/02:18:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/02:06:14
15987	MGS	02-001/02:18:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/02:06:14
15988	MGS	02-001/02:40:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/02:28:14
15989	MGS	02-001/02:40:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/02:28:14
15990	MGS	02-001/02:50:35		NOTE: Start Block (SSRMGR)		02-001/02:38:08
15991	MGS	02-001/02:50:35		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-001/02:38:08
15992	MGS	02-001/02:50:36		SSR 1A Data Enable	CSD1AE	02-001/02:38:09
15993	MGS	02-001/02:50:36		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-001/02:38:09
15994	MGS	02-001/03:03:11		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/02:50:44
15995	MGS	02-001/03:05:10		NOTE: Start Block (MAP_PB_ODY)		02-001/02:52:43
15996	MGS	02-001/03:05:11		: 00:23:30, 01:35:44, FALSE, FALSE, FALSE, 00:01:15, 00:07:04, 01:20:39, 00:06:45	AEMINI	02-001/02:52:44
15997	MGS	02-001/03:05:11		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/02:52:44
15998	MGS	02-001/03:05:11		NOTE: Start EVP data return script		02-001/02:52:44
15999	MGS	02-001/03:05:12		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-001T03:34:34.000	AEMPBI	02-001/02:52:45
16000	MGS	02-001/03:08:11		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/02:55:44
16001	MGS	02-001/03:08:11		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8440000, DUR=00:17:35		02-001/02:55:44
16002	MGS	02-001/03:08:11		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-001/02:55:44
16003	MGS	02-001/03:08:11		: 00:08:25, FALSE	RDSCII	02-001/02:55:44
16004	MGS	02-001/03:08:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/02:55:44
16005	MGS	02-001/03:08:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/02:55:44
16006	MGS	02-001/03:08:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/02:55:44
16007	MGS	02-001/03:08:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/02:55:44
16008	MGS	02-001/03:08:11	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16009	MGS	02-001/03:08:11	43	NOTE: Carrier Only -- No Telemetry Modulation		
16010	MGS	02-001/03:10:21		NOTE: Enter Planetary Atmosphere 12591		02-001/02:57:54
16011	MGS	02-001/03:12:30		NOTE: Apoapsis 12591 -		02-001/03:00:03
16012	MGS	02-001/03:14:10		SSR 1B Data Disable	CSD1BX	02-001/03:01:43
16013	MGS	02-001/03:14:10		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-001/03:01:43
16014	MGS	02-001/03:14:11		NOTE: End Block (SSRMGR)		02-001/03:01:44
16015	MGS	02-001/03:15:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/03:02:44
16016	MGS	02-001/03:15:11		NOTE: Enter Solar Eclipse 12591		02-001/03:02:44

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16017	MGS	02-001/03:16:04		NOTE: Enter Earth Occultation 12591		02-001/03:03:37
16018	MGS	02-001/03:16:04	43	NOTE: Loss Of X-Band Signal		
16019	MGS	02-001/03:16:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/03:04:09
16020	MGS	02-001/03:16:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/03:04:09
16021	MGS	02-001/03:16:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/03:04:09
16022	MGS	02-001/03:16:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/03:04:09
16023	MGS	02-001/03:16:37		NOTE: End EVP script		02-001/03:04:10
16024	MGS	02-001/03:16:37		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/03:04:10
16025	MGS	02-001/03:16:38		NOTE: End Block (MAP_RT)		02-001/03:04:11
16026	MGS	02-001/03:16:41		NOTE: End fixed Sub-Reflector for Radio Science		02-001/03:04:14
16027	MGS	02-001/03:38:41		: 01:35:44	RPAONX	02-001/03:26:14
16028	MGS	02-001/03:38:41		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/03:26:14
16029	MGS	02-001/03:39:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/03:27:14
16030	MGS	02-001/03:39:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/03:27:14
16031	MGS	02-001/03:39:45		Command the PSE with included data word: 3990	SWPSEL	02-001/03:27:18
16032	MGS	02-001/03:39:46		Set eclipse egress script address: 0158	SWSEES	02-001/03:27:19
16033	MGS	02-001/03:40:26		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/03:27:59
16034	MGS	02-001/03:40:31		NOTE: Exit Earth Occultation 12591		02-001/03:28:04
16035	MGS	02-001/03:40:31	43	Acquisition Of X-Band Signal		
16036	MGS	02-001/03:40:31	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16037	MGS	02-001/03:46:32		NOTE: Exit Planetary Atmosphere 12591		02-001/03:34:05
16038	MGS	02-001/03:47:00		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:16:46	AEMPB	02-001/03:34:33
16039	MGS	02-001/03:47:00		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-001/03:34:33
16040	MGS	02-001/03:47:00		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-001/03:34:33
16041	MGS	02-001/03:47:01		SSR 1B Data Enable	CSD1BE	02-001/03:34:34
16042	MGS	02-001/03:47:01		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-001/03:34:34
16043	MGS	02-001/03:47:01	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16044	MGS	02-001/03:55:29		NOTE: Exit Solar Eclipse 12591		02-001/03:43:02
16045	MGS	02-001/04:11:36		NOTE: Periapsis 12592 ----------		02-001/03:59:09
16046	MGS	02-001/04:20:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/04:08:01
16047	MGS	02-001/04:20:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/04:08:01
16048	MGS	02-001/04:20:29		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/04:08:02
16049	MGS	02-001/04:20:29		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/04:08:02
16050	MGS	02-001/04:42:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/04:30:02
16051	MGS	02-001/04:42:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/04:30:02
16052	MGS	02-001/04:57:39		SSR 1B Data Disable	CSD1BX	02-001/04:45:12
16053	MGS	02-001/04:57:39		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-001/04:45:12
16054	MGS	02-001/04:57:39		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-001/04:45:12
16055	MGS	02-001/04:57:39	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16056	MGS	02-001/05:02:56		NOTE: Start Block (MAP_RT)		02-001/04:50:29
16057	MGS	02-001/05:02:57		: 00:23:30, 01:35:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:44, 01:17:18, 00:08:25	AEMINI	02-001/04:50:30
16058	MGS	02-001/05:02:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/04:50:30
16059	MGS	02-001/05:02:57		NOTE: Start EVP data return script		02-001/04:50:30
16060	MGS	02-001/05:02:58		: SE_2A, RTM, 01:17:17, MRC, 2002-001T05:34:00.000	AEMRTI	02-001/04:50:31
16061	MGS	02-001/05:08:08		NOTE: Enter Planetary Atmosphere 12592		02-001/04:55:41
16062	MGS	02-001/05:10:19		NOTE: Apoapsis 12592 -		02-001/04:57:52
16063	MGS	02-001/05:12:57		NOTE: Enter Solar Eclipse 12592		02-001/05:00:30
16064	MGS	02-001/05:12:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/05:00:30
16065	MGS	02-001/05:13:51		NOTE: Enter Earth Occultation 12592		02-001/05:01:24
16066	MGS	02-001/05:13:51	43	NOTE: Loss Of X-Band Signal		
16067	MGS	02-001/05:14:25		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/05:01:58
16068	MGS	02-001/05:14:25		NOTE: End EVP script		02-001/05:01:58
16069	MGS	02-001/05:14:26		NOTE: End Block (MAP_PB_ODY)		02-001/05:01:59
16070	MGS	02-001/05:32:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/05:20:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16071	MGS	02-001/05:36:27		: 01:35:43	RPAONX	02-001/05:24:00
16072	MGS	02-001/05:36:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/05:24:00
16073	MGS	02-001/05:37:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/05:25:02
16074	MGS	02-001/05:37:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/05:25:02
16075	MGS	02-001/05:37:34		Set eclipse egress script address: 019A	SWSEES	02-001/05:25:07
16076	MGS	02-001/05:37:42		: 00:00:30, 00:08:44, FALSE	RDSCIE	02-001/05:25:15
16077	MGS	02-001/05:37:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/05:25:15
16078	MGS	02-001/05:37:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/05:25:15
16079	MGS	02-001/05:37:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/05:25:15
16080	MGS	02-001/05:37:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/05:25:15
16081	MGS	02-001/05:38:18		NOTE: Exit Earth Occultation 12592		02-001/05:25:51
16082	MGS	02-001/05:38:18	43	Acquisition Of X-Band Signal		
16083	MGS	02-001/05:38:18	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16084	MGS	02-001/05:38:18	43	NOTE: Carrier Only -- No Telemetry Modulation		
16085	MGS	02-001/05:44:20		NOTE: Exit Planetary Atmosphere 12592		02-001/05:31:52
16086	MGS	02-001/05:46:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/05:33:59
16087	MGS	02-001/05:46:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/05:33:59
16088	MGS	02-001/05:46:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/05:33:59
16089	MGS	02-001/05:46:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/05:33:59
16090	MGS	02-001/05:46:26	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16091	MGS	02-001/05:46:27		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	02-001/05:34:00
16092	MGS	02-001/05:46:27		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/05:34:00
16093	MGS	02-001/05:46:27		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/05:34:00
16094	MGS	02-001/05:46:27	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16095	MGS	02-001/05:46:31		NOTE: End fixed Sub-Reflector for Radio Science		02-001/05:34:04
16096	MGS	02-001/05:53:15		NOTE: Exit Solar Eclipse 12592		02-001/05:40:47
16097	MGS	02-001/06:09:09		NOTE: Periapsis 12593 ----------		02-001/05:56:41
16098	MGS	02-001/06:14:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/06:01:46
16099	MGS	02-001/06:14:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/06:01:46
16100	MGS	02-001/06:14:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/06:01:47
16101	MGS	02-001/06:14:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/06:01:47
16102	MGS	02-001/06:36:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/06:23:47
16103	MGS	02-001/06:36:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/06:23:47
16104	MGS	02-001/06:58:44		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/06:46:17
16105	MGS	02-001/07:00:39		NOTE: Start EVP data return script		02-001/06:48:12
16106	MGS	02-001/07:03:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/06:51:17
16107	MGS	02-001/07:03:44		: 00:08:25, FALSE	RDSCII	02-001/06:51:17
16108	MGS	02-001/07:03:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/06:51:17
16109	MGS	02-001/07:03:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/06:51:17
16110	MGS	02-001/07:03:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/06:51:17
16111	MGS	02-001/07:03:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/06:51:17
16112	MGS	02-001/07:03:44	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16113	MGS	02-001/07:03:44	43	NOTE: Carrier Only -- No Telemetry Modulation		
16114	MGS	02-001/07:05:51		NOTE: Enter Planetary Atmosphere 12593		02-001/06:53:23
16115	MGS	02-001/07:07:40		NOTE: Apoapsis 12593 -		02-001/06:55:12
16116	MGS	02-001/07:10:39		NOTE: Enter Solar Eclipse 12593		02-001/06:58:12
16117	MGS	02-001/07:10:39		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/06:58:12
16118	MGS	02-001/07:11:34		NOTE: Enter Earth Occultation 12593		02-001/06:59:07
16119	MGS	02-001/07:11:34	43	NOTE: Loss Of X-Band Signal		
16120	MGS	02-001/07:12:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/06:59:42
16121	MGS	02-001/07:12:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/06:59:42
16122	MGS	02-001/07:12:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/06:59:42
16123	MGS	02-001/07:12:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/06:59:42
16124	MGS	02-001/07:12:10		NOTE: End EVP script		02-001/06:59:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16125	MGS	02-001/07:12:10		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/06:59:43
16126	MGS	02-001/07:12:14		NOTE: End fixed Sub-Reflector for Radio Science		02-001/06:59:47
16127	MGS	02-001/07:30:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/07:17:57
16128	MGS	02-001/07:34:10		: 01:35:43	RPAONX	02-001/07:21:42
16129	MGS	02-001/07:34:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/07:21:42
16130	MGS	02-001/07:35:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/07:22:47
16131	MGS	02-001/07:35:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/07:22:47
16132	MGS	02-001/07:35:20		Set eclipse egress script address: 01DC	SWSEES	02-001/07:22:52
16133	MGS	02-001/07:35:25		: 00:00:30, 00:08:44, FALSE	RDSCIE	02-001/07:22:57
16134	MGS	02-001/07:35:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/07:22:57
16135	MGS	02-001/07:35:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/07:22:57
16136	MGS	02-001/07:35:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/07:22:57
16137	MGS	02-001/07:35:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/07:22:57
16138	MGS	02-001/07:35:55		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/07:23:27
16139	MGS	02-001/07:36:02		NOTE: Exit Earth Occultation 12593		02-001/07:23:34
16140	MGS	02-001/07:36:02	43	Acquisition Of X-Band Signal		
16141	MGS	02-001/07:36:02	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16142	MGS	02-001/07:36:02	43	NOTE: Carrier Only -- No Telemetry Modulation		
16143	MGS	02-001/07:42:04		NOTE: Exit Planetary Atmosphere 12593		02-001/07:29:36
16144	MGS	02-001/07:44:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/07:31:41
16145	MGS	02-001/07:44:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/07:31:41
16146	MGS	02-001/07:44:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/07:31:41
16147	MGS	02-001/07:44:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/07:31:41
16148	MGS	02-001/07:44:09	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16149	MGS	02-001/07:44:10		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	02-001/07:31:42
16150	MGS	02-001/07:44:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/07:31:42
16151	MGS	02-001/07:44:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/07:31:42
16152	MGS	02-001/07:44:10	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16153	MGS	02-001/07:44:13		NOTE: End fixed Sub-Reflector for Radio Science		02-001/07:31:46
16154	MGS	02-001/07:50:57		NOTE: Exit Solar Eclipse 12593		02-001/07:38:29
16155	MGS	02-001/08:06:31		NOTE: Periapsis 12594 ----------		02-001/07:54:04
16156	MGS	02-001/08:11:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/07:59:28
16157	MGS	02-001/08:11:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/07:59:28
16158	MGS	02-001/08:11:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/07:59:29
16159	MGS	02-001/08:11:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/07:59:29
16160	MGS	02-001/08:33:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/08:21:29
16161	MGS	02-001/08:33:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/08:21:29
16162	MGS	02-001/08:43:54		NOTE: Start Block (SSRMGR)		02-001/08:31:26
16163	MGS	02-001/08:43:54		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-001/08:31:26
16164	MGS	02-001/08:43:55		SSR 1B Data Enable	CSD1BE	02-001/08:31:27
16165	MGS	02-001/08:43:55		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-001/08:31:27
16166	MGS	02-001/08:56:26		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/08:43:59
16167	MGS	02-001/08:58:19		NOTE: Start Block (MAP_PB_ODY)		02-001/08:45:51
16168	MGS	02-001/08:58:20		: 00:23:30, 01:35:44, FALSE, FALSE, FALSE, 00:01:15, 00:07:04, 01:20:39, 00:06:45	AEMINI	02-001/08:45:52
16169	MGS	02-001/08:58:20		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/08:45:52
16170	MGS	02-001/08:58:20		NOTE: Start EVP data return script		02-001/08:45:52
16171	MGS	02-001/08:58:21		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-001T09:27:42.000	AEMPBI	02-001/08:45:53
16172	MGS	02-001/09:01:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/08:48:59
16173	MGS	02-001/09:01:27		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8416000, DUR=00:17:32		02-001/08:48:59
16174	MGS	02-001/09:01:27		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-001/08:48:59
16175	MGS	02-001/09:01:27		: 00:08:25, FALSE	RDSCII	02-001/08:48:59
16176	MGS	02-001/09:01:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/08:48:59
16177	MGS	02-001/09:01:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/08:48:59
16178	MGS	02-001/09:01:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/08:48:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16179	MGS	02-001/09:01:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/08:48:59
16180	MGS	02-001/09:01:27	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16181	MGS	02-001/09:01:27	43	NOTE: Carrier Only -- No Telemetry Modulation		
16182	MGS	02-001/09:03:30		NOTE: Enter Planetary Atmosphere 12594		02-001/08:51:02
16183	MGS	02-001/09:05:20		NOTE: Apoapsis 12594 -		02-001/08:52:52
16184	MGS	02-001/09:07:20		SSR 1A Data Disable	CSD1AX	02-001/08:54:52
16185	MGS	02-001/09:07:20		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-001/08:54:52
16186	MGS	02-001/09:07:21		NOTE: End Block (SSRMGR)		02-001/08:54:53
16187	MGS	02-001/09:08:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/08:55:52
16188	MGS	02-001/09:08:20		NOTE: Enter Solar Eclipse 12594		02-001/08:55:52
16189	MGS	02-001/09:09:12		NOTE: Enter Earth Occultation 12594		02-001/08:56:45
16190	MGS	02-001/09:09:12	43	NOTE: Loss Of X-Band Signal		
16191	MGS	02-001/09:09:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/08:57:24
16192	MGS	02-001/09:09:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/08:57:24
16193	MGS	02-001/09:09:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/08:57:24
16194	MGS	02-001/09:09:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/08:57:24
16195	MGS	02-001/09:09:52		NOTE: End EVP script		02-001/08:57:25
16196	MGS	02-001/09:09:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/08:57:25
16197	MGS	02-001/09:09:53		NOTE: End Block (MAP_RT)		02-001/08:57:26
16198	MGS	02-001/09:09:56		NOTE: End fixed Sub-Reflector for Radio Science		02-001/08:57:29
16199	MGS	02-001/09:31:50		: 01:35:44	RPAONX	02-001/09:19:22
16200	MGS	02-001/09:31:50		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/09:19:22
16201	MGS	02-001/09:32:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/09:20:29
16202	MGS	02-001/09:32:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/09:20:29
16203	MGS	02-001/09:33:01		Command the PSE with included data word: 3990	SWPSEL	02-001/09:20:33
16204	MGS	02-001/09:33:02		Set eclipse egress script address: 0158	SWSEES	02-001/09:20:34
16205	MGS	02-001/09:33:35		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/09:21:07
16206	MGS	02-001/09:33:44		NOTE: Exit Earth Occultation 12594		02-001/09:21:16
16207	MGS	02-001/09:33:44	43	Acquisition Of X-Band Signal		
16208	MGS	02-001/09:33:44	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16209	MGS	02-001/09:39:44		NOTE: Exit Planetary Atmosphere 12594		02-001/09:27:16
16210	MGS	02-001/09:40:09		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:16:46	AEMPB	02-001/09:27:41
16211	MGS	02-001/09:40:09		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-001/09:27:41
16212	MGS	02-001/09:40:09		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-001/09:27:41
16213	MGS	02-001/09:40:10		SSR 1A Data Enable	CSD1AE	02-001/09:27:42
16214	MGS	02-001/09:40:10		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-001/09:27:42
16215	MGS	02-001/09:40:10	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16216	MGS	02-001/09:48:37		NOTE: Exit Solar Eclipse 12594		02-001/09:36:10
16217	MGS	02-001/10:04:10		NOTE: Periapsis 12595 ----------		02-001/09:51:42
16218	MGS	02-001/10:13:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/10:01:08
16219	MGS	02-001/10:13:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/10:01:08
16220	MGS	02-001/10:13:37		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/10:01:09
16221	MGS	02-001/10:13:37		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/10:01:09
16222	MGS	02-001/10:20:00	63	Begin Pre-Cal		
16223	MGS	02-001/10:20:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
16224	MGS	02-001/10:20:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
16225	MGS	02-001/10:20:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
16226	MGS	02-001/10:20:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
16227	MGS	02-001/10:20:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
16228	MGS	02-001/10:20:00	63	Config: TGC: DEST=37		
16229	MGS	02-001/10:20:00	63	Config: TGC: BAND=X, BR=40000.000000		
16230	MGS	02-001/10:20:00	63	Config: FSS: CH=2, PRI_FL=10000		
16231	MGS	02-001/10:20:00	63	Config: RSR		
16232	MGS	02-001/10:20:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16233	MGS	02-001/10:20:00	63	Config: BVR		
16234	MGS	02-001/10:20:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
16235	MGS	02-001/10:20:00	63	Config: MDA: SMPL=0.1		
16236	MGS	02-001/10:35:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/10:23:09
16237	MGS	02-001/10:35:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/10:23:09
16238	MGS	02-001/10:50:48		SSR 1A Data Disable	CSD1AX	02-001/10:38:20
16239	MGS	02-001/10:50:48		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-001/10:38:20
16240	MGS	02-001/10:50:48		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-001/10:38:20
16241	MGS	02-001/10:50:48	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16242	MGS	02-001/10:56:04		NOTE: Start Block (MAP_RT)		02-001/10:43:36
16243	MGS	02-001/10:56:05		: 00:23:30, 01:35:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:44, 01:17:18, 00:08:25	AEMINI	02-001/10:43:37
16244	MGS	02-001/10:56:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/10:43:37
16245	MGS	02-001/10:56:05		NOTE: Start EVP data return script		02-001/10:43:37
16246	MGS	02-001/10:56:06		: SE_2A, RTM, 01:17:17, MRC, 2002-001T11:27:08.000	AEMRTI	02-001/10:43:38
16247	MGS	02-001/11:01:15		NOTE: Enter Planetary Atmosphere 12595		02-001/10:48:47
16248	MGS	02-001/11:03:16		NOTE: Apoapsis 12595 -		02-001/10:50:48
16249	MGS	02-001/11:06:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/10:53:37
16250	MGS	02-001/11:06:05		NOTE: Enter Solar Eclipse 12595		02-001/10:53:37
16251	MGS	02-001/11:06:56		NOTE: Enter Earth Occultation 12595		02-001/10:54:28
16252	MGS	02-001/11:06:56	43	NOTE: Loss Of X-Band Signal		
16253	MGS	02-001/11:07:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/10:55:06
16254	MGS	02-001/11:07:34		NOTE: End EVP script		02-001/10:55:06
16255	MGS	02-001/11:07:35		NOTE: End Block (MAP_PB_ODY)		02-001/10:55:07
16256	MGS	02-001/11:25:50		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/11:13:22
16257	MGS	02-001/11:29:35		: 01:35:43	RPAONX	02-001/11:17:07
16258	MGS	02-001/11:29:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/11:17:07
16259	MGS	02-001/11:30:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/11:18:09
16260	MGS	02-001/11:30:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/11:18:09
16261	MGS	02-001/11:30:42		Set eclipse egress script address: 019A	SWSEES	02-001/11:18:14
16262	MGS	02-001/11:30:50		: 00:00:30, 00:08:44, FALSE	RDSCIE	02-001/11:18:22
16263	MGS	02-001/11:30:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/11:18:22
16264	MGS	02-001/11:30:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/11:18:22
16265	MGS	02-001/11:30:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/11:18:22
16266	MGS	02-001/11:30:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/11:18:22
16267	MGS	02-001/11:31:29		NOTE: Exit Earth Occultation 12595		02-001/11:19:01
16268	MGS	02-001/11:31:29	43	Acquisition Of X-Band Signal		
16269	MGS	02-001/11:31:29	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16270	MGS	02-001/11:31:29	43	NOTE: Carrier Only -- No Telemetry Modulation		
16271	MGS	02-001/11:37:28		NOTE: Exit Planetary Atmosphere 12595		02-001/11:25:00
16272	MGS	02-001/11:39:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/11:27:06
16273	MGS	02-001/11:39:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/11:27:06
16274	MGS	02-001/11:39:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/11:27:06
16275	MGS	02-001/11:39:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/11:27:06
16276	MGS	02-001/11:39:34	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16277	MGS	02-001/11:39:35		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	02-001/11:27:07
16278	MGS	02-001/11:39:35		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/11:27:07
16279	MGS	02-001/11:39:35		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/11:27:07
16280	MGS	02-001/11:39:35	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16281	MGS	02-001/11:39:39		NOTE: End fixed Sub-Reflector for Radio Science		02-001/11:27:11
16282	MGS	02-001/11:46:23		NOTE: Exit Solar Eclipse 12595		02-001/11:33:55
16283	MGS	02-001/11:50:00	63	Begin Tracking		
16284	MGS	02-001/11:50:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16285	MGS	02-001/12:00:46	43	NOTE: Below Uplink Interlock Limit		
16286	MGS	02-001/12:01:11	63	NOTE: Above Uplink Interlock Limit		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16287	MGS	02-001/12:02:05		NOTE: Periapsis 12596 ----------		02-001/11:49:37
16288	MGS	02-001/12:07:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/11:54:54
16289	MGS	02-001/12:07:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/11:54:54
16290	MGS	02-001/12:07:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/11:54:55
16291	MGS	02-001/12:07:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/11:54:55
16292	MGS	02-001/12:10:00	43	End Tracking		
16293	MGS	02-001/12:12:27		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-001/11:59:59
16294	MGS	02-001/12:25:00	43	End Post-Cal		
16295	MGS	02-001/12:29:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/12:16:55
16296	MGS	02-001/12:29:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/12:16:55
16297	MGS	02-001/12:51:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/12:39:24
16298	MGS	02-001/12:53:52		NOTE: Start EVP data return script		02-001/12:41:24
16299	MGS	02-001/12:56:52		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/12:44:24
16300	MGS	02-001/12:56:52		: 00:08:25, FALSE	RDSCII	02-001/12:44:24
16301	MGS	02-001/12:56:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/12:44:24
16302	MGS	02-001/12:56:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/12:44:24
16303	MGS	02-001/12:56:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/12:44:24
16304	MGS	02-001/12:56:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/12:44:24
16305	MGS	02-001/12:56:52	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16306	MGS	02-001/12:56:52	63	NOTE: Carrier Only -- No Telemetry Modulation		
16307	MGS	02-001/12:59:02		NOTE: Enter Planetary Atmosphere 12596		02-001/12:46:34
16308	MGS	02-001/13:01:02		NOTE: Apoapsis 12596 -		02-001/12:48:33
16309	MGS	02-001/13:03:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/12:51:24
16310	MGS	02-001/13:03:53		NOTE: Enter Solar Eclipse 12596		02-001/12:51:24
16311	MGS	02-001/13:04:43		NOTE: Enter Earth Occultation 12596		02-001/12:52:15
16312	MGS	02-001/13:04:43	63	NOTE: Loss Of X-Band Signal		
16313	MGS	02-001/13:05:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/12:52:49
16314	MGS	02-001/13:05:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/12:52:49
16315	MGS	02-001/13:05:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/12:52:49
16316	MGS	02-001/13:05:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/12:52:49
16317	MGS	02-001/13:05:18		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/12:52:50
16318	MGS	02-001/13:05:19		NOTE: End EVP script		02-001/12:52:50
16319	MGS	02-001/13:05:23		NOTE: End fixed Sub-Reflector for Radio Science		02-001/12:52:54
16320	MGS	02-001/13:23:38		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/13:11:09
16321	MGS	02-001/13:27:22		: 01:35:43	RPAONX	02-001/13:14:54
16322	MGS	02-001/13:27:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/13:14:54
16323	MGS	02-001/13:28:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/13:15:55
16324	MGS	02-001/13:28:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/13:15:55
16325	MGS	02-001/13:28:28		Set eclipse egress script address: 01DC	SWSEES	02-001/13:16:00
16326	MGS	02-001/13:28:37		: 00:00:30, 00:08:44, FALSE	RDSCIE	02-001/13:16:09
16327	MGS	02-001/13:28:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/13:16:09
16328	MGS	02-001/13:28:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/13:16:09
16329	MGS	02-001/13:28:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/13:16:09
16330	MGS	02-001/13:28:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/13:16:09
16331	MGS	02-001/13:29:07		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/13:16:39
16332	MGS	02-001/13:29:17		NOTE: Exit Earth Occultation 12596		02-001/13:16:48
16333	MGS	02-001/13:29:17	63	Acquisition Of X-Band Signal		
16334	MGS	02-001/13:29:17	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16335	MGS	02-001/13:29:17	63	NOTE: Carrier Only -- No Telemetry Modulation		
16336	MGS	02-001/13:35:16		NOTE: Exit Planetary Atmosphere 12596		02-001/13:22:48
16337	MGS	02-001/13:37:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/13:24:53
16338	MGS	02-001/13:37:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/13:24:53
16339	MGS	02-001/13:37:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/13:24:53
16340	MGS	02-001/13:37:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/13:24:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16341	MGS	02-001/13:37:21	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16342	MGS	02-001/13:37:22		: RTM, MRC, 01:17:17, S&E_2A, FALSE, 00:08:26	AEMRT	02-001/13:24:54
16343	MGS	02-001/13:37:22		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/13:24:54
16344	MGS	02-001/13:37:22		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/13:24:54
16345	MGS	02-001/13:37:22	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16346	MGS	02-001/13:37:27		NOTE: End fixed Sub-Reflector for Radio Science		02-001/13:24:58
16347	MGS	02-001/13:44:11		NOTE: Exit Solar Eclipse 12596		02-001/13:31:42
16348	MGS	02-001/13:59:53		NOTE: Periapsis 12597 ----------		02-001/13:47:25
16349	MGS	02-001/14:05:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/13:52:41
16350	MGS	02-001/14:05:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/13:52:41
16351	MGS	02-001/14:05:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/13:52:42
16352	MGS	02-001/14:05:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/13:52:42
16353	MGS	02-001/14:27:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/14:14:42
16354	MGS	02-001/14:27:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/14:14:42
16355	MGS	02-001/14:37:05		NOTE: Start Block (SSRMGR)		02-001/14:24:36
16356	MGS	02-001/14:37:05		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-001/14:24:36
16357	MGS	02-001/14:37:06		SSR 1A Data Enable	CSD1AE	02-001/14:24:37
16358	MGS	02-001/14:37:06		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-001/14:24:37
16359	MGS	02-001/14:49:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/14:37:11
16360	MGS	02-001/14:51:39		NOTE: Start Block (MAP_PB_ODY)		02-001/14:39:10
16361	MGS	02-001/14:51:40		: 00:23:30, 01:35:44, FALSE, FALSE, FALSE, 00:01:15, 00:07:04, 01:20:39, 00:06:45	AEMINI	02-001/14:39:11
16362	MGS	02-001/14:51:40		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/14:39:11
16363	MGS	02-001/14:51:40		NOTE: Start EVP data return script		02-001/14:39:11
16364	MGS	02-001/14:51:41		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-001T15:21:01.000	AEMPBI	02-001/14:39:12
16365	MGS	02-001/14:54:40		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/14:42:11
16366	MGS	02-001/14:54:40		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8432000, DUR=00:17:34		02-001/14:42:11
16367	MGS	02-001/14:54:40		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-001/14:42:11
16368	MGS	02-001/14:54:40		: 00:08:25, FALSE	RDSCII	02-001/14:42:11
16369	MGS	02-001/14:54:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/14:42:11
16370	MGS	02-001/14:54:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/14:42:11
16371	MGS	02-001/14:54:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/14:42:11
16372	MGS	02-001/14:54:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/14:42:11
16373	MGS	02-001/14:54:40	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16374	MGS	02-001/14:54:40	63	NOTE: Carrier Only -- No Telemetry Modulation		
16375	MGS	02-001/14:56:49		NOTE: Enter Planetary Atmosphere 12597		02-001/14:44:20
16376	MGS	02-001/14:58:34		NOTE: Apoapsis 12597 -		02-001/14:46:05
16377	MGS	02-001/15:00:39		SSR 1B Data Disable	CSD1BX	02-001/14:48:10
16378	MGS	02-001/15:00:39		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-001/14:48:10
16379	MGS	02-001/15:00:40		NOTE: End Block (SSRMGR)		02-001/14:48:11
16380	MGS	02-001/15:01:40		NOTE: Enter Solar Eclipse 12597		02-001/14:49:11
16381	MGS	02-001/15:01:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/14:49:11
16382	MGS	02-001/15:02:30		NOTE: Enter Earth Occultation 12597		02-001/14:50:01
16383	MGS	02-001/15:02:30	63	NOTE: Loss Of X-Band Signal		
16384	MGS	02-001/15:03:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/14:50:36
16385	MGS	02-001/15:03:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/14:50:36
16386	MGS	02-001/15:03:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/14:50:36
16387	MGS	02-001/15:03:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/14:50:36
16388	MGS	02-001/15:03:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/14:50:37
16389	MGS	02-001/15:03:06		NOTE: End EVP script		02-001/14:50:37
16390	MGS	02-001/15:03:07		NOTE: End Block (MAP_RT)		02-001/14:50:38
16391	MGS	02-001/15:03:10		NOTE: End fixed Sub-Reflector for Radio Science		02-001/14:50:41
16392	MGS	02-001/15:25:10		: 01:35:44	RPAONX	02-001/15:12:41
16393	MGS	02-001/15:25:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/15:12:41
16394	MGS	02-001/15:26:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/15:13:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16395	MGS	02-001/15:26:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/15:13:42
16396	MGS	02-001/15:26:15		Command the PSE with included data word: 3990	SWPSEL	02-001/15:13:46
16397	MGS	02-001/15:26:16		Set eclipse egress script address: 0158	SWSEES	02-001/15:13:47
16398	MGS	02-001/15:26:55		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/15:14:26
16399	MGS	02-001/15:27:05		NOTE: Exit Earth Occultation 12597		02-001/15:14:36
16400	MGS	02-001/15:27:05	63	Acquisition Of X-Band Signal		
16401	MGS	02-001/15:27:05	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16402	MGS	02-001/15:33:04		NOTE: Exit Planetary Atmosphere 12597		02-001/15:20:35
16403	MGS	02-001/15:33:29		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:16:46	AEMPB	02-001/15:21:00
16404	MGS	02-001/15:33:29		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-001/15:21:00
16405	MGS	02-001/15:33:29		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-001/15:21:00
16406	MGS	02-001/15:33:30		SSR 1B Data Enable	CSD1BE	02-001/15:21:01
16407	MGS	02-001/15:33:30		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-001/15:21:01
16408	MGS	02-001/15:33:30	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16409	MGS	02-001/15:41:58		NOTE: Exit Solar Eclipse 12597		02-001/15:29:29
16410	MGS	02-001/15:57:35		NOTE: Periapsis 12598 ----------		02-001/15:45:06
16411	MGS	02-001/16:06:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/15:54:28
16412	MGS	02-001/16:06:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/15:54:28
16413	MGS	02-001/16:06:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/15:54:29
16414	MGS	02-001/16:06:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/15:54:29
16415	MGS	02-001/16:28:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/16:16:29
16416	MGS	02-001/16:28:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/16:16:29
16417	MGS	02-001/16:44:08		SSR 1B Data Disable	CSD1BX	02-001/16:31:39
16418	MGS	02-001/16:44:08		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-001/16:31:39
16419	MGS	02-001/16:44:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-001/16:31:39
16420	MGS	02-001/16:44:08	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16421	MGS	02-001/16:49:24		NOTE: Start Block (MAP_RT)		02-001/16:36:55
16422	MGS	02-001/16:49:25		: 00:23:40, 01:35:27, FALSE, TRUE, FALSE, 00:01:15, 00:08:39, 01:17:12, 00:08:20	AEMINI	02-001/16:36:56
16423	MGS	02-001/16:49:25		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/16:36:56
16424	MGS	02-001/16:49:25		NOTE: Start EVP data return script		02-001/16:36:56
16425	MGS	02-001/16:49:26		: SE_2A, RTM, 01:17:11, MRC, 2002-001T17:20:31.000	AEMRTI	02-001/16:36:57
16426	MGS	02-001/16:54:33		NOTE: Enter Planetary Atmosphere 12598		02-001/16:42:04
16427	MGS	02-001/16:56:03		NOTE: Apoapsis 12598 -		02-001/16:43:34
16428	MGS	02-001/16:59:25		NOTE: Enter Solar Eclipse 12598		02-001/16:46:56
16429	MGS	02-001/16:59:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/16:46:56
16430	MGS	02-001/17:00:14		NOTE: Enter Earth Occultation 12598		02-001/16:47:45
16431	MGS	02-001/17:00:14	63	NOTE: Loss Of X-Band Signal		
16432	MGS	02-001/17:00:54		NOTE: End EVP script		02-001/16:48:25
16433	MGS	02-001/17:00:54		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/16:48:25
16434	MGS	02-001/17:00:55		NOTE: End Block (MAP_PB_ODY)		02-001/16:48:26
16435	MGS	02-001/17:19:20		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/17:06:51
16436	MGS	02-001/17:23:05		: 01:35:27	RPAONX	02-001/17:10:36
16437	MGS	02-001/17:23:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/17:10:36
16438	MGS	02-001/17:23:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/17:11:29
16439	MGS	02-001/17:23:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/17:11:29
16440	MGS	02-001/17:24:03		Set eclipse egress script address: 019A	SWSEES	02-001/17:11:34
16441	MGS	02-001/17:24:20		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-001/17:11:51
16442	MGS	02-001/17:24:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/17:11:51
16443	MGS	02-001/17:24:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/17:11:51
16444	MGS	02-001/17:24:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/17:11:51
16445	MGS	02-001/17:24:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/17:11:51
16446	MGS	02-001/17:24:51		NOTE: Exit Earth Occultation 12598		02-001/17:12:22
16447	MGS	02-001/17:24:51	63	Acquisition Of X-Band Signal		
16448	MGS	02-001/17:24:51	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16449	MGS	02-001/17:24:51	63	NOTE: Carrier Only -- No Telemetry Modulation		
16450	MGS	02-001/17:30:50		NOTE: Exit Planetary Atmosphere 12598		02-001/17:18:21
16451	MGS	02-001/17:32:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/17:20:30
16452	MGS	02-001/17:32:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/17:20:30
16453	MGS	02-001/17:32:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/17:20:30
16454	MGS	02-001/17:32:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/17:20:30
16455	MGS	02-001/17:32:59	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16456	MGS	02-001/17:33:00		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-001/17:20:31
16457	MGS	02-001/17:33:00		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/17:20:31
16458	MGS	02-001/17:33:00		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/17:20:31
16459	MGS	02-001/17:33:00	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16460	MGS	02-001/17:33:04		NOTE: End fixed Sub-Reflector for Radio Science		02-001/17:20:35
16461	MGS	02-001/17:39:42		NOTE: Exit Solar Eclipse 12598		02-001/17:27:13
16462	MGS	02-001/17:55:19		NOTE: Periapsis 12599 ----------		02-001/17:42:50
16463	MGS	02-001/18:00:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/17:48:12
16464	MGS	02-001/18:00:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/17:48:12
16465	MGS	02-001/18:00:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/17:48:13
16466	MGS	02-001/18:00:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/17:48:13
16467	MGS	02-001/18:15:00	15	Begin Pre-Cal		
16468	MGS	02-001/18:15:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
16469	MGS	02-001/18:15:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
16470	MGS	02-001/18:15:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
16471	MGS	02-001/18:15:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
16472	MGS	02-001/18:15:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
16473	MGS	02-001/18:15:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
16474	MGS	02-001/18:15:00	15	Config: TGC: DEST=37		
16475	MGS	02-001/18:15:00	15	Config: TGC: BAND=X, BR=0.000000		
16476	MGS	02-001/18:15:00	15	Config: FSS: CH=2, PRI_FL=10000		
16477	MGS	02-001/18:15:00	15	Config: RSR		
16478	MGS	02-001/18:15:00	15	Config: TXL		
16479	MGS	02-001/18:15:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
16480	MGS	02-001/18:15:00	15	Config: BVR		
16481	MGS	02-001/18:15:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
16482	MGS	02-001/18:15:00	15	Config: MDA: SMPL=0.1		
16483	MGS	02-001/18:15:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
16484	MGS	02-001/18:15:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
16485	MGS	02-001/18:15:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
16486	MGS	02-001/18:22:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/18:10:13
16487	MGS	02-001/18:22:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/18:10:13
16488	MGS	02-001/18:45:11		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/18:32:42
16489	MGS	02-001/18:47:08		NOTE: Start EVP data return script		02-001/18:34:39
16490	MGS	02-001/18:50:11		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/18:37:42
16491	MGS	02-001/18:50:11		: 00:08:20, FALSE	RDSCII	02-001/18:37:42
16492	MGS	02-001/18:50:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/18:37:42
16493	MGS	02-001/18:50:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/18:37:42
16494	MGS	02-001/18:50:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/18:37:42
16495	MGS	02-001/18:50:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/18:37:42
16496	MGS	02-001/18:50:11	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16497	MGS	02-001/18:50:11	63	NOTE: Carrier Only -- No Telemetry Modulation		
16498	MGS	02-001/18:52:15		NOTE: Enter Planetary Atmosphere 12599		02-001/18:39:46
16499	MGS	02-001/18:53:54		NOTE: Apoapsis 12599 -		02-001/18:41:25
16500	MGS	02-001/18:57:08		NOTE: Enter Solar Eclipse 12599		02-001/18:44:38
16501	MGS	02-001/18:57:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/18:44:39
16502	MGS	02-001/18:57:56		NOTE: Enter Earth Occultation 12599		02-001/18:45:27

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16503	MGS	02-001/18:57:56	63	NOTE: Loss Of X-Band Signal		
16504	MGS	02-001/18:58:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/18:46:02
16505	MGS	02-001/18:58:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/18:46:02
16506	MGS	02-001/18:58:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/18:46:02
16507	MGS	02-001/18:58:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/18:46:02
16508	MGS	02-001/18:58:32		NOTE: End EVP script		02-001/18:46:03
16509	MGS	02-001/18:58:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/18:46:03
16510	MGS	02-001/18:58:36		NOTE: End fixed Sub-Reflector for Radio Science		02-001/18:46:07
16511	MGS	02-001/19:15:00	15	Begin Tracking		
16512	MGS	02-001/19:17:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/19:04:34
16513	MGS	02-001/19:20:48		: 01:35:27	RPAONX	02-001/19:08:19
16514	MGS	02-001/19:20:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/19:08:19
16515	MGS	02-001/19:21:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/19:09:13
16516	MGS	02-001/19:21:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/19:09:13
16517	MGS	02-001/19:21:47		Set eclipse egress script address: 01DC	SWSEES	02-001/19:09:18
16518	MGS	02-001/19:22:03		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-001/19:09:34
16519	MGS	02-001/19:22:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/19:09:34
16520	MGS	02-001/19:22:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/19:09:34
16521	MGS	02-001/19:22:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/19:09:34
16522	MGS	02-001/19:22:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/19:09:34
16523	MGS	02-001/19:22:33		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/19:10:04
16524	MGS	02-001/19:22:35		NOTE: Exit Earth Occultation 12599		02-001/19:10:06
16525	MGS	02-001/19:22:35	15	Acquisition Of X-Band Signal		
16526	MGS	02-001/19:22:35	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16527	MGS	02-001/19:22:35	15	NOTE: Carrier Only -- No Telemetry Modulation		
16528	MGS	02-001/19:22:35	63	Acquisition Of X-Band Signal		
16529	MGS	02-001/19:22:35	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16530	MGS	02-001/19:22:35	63	NOTE: Carrier Only -- No Telemetry Modulation		
16531	MGS	02-001/19:25:02	15	NOTE: Above Uplink Interlock Limit		
16532	MGS	02-001/19:28:34		NOTE: Exit Planetary Atmosphere 12599		02-001/19:16:05
16533	MGS	02-001/19:30:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16534	MGS	02-001/19:30:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/19:18:13
16535	MGS	02-001/19:30:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/19:18:13
16536	MGS	02-001/19:30:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/19:18:13
16537	MGS	02-001/19:30:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/19:18:13
16538	MGS	02-001/19:30:42	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16539	MGS	02-001/19:30:42	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16540	MGS	02-001/19:30:43		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-001/19:18:14
16541	MGS	02-001/19:30:43		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/19:18:14
16542	MGS	02-001/19:30:43		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/19:18:14
16543	MGS	02-001/19:30:43	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16544	MGS	02-001/19:30:43	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16545	MGS	02-001/19:30:47		NOTE: End fixed Sub-Reflector for Radio Science		02-001/19:18:18
16546	MGS	02-001/19:32:00	15	Range Modulation On: SUP=3.0dB		
16547	MGS	02-001/19:33:00	15	Begin Ranging Acquisition		
16548	MGS	02-001/19:37:25		NOTE: Exit Solar Eclipse 12599		02-001/19:24:56
16549	MGS	02-001/19:53:01		NOTE: Periapsis 12600 ----------		02-001/19:40:32
16550	MGS	02-001/19:54:58	15	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16551	MGS	02-001/19:54:58	63	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16552	MGS	02-001/19:58:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/19:45:55
16553	MGS	02-001/19:58:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/19:45:55
16554	MGS	02-001/19:58:25		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/19:45:56
16555	MGS	02-001/19:58:25		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/19:45:56

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16556	MGS	02-001/20:11:55	15	NOTE: Transmitter Off in 15 minutes		
16557	MGS	02-001/20:20:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/20:07:56
16558	MGS	02-001/20:20:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/20:07:56
16559	MGS	02-001/20:24:56	15	Range Modulation Off		
16560	MGS	02-001/20:26:55	15	Transmitter Off		
16561	MGS	02-001/20:30:21		NOTE: Start Block (SSRMGR)		02-001/20:17:51
16562	MGS	02-001/20:30:21		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-001/20:17:51
16563	MGS	02-001/20:30:22		SSR 1B Data Enable	CSD1BE	02-001/20:17:52
16564	MGS	02-001/20:30:22		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-001/20:17:52
16565	MGS	02-001/20:42:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/20:30:25
16566	MGS	02-001/20:44:49		NOTE: Start Block (MAP_PB_ODY)		02-001/20:32:19
16567	MGS	02-001/20:44:50		: 00:23:40, 01:35:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:59, 01:20:33, 00:06:40	AEMINI	02-001/20:32:20
16568	MGS	02-001/20:44:50		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/20:32:20
16569	MGS	02-001/20:44:50		NOTE: Start EVP data return script		02-001/20:32:20
16570	MGS	02-001/20:44:51		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-001T21:14:15.000	AEMPBI	02-001/20:32:21
16571	MGS	02-001/20:47:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-001/20:35:25
16572	MGS	02-001/20:47:55		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8424000, DUR=00:17:33		02-001/20:35:25
16573	MGS	02-001/20:47:55		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-001/20:35:25
16574	MGS	02-001/20:47:55		: 00:08:20, FALSE	RDSCII	02-001/20:35:25
16575	MGS	02-001/20:47:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/20:35:25
16576	MGS	02-001/20:47:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/20:35:25
16577	MGS	02-001/20:47:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/20:35:25
16578	MGS	02-001/20:47:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/20:35:25
16579	MGS	02-001/20:47:55	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16580	MGS	02-001/20:47:55	15	NOTE: Carrier Only -- No Telemetry Modulation		
16581	MGS	02-001/20:47:55	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16582	MGS	02-001/20:47:55	63	NOTE: Carrier Only -- No Telemetry Modulation		
16583	MGS	02-001/20:49:58		NOTE: Enter Planetary Atmosphere 12600		02-001/20:37:29
16584	MGS	02-001/20:51:37		NOTE: Apoapsis 12600 -		02-001/20:39:07
16585	MGS	02-001/20:53:50		SSR 1A Data Disable	CSD1AX	02-001/20:41:20
16586	MGS	02-001/20:53:50		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-001/20:41:20
16587	MGS	02-001/20:53:51		NOTE: End Block (SSRMGR)		02-001/20:41:21
16588	MGS	02-001/20:54:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/20:42:20
16589	MGS	02-001/20:54:50		NOTE: Enter Solar Eclipse 12600		02-001/20:42:20
16590	MGS	02-001/20:55:39		NOTE: Enter Earth Occultation 12600		02-001/20:43:09
16591	MGS	02-001/20:55:39	15	NOTE: Loss Of X-Band Signal		
16592	MGS	02-001/20:55:39	63	NOTE: Loss Of X-Band Signal		
16593	MGS	02-001/20:56:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/20:43:45
16594	MGS	02-001/20:56:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/20:43:45
16595	MGS	02-001/20:56:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/20:43:45
16596	MGS	02-001/20:56:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/20:43:45
16597	MGS	02-001/20:56:15		NOTE: End EVP script		02-001/20:43:46
16598	MGS	02-001/20:56:16		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/20:43:46
16599	MGS	02-001/20:56:16		NOTE: End Block (MAP_RT)		02-001/20:43:47
16600	MGS	02-001/20:56:19		NOTE: End fixed Sub-Reflector for Radio Science		02-001/20:43:50
16601	MGS	02-001/20:59:04	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16602	MGS	02-001/21:01:04	15	Range Modulation On: SUP=3.0dB		
16603	MGS	02-001/21:02:04	15	Begin Ranging Acquisition		
16604	MGS	02-001/21:18:30		: 01:35:28	RPAONX	02-001/21:06:00
16605	MGS	02-001/21:18:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/21:06:00
16606	MGS	02-001/21:19:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/21:06:56
16607	MGS	02-001/21:19:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/21:06:56
16608	MGS	02-001/21:19:30		Command the PSE with included data word: 3990	SWPSEL	02-001/21:07:00
16609	MGS	02-001/21:19:31		Set eclipse egress script address: 0158	SWSEES	02-001/21:07:01

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16610	MGS	02-001/21:20:15		Disables autonomous command to send eclipse ingress script	SWEISX	02-001/21:07:45
16611	MGS	02-001/21:20:18		NOTE: Exit Earth Occultation 12600		02-001/21:07:48
16612	MGS	02-001/21:20:18	15	Acquisition Of X-Band Signal		
16613	MGS	02-001/21:20:18	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16614	MGS	02-001/21:20:18	63	Acquisition Of X-Band Signal		
16615	MGS	02-001/21:20:18	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16616	MGS	02-001/21:24:03	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16617	MGS	02-001/21:24:03	63	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16618	MGS	02-001/21:26:17		NOTE: Exit Planetary Atmosphere 12600		02-001/21:13:47
16619	MGS	02-001/21:26:44		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:16:35	AEMPB	02-001/21:14:14
16620	MGS	02-001/21:26:44		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-001/21:14:14
16621	MGS	02-001/21:26:44		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-001/21:14:14
16622	MGS	02-001/21:26:45		SSR 1A Data Enable	CSD1AE	02-001/21:14:15
16623	MGS	02-001/21:26:45		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-001/21:14:15
16624	MGS	02-001/21:26:45	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16625	MGS	02-001/21:26:45	63	D/L Change: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16626	MGS	02-001/21:33:22	63	NOTE: Below Uplink Interlock Limit		
16627	MGS	02-001/21:35:00	63	End Tracking		
16628	MGS	02-001/21:35:07		NOTE: Exit Solar Eclipse 12600		02-001/21:22:37
16629	MGS	02-001/21:50:00	63	End Post-Cal		
16630	MGS	02-001/21:50:23		NOTE: Periapsis 12601 ----------		02-001/21:37:54
16631	MGS	02-001/22:00:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/21:47:36
16632	MGS	02-001/22:00:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/21:47:36
16633	MGS	02-001/22:00:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/21:47:37
16634	MGS	02-001/22:00:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/21:47:37
16635	MGS	02-001/22:09:36	15	NOTE: Transmitter Off in 15 minutes		
16636	MGS	02-001/22:22:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-001/22:09:37
16637	MGS	02-001/22:22:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-001/22:09:37
16638	MGS	02-001/22:22:37	15	Range Modulation Off		
16639	MGS	02-001/22:24:36	15	Transmitter Off		
16640	MGS	02-001/22:37:23		SSR 1A Data Disable	CSD1AX	02-001/22:24:53
16641	MGS	02-001/22:37:23		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-001/22:24:53
16642	MGS	02-001/22:37:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-001/22:24:53
16643	MGS	02-001/22:37:23	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16644	MGS	02-001/22:42:32		NOTE: Start Block (MAP_RT)		02-001/22:30:02
16645	MGS	02-001/22:42:33		: 00:23:40, 01:35:27, FALSE, TRUE, FALSE, 00:01:15, 00:08:39, 01:17:12, 00:08:20	AEMINI	02-001/22:30:03
16646	MGS	02-001/22:42:33		Enable sending eclipse ingress script when array power disappears	SWEISE	02-001/22:30:03
16647	MGS	02-001/22:42:33		NOTE: Start EVP data return script		02-001/22:30:03
16648	MGS	02-001/22:42:34		: SE_2A, RTM, 01:17:11, MRC, 2002-001T23:13:39.000	AEMRTI	02-001/22:30:04
16649	MGS	02-001/22:47:41		NOTE: Enter Planetary Atmosphere 12601		02-001/22:35:11
16650	MGS	02-001/22:49:02		NOTE: Apoapsis 12601 -		02-001/22:36:32
16651	MGS	02-001/22:49:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16652	MGS	02-001/22:52:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-001/22:40:03
16653	MGS	02-001/22:52:33		NOTE: Enter Solar Eclipse 12601		02-001/22:40:03
16654	MGS	02-001/22:53:21		NOTE: Enter Earth Occultation 12601		02-001/22:40:51
16655	MGS	02-001/22:53:21	15	NOTE: Loss Of X-Band Signal		
16656	MGS	02-001/22:53:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-001/22:41:28
16657	MGS	02-001/22:53:58		NOTE: End EVP script		02-001/22:41:28
16658	MGS	02-001/22:53:59		NOTE: End Block (MAP_PB_ODY)		02-001/22:41:29
16659	MGS	02-001/22:56:47	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16660	MGS	02-001/22:58:47	15	Range Modulation On: SUP=3.0dB		
16661	MGS	02-001/22:59:47	15	Begin Ranging Acquisition		
16662	MGS	02-001/23:12:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-001/22:59:58
16663	MGS	02-001/23:16:13		: 01:35:27	RPAONX	02-001/23:03:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16664	MGS	02-001/23:16:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-001/23:03:43
16665	MGS	02-001/23:17:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-001/23:04:37
16666	MGS	02-001/23:17:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-001/23:04:37
16667	MGS	02-001/23:17:12		Set eclipse egress script address: 019A	SWSEES	02-001/23:04:42
16668	MGS	02-001/23:17:28		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-001/23:04:58
16669	MGS	02-001/23:17:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-001/23:04:58
16670	MGS	02-001/23:17:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-001/23:04:58
16671	MGS	02-001/23:17:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-001/23:04:58
16672	MGS	02-001/23:17:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-001/23:04:58
16673	MGS	02-001/23:18:02		NOTE: Exit Earth Occultation 12601		02-001/23:05:32
16674	MGS	02-001/23:18:02	15	Acquisition Of X-Band Signal		
16675	MGS	02-001/23:18:02	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16676	MGS	02-001/23:18:02	15	NOTE: Carrier Only -- No Telemetry Modulation		
16677	MGS	02-001/23:23:59		NOTE: Exit Planetary Atmosphere 12601		02-001/23:11:29
16678	MGS	02-001/23:26:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-001/23:13:37
16679	MGS	02-001/23:26:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-001/23:13:37
16680	MGS	02-001/23:26:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-001/23:13:37
16681	MGS	02-001/23:26:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-001/23:13:37
16682	MGS	02-001/23:26:07	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16683	MGS	02-001/23:26:08		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-001/23:13:38
16684	MGS	02-001/23:26:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-001/23:13:38
16685	MGS	02-001/23:26:08		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-001/23:13:38
16686	MGS	02-001/23:26:08	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16687	MGS	02-001/23:26:12		NOTE: End fixed Sub-Reflector for Radio Science		02-001/23:13:42
16688	MGS	02-001/23:32:50		NOTE: Exit Solar Eclipse 12601		02-001/23:20:20
16689	MGS	02-001/23:48:06		NOTE: Periapsis 12602 ----------		02-001/23:35:36
16690	MGS	02-001/23:53:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-001/23:41:19
16691	MGS	02-001/23:53:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-001/23:41:19
16692	MGS	02-001/23:53:50		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-001/23:41:20
16693	MGS	02-001/23:53:50		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-001/23:41:20
16694	MGS	02-002/00:00:00		Light Time: OWLT = 12:30, RTLT = 25:00		
16695	MGS	02-002/00:07:18	15	NOTE: Transmitter Off in 15 minutes		
16696	MGS	02-002/00:15:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/00:03:20
16697	MGS	02-002/00:15:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/00:03:20
16698	MGS	02-002/00:20:18	15	Range Modulation Off		
16699	MGS	02-002/00:22:18	15	Transmitter Off		
16700	MGS	02-002/00:38:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/00:25:49
16701	MGS	02-002/00:40:18		NOTE: Start EVP data return script		02-002/00:27:48
16702	MGS	02-002/00:43:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/00:30:49
16703	MGS	02-002/00:43:19		: 00:08:20, FALSE	RDSCII	02-002/00:30:49
16704	MGS	02-002/00:43:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/00:30:49
16705	MGS	02-002/00:43:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/00:30:49
16706	MGS	02-002/00:43:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/00:30:49
16707	MGS	02-002/00:43:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/00:30:49
16708	MGS	02-002/00:43:19	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16709	MGS	02-002/00:43:19	15	NOTE: Carrier Only -- No Telemetry Modulation		
16710	MGS	02-002/00:45:24		NOTE: Enter Planetary Atmosphere 12602		02-002/00:32:54
16711	MGS	02-002/00:46:55		NOTE: Apoapsis 12602 -		02-002/00:34:25
16712	MGS	02-002/00:50:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/00:37:48
16713	MGS	02-002/00:50:18		NOTE: Enter Solar Eclipse 12602		02-002/00:37:48
16714	MGS	02-002/00:51:03		NOTE: Enter Earth Occultation 12602		02-002/00:38:33
16715	MGS	02-002/00:51:03	15	NOTE: Loss Of X-Band Signal		
16716	MGS	02-002/00:51:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/00:39:09
16717	MGS	02-002/00:51:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/00:39:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16718	MGS	02-002/00:51:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/00:39:09
16719	MGS	02-002/00:51:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/00:39:09
16720	MGS	02-002/00:51:40		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/00:39:10
16721	MGS	02-002/00:51:40		NOTE: End EVP script		02-002/00:39:10
16722	MGS	02-002/00:51:44		NOTE: End fixed Sub-Reflector for Radio Science		02-002/00:39:14
16723	MGS	02-002/00:54:32	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16724	MGS	02-002/00:56:33	15	Range Modulation On: SUP=3.0dB		
16725	MGS	02-002/00:57:33	15	Begin Ranging Acquisition		
16726	MGS	02-002/01:10:13		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/00:57:43
16727	MGS	02-002/01:13:58		: 01:35:27	RPAONX	02-002/01:01:28
16728	MGS	02-002/01:13:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/01:01:28
16729	MGS	02-002/01:14:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/01:02:20
16730	MGS	02-002/01:14:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/01:02:20
16731	MGS	02-002/01:14:55		Set eclipse egress script address: 01DC	SWSEES	02-002/01:02:25
16732	MGS	02-002/01:15:13		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-002/01:02:43
16733	MGS	02-002/01:15:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/01:02:43
16734	MGS	02-002/01:15:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/01:02:43
16735	MGS	02-002/01:15:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/01:02:43
16736	MGS	02-002/01:15:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/01:02:43
16737	MGS	02-002/01:15:43		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/01:03:13
16738	MGS	02-002/01:15:48		NOTE: Exit Earth Occultation 12602		02-002/01:03:17
16739	MGS	02-002/01:15:48	15	Acquisition Of X-Band Signal		
16740	MGS	02-002/01:15:48	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16741	MGS	02-002/01:15:48	15	NOTE: Carrier Only -- No Telemetry Modulation		
16742	MGS	02-002/01:21:44		NOTE: Exit Planetary Atmosphere 12602		02-002/01:09:14
16743	MGS	02-002/01:23:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/01:11:22
16744	MGS	02-002/01:23:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/01:11:22
16745	MGS	02-002/01:23:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/01:11:22
16746	MGS	02-002/01:23:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/01:11:22
16747	MGS	02-002/01:23:52	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16748	MGS	02-002/01:23:53		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-002/01:11:23
16749	MGS	02-002/01:23:53		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/01:11:23
16750	MGS	02-002/01:23:53		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/01:11:23
16751	MGS	02-002/01:23:53	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16752	MGS	02-002/01:23:57		NOTE: End fixed Sub-Reflector for Radio Science		02-002/01:11:27
16753	MGS	02-002/01:30:36		NOTE: Exit Solar Eclipse 12602		02-002/01:18:06
16754	MGS	02-002/01:46:17		NOTE: Periapsis 12603 ----------		02-002/01:33:47
16755	MGS	02-002/01:51:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/01:39:05
16756	MGS	02-002/01:51:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/01:39:05
16757	MGS	02-002/01:51:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/01:39:06
16758	MGS	02-002/01:51:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/01:39:06
16759	MGS	02-002/02:05:03	15	NOTE: Transmitter Off in 15 minutes		
16760	MGS	02-002/02:13:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/02:01:06
16761	MGS	02-002/02:13:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/02:01:06
16762	MGS	02-002/02:18:03	15	Range Modulation Off		
16763	MGS	02-002/02:20:03	15	Transmitter Off		
16764	MGS	02-002/02:23:32		NOTE: Start Block (SSRMGR)		02-002/02:11:02
16765	MGS	02-002/02:23:32		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-002/02:11:02
16766	MGS	02-002/02:23:33		SSR 1A Data Enable	CSD1AE	02-002/02:11:03
16767	MGS	02-002/02:23:33		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-002/02:11:03
16768	MGS	02-002/02:36:05		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/02:23:34
16769	MGS	02-002/02:38:04		NOTE: Start Block (MAP_PB_ODY)		02-002/02:25:34
16770	MGS	02-002/02:38:05		: 00:23:40, 01:35:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:59, 01:20:33, 00:06:40	AEMINI	02-002/02:25:35
16771	MGS	02-002/02:38:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/02:25:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16772	MGS	02-002/02:38:05		NOTE: Start EVP data return script		02-002/02:25:35
16773	MGS	02-002/02:38:06		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-002T03:07:29.000	AEMPBI	02-002/02:25:36
16774	MGS	02-002/02:41:04		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/02:28:34
16775	MGS	02-002/02:41:04		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8408000, DUR=00:17:31		02-002/02:28:34
16776	MGS	02-002/02:41:04		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-002/02:28:34
16777	MGS	02-002/02:41:04		: 00:08:20, FALSE	RDSCII	02-002/02:28:34
16778	MGS	02-002/02:41:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/02:28:34
16779	MGS	02-002/02:41:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/02:28:34
16780	MGS	02-002/02:41:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/02:28:34
16781	MGS	02-002/02:41:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/02:28:34
16782	MGS	02-002/02:41:04	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16783	MGS	02-002/02:41:04	15	NOTE: Carrier Only -- No Telemetry Modulation		
16784	MGS	02-002/02:43:10		NOTE: Enter Planetary Atmosphere 12603		02-002/02:30:39
16785	MGS	02-002/02:45:16		NOTE: Apoapsis 12603 -		02-002/02:32:45
16786	MGS	02-002/02:47:06		SSR 1B Data Disable	CSD1BX	02-002/02:34:35
16787	MGS	02-002/02:47:06		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-002/02:34:35
16788	MGS	02-002/02:47:07		NOTE: End Block (SSRMGR)		02-002/02:34:36
16789	MGS	02-002/02:48:05		NOTE: Enter Solar Eclipse 12603		02-002/02:35:35
16790	MGS	02-002/02:48:06		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/02:35:35
16791	MGS	02-002/02:48:49		NOTE: Enter Earth Occultation 12603		02-002/02:36:18
16792	MGS	02-002/02:48:49	15	NOTE: Loss Of X-Band Signal		
16793	MGS	02-002/02:49:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/02:36:54
16794	MGS	02-002/02:49:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/02:36:54
16795	MGS	02-002/02:49:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/02:36:54
16796	MGS	02-002/02:49:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/02:36:54
16797	MGS	02-002/02:49:26		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/02:36:55
16798	MGS	02-002/02:49:26		NOTE: End EVP script		02-002/02:36:55
16799	MGS	02-002/02:49:27		NOTE: End Block (MAP_RT)		02-002/02:36:56
16800	MGS	02-002/02:49:30		NOTE: End fixed Sub-Reflector for Radio Science		02-002/02:36:59
16801	MGS	02-002/02:52:19	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16802	MGS	02-002/02:54:20	15	Range Modulation On: SUP=3.0dB		
16803	MGS	02-002/02:55:20	15	Begin Ranging Acquisition		
16804	MGS	02-002/03:10:00	43	Begin Pre-Cal		
16805	MGS	02-002/03:10:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
16806	MGS	02-002/03:10:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
16807	MGS	02-002/03:10:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
16808	MGS	02-002/03:10:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
16809	MGS	02-002/03:10:00	43	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
16810	MGS	02-002/03:10:00	43	Config: TGC: DEST=37		
16811	MGS	02-002/03:10:00	43	Config: TGC: BAND=X, BR=8000.000000		
16812	MGS	02-002/03:10:00	43	Config: FSS: CH=2, PRI_FL=10000		
16813	MGS	02-002/03:10:00	43	Config: RSR		
16814	MGS	02-002/03:10:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
16815	MGS	02-002/03:10:00	43	Config: BVR		
16816	MGS	02-002/03:10:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
16817	MGS	02-002/03:10:00	43	Config: MDA: SMPL=0.1		
16818	MGS	02-002/03:11:46		: 01:35:28	RPAONX	02-002/02:59:15
16819	MGS	02-002/03:11:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/02:59:15
16820	MGS	02-002/03:12:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/03:00:06
16821	MGS	02-002/03:12:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/03:00:06
16822	MGS	02-002/03:12:41		Command the PSE with included data word: 3990	SWPSEL	02-002/03:00:10
16823	MGS	02-002/03:12:42		Set eclipse egress script address: 0158	SWSEES	02-002/03:00:11
16824	MGS	02-002/03:13:31		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/03:01:00
16825	MGS	02-002/03:13:35		NOTE: Exit Earth Occultation 12603		02-002/03:01:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16826	MGS	02-002/03:13:35	15	Acquisition Of X-Band Signal		
16827	MGS	02-002/03:13:35	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16828	MGS	02-002/03:17:20	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16829	MGS	02-002/03:19:31		NOTE: Exit Planetary Atmosphere 12603		02-002/03:07:00
16830	MGS	02-002/03:20:00		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:16:35	AEMPB	02-002/03:07:29
16831	MGS	02-002/03:20:00		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-002/03:07:29
16832	MGS	02-002/03:20:00		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-002/03:07:29
16833	MGS	02-002/03:20:01		SSR 1B Data Enable	CSD1BE	02-002/03:07:30
16834	MGS	02-002/03:20:01		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-002/03:07:30
16835	MGS	02-002/03:20:01	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16836	MGS	02-002/03:28:23		NOTE: Exit Solar Eclipse 12603		02-002/03:15:53
16837	MGS	02-002/03:44:28		NOTE: Periapsis 12604 ----------		02-002/03:31:57
16838	MGS	02-002/03:53:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/03:40:52
16839	MGS	02-002/03:53:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/03:40:52
16840	MGS	02-002/03:53:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/03:40:53
16841	MGS	02-002/03:53:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/03:40:53
16842	MGS	02-002/03:55:00	45	Begin Pre-Cal		
16843	MGS	02-002/03:55:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
16844	MGS	02-002/03:55:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
16845	MGS	02-002/03:55:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
16846	MGS	02-002/03:55:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
16847	MGS	02-002/03:55:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
16848	MGS	02-002/03:55:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
16849	MGS	02-002/03:55:00	45	Config: TGC: DEST=37		
16850	MGS	02-002/03:55:00	45	Config: TGC: BAND=X, BR=8000.000000		
16851	MGS	02-002/03:55:00	45	Config: FSS: CH=2, PRI_FL=10000		
16852	MGS	02-002/03:55:00	45	Config: RSR		
16853	MGS	02-002/03:55:00	45	Config: TXL		
16854	MGS	02-002/03:55:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
16855	MGS	02-002/03:55:00	45	Config: BVR		
16856	MGS	02-002/03:55:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
16857	MGS	02-002/03:55:00	45	Config: MDA: SMPL=0.1		
16858	MGS	02-002/03:55:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
16859	MGS	02-002/03:55:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
16860	MGS	02-002/03:55:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
16861	MGS	02-002/04:02:51	15	NOTE: Transmitter Off in 15 minutes		
16862	MGS	02-002/04:15:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/04:02:53
16863	MGS	02-002/04:15:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/04:02:53
16864	MGS	02-002/04:15:51	15	Range Modulation Off		
16865	MGS	02-002/04:17:51	15	Transmitter Off		
16866	MGS	02-002/04:30:39		SSR 1B Data Disable	CSD1BX	02-002/04:18:08
16867	MGS	02-002/04:30:39		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-002/04:18:08
16868	MGS	02-002/04:30:39		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-002/04:18:08
16869	MGS	02-002/04:30:39	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16870	MGS	02-002/04:35:52		NOTE: Start Block (MAP_RT)		02-002/04:23:21
16871	MGS	02-002/04:35:53		: 00:23:40, 01:35:27, FALSE, TRUE, FALSE, 00:01:15, 00:08:39, 01:17:12, 00:08:20	AEMINI	02-002/04:23:22
16872	MGS	02-002/04:35:53		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/04:23:22
16873	MGS	02-002/04:35:53		NOTE: Start EVP data return script		02-002/04:23:22
16874	MGS	02-002/04:35:54		: SE_2A, RTM, 01:17:11, MRC, 2002-002T05:06:57.000	AEMRTI	02-002/04:23:23
16875	MGS	02-002/04:40:00	43	Begin Tracking		
16876	MGS	02-002/04:40:00	43	Acquire D/L: X/16, 3-Way/15, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16877	MGS	02-002/04:40:58		NOTE: Enter Planetary Atmosphere 12604		02-002/04:28:27
16878	MGS	02-002/04:42:52	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16879	MGS	02-002/04:42:52	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16880	MGS	02-002/04:43:22		NOTE: Apoapsis 12604 -		02-002/04:30:51
16881	MGS	02-002/04:45:52		NOTE: Enter Solar Eclipse 12604		02-002/04:33:22
16882	MGS	02-002/04:45:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/04:33:22
16883	MGS	02-002/04:46:37		NOTE: Enter Earth Occultation 12604		02-002/04:34:06
16884	MGS	02-002/04:46:37	15	NOTE: Loss Of X-Band Signal		
16885	MGS	02-002/04:46:37	43	NOTE: Loss Of X-Band Signal		
16886	MGS	02-002/04:47:14		NOTE: End EVP script		02-002/04:34:43
16887	MGS	02-002/04:47:14		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/04:34:43
16888	MGS	02-002/04:47:15		NOTE: End Block (MAP_PB_ODY)		02-002/04:34:44
16889	MGS	02-002/04:55:00	45	Begin Tracking		
16890	MGS	02-002/05:05:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16891	MGS	02-002/05:05:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/04:53:17
16892	MGS	02-002/05:07:00	45	Range Modulation On: SUP=3.0dB		
16893	MGS	02-002/05:08:00	45	Begin Ranging Acquisition		
16894	MGS	02-002/05:09:33		: 01:35:27	RPAONX	02-002/04:57:02
16895	MGS	02-002/05:09:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/04:57:02
16896	MGS	02-002/05:09:46	15	NOTE: Below Uplink Interlock Limit		
16897	MGS	02-002/05:10:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/04:57:53
16898	MGS	02-002/05:10:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/04:57:53
16899	MGS	02-002/05:10:29		Set eclipse egress script address: 019A	SWSEES	02-002/04:57:58
16900	MGS	02-002/05:10:48		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-002/04:58:17
16901	MGS	02-002/05:10:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/04:58:17
16902	MGS	02-002/05:10:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/04:58:17
16903	MGS	02-002/05:10:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/04:58:17
16904	MGS	02-002/05:10:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/04:58:17
16905	MGS	02-002/05:11:23		NOTE: Exit Earth Occultation 12604		02-002/04:58:52
16906	MGS	02-002/05:11:23	15	Acquisition Of X-Band Signal		
16907	MGS	02-002/05:11:23	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16908	MGS	02-002/05:11:23	15	NOTE: Carrier Only -- No Telemetry Modulation		
16909	MGS	02-002/05:11:23	43	Acquisition Of X-Band Signal		
16910	MGS	02-002/05:11:23	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16911	MGS	02-002/05:11:23	43	NOTE: Carrier Only -- No Telemetry Modulation		
16912	MGS	02-002/05:11:23	45	Acquisition Of X-Band Signal		
16913	MGS	02-002/05:11:23	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16914	MGS	02-002/05:11:23	45	NOTE: Carrier Only -- No Telemetry Modulation		
16915	MGS	02-002/05:15:00	15	End Tracking		
16916	MGS	02-002/05:17:20		NOTE: Exit Planetary Atmosphere 12604		02-002/05:04:49
16917	MGS	02-002/05:19:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/05:06:56
16918	MGS	02-002/05:19:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/05:06:56
16919	MGS	02-002/05:19:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/05:06:56
16920	MGS	02-002/05:19:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/05:06:56
16921	MGS	02-002/05:19:27	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16922	MGS	02-002/05:19:27	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16923	MGS	02-002/05:19:28		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-002/05:06:57
16924	MGS	02-002/05:19:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/05:06:57
16925	MGS	02-002/05:19:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/05:06:57
16926	MGS	02-002/05:19:28	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16927	MGS	02-002/05:19:28	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16928	MGS	02-002/05:19:31		NOTE: End fixed Sub-Reflector for Radio Science		02-002/05:07:01
16929	MGS	02-002/05:26:11		NOTE: Exit Solar Eclipse 12604		02-002/05:13:40
16930	MGS	02-002/05:30:00	15	End Post-Cal		
16931	MGS	02-002/05:30:01	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16932	MGS	02-002/05:30:01	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16933	MGS	02-002/05:42:17		NOTE: Periapsis 12605 ----------		02-002/05:29:46
16934	MGS	02-002/05:47:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/05:34:39
16935	MGS	02-002/05:47:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/05:34:39
16936	MGS	02-002/05:47:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/05:34:40
16937	MGS	02-002/05:47:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/05:34:40
16938	MGS	02-002/06:00:36	45	NOTE: Transmitter Off in 15 minutes		
16939	MGS	02-002/06:09:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/05:56:40
16940	MGS	02-002/06:09:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/05:56:40
16941	MGS	02-002/06:13:37	45	Range Modulation Off		
16942	MGS	02-002/06:15:36	45	Transmitter Off		
16943	MGS	02-002/06:31:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/06:19:08
16944	MGS	02-002/06:33:37		NOTE: Start EVP data return script		02-002/06:21:06
16945	MGS	02-002/06:36:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/06:24:08
16946	MGS	02-002/06:36:39		: 00:08:20, FALSE	RDSCII	02-002/06:24:08
16947	MGS	02-002/06:36:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/06:24:08
16948	MGS	02-002/06:36:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/06:24:08
16949	MGS	02-002/06:36:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/06:24:08
16950	MGS	02-002/06:36:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/06:24:08
16951	MGS	02-002/06:36:39	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16952	MGS	02-002/06:36:39	43	NOTE: Carrier Only -- No Telemetry Modulation		
16953	MGS	02-002/06:36:39	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16954	MGS	02-002/06:36:39	45	NOTE: Carrier Only -- No Telemetry Modulation		
16955	MGS	02-002/06:38:44		NOTE: Enter Planetary Atmosphere 12605		02-002/06:26:13
16956	MGS	02-002/06:40:55		NOTE: Apoapsis 12605 -		02-002/06:28:24
16957	MGS	02-002/06:43:37		NOTE: Enter Solar Eclipse 12605		02-002/06:31:06
16958	MGS	02-002/06:43:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/06:31:06
16959	MGS	02-002/06:44:23		NOTE: Enter Earth Occultation 12605		02-002/06:31:52
16960	MGS	02-002/06:44:23	43	NOTE: Loss Of X-Band Signal		
16961	MGS	02-002/06:44:23	45	NOTE: Loss Of X-Band Signal		
16962	MGS	02-002/06:44:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/06:32:28
16963	MGS	02-002/06:44:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/06:32:28
16964	MGS	02-002/06:44:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/06:32:28
16965	MGS	02-002/06:44:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/06:32:28
16966	MGS	02-002/06:45:00		NOTE: End EVP script		02-002/06:32:29
16967	MGS	02-002/06:45:00		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/06:32:29
16968	MGS	02-002/06:45:04		NOTE: End fixed Sub-Reflector for Radio Science		02-002/06:32:33
16969	MGS	02-002/06:47:52	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
16970	MGS	02-002/06:49:52	45	Range Modulation On: SUP=3.0dB		
16971	MGS	02-002/06:50:52	45	Begin Ranging Acquisition		
16972	MGS	02-002/07:03:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/06:51:01
16973	MGS	02-002/07:07:17		: 01:35:27	RPAONX	02-002/06:54:46
16974	MGS	02-002/07:07:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/06:54:46
16975	MGS	02-002/07:08:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/06:55:40
16976	MGS	02-002/07:08:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/06:55:40
16977	MGS	02-002/07:08:16		Set eclipse egress script address: 01DC	SWSEES	02-002/06:55:45
16978	MGS	02-002/07:08:32		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-002/06:56:01
16979	MGS	02-002/07:08:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/06:56:01
16980	MGS	02-002/07:08:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/06:56:01
16981	MGS	02-002/07:08:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/06:56:01
16982	MGS	02-002/07:08:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/06:56:01
16983	MGS	02-002/07:09:02		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/06:56:31
16984	MGS	02-002/07:09:09		NOTE: Exit Earth Occultation 12605		02-002/06:56:38
16985	MGS	02-002/07:09:09	43	Acquisition Of X-Band Signal		
16986	MGS	02-002/07:09:09	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
16987	MGS	02-002/07:09:09	43	NOTE: Carrier Only -- No Telemetry Modulation		
16988	MGS	02-002/07:09:09	45	Acquisition Of X-Band Signal		
16989	MGS	02-002/07:09:09	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
16990	MGS	02-002/07:09:09	45	NOTE: Carrier Only -- No Telemetry Modulation		
16991	MGS	02-002/07:15:06		NOTE: Exit Planetary Atmosphere 12605		02-002/07:02:35
16992	MGS	02-002/07:17:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/07:04:40
16993	MGS	02-002/07:17:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/07:04:40
16994	MGS	02-002/07:17:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/07:04:40
16995	MGS	02-002/07:17:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/07:04:40
16996	MGS	02-002/07:17:11	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16997	MGS	02-002/07:17:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
16998	MGS	02-002/07:17:12		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-002/07:04:41
16999	MGS	02-002/07:17:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/07:04:41
17000	MGS	02-002/07:17:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/07:04:41
17001	MGS	02-002/07:17:12	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17002	MGS	02-002/07:17:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17003	MGS	02-002/07:17:16		NOTE: End fixed Sub-Reflector for Radio Science		02-002/07:04:45
17004	MGS	02-002/07:23:55		NOTE: Exit Solar Eclipse 12605		02-002/07:11:24
17005	MGS	02-002/07:39:40		NOTE: Periapsis 12606 ----------		02-002/07:27:09
17006	MGS	02-002/07:44:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/07:32:23
17007	MGS	02-002/07:44:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/07:32:23
17008	MGS	02-002/07:44:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/07:32:24
17009	MGS	02-002/07:44:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/07:32:24
17010	MGS	02-002/07:58:15	45	NOTE: Transmitter Off in 15 minutes		
17011	MGS	02-002/08:06:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/07:54:24
17012	MGS	02-002/08:06:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/07:54:24
17013	MGS	02-002/08:11:15	45	Range Modulation Off		
17014	MGS	02-002/08:13:15	45	Transmitter Off		
17015	MGS	02-002/08:16:48		NOTE: Start Block (SSRMGR)		02-002/08:04:17
17016	MGS	02-002/08:16:48		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-002/08:04:17
17017	MGS	02-002/08:16:49		SSR 1B Data Enable	CSD1BE	02-002/08:04:18
17018	MGS	02-002/08:16:49		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-002/08:04:18
17019	MGS	02-002/08:29:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/08:16:52
17020	MGS	02-002/08:31:16		NOTE: Start Block (MAP_PB_ODY)		02-002/08:18:45
17021	MGS	02-002/08:31:17		: 00:23:40, 01:35:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:59, 01:20:33, 00:06:40	AEMINI	02-002/08:18:46
17022	MGS	02-002/08:31:17		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/08:18:46
17023	MGS	02-002/08:31:17		NOTE: Start EVP data return script		02-002/08:18:46
17024	MGS	02-002/08:31:18		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-002T09:00:41.000	AEMPBI	02-002/08:18:47
17025	MGS	02-002/08:34:23		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/08:21:52
17026	MGS	02-002/08:34:23		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8432000, DUR=00:17:34		02-002/08:21:52
17027	MGS	02-002/08:34:23		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-002/08:21:52
17028	MGS	02-002/08:34:23		: 00:08:20, FALSE	RDSCII	02-002/08:21:52
17029	MGS	02-002/08:34:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/08:21:52
17030	MGS	02-002/08:34:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/08:21:52
17031	MGS	02-002/08:34:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/08:21:52
17032	MGS	02-002/08:34:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/08:21:52
17033	MGS	02-002/08:34:23	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17034	MGS	02-002/08:34:23	43	NOTE: Carrier Only -- No Telemetry Modulation		
17035	MGS	02-002/08:34:23	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17036	MGS	02-002/08:34:23	45	NOTE: Carrier Only -- No Telemetry Modulation		
17037	MGS	02-002/08:36:24		NOTE: Enter Planetary Atmosphere 12606		02-002/08:23:52
17038	MGS	02-002/08:38:15		NOTE: Apoapsis 12606 -		02-002/08:25:44
17039	MGS	02-002/08:40:17		SSR 1A Data Disable	CSD1AX	02-002/08:27:46
17040	MGS	02-002/08:40:17		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-002/08:27:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17041	MGS	02-002/08:40:18		NOTE: End Block (SSRMGR)		02-002/08:27:47
17042	MGS	02-002/08:41:17		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/08:28:46
17043	MGS	02-002/08:41:18		NOTE: Enter Solar Eclipse 12606		02-002/08:28:46
17044	MGS	02-002/08:42:03		NOTE: Enter Earth Occultation 12606		02-002/08:29:31
17045	MGS	02-002/08:42:03	43	NOTE: Loss Of X-Band Signal		
17046	MGS	02-002/08:42:03	45	NOTE: Loss Of X-Band Signal		
17047	MGS	02-002/08:42:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/08:30:12
17048	MGS	02-002/08:42:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/08:30:12
17049	MGS	02-002/08:42:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/08:30:12
17050	MGS	02-002/08:42:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/08:30:12
17051	MGS	02-002/08:42:44		NOTE: End EVP script		02-002/08:30:13
17052	MGS	02-002/08:42:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/08:30:13
17053	MGS	02-002/08:42:45		NOTE: End Block (MAP_RT)		02-002/08:30:14
17054	MGS	02-002/08:42:48		NOTE: End fixed Sub-Reflector for Radio Science		02-002/08:30:17
17055	MGS	02-002/08:45:33	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17056	MGS	02-002/08:47:34	45	Range Modulation On: SUP=3.0dB		
17057	MGS	02-002/08:48:34	45	Begin Ranging Acquisition		
17058	MGS	02-002/09:04:57		: 01:35:28	RPAONX	02-002/08:52:26
17059	MGS	02-002/09:04:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/08:52:26
17060	MGS	02-002/09:05:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/08:53:24
17061	MGS	02-002/09:05:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/08:53:24
17062	MGS	02-002/09:05:59		Command the PSE with included data word: 3990	SWPSEL	02-002/08:53:28
17063	MGS	02-002/09:06:00		Set eclipse egress script address: 0158	SWSEES	02-002/08:53:29
17064	MGS	02-002/09:06:42		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/08:54:11
17065	MGS	02-002/09:06:51		NOTE: Exit Earth Occultation 12606		02-002/08:54:20
17066	MGS	02-002/09:06:51	43	Acquisition Of X-Band Signal		
17067	MGS	02-002/09:06:51	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17068	MGS	02-002/09:06:51	45	Acquisition Of X-Band Signal		
17069	MGS	02-002/09:06:51	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17070	MGS	02-002/09:10:36	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17071	MGS	02-002/09:10:36	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17072	MGS	02-002/09:12:48		NOTE: Exit Planetary Atmosphere 12606		02-002/09:00:16
17073	MGS	02-002/09:13:11		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:16:35	AEMPB	02-002/09:00:40
17074	MGS	02-002/09:13:11		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-002/09:00:40
17075	MGS	02-002/09:13:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-002/09:00:40
17076	MGS	02-002/09:13:12		SSR 1A Data Enable	CSD1AE	02-002/09:00:41
17077	MGS	02-002/09:13:12		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-002/09:00:41
17078	MGS	02-002/09:13:12	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17079	MGS	02-002/09:13:12	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17080	MGS	02-002/09:21:35		NOTE: Exit Solar Eclipse 12606		02-002/09:09:04
17081	MGS	02-002/09:37:05		NOTE: Periapsis 12607 ----------		02-002/09:24:34
17082	MGS	02-002/09:46:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/09:34:03
17083	MGS	02-002/09:46:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/09:34:03
17084	MGS	02-002/09:46:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/09:34:04
17085	MGS	02-002/09:46:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/09:34:04
17086	MGS	02-002/09:55:54	45	NOTE: Transmitter Off in 15 minutes		
17087	MGS	02-002/10:08:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/09:56:04
17088	MGS	02-002/10:08:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/09:56:04
17089	MGS	02-002/10:08:54	45	Range Modulation Off		
17090	MGS	02-002/10:10:54	45	Transmitter Off		
17091	MGS	02-002/10:15:00	54	Begin Pre-Cal		
17092	MGS	02-002/10:15:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
17093	MGS	02-002/10:15:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
17094	MGS	02-002/10:15:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17095	MGS	02-002/10:15:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
17096	MGS	02-002/10:15:00	54	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
17097	MGS	02-002/10:15:00	54	Config: TGC: DEST=37		
17098	MGS	02-002/10:15:00	54	Config: TGC: BAND=X, BR=40000.000000		
17099	MGS	02-002/10:15:00	54	Config: FSS: CH=2, PRI_FL=10000		
17100	MGS	02-002/10:15:00	54	Config: RSR		
17101	MGS	02-002/10:15:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
17102	MGS	02-002/10:15:00	54	Config: BVR		
17103	MGS	02-002/10:15:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
17104	MGS	02-002/10:15:00	54	Config: MDA: SMPL=0.1		
17105	MGS	02-002/10:23:51		SSR 1A Data Disable	CSD1AX	02-002/10:11:19
17106	MGS	02-002/10:23:51		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-002/10:11:19
17107	MGS	02-002/10:23:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-002/10:11:19
17108	MGS	02-002/10:23:51	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17109	MGS	02-002/10:23:51	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17110	MGS	02-002/10:28:59		NOTE: Start Block (MAP_RT)		02-002/10:16:27
17111	MGS	02-002/10:29:00		: 00:23:40, 01:35:27, FALSE, TRUE, FALSE, 00:01:15, 00:08:39, 01:17:12, 00:08:20	AEMINI	02-002/10:16:28
17112	MGS	02-002/10:29:00		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/10:16:28
17113	MGS	02-002/10:29:00		NOTE: Start EVP data return script		02-002/10:16:28
17114	MGS	02-002/10:29:01		: SE_2A, RTM, 01:17:11, MRC, 2002-002T11:00:03.000	AEMRTI	02-002/10:16:29
17115	MGS	02-002/10:34:04		NOTE: Enter Planetary Atmosphere 12607		02-002/10:21:32
17116	MGS	02-002/10:35:57	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17117	MGS	02-002/10:35:57	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17118	MGS	02-002/10:35:59		NOTE: Apoapsis 12607 -		02-002/10:23:27
17119	MGS	02-002/10:39:00		NOTE: Enter Solar Eclipse 12607		02-002/10:26:28
17120	MGS	02-002/10:39:00		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/10:26:28
17121	MGS	02-002/10:39:42		NOTE: Enter Earth Occultation 12607		02-002/10:27:10
17122	MGS	02-002/10:39:42	43	NOTE: Loss Of X-Band Signal		
17123	MGS	02-002/10:39:42	45	NOTE: Loss Of X-Band Signal		
17124	MGS	02-002/10:40:26		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/10:27:54
17125	MGS	02-002/10:40:26		NOTE: End EVP script		02-002/10:27:54
17126	MGS	02-002/10:40:27		NOTE: End Block (MAP_PB_ODY)		02-002/10:27:55
17127	MGS	02-002/10:43:15	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17128	MGS	02-002/10:45:00	45	NOTE: Transmitter Off in 15 minutes		
17129	MGS	02-002/10:45:16	45	Range Modulation On: SUP=3.0dB		
17130	MGS	02-002/10:46:16	45	Begin Ranging Acquisition		
17131	MGS	02-002/10:58:00	45	Range Modulation Off		
17132	MGS	02-002/10:58:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/10:46:23
17133	MGS	02-002/11:00:00	45	Transmitter Off		
17134	MGS	02-002/11:02:40		: 01:35:27	RPAONX	02-002/10:50:08
17135	MGS	02-002/11:02:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/10:50:08
17136	MGS	02-002/11:03:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/10:51:04
17137	MGS	02-002/11:03:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/10:51:04
17138	MGS	02-002/11:03:41		Set eclipse egress script address: 019A	SWSEES	02-002/10:51:09
17139	MGS	02-002/11:03:55		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-002/10:51:23
17140	MGS	02-002/11:03:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/10:51:23
17141	MGS	02-002/11:03:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/10:51:23
17142	MGS	02-002/11:03:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/10:51:23
17143	MGS	02-002/11:03:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/10:51:23
17144	MGS	02-002/11:04:34		NOTE: Exit Earth Occultation 12607		02-002/10:52:02
17145	MGS	02-002/11:04:34	43	Acquisition Of X-Band Signal		
17146	MGS	02-002/11:04:34	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17147	MGS	02-002/11:04:34	43	NOTE: Carrier Only -- No Telemetry Modulation		
17148	MGS	02-002/11:04:34	45	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17149	MGS	02-002/11:04:34	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17150	MGS	02-002/11:04:34	45	NOTE: Carrier Only -- No Telemetry Modulation		
17151	MGS	02-002/11:05:00	45	End Tracking		
17152	MGS	02-002/11:10:29		NOTE: Exit Planetary Atmosphere 12607		02-002/10:57:57
17153	MGS	02-002/11:12:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/11:00:02
17154	MGS	02-002/11:12:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/11:00:02
17155	MGS	02-002/11:12:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/11:00:02
17156	MGS	02-002/11:12:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/11:00:02
17157	MGS	02-002/11:12:34	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17158	MGS	02-002/11:12:35		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-002/11:00:03
17159	MGS	02-002/11:12:35		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/11:00:03
17160	MGS	02-002/11:12:35		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/11:00:03
17161	MGS	02-002/11:12:35	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17162	MGS	02-002/11:12:39		NOTE: End fixed Sub-Reflector for Radio Science		02-002/11:00:07
17163	MGS	02-002/11:19:17		NOTE: Exit Solar Eclipse 12607		02-002/11:06:46
17164	MGS	02-002/11:20:00	45	End Post-Cal		
17165	MGS	02-002/11:25:03	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17166	MGS	02-002/11:34:49		NOTE: Periapsis 12608 ----------		02-002/11:22:17
17167	MGS	02-002/11:40:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/11:27:44
17168	MGS	02-002/11:40:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/11:27:44
17169	MGS	02-002/11:40:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/11:27:45
17170	MGS	02-002/11:40:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/11:27:45
17171	MGS	02-002/11:45:00	54	Begin Tracking		
17172	MGS	02-002/11:45:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17173	MGS	02-002/11:58:38	43	NOTE: Below Uplink Interlock Limit		
17174	MGS	02-002/12:00:27	54	NOTE: Above Uplink Interlock Limit		
17175	MGS	02-002/12:02:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/11:49:45
17176	MGS	02-002/12:02:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/11:49:45
17177	MGS	02-002/12:05:00	43	End Tracking		
17178	MGS	02-002/12:12:31		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-002/11:59:59
17179	MGS	02-002/12:20:00	43	End Post-Cal		
17180	MGS	02-002/12:24:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/12:12:14
17181	MGS	02-002/12:26:46		NOTE: Start EVP data return script		02-002/12:14:14
17182	MGS	02-002/12:29:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/12:17:14
17183	MGS	02-002/12:29:46		: 00:08:20, FALSE	RDSCII	02-002/12:17:14
17184	MGS	02-002/12:29:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/12:17:14
17185	MGS	02-002/12:29:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/12:17:14
17186	MGS	02-002/12:29:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/12:17:14
17187	MGS	02-002/12:29:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/12:17:14
17188	MGS	02-002/12:29:46	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17189	MGS	02-002/12:29:46	54	NOTE: Carrier Only -- No Telemetry Modulation		
17190	MGS	02-002/12:31:51		NOTE: Enter Planetary Atmosphere 12608		02-002/12:19:19
17191	MGS	02-002/12:33:52		NOTE: Apoapsis 12608 -		02-002/12:21:20
17192	MGS	02-002/12:36:46		NOTE: Enter Solar Eclipse 12608		02-002/12:24:14
17193	MGS	02-002/12:36:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/12:24:14
17194	MGS	02-002/12:37:28		NOTE: Enter Earth Occultation 12608		02-002/12:24:56
17195	MGS	02-002/12:37:28	54	NOTE: Loss Of X-Band Signal		
17196	MGS	02-002/12:38:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/12:25:34
17197	MGS	02-002/12:38:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/12:25:34
17198	MGS	02-002/12:38:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/12:25:34
17199	MGS	02-002/12:38:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/12:25:34
17200	MGS	02-002/12:38:07		NOTE: End EVP script		02-002/12:25:35
17201	MGS	02-002/12:38:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/12:25:35
17202	MGS	02-002/12:38:11		NOTE: End fixed Sub-Reflector for Radio Science		02-002/12:25:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17203	MGS	02-002/12:56:41		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/12:44:09
17204	MGS	02-002/13:00:26		: 01:35:27	RPAONX	02-002/12:47:54
17205	MGS	02-002/13:00:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/12:47:54
17206	MGS	02-002/13:01:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/12:48:45
17207	MGS	02-002/13:01:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/12:48:45
17208	MGS	02-002/13:01:22		Set eclipse egress script address: 01DC	SWSEES	02-002/12:48:50
17209	MGS	02-002/13:01:41		: 00:00:30, 00:08:39, FALSE	RDSCIE	02-002/12:49:09
17210	MGS	02-002/13:01:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/12:49:09
17211	MGS	02-002/13:01:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/12:49:09
17212	MGS	02-002/13:01:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/12:49:09
17213	MGS	02-002/13:01:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/12:49:09
17214	MGS	02-002/13:02:11		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/12:49:39
17215	MGS	02-002/13:02:20		NOTE: Exit Earth Occultation 12608		02-002/12:49:48
17216	MGS	02-002/13:02:20	54	Acquisition Of X-Band Signal		
17217	MGS	02-002/13:02:20	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17218	MGS	02-002/13:02:20	54	NOTE: Carrier Only -- No Telemetry Modulation		
17219	MGS	02-002/13:08:15		NOTE: Exit Planetary Atmosphere 12608		02-002/12:55:43
17220	MGS	02-002/13:10:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/12:57:48
17221	MGS	02-002/13:10:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/12:57:48
17222	MGS	02-002/13:10:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/12:57:48
17223	MGS	02-002/13:10:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/12:57:48
17224	MGS	02-002/13:10:20	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17225	MGS	02-002/13:10:21		: RTM, MRC, 01:17:11, S&E_2A, FALSE, 00:08:21	AEMRT	02-002/12:57:49
17226	MGS	02-002/13:10:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/12:57:49
17227	MGS	02-002/13:10:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/12:57:49
17228	MGS	02-002/13:10:21	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17229	MGS	02-002/13:10:25		NOTE: End fixed Sub-Reflector for Radio Science		02-002/12:57:53
17230	MGS	02-002/13:17:04		NOTE: Exit Solar Eclipse 12608		02-002/13:04:32
17231	MGS	02-002/13:32:43		NOTE: Periapsis 12609 ----------		02-002/13:20:11
17232	MGS	02-002/13:38:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/13:25:31
17233	MGS	02-002/13:38:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/13:25:31
17234	MGS	02-002/13:38:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/13:25:32
17235	MGS	02-002/13:38:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/13:25:32
17236	MGS	02-002/14:00:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/13:47:32
17237	MGS	02-002/14:00:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/13:47:32
17238	MGS	02-002/14:10:00		NOTE: Start Block (SSRMGR)		02-002/13:57:28
17239	MGS	02-002/14:10:00		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-002/13:57:28
17240	MGS	02-002/14:10:01		SSR 1A Data Enable	CSD1AE	02-002/13:57:29
17241	MGS	02-002/14:10:01		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-002/13:57:29
17242	MGS	02-002/14:22:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/14:10:00
17243	MGS	02-002/14:24:32		NOTE: Start Block (MAP_PB_ODY)		02-002/14:12:00
17244	MGS	02-002/14:24:33		: 00:23:40, 01:35:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:59, 01:20:33, 00:06:40	AEMINI	02-002/14:12:01
17245	MGS	02-002/14:24:33		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/14:12:01
17246	MGS	02-002/14:24:33		NOTE: Start EVP data return script		02-002/14:12:01
17247	MGS	02-002/14:24:34		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-002T14:53:56.000	AEMPBI	02-002/14:12:02
17248	MGS	02-002/14:27:32		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/14:15:00
17249	MGS	02-002/14:27:32		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8408000, DUR=00:17:31		02-002/14:15:00
17250	MGS	02-002/14:27:32		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-002/14:15:00
17251	MGS	02-002/14:27:32		: 00:08:20, FALSE	RDSCII	02-002/14:15:00
17252	MGS	02-002/14:27:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/14:15:00
17253	MGS	02-002/14:27:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/14:15:00
17254	MGS	02-002/14:27:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/14:15:00
17255	MGS	02-002/14:27:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/14:15:00
17256	MGS	02-002/14:27:32	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17257	MGS	02-002/14:27:32	54	NOTE: Carrier Only -- No Telemetry Modulation		
17258	MGS	02-002/14:29:38		NOTE: Enter Planetary Atmosphere 12609		02-002/14:17:06
17259	MGS	02-002/14:31:34		NOTE: Apoapsis 12609 -		02-002/14:19:01
17260	MGS	02-002/14:33:33		SSR 1B Data Disable	CSD1BX	02-002/14:21:01
17261	MGS	02-002/14:33:33		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-002/14:21:01
17262	MGS	02-002/14:33:34		NOTE: End Block (SSRMGR)		02-002/14:21:02
17263	MGS	02-002/14:34:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/14:22:01
17264	MGS	02-002/14:34:33		NOTE: Enter Solar Eclipse 12609		02-002/14:22:01
17265	MGS	02-002/14:35:15		NOTE: Enter Earth Occultation 12609		02-002/14:22:43
17266	MGS	02-002/14:35:15	54	NOTE: Loss Of X-Band Signal		
17267	MGS	02-002/14:35:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/14:23:20
17268	MGS	02-002/14:35:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/14:23:20
17269	MGS	02-002/14:35:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/14:23:20
17270	MGS	02-002/14:35:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/14:23:20
17271	MGS	02-002/14:35:53		NOTE: End EVP script		02-002/14:23:21
17272	MGS	02-002/14:35:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/14:23:21
17273	MGS	02-002/14:35:54		NOTE: End Block (MAP_RT)		02-002/14:23:22
17274	MGS	02-002/14:35:57		NOTE: End fixed Sub-Reflector for Radio Science		02-002/14:23:25
17275	MGS	02-002/14:58:13		: 01:35:28	RPAONX	02-002/14:45:41
17276	MGS	02-002/14:58:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/14:45:41
17277	MGS	02-002/14:59:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/14:46:32
17278	MGS	02-002/14:59:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/14:46:32
17279	MGS	02-002/14:59:08		Command the PSE with included data word: 3990	SWPSEL	02-002/14:46:36
17280	MGS	02-002/14:59:09		Set eclipse egress script address: 0158	SWSEES	02-002/14:46:37
17281	MGS	02-002/14:59:58		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/14:47:26
17282	MGS	02-002/15:00:08		NOTE: Exit Earth Occultation 12609		02-002/14:47:35
17283	MGS	02-002/15:00:08	54	Acquisition Of X-Band Signal		
17284	MGS	02-002/15:00:08	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17285	MGS	02-002/15:06:03		NOTE: Exit Planetary Atmosphere 12609		02-002/14:53:30
17286	MGS	02-002/15:06:27		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:16:35	AEMPB	02-002/14:53:55
17287	MGS	02-002/15:06:27		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-002/14:53:55
17288	MGS	02-002/15:06:27		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-002/14:53:55
17289	MGS	02-002/15:06:28		SSR 1B Data Enable	CSD1BE	02-002/14:53:56
17290	MGS	02-002/15:06:28		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-002/14:53:56
17291	MGS	02-002/15:06:28	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17292	MGS	02-002/15:14:52		NOTE: Exit Solar Eclipse 12609		02-002/15:02:19
17293	MGS	02-002/15:30:27		NOTE: Periapsis 12610 ----------		02-002/15:17:54
17294	MGS	02-002/15:39:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/15:27:18
17295	MGS	02-002/15:39:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/15:27:18
17296	MGS	02-002/15:39:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/15:27:19
17297	MGS	02-002/15:39:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/15:27:19
17298	MGS	02-002/16:01:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/15:49:19
17299	MGS	02-002/16:01:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/15:49:19
17300	MGS	02-002/16:17:07		SSR 1B Data Disable	CSD1BX	02-002/16:04:34
17301	MGS	02-002/16:17:07		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-002/16:04:34
17302	MGS	02-002/16:17:07		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-002/16:04:34
17303	MGS	02-002/16:17:07	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17304	MGS	02-002/16:22:19		NOTE: Start Block (MAP_RT)		02-002/16:09:46
17305	MGS	02-002/16:22:20		: 00:23:49, 01:35:10, FALSE, TRUE, FALSE, 00:01:15, 00:08:34, 01:17:03, 00:08:17	AEMINI	02-002/16:09:47
17306	MGS	02-002/16:22:20		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/16:09:47
17307	MGS	02-002/16:22:20		NOTE: Start EVP data return script		02-002/16:09:47
17308	MGS	02-002/16:22:21		: SE_2A, RTM, 01:17:02, MRC, 2002-002T16:53:26.000	AEMRTI	02-002/16:09:48
17309	MGS	02-002/16:27:24		NOTE: Enter Planetary Atmosphere 12610		02-002/16:14:51
17310	MGS	02-002/16:29:02		NOTE: Apoapsis 12610 -		02-002/16:16:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17311	MGS	02-002/16:32:20		NOTE: Enter Solar Eclipse 12610		02-002/16:19:47
17312	MGS	02-002/16:32:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/16:19:47
17313	MGS	02-002/16:33:00		NOTE: Enter Earth Occultation 12610		02-002/16:20:28
17314	MGS	02-002/16:33:00	54	NOTE: Loss Of X-Band Signal		
17315	MGS	02-002/16:33:42		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/16:21:09
17316	MGS	02-002/16:33:42		NOTE: End EVP script		02-002/16:21:09
17317	MGS	02-002/16:33:43		NOTE: End Block (MAP_PB_ODY)		02-002/16:21:10
17318	MGS	02-002/16:52:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/16:39:51
17319	MGS	02-002/16:56:09		: 01:35:10	RPAONX	02-002/16:43:36
17320	MGS	02-002/16:56:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/16:43:36
17321	MGS	02-002/16:56:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/16:44:19
17322	MGS	02-002/16:56:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/16:44:19
17323	MGS	02-002/16:56:57		Set eclipse egress script address: 019A	SWSEES	02-002/16:44:24
17324	MGS	02-002/16:57:24		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-002/16:44:51
17325	MGS	02-002/16:57:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/16:44:51
17326	MGS	02-002/16:57:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/16:44:51
17327	MGS	02-002/16:57:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/16:44:51
17328	MGS	02-002/16:57:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/16:44:51
17329	MGS	02-002/16:57:55		NOTE: Exit Earth Occultation 12610		02-002/16:45:23
17330	MGS	02-002/16:57:55	54	Acquisition Of X-Band Signal		
17331	MGS	02-002/16:57:55	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17332	MGS	02-002/16:57:55	54	NOTE: Carrier Only -- No Telemetry Modulation		
17333	MGS	02-002/17:03:50		NOTE: Exit Planetary Atmosphere 12610		02-002/16:51:17
17334	MGS	02-002/17:05:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/16:53:25
17335	MGS	02-002/17:05:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/16:53:25
17336	MGS	02-002/17:05:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/16:53:25
17337	MGS	02-002/17:05:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/16:53:25
17338	MGS	02-002/17:05:58	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17339	MGS	02-002/17:05:59		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-002/16:53:26
17340	MGS	02-002/17:05:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/16:53:26
17341	MGS	02-002/17:05:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/16:53:26
17342	MGS	02-002/17:05:59	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17343	MGS	02-002/17:06:03		NOTE: End fixed Sub-Reflector for Radio Science		02-002/16:53:30
17344	MGS	02-002/17:12:38		NOTE: Exit Solar Eclipse 12610		02-002/17:00:05
17345	MGS	02-002/17:28:11		NOTE: Periapsis 12611 ----------		02-002/17:15:39
17346	MGS	02-002/17:33:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/17:21:04
17347	MGS	02-002/17:33:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/17:21:04
17348	MGS	02-002/17:33:38		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/17:21:05
17349	MGS	02-002/17:33:38		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/17:21:05
17350	MGS	02-002/17:55:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/17:43:05
17351	MGS	02-002/17:55:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/17:43:05
17352	MGS	02-002/18:10:00	15	Begin Pre-Cal		
17353	MGS	02-002/18:10:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
17354	MGS	02-002/18:10:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
17355	MGS	02-002/18:10:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
17356	MGS	02-002/18:10:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
17357	MGS	02-002/18:10:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
17358	MGS	02-002/18:10:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
17359	MGS	02-002/18:10:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
17360	MGS	02-002/18:10:00	15	Config: TGC: DEST=37		
17361	MGS	02-002/18:10:00	15	Config: TGC: BAND=X, BR=40000.000000		
17362	MGS	02-002/18:10:00	15	Config: FSS: CH=2, PRI_FL=10000		
17363	MGS	02-002/18:10:00	15	Config: RSR		
17364	MGS	02-002/18:10:00	15	Config: TXL		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17365	MGS	02-002/18:10:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
17366	MGS	02-002/18:10:00	15	Config: BVR		
17367	MGS	02-002/18:10:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
17368	MGS	02-002/18:10:00	15	Config: MDA: SMPL=0.1		
17369	MGS	02-002/18:10:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
17370	MGS	02-002/18:10:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
17371	MGS	02-002/18:10:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
17372	MGS	02-002/18:18:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/18:05:28
17373	MGS	02-002/18:20:04		NOTE: Start EVP data return script		02-002/18:07:31
17374	MGS	02-002/18:23:01		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/18:10:28
17375	MGS	02-002/18:23:01		: 00:08:17, FALSE	RDSCII	02-002/18:10:28
17376	MGS	02-002/18:23:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/18:10:28
17377	MGS	02-002/18:23:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/18:10:28
17378	MGS	02-002/18:23:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/18:10:28
17379	MGS	02-002/18:23:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/18:10:28
17380	MGS	02-002/18:23:01	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17381	MGS	02-002/18:23:01	54	NOTE: Carrier Only -- No Telemetry Modulation		
17382	MGS	02-002/18:25:07		NOTE: Enter Planetary Atmosphere 12611		02-002/18:12:34
17383	MGS	02-002/18:26:39		NOTE: Apoapsis 12611 -		02-002/18:14:07
17384	MGS	02-002/18:30:03		NOTE: Enter Solar Eclipse 12611		02-002/18:17:31
17385	MGS	02-002/18:30:04		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/18:17:31
17386	MGS	02-002/18:30:44		NOTE: Enter Earth Occultation 12611		02-002/18:18:11
17387	MGS	02-002/18:30:44	54	NOTE: Loss Of X-Band Signal		
17388	MGS	02-002/18:31:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/18:18:45
17389	MGS	02-002/18:31:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/18:18:45
17390	MGS	02-002/18:31:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/18:18:45
17391	MGS	02-002/18:31:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/18:18:45
17392	MGS	02-002/18:31:19		NOTE: End EVP script		02-002/18:18:46
17393	MGS	02-002/18:31:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/18:18:46
17394	MGS	02-002/18:31:23		NOTE: End fixed Sub-Reflector for Radio Science		02-002/18:18:50
17395	MGS	02-002/18:50:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/18:37:35
17396	MGS	02-002/18:53:53		: 01:35:10	RPAONX	02-002/18:41:20
17397	MGS	02-002/18:53:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/18:41:20
17398	MGS	02-002/18:54:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/18:42:05
17399	MGS	02-002/18:54:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/18:42:05
17400	MGS	02-002/18:54:43		Set eclipse egress script address: 01DC	SWSEES	02-002/18:42:10
17401	MGS	02-002/18:55:08		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-002/18:42:35
17402	MGS	02-002/18:55:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/18:42:35
17403	MGS	02-002/18:55:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/18:42:35
17404	MGS	02-002/18:55:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/18:42:35
17405	MGS	02-002/18:55:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/18:42:35
17406	MGS	02-002/18:55:38		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/18:43:05
17407	MGS	02-002/18:55:41		NOTE: Exit Earth Occultation 12611		02-002/18:43:08
17408	MGS	02-002/18:55:41	54	Acquisition Of X-Band Signal		
17409	MGS	02-002/18:55:41	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17410	MGS	02-002/18:55:41	54	NOTE: Carrier Only -- No Telemetry Modulation		
17411	MGS	02-002/19:01:35		NOTE: Exit Planetary Atmosphere 12611		02-002/18:49:02
17412	MGS	02-002/19:03:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/18:51:09
17413	MGS	02-002/19:03:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/18:51:09
17414	MGS	02-002/19:03:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/18:51:09
17415	MGS	02-002/19:03:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/18:51:09
17416	MGS	02-002/19:03:42	54	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17417	MGS	02-002/19:03:43		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-002/18:51:10
17418	MGS	02-002/19:03:43		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/18:51:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17419	MGS	02-002/19:03:43		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/18:51:10
17420	MGS	02-002/19:03:43	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17421	MGS	02-002/19:03:47		NOTE: End fixed Sub-Reflector for Radio Science		02-002/18:51:14
17422	MGS	02-002/19:10:00	15	Begin Tracking		
17423	MGS	02-002/19:10:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17424	MGS	02-002/19:10:22		NOTE: Exit Solar Eclipse 12611		02-002/18:57:49
17425	MGS	02-002/19:22:50	15	NOTE: Above Uplink Interlock Limit		
17426	MGS	02-002/19:25:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17427	MGS	02-002/19:25:56		NOTE: Periapsis 12612 ----------		02-002/19:13:23
17428	MGS	02-002/19:27:00	15	Range Modulation On: SUP=3.0dB		
17429	MGS	02-002/19:28:00	15	Begin Ranging Acquisition		
17430	MGS	02-002/19:31:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/19:18:48
17431	MGS	02-002/19:31:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/19:18:48
17432	MGS	02-002/19:31:22		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/19:18:49
17433	MGS	02-002/19:31:22		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/19:18:49
17434	MGS	02-002/19:44:35	15	NOTE: Transmitter Off in 15 minutes		
17435	MGS	02-002/19:50:06	15	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17436	MGS	02-002/19:50:06	54	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17437	MGS	02-002/19:53:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/19:40:49
17438	MGS	02-002/19:53:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/19:40:49
17439	MGS	02-002/19:57:35	15	Range Modulation Off		
17440	MGS	02-002/19:59:35	15	Transmitter Off		
17441	MGS	02-002/20:03:13		NOTE: Start Block (SSRMGR)		02-002/19:50:40
17442	MGS	02-002/20:03:13		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-002/19:50:40
17443	MGS	02-002/20:03:14		SSR 1B Data Enable	CSD1BE	02-002/19:50:41
17444	MGS	02-002/20:03:14		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-002/19:50:41
17445	MGS	02-002/20:15:45		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/20:03:12
17446	MGS	02-002/20:17:44		NOTE: Start Block (MAP_PB_ODY)		02-002/20:05:11
17447	MGS	02-002/20:17:45		: 00:23:49, 01:35:11, FALSE, FALSE, FALSE, 00:01:15, 00:06:54, 01:20:24, 00:06:37	AEMINI	02-002/20:05:12
17448	MGS	02-002/20:17:45		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/20:05:12
17449	MGS	02-002/20:17:45		NOTE: Start EVP data return script		02-002/20:05:12
17450	MGS	02-002/20:17:46		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-002T20:47:11.000	AEMPBI	02-002/20:05:13
17451	MGS	02-002/20:20:45		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-002/20:08:12
17452	MGS	02-002/20:20:45		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8408000, DUR=00:17:31		02-002/20:08:12
17453	MGS	02-002/20:20:45		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-002/20:08:12
17454	MGS	02-002/20:20:45		: 00:08:17, FALSE	RDSCII	02-002/20:08:12
17455	MGS	02-002/20:20:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/20:08:12
17456	MGS	02-002/20:20:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/20:08:12
17457	MGS	02-002/20:20:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/20:08:12
17458	MGS	02-002/20:20:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/20:08:12
17459	MGS	02-002/20:20:45	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17460	MGS	02-002/20:20:45	15	NOTE: Carrier Only -- No Telemetry Modulation		
17461	MGS	02-002/20:20:45	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17462	MGS	02-002/20:20:45	54	NOTE: Carrier Only -- No Telemetry Modulation		
17463	MGS	02-002/20:22:49		NOTE: Enter Planetary Atmosphere 12612		02-002/20:10:16
17464	MGS	02-002/20:24:35		NOTE: Apoapsis 12612 -		02-002/20:12:01
17465	MGS	02-002/20:26:45		SSR 1A Data Disable	CSD1AX	02-002/20:14:12
17466	MGS	02-002/20:26:45		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-002/20:14:12
17467	MGS	02-002/20:26:46		NOTE: End Block (SSRMGR)		02-002/20:14:13
17468	MGS	02-002/20:27:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/20:15:12
17469	MGS	02-002/20:27:46		NOTE: Enter Solar Eclipse 12612		02-002/20:15:13
17470	MGS	02-002/20:28:26		NOTE: Enter Earth Occultation 12612		02-002/20:15:53
17471	MGS	02-002/20:28:26	15	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17472	MGS	02-002/20:28:26	54	NOTE: Loss Of X-Band Signal		
17473	MGS	02-002/20:29:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/20:16:29
17474	MGS	02-002/20:29:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/20:16:29
17475	MGS	02-002/20:29:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/20:16:29
17476	MGS	02-002/20:29:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/20:16:29
17477	MGS	02-002/20:29:03		NOTE: End EVP script		02-002/20:16:30
17478	MGS	02-002/20:29:03		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/20:16:30
17479	MGS	02-002/20:29:04		NOTE: End Block (MAP_RT)		02-002/20:16:31
17480	MGS	02-002/20:29:07		NOTE: End fixed Sub-Reflector for Radio Science		02-002/20:16:34
17481	MGS	02-002/20:32:02	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17482	MGS	02-002/20:34:03	15	Range Modulation On: SUP=3.0dB		
17483	MGS	02-002/20:35:03	15	Begin Ranging Acquisition		
17484	MGS	02-002/20:51:34		: 01:35:11	RPAONX	02-002/20:39:01
17485	MGS	02-002/20:51:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/20:39:01
17486	MGS	02-002/20:52:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/20:39:49
17487	MGS	02-002/20:52:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/20:39:49
17488	MGS	02-002/20:52:26		Command the PSE with included data word: 3990	SWPSEL	02-002/20:39:53
17489	MGS	02-002/20:52:27		Set eclipse egress script address: 0158	SWSEES	02-002/20:39:54
17490	MGS	02-002/20:53:19		Disables autonomous command to send eclipse ingress script	SWEISX	02-002/20:40:46
17491	MGS	02-002/20:53:24		NOTE: Exit Earth Occultation 12612		02-002/20:40:50
17492	MGS	02-002/20:53:24	15	Acquisition Of X-Band Signal		
17493	MGS	02-002/20:53:24	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17494	MGS	02-002/20:53:24	54	Acquisition Of X-Band Signal		
17495	MGS	02-002/20:53:24	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17496	MGS	02-002/20:57:09	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17497	MGS	02-002/20:57:09	54	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17498	MGS	02-002/20:59:18		NOTE: Exit Planetary Atmosphere 12612		02-002/20:46:45
17499	MGS	02-002/20:59:43		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:16:23	AEMPB	02-002/20:47:10
17500	MGS	02-002/20:59:43		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-002/20:47:10
17501	MGS	02-002/20:59:43		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-002/20:47:10
17502	MGS	02-002/20:59:44		SSR 1A Data Enable	CSD1AE	02-002/20:47:11
17503	MGS	02-002/20:59:44		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-002/20:47:11
17504	MGS	02-002/20:59:44	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17505	MGS	02-002/20:59:44	54	D/L Change: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17506	MGS	02-002/21:08:04		NOTE: Exit Solar Eclipse 12612		02-002/20:55:31
17507	MGS	02-002/21:23:30		NOTE: Periapsis 12613 ----------		02-002/21:10:56
17508	MGS	02-002/21:30:00	54	End Tracking		
17509	MGS	02-002/21:33:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/21:20:30
17510	MGS	02-002/21:33:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/21:20:30
17511	MGS	02-002/21:33:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/21:20:31
17512	MGS	02-002/21:33:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/21:20:31
17513	MGS	02-002/21:42:17	15	NOTE: Transmitter Off in 15 minutes		
17514	MGS	02-002/21:45:00	54	End Post-Cal		
17515	MGS	02-002/21:55:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/21:42:31
17516	MGS	02-002/21:55:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/21:42:31
17517	MGS	02-002/21:55:17	15	Range Modulation Off		
17518	MGS	02-002/21:57:17	15	Transmitter Off		
17519	MGS	02-002/22:10:22		SSR 1A Data Disable	CSD1AX	02-002/21:57:49
17520	MGS	02-002/22:10:22		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-002/21:57:49
17521	MGS	02-002/22:10:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-002/21:57:49
17522	MGS	02-002/22:10:22	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17523	MGS	02-002/22:15:28		NOTE: Start Block (MAP_RT)		02-002/22:02:54
17524	MGS	02-002/22:15:29		: 00:23:49, 01:35:10, FALSE, TRUE, FALSE, 00:01:15, 00:08:34, 01:17:03, 00:08:17	AEMINI	02-002/22:02:55
17525	MGS	02-002/22:15:29		Enable sending eclipse ingress script when array power disappears	SWEISE	02-002/22:02:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17526	MGS	02-002/22:15:29		NOTE: Start EVP data return script		02-002/22:02:55
17527	MGS	02-002/22:15:30		: SE_2A, RTM, 01:17:02, MRC, 2002-002T22:46:34.000	AEMRTI	02-002/22:02:56
17528	MGS	02-002/22:20:32		NOTE: Enter Planetary Atmosphere 12613		02-002/22:07:59
17529	MGS	02-002/22:22:04		NOTE: Apoapsis 12613 -		02-002/22:09:31
17530	MGS	02-002/22:22:23	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17531	MGS	02-002/22:25:28		NOTE: Enter Solar Eclipse 12613		02-002/22:12:55
17532	MGS	02-002/22:25:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-002/22:12:55
17533	MGS	02-002/22:26:08		NOTE: Enter Earth Occultation 12613		02-002/22:13:35
17534	MGS	02-002/22:26:08	15	NOTE: Loss Of X-Band Signal		
17535	MGS	02-002/22:26:46		Turn off the MOT Exciter and RPA beam	STRPAF	02-002/22:14:12
17536	MGS	02-002/22:26:46		NOTE: End EVP script		02-002/22:14:13
17537	MGS	02-002/22:26:47		NOTE: End Block (MAP_PB_ODY)		02-002/22:14:14
17538	MGS	02-002/22:29:44	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17539	MGS	02-002/22:31:45	15	Range Modulation On: SUP=3.0dB		
17540	MGS	02-002/22:32:45	15	Begin Ranging Acquisition		
17541	MGS	02-002/22:45:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/22:32:59
17542	MGS	02-002/22:49:18		: 01:35:10	RPAONX	02-002/22:36:44
17543	MGS	02-002/22:49:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-002/22:36:44
17544	MGS	02-002/22:50:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-002/22:37:31
17545	MGS	02-002/22:50:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-002/22:37:31
17546	MGS	02-002/22:50:10		Set eclipse egress script address: 019A	SWSEES	02-002/22:37:36
17547	MGS	02-002/22:50:33		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-002/22:37:59
17548	MGS	02-002/22:50:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-002/22:37:59
17549	MGS	02-002/22:50:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-002/22:37:59
17550	MGS	02-002/22:50:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-002/22:37:59
17551	MGS	02-002/22:50:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-002/22:37:59
17552	MGS	02-002/22:51:06		NOTE: Exit Earth Occultation 12613		02-002/22:38:33
17553	MGS	02-002/22:51:06	15	Acquisition Of X-Band Signal		
17554	MGS	02-002/22:51:06	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17555	MGS	02-002/22:51:06	15	NOTE: Carrier Only -- No Telemetry Modulation		
17556	MGS	02-002/22:57:01		NOTE: Exit Planetary Atmosphere 12613		02-002/22:44:27
17557	MGS	02-002/22:59:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-002/22:46:33
17558	MGS	02-002/22:59:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-002/22:46:33
17559	MGS	02-002/22:59:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-002/22:46:33
17560	MGS	02-002/22:59:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-002/22:46:33
17561	MGS	02-002/22:59:07	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17562	MGS	02-002/22:59:08		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-002/22:46:34
17563	MGS	02-002/22:59:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-002/22:46:34
17564	MGS	02-002/22:59:08		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-002/22:46:34
17565	MGS	02-002/22:59:08	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17566	MGS	02-002/22:59:11		NOTE: End fixed Sub-Reflector for Radio Science		02-002/22:46:38
17567	MGS	02-002/23:05:46		NOTE: Exit Solar Eclipse 12613		02-002/22:53:12
17568	MGS	02-002/23:20:50		NOTE: Periapsis 12614 ----------		02-002/23:08:16
17569	MGS	02-002/23:26:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-002/23:14:11
17570	MGS	02-002/23:26:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-002/23:14:11
17571	MGS	02-002/23:26:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-002/23:14:12
17572	MGS	02-002/23:26:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-002/23:14:12
17573	MGS	02-002/23:39:58	15	NOTE: Transmitter Off in 15 minutes		
17574	MGS	02-002/23:48:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-002/23:36:12
17575	MGS	02-002/23:48:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-002/23:36:12
17576	MGS	02-002/23:52:58	15	Range Modulation Off		
17577	MGS	02-002/23:54:58	15	Transmitter Off		
17578	MGS	02-003/00:00:00		Light Time: OWLT = 12:33, RTLT = 25:07		
17579	MGS	02-003/00:11:09		NOTE: Begin fixed Sub-Reflector for Radio Science		02-002/23:58:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17580	MGS	02-003/00:13:13		NOTE: Start EVP data return script		02-003/00:00:39
17581	MGS	02-003/00:16:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/00:03:36
17582	MGS	02-003/00:16:10		: 00:08:17, FALSE	RDSCII	02-003/00:03:36
17583	MGS	02-003/00:16:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/00:03:36
17584	MGS	02-003/00:16:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/00:03:36
17585	MGS	02-003/00:16:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/00:03:36
17586	MGS	02-003/00:16:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/00:03:36
17587	MGS	02-003/00:16:10	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17588	MGS	02-003/00:16:10	15	NOTE: Carrier Only -- No Telemetry Modulation		
17589	MGS	02-003/00:18:15		NOTE: Enter Planetary Atmosphere 12614		02-003/00:05:41
17590	MGS	02-003/00:19:30		NOTE: Apoapsis 12614 -		02-003/00:06:56
17591	MGS	02-003/00:23:12		NOTE: Enter Solar Eclipse 12614		02-003/00:10:39
17592	MGS	02-003/00:23:13		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/00:10:39
17593	MGS	02-003/00:23:50		NOTE: Enter Earth Occultation 12614		02-003/00:11:16
17594	MGS	02-003/00:23:50	15	NOTE: Loss Of X-Band Signal		
17595	MGS	02-003/00:24:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/00:11:53
17596	MGS	02-003/00:24:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/00:11:53
17597	MGS	02-003/00:24:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/00:11:53
17598	MGS	02-003/00:24:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/00:11:53
17599	MGS	02-003/00:24:27		NOTE: End EVP script		02-003/00:11:54
17600	MGS	02-003/00:24:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/00:11:54
17601	MGS	02-003/00:24:31		NOTE: End fixed Sub-Reflector for Radio Science		02-003/00:11:58
17602	MGS	02-003/00:27:29	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17603	MGS	02-003/00:29:29	15	Range Modulation On: SUP=3.0dB		
17604	MGS	02-003/00:30:29	15	Begin Ranging Acquisition		
17605	MGS	02-003/00:43:16		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/00:30:43
17606	MGS	02-003/00:47:02		: 01:35:10	RPAONX	02-003/00:34:28
17607	MGS	02-003/00:47:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/00:34:28
17608	MGS	02-003/00:47:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/00:35:12
17609	MGS	02-003/00:47:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/00:35:12
17610	MGS	02-003/00:47:51		Set eclipse egress script address: 01DC	SWSEES	02-003/00:35:17
17611	MGS	02-003/00:48:17		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-003/00:35:43
17612	MGS	02-003/00:48:17		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/00:35:43
17613	MGS	02-003/00:48:17		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/00:35:43
17614	MGS	02-003/00:48:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/00:35:43
17615	MGS	02-003/00:48:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/00:35:43
17616	MGS	02-003/00:48:47		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/00:36:13
17617	MGS	02-003/00:48:51		NOTE: Exit Earth Occultation 12614		02-003/00:36:17
17618	MGS	02-003/00:48:51	15	Acquisition Of X-Band Signal		
17619	MGS	02-003/00:48:51	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17620	MGS	02-003/00:48:51	15	NOTE: Carrier Only -- No Telemetry Modulation		
17621	MGS	02-003/00:54:44		NOTE: Exit Planetary Atmosphere 12614		02-003/00:42:10
17622	MGS	02-003/00:56:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/00:44:17
17623	MGS	02-003/00:56:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/00:44:17
17624	MGS	02-003/00:56:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/00:44:17
17625	MGS	02-003/00:56:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/00:44:17
17626	MGS	02-003/00:56:51	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17627	MGS	02-003/00:56:52		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-003/00:44:18
17628	MGS	02-003/00:56:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/00:44:18
17629	MGS	02-003/00:56:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/00:44:18
17630	MGS	02-003/00:56:52	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17631	MGS	02-003/00:56:55		NOTE: End fixed Sub-Reflector for Radio Science		02-003/00:44:22
17632	MGS	02-003/01:03:30		NOTE: Exit Solar Eclipse 12614		02-003/00:50:56
17633	MGS	02-003/01:18:47		NOTE: Periapsis 12615 ----------		02-003/01:06:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17634	MGS	02-003/01:24:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/01:11:55
17635	MGS	02-003/01:24:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/01:11:55
17636	MGS	02-003/01:24:30		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/01:11:56
17637	MGS	02-003/01:24:30		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/01:11:56
17638	MGS	02-003/01:30:00	43	Begin Pre-Cal		
17639	MGS	02-003/01:30:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
17640	MGS	02-003/01:30:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
17641	MGS	02-003/01:30:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
17642	MGS	02-003/01:30:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
17643	MGS	02-003/01:30:00	43	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
17644	MGS	02-003/01:30:00	43	Config: TGC: DEST=37		
17645	MGS	02-003/01:30:00	43	Config: TGC: BAND=X, BR=42666.666667		
17646	MGS	02-003/01:30:00	43	Config: FSS: CH=2, PRI_FL=10000		
17647	MGS	02-003/01:30:00	43	Config: RSR		
17648	MGS	02-003/01:30:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
17649	MGS	02-003/01:30:00	43	Config: BVR		
17650	MGS	02-003/01:30:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
17651	MGS	02-003/01:30:00	43	Config: MDA: SMPL=0.1		
17652	MGS	02-003/01:37:41	15	NOTE: Transmitter Off in 15 minutes		
17653	MGS	02-003/01:46:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/01:33:56
17654	MGS	02-003/01:46:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/01:33:56
17655	MGS	02-003/01:50:41	15	Range Modulation Off		
17656	MGS	02-003/01:52:41	15	Transmitter Off		
17657	MGS	02-003/01:56:29		NOTE: Start Block (SSRMGR)		02-003/01:43:55
17658	MGS	02-003/01:56:29		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-003/01:43:55
17659	MGS	02-003/01:56:30		SSR 1A Data Enable	CSD1AE	02-003/01:43:56
17660	MGS	02-003/01:56:30		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-003/01:43:56
17661	MGS	02-003/02:08:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/01:56:20
17662	MGS	02-003/02:10:57		NOTE: Start Block (MAP_PB_ODY)		02-003/01:58:23
17663	MGS	02-003/02:10:58		: 00:23:49, 01:35:11, FALSE, FALSE, FALSE, 00:01:15, 00:06:54, 01:20:24, 00:06:37	AEMINI	02-003/01:58:24
17664	MGS	02-003/02:10:58		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/01:58:24
17665	MGS	02-003/02:10:58		NOTE: Start EVP data return script		02-003/01:58:24
17666	MGS	02-003/02:10:59		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-003T02:40:23.000	AEMPBI	02-003/01:58:25
17667	MGS	02-003/02:13:54		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/02:01:20
17668	MGS	02-003/02:13:54		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8352000, DUR=00:17:24		02-003/02:01:20
17669	MGS	02-003/02:13:54		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-003/02:01:20
17670	MGS	02-003/02:13:54		: 00:08:17, FALSE	RDSCII	02-003/02:01:20
17671	MGS	02-003/02:13:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/02:01:20
17672	MGS	02-003/02:13:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/02:01:20
17673	MGS	02-003/02:13:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/02:01:20
17674	MGS	02-003/02:13:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/02:01:20
17675	MGS	02-003/02:13:54	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17676	MGS	02-003/02:13:54	15	NOTE: Carrier Only -- No Telemetry Modulation		
17677	MGS	02-003/02:15:59		NOTE: Enter Planetary Atmosphere 12615		02-003/02:03:25
17678	MGS	02-003/02:17:38		NOTE: Apoapsis 12615 -		02-003/02:05:04
17679	MGS	02-003/02:19:58		SSR 1B Data Disable	CSD1BX	02-003/02:07:24
17680	MGS	02-003/02:19:58		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-003/02:07:24
17681	MGS	02-003/02:19:59		NOTE: End Block (SSRMGR)		02-003/02:07:25
17682	MGS	02-003/02:20:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/02:08:24
17683	MGS	02-003/02:20:58		NOTE: Enter Solar Eclipse 12615		02-003/02:08:24
17684	MGS	02-003/02:21:34		NOTE: Enter Earth Occultation 12615		02-003/02:09:00
17685	MGS	02-003/02:21:34	15	NOTE: Loss Of X-Band Signal		
17686	MGS	02-003/02:22:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/02:09:37
17687	MGS	02-003/02:22:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/02:09:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17688	MGS	02-003/02:22:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/02:09:37
17689	MGS	02-003/02:22:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/02:09:37
17690	MGS	02-003/02:22:12		NOTE: End EVP script		02-003/02:09:38
17691	MGS	02-003/02:22:12		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/02:09:38
17692	MGS	02-003/02:22:13		NOTE: End Block (MAP_RT)		02-003/02:09:39
17693	MGS	02-003/02:22:16		NOTE: End fixed Sub-Reflector for Radio Science		02-003/02:09:42
17694	MGS	02-003/02:25:15	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17695	MGS	02-003/02:27:15	15	Range Modulation On: SUP=3.0dB		
17696	MGS	02-003/02:28:15	15	Begin Ranging Acquisition		
17697	MGS	02-003/02:44:47		: 01:35:11	RPAONX	02-003/02:32:13
17698	MGS	02-003/02:44:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/02:32:13
17699	MGS	02-003/02:45:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/02:32:56
17700	MGS	02-003/02:45:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/02:32:56
17701	MGS	02-003/02:45:34		Command the PSE with included data word: 3990	SWPSEL	02-003/02:33:00
17702	MGS	02-003/02:45:35		Set eclipse egress script address: 0158	SWSEES	02-003/02:33:01
17703	MGS	02-003/02:46:32		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/02:33:58
17704	MGS	02-003/02:46:38		NOTE: Exit Earth Occultation 12615		02-003/02:34:04
17705	MGS	02-003/02:46:38	15	Acquisition Of X-Band Signal		
17706	MGS	02-003/02:46:38	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17707	MGS	02-003/02:50:23	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17708	MGS	02-003/02:52:30		NOTE: Exit Planetary Atmosphere 12615		02-003/02:39:55
17709	MGS	02-003/02:52:56		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:16:23	AEMPB	02-003/02:40:22
17710	MGS	02-003/02:52:56		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-003/02:40:22
17711	MGS	02-003/02:52:56		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-003/02:40:22
17712	MGS	02-003/02:52:57		SSR 1B Data Enable	CSD1BE	02-003/02:40:23
17713	MGS	02-003/02:52:57		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-003/02:40:23
17714	MGS	02-003/02:52:57	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17715	MGS	02-003/03:00:00	43	Begin Tracking		
17716	MGS	02-003/03:00:00	43	Acquire D/L: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17717	MGS	02-003/03:01:17		NOTE: Exit Solar Eclipse 12615		02-003/02:48:43
17718	MGS	02-003/03:17:01		NOTE: Periapsis 12616 ----------		02-003/03:04:27
17719	MGS	02-003/03:26:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/03:13:42
17720	MGS	02-003/03:26:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/03:13:42
17721	MGS	02-003/03:26:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/03:13:43
17722	MGS	02-003/03:26:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/03:13:43
17723	MGS	02-003/03:35:27	15	NOTE: Transmitter Off in 15 minutes		
17724	MGS	02-003/03:48:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/03:35:43
17725	MGS	02-003/03:48:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/03:35:43
17726	MGS	02-003/03:48:28	15	Range Modulation Off		
17727	MGS	02-003/03:50:27	15	Transmitter Off		
17728	MGS	02-003/04:00:00	45	Begin Pre-Cal		
17729	MGS	02-003/04:00:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
17730	MGS	02-003/04:00:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
17731	MGS	02-003/04:00:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
17732	MGS	02-003/04:00:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
17733	MGS	02-003/04:00:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
17734	MGS	02-003/04:00:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
17735	MGS	02-003/04:00:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
17736	MGS	02-003/04:00:00	45	Config: TGC: DEST=37		
17737	MGS	02-003/04:00:00	45	Config: TGC: BAND=X, BR=40000.000000		
17738	MGS	02-003/04:00:00	45	Config: FSS: CH=2, PRI_FL=10000		
17739	MGS	02-003/04:00:00	45	Config: RSR		
17740	MGS	02-003/04:00:00	45	Config: TXL		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17741	MGS	02-003/04:00:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
17742	MGS	02-003/04:00:00	45	Config: BVR		
17743	MGS	02-003/04:00:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
17744	MGS	02-003/04:00:00	45	Config: MDA: SMPL=0.1		
17745	MGS	02-003/04:00:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
17746	MGS	02-003/04:00:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
17747	MGS	02-003/04:00:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
17748	MGS	02-003/04:03:35		SSR 1B Data Disable	CSD1BX	02-003/03:51:01
17749	MGS	02-003/04:03:35		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-003/03:51:01
17750	MGS	02-003/04:03:35		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-003/03:51:01
17751	MGS	02-003/04:03:35	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17752	MGS	02-003/04:03:35	43	D/L Change: X/16, 3-Way/15, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17753	MGS	02-003/04:08:44		NOTE: Start Block (MAP_RT)		02-003/03:56:10
17754	MGS	02-003/04:08:45		: 00:23:49, 01:35:10, FALSE, TRUE, FALSE, 00:01:15, 00:08:34, 01:17:03, 00:08:17	AEMINI	02-003/03:56:11
17755	MGS	02-003/04:08:45		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/03:56:11
17756	MGS	02-003/04:08:45		NOTE: Start EVP data return script		02-003/03:56:11
17757	MGS	02-003/04:08:46		: SE_2A, RTM, 01:17:02, MRC, 2002-003T04:39:51.000	AEMRTI	02-003/03:56:12
17758	MGS	02-003/04:13:46		NOTE: Enter Planetary Atmosphere 12616		02-003/04:01:12
17759	MGS	02-003/04:15:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17760	MGS	02-003/04:15:36	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17761	MGS	02-003/04:15:58		NOTE: Apoapsis 12616 -		02-003/04:03:23
17762	MGS	02-003/04:18:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/04:06:11
17763	MGS	02-003/04:18:46		NOTE: Enter Solar Eclipse 12616		02-003/04:06:11
17764	MGS	02-003/04:19:21		NOTE: Enter Earth Occultation 12616		02-003/04:06:47
17765	MGS	02-003/04:19:21	15	NOTE: Loss Of X-Band Signal		
17766	MGS	02-003/04:19:21	43	NOTE: Loss Of X-Band Signal		
17767	MGS	02-003/04:19:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/04:07:24
17768	MGS	02-003/04:19:59		NOTE: End EVP script		02-003/04:07:24
17769	MGS	02-003/04:20:00		NOTE: End Block (MAP_PB_ODY)		02-003/04:07:25
17770	MGS	02-003/04:23:02	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17771	MGS	02-003/04:25:02	15	Range Modulation On: SUP=3.0dB		
17772	MGS	02-003/04:26:02	15	Begin Ranging Acquisition		
17773	MGS	02-003/04:38:50		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/04:26:15
17774	MGS	02-003/04:40:00	15	NOTE: Transmitter Off in 15 minutes		
17775	MGS	02-003/04:42:35		: 01:35:10	RPAONX	02-003/04:30:00
17776	MGS	02-003/04:42:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/04:30:00
17777	MGS	02-003/04:43:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/04:30:43
17778	MGS	02-003/04:43:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/04:30:43
17779	MGS	02-003/04:43:23		Set eclipse egress script address: 019A	SWSEES	02-003/04:30:48
17780	MGS	02-003/04:43:50		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-003/04:31:15
17781	MGS	02-003/04:43:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/04:31:15
17782	MGS	02-003/04:43:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/04:31:15
17783	MGS	02-003/04:43:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/04:31:15
17784	MGS	02-003/04:43:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/04:31:15
17785	MGS	02-003/04:44:26		NOTE: Exit Earth Occultation 12616		02-003/04:31:51
17786	MGS	02-003/04:44:26	15	Acquisition Of X-Band Signal		
17787	MGS	02-003/04:44:26	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17788	MGS	02-003/04:44:26	15	NOTE: Carrier Only -- No Telemetry Modulation		
17789	MGS	02-003/04:44:26	43	Acquisition Of X-Band Signal		
17790	MGS	02-003/04:44:26	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17791	MGS	02-003/04:44:26	43	NOTE: Carrier Only -- No Telemetry Modulation		
17792	MGS	02-003/04:50:18		NOTE: Exit Planetary Atmosphere 12616		02-003/04:37:43
17793	MGS	02-003/04:52:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/04:39:49
17794	MGS	02-003/04:52:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/04:39:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17795	MGS	02-003/04:52:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/04:39:49
17796	MGS	02-003/04:52:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/04:39:49
17797	MGS	02-003/04:52:24	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17798	MGS	02-003/04:52:24	43	Acquire D/L: X/16, 3-Way/15, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17799	MGS	02-003/04:52:25		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-003/04:39:50
17800	MGS	02-003/04:52:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/04:39:50
17801	MGS	02-003/04:52:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/04:39:50
17802	MGS	02-003/04:52:25	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17803	MGS	02-003/04:52:25	43	D/L Change: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17804	MGS	02-003/04:52:29		NOTE: End fixed Sub-Reflector for Radio Science		02-003/04:39:54
17805	MGS	02-003/04:53:00	15	Range Modulation Off		
17806	MGS	02-003/04:55:00	15	Transmitter Off		
17807	MGS	02-003/04:59:04		NOTE: Exit Solar Eclipse 12616		02-003/04:46:30
17808	MGS	02-003/05:00:00	45	Begin Tracking		
17809	MGS	02-003/05:00:00	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17810	MGS	02-003/05:09:26	15	NOTE: Below Uplink Interlock Limit		
17811	MGS	02-003/05:10:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17812	MGS	02-003/05:12:00	45	Range Modulation On: SUP=3.0dB		
17813	MGS	02-003/05:13:00	45	Begin Ranging Acquisition		
17814	MGS	02-003/05:15:05		NOTE: Periapsis 12617 ----------		02-003/05:02:30
17815	MGS	02-003/05:20:00	15	End Tracking		
17816	MGS	02-003/05:20:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/05:07:29
17817	MGS	02-003/05:20:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/05:07:29
17818	MGS	02-003/05:20:05		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/05:07:30
17819	MGS	02-003/05:20:05		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/05:07:30
17820	MGS	02-003/05:20:09	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17821	MGS	02-003/05:20:09	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17822	MGS	02-003/05:33:15	45	NOTE: Transmitter Off in 15 minutes		
17823	MGS	02-003/05:35:00	15	End Post-Cal		
17824	MGS	02-003/05:35:09	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17825	MGS	02-003/05:35:09	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17826	MGS	02-003/05:42:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/05:29:30
17827	MGS	02-003/05:42:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/05:29:30
17828	MGS	02-003/05:46:15	45	Range Modulation Off		
17829	MGS	02-003/05:48:15	45	Transmitter Off		
17830	MGS	02-003/06:04:27		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/05:51:52
17831	MGS	02-003/06:06:32		NOTE: Start EVP data return script		02-003/05:53:57
17832	MGS	02-003/06:09:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/05:56:52
17833	MGS	02-003/06:09:27		: 00:08:17, FALSE	RDSCII	02-003/05:56:52
17834	MGS	02-003/06:09:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/05:56:52
17835	MGS	02-003/06:09:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/05:56:52
17836	MGS	02-003/06:09:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/05:56:52
17837	MGS	02-003/06:09:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/05:56:52
17838	MGS	02-003/06:09:27	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17839	MGS	02-003/06:09:27	43	NOTE: Carrier Only -- No Telemetry Modulation		
17840	MGS	02-003/06:09:27	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17841	MGS	02-003/06:09:27	45	NOTE: Carrier Only -- No Telemetry Modulation		
17842	MGS	02-003/06:11:34		NOTE: Enter Planetary Atmosphere 12617		02-003/05:58:59
17843	MGS	02-003/06:13:49		NOTE: Apoapsis 12617 -		02-003/06:01:15
17844	MGS	02-003/06:16:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/06:03:57
17845	MGS	02-003/06:16:32		NOTE: Enter Solar Eclipse 12617		02-003/06:03:57
17846	MGS	02-003/06:17:09		NOTE: Enter Earth Occultation 12617		02-003/06:04:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17847	MGS	02-003/06:17:09	43	NOTE: Loss Of X-Band Signal		
17848	MGS	02-003/06:17:09	45	NOTE: Loss Of X-Band Signal		
17849	MGS	02-003/06:17:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/06:05:09
17850	MGS	02-003/06:17:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/06:05:09
17851	MGS	02-003/06:17:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/06:05:09
17852	MGS	02-003/06:17:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/06:05:09
17853	MGS	02-003/06:17:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/06:05:10
17854	MGS	02-003/06:17:45		NOTE: End EVP script		02-003/06:05:10
17855	MGS	02-003/06:17:49		NOTE: End fixed Sub-Reflector for Radio Science		02-003/06:05:14
17856	MGS	02-003/06:20:49	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17857	MGS	02-003/06:22:49	45	Range Modulation On: SUP=3.0dB		
17858	MGS	02-003/06:23:49	45	Begin Ranging Acquisition		
17859	MGS	02-003/06:36:36		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/06:24:01
17860	MGS	02-003/06:40:21		: 01:35:10	RPAONX	02-003/06:27:46
17861	MGS	02-003/06:40:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/06:27:46
17862	MGS	02-003/06:41:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/06:28:30
17863	MGS	02-003/06:41:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/06:28:30
17864	MGS	02-003/06:41:10		Set eclipse egress script address: 01DC	SWSEES	02-003/06:28:35
17865	MGS	02-003/06:41:36		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-003/06:29:01
17866	MGS	02-003/06:41:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/06:29:01
17867	MGS	02-003/06:41:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/06:29:01
17868	MGS	02-003/06:41:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/06:29:01
17869	MGS	02-003/06:41:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/06:29:01
17870	MGS	02-003/06:42:06		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/06:29:31
17871	MGS	02-003/06:42:13		NOTE: Exit Earth Occultation 12617		02-003/06:29:38
17872	MGS	02-003/06:42:13	43	Acquisition Of X-Band Signal		
17873	MGS	02-003/06:42:13	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17874	MGS	02-003/06:42:13	43	NOTE: Carrier Only -- No Telemetry Modulation		
17875	MGS	02-003/06:42:13	45	Acquisition Of X-Band Signal		
17876	MGS	02-003/06:42:13	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17877	MGS	02-003/06:42:13	45	NOTE: Carrier Only -- No Telemetry Modulation		
17878	MGS	02-003/06:48:06		NOTE: Exit Planetary Atmosphere 12617		02-003/06:35:31
17879	MGS	02-003/06:50:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/06:37:35
17880	MGS	02-003/06:50:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/06:37:35
17881	MGS	02-003/06:50:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/06:37:35
17882	MGS	02-003/06:50:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/06:37:35
17883	MGS	02-003/06:50:10	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17884	MGS	02-003/06:50:10	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17885	MGS	02-003/06:50:11		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-003/06:37:36
17886	MGS	02-003/06:50:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/06:37:36
17887	MGS	02-003/06:50:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/06:37:36
17888	MGS	02-003/06:50:11	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17889	MGS	02-003/06:50:11	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17890	MGS	02-003/06:50:15		NOTE: End fixed Sub-Reflector for Radio Science		02-003/06:37:40
17891	MGS	02-003/06:56:51		NOTE: Exit Solar Eclipse 12617		02-003/06:44:16
17892	MGS	02-003/07:12:41		NOTE: Periapsis 12618 ----------		02-003/07:00:06
17893	MGS	02-003/07:17:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/07:05:15
17894	MGS	02-003/07:17:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/07:05:15
17895	MGS	02-003/07:17:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/07:05:16
17896	MGS	02-003/07:17:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/07:05:16
17897	MGS	02-003/07:30:57	45	NOTE: Transmitter Off in 15 minutes		
17898	MGS	02-003/07:39:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/07:27:16
17899	MGS	02-003/07:39:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/07:27:16
17900	MGS	02-003/07:43:58	45	Range Modulation Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17901	MGS	02-003/07:45:57	45	Transmitter Off		
17902	MGS	02-003/07:49:42		NOTE: Start Block (SSRMGR)		02-003/07:37:07
17903	MGS	02-003/07:49:42		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-003/07:37:07
17904	MGS	02-003/07:49:43		SSR 1B Data Enable	CSD1BE	02-003/07:37:08
17905	MGS	02-003/07:49:43		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-003/07:37:08
17906	MGS	02-003/08:02:13		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/07:49:38
17907	MGS	02-003/08:04:14		NOTE: Start Block (MAP_PB_ODY)		02-003/07:51:39
17908	MGS	02-003/08:04:15		: 00:23:49, 01:35:11, FALSE, FALSE, FALSE, 00:01:15, 00:06:54, 01:20:24, 00:06:37	AEMINI	02-003/07:51:40
17909	MGS	02-003/08:04:15		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/07:51:40
17910	MGS	02-003/08:04:15		NOTE: Start EVP data return script		02-003/07:51:40
17911	MGS	02-003/08:04:16		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-003T08:33:38.000	AEMPBI	02-003/07:51:41
17912	MGS	02-003/08:07:13		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/07:54:38
17913	MGS	02-003/08:07:13		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8400000, DUR=00:17:30		02-003/07:54:38
17914	MGS	02-003/08:07:13		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-003/07:54:38
17915	MGS	02-003/08:07:13		: 00:08:17, FALSE	RDSCII	02-003/07:54:38
17916	MGS	02-003/08:07:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/07:54:38
17917	MGS	02-003/08:07:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/07:54:38
17918	MGS	02-003/08:07:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/07:54:38
17919	MGS	02-003/08:07:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/07:54:38
17920	MGS	02-003/08:07:13	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17921	MGS	02-003/08:07:13	43	NOTE: Carrier Only -- No Telemetry Modulation		
17922	MGS	02-003/08:07:13	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
17923	MGS	02-003/08:07:13	45	NOTE: Carrier Only -- No Telemetry Modulation		
17924	MGS	02-003/08:09:18		NOTE: Enter Planetary Atmosphere 12618		02-003/07:56:42
17925	MGS	02-003/08:11:12		NOTE: Apoapsis 12618 -		02-003/07:58:37
17926	MGS	02-003/08:13:14		SSR 1A Data Disable	CSD1AX	02-003/08:00:39
17927	MGS	02-003/08:13:14		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-003/08:00:39
17928	MGS	02-003/08:13:15		NOTE: End Block (SSRMGR)		02-003/08:00:40
17929	MGS	02-003/08:14:15		NOTE: Enter Solar Eclipse 12618		02-003/08:01:40
17930	MGS	02-003/08:14:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/08:01:40
17931	MGS	02-003/08:14:52		NOTE: Enter Earth Occultation 12618		02-003/08:02:17
17932	MGS	02-003/08:14:52	43	NOTE: Loss Of X-Band Signal		
17933	MGS	02-003/08:14:52	45	NOTE: Loss Of X-Band Signal		
17934	MGS	02-003/08:15:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/08:02:55
17935	MGS	02-003/08:15:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/08:02:55
17936	MGS	02-003/08:15:30		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/08:02:55
17937	MGS	02-003/08:15:30		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/08:02:55
17938	MGS	02-003/08:15:31		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/08:02:56
17939	MGS	02-003/08:15:31		NOTE: End EVP script		02-003/08:02:56
17940	MGS	02-003/08:15:32		NOTE: End Block (MAP_RT)		02-003/08:02:57
17941	MGS	02-003/08:15:35		NOTE: End fixed Sub-Reflector for Radio Science		02-003/08:03:00
17942	MGS	02-003/08:18:32	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
17943	MGS	02-003/08:20:33	45	Range Modulation On: SUP=3.0dB		
17944	MGS	02-003/08:21:33	45	Begin Ranging Acquisition		
17945	MGS	02-003/08:38:04		: 01:35:11	RPAONX	02-003/08:25:29
17946	MGS	02-003/08:38:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/08:25:29
17947	MGS	02-003/08:38:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/08:26:16
17948	MGS	02-003/08:38:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/08:26:16
17949	MGS	02-003/08:38:55		Command the PSE with included data word: 3990	SWPSEL	02-003/08:26:20
17950	MGS	02-003/08:38:56		Set eclipse egress script address: 0158	SWSEES	02-003/08:26:21
17951	MGS	02-003/08:39:49		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/08:27:14
17952	MGS	02-003/08:39:57		NOTE: Exit Earth Occultation 12618		02-003/08:27:22
17953	MGS	02-003/08:39:57	43	Acquisition Of X-Band Signal		
17954	MGS	02-003/08:39:57	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
17955	MGS	02-003/08:39:57	45	Acquisition Of X-Band Signal		
17956	MGS	02-003/08:39:57	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17957	MGS	02-003/08:43:42	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17958	MGS	02-003/08:43:42	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17959	MGS	02-003/08:45:50		NOTE: Exit Planetary Atmosphere 12618		02-003/08:33:15
17960	MGS	02-003/08:46:13		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:16:23	AEMPB	02-003/08:33:38
17961	MGS	02-003/08:46:13		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-003/08:33:38
17962	MGS	02-003/08:46:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-003/08:33:38
17963	MGS	02-003/08:46:14		SSR 1A Data Enable	CSD1AE	02-003/08:33:39
17964	MGS	02-003/08:46:14		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-003/08:33:39
17965	MGS	02-003/08:46:14	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17966	MGS	02-003/08:46:14	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17967	MGS	02-003/08:54:33		NOTE: Exit Solar Eclipse 12618		02-003/08:41:58
17968	MGS	02-003/09:10:02		NOTE: Periapsis 12619 ----------		02-003/08:57:27
17969	MGS	02-003/09:19:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/09:06:57
17970	MGS	02-003/09:19:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/09:06:57
17971	MGS	02-003/09:19:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/09:06:58
17972	MGS	02-003/09:19:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/09:06:58
17973	MGS	02-003/09:28:35	45	NOTE: Transmitter Off in 15 minutes		
17974	MGS	02-003/09:41:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/09:28:58
17975	MGS	02-003/09:41:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/09:28:58
17976	MGS	02-003/09:41:36	45	Range Modulation Off		
17977	MGS	02-003/09:43:35	45	Transmitter Off		
17978	MGS	02-003/09:56:52		SSR 1A Data Disable	CSD1AX	02-003/09:44:17
17979	MGS	02-003/09:56:52		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-003/09:44:17
17980	MGS	02-003/09:56:52		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-003/09:44:17
17981	MGS	02-003/09:56:52	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17982	MGS	02-003/09:56:52	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17983	MGS	02-003/10:01:54		NOTE: Start Block (MAP_RT)		02-003/09:49:19
17984	MGS	02-003/10:01:55		: 00:23:49, 01:35:10, FALSE, TRUE, FALSE, 00:01:15, 00:08:34, 01:17:03, 00:08:17	AEMINI	02-003/09:49:20
17985	MGS	02-003/10:01:55		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/09:49:20
17986	MGS	02-003/10:01:55		NOTE: Start EVP data return script		02-003/09:49:20
17987	MGS	02-003/10:01:56		: SE_2A, RTM, 01:17:02, MRC, 2002-003T10:33:00.000	AEMRTI	02-003/09:49:21
17988	MGS	02-003/10:06:57		NOTE: Enter Planetary Atmosphere 12619		02-003/09:54:21
17989	MGS	02-003/10:08:46		NOTE: Apoapsis 12619 -		02-003/09:56:10
17990	MGS	02-003/10:08:46	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17991	MGS	02-003/10:08:46	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
17992	MGS	02-003/10:11:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/09:59:20
17993	MGS	02-003/10:11:56		NOTE: Enter Solar Eclipse 12619		02-003/09:59:20
17994	MGS	02-003/10:12:31		NOTE: Enter Earth Occultation 12619		02-003/09:59:56
17995	MGS	02-003/10:12:31	43	NOTE: Loss Of X-Band Signal		
17996	MGS	02-003/10:12:31	45	NOTE: Loss Of X-Band Signal		
17997	MGS	02-003/10:13:15		NOTE: End EVP script		02-003/10:00:40
17998	MGS	02-003/10:13:15		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/10:00:40
17999	MGS	02-003/10:13:16		NOTE: End Block (MAP_PB_ODY)		02-003/10:00:41
18000	MGS	02-003/10:15:00	65	Begin Pre-Cal		
18001	MGS	02-003/10:15:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18002	MGS	02-003/10:15:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18003	MGS	02-003/10:15:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18004	MGS	02-003/10:15:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18005	MGS	02-003/10:15:00	65	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
18006	MGS	02-003/10:15:00	65	Config: TGC: DEST=37		
18007	MGS	02-003/10:15:00	65	Config: TGC: BAND=X, BR=40000.000000		
18008	MGS	02-003/10:15:00	65	Config: FSS: CH=2, PRI_FL=10000		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18009	MGS	02-003/10:15:00	65	Config: RSR		
18010	MGS	02-003/10:15:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
18011	MGS	02-003/10:15:00	65	Config: BVR		
18012	MGS	02-003/10:15:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
18013	MGS	02-003/10:15:00	65	Config: MDA: SMPL=0.1		
18014	MGS	02-003/10:16:14	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18015	MGS	02-003/10:18:14	45	Range Modulation On: SUP=3.0dB		
18016	MGS	02-003/10:19:14	45	Begin Ranging Acquisition		
18017	MGS	02-003/10:32:00		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/10:19:24
18018	MGS	02-003/10:35:00	45	NOTE: Transmitter Off in 15 minutes		
18019	MGS	02-003/10:35:44		: 01:35:10	RPAONX	02-003/10:23:09
18020	MGS	02-003/10:35:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/10:23:09
18021	MGS	02-003/10:36:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/10:23:58
18022	MGS	02-003/10:36:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/10:23:58
18023	MGS	02-003/10:36:38		Set eclipse egress script address: 019A	SWSEES	02-003/10:24:03
18024	MGS	02-003/10:36:59		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-003/10:24:24
18025	MGS	02-003/10:36:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/10:24:24
18026	MGS	02-003/10:36:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/10:24:24
18027	MGS	02-003/10:36:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/10:24:24
18028	MGS	02-003/10:36:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/10:24:24
18029	MGS	02-003/10:37:39		NOTE: Exit Earth Occultation 12619		02-003/10:25:04
18030	MGS	02-003/10:37:39	43	Acquisition Of X-Band Signal		
18031	MGS	02-003/10:37:39	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18032	MGS	02-003/10:37:39	43	NOTE: Carrier Only -- No Telemetry Modulation		
18033	MGS	02-003/10:37:39	45	Acquisition Of X-Band Signal		
18034	MGS	02-003/10:37:39	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18035	MGS	02-003/10:37:39	45	NOTE: Carrier Only -- No Telemetry Modulation		
18036	MGS	02-003/10:43:31		NOTE: Exit Planetary Atmosphere 12619		02-003/10:30:55
18037	MGS	02-003/10:45:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/10:32:58
18038	MGS	02-003/10:45:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/10:32:58
18039	MGS	02-003/10:45:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/10:32:58
18040	MGS	02-003/10:45:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/10:32:58
18041	MGS	02-003/10:45:33	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18042	MGS	02-003/10:45:33	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18043	MGS	02-003/10:45:34		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-003/10:32:59
18044	MGS	02-003/10:45:34		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/10:32:59
18045	MGS	02-003/10:45:34		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/10:32:59
18046	MGS	02-003/10:45:34	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18047	MGS	02-003/10:45:34	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18048	MGS	02-003/10:45:39		NOTE: End fixed Sub-Reflector for Radio Science		02-003/10:33:03
18049	MGS	02-003/10:48:00	45	Range Modulation Off		
18050	MGS	02-003/10:50:00	45	Transmitter Off		
18051	MGS	02-003/10:52:14		NOTE: Exit Solar Eclipse 12619		02-003/10:39:38
18052	MGS	02-003/10:55:00	45	End Tracking		
18053	MGS	02-003/11:07:37		NOTE: Periapsis 12620 ----------		02-003/10:55:02
18054	MGS	02-003/11:10:00	45	End Post-Cal		
18055	MGS	02-003/11:13:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/11:00:37
18056	MGS	02-003/11:13:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/11:00:37
18057	MGS	02-003/11:13:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/11:00:38
18058	MGS	02-003/11:13:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/11:00:38
18059	MGS	02-003/11:15:10	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18060	MGS	02-003/11:35:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/11:22:38
18061	MGS	02-003/11:35:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/11:22:38
18062	MGS	02-003/11:45:00	65	Begin Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18063	MGS	02-003/11:45:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18064	MGS	02-003/11:56:31	43	NOTE: Below Uplink Interlock Limit		
18065	MGS	02-003/11:56:57	65	NOTE: Above Uplink Interlock Limit		
18066	MGS	02-003/11:57:37		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/11:45:01
18067	MGS	02-003/11:59:40		NOTE: Start EVP data return script		02-003/11:47:04
18068	MGS	02-003/12:02:37		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/11:50:01
18069	MGS	02-003/12:02:37		: 00:08:17, FALSE	RDSCII	02-003/11:50:01
18070	MGS	02-003/12:02:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/11:50:01
18071	MGS	02-003/12:02:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/11:50:01
18072	MGS	02-003/12:02:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/11:50:01
18073	MGS	02-003/12:02:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/11:50:01
18074	MGS	02-003/12:02:37	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18075	MGS	02-003/12:02:37	43	NOTE: Carrier Only -- No Telemetry Modulation		
18076	MGS	02-003/12:02:37	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18077	MGS	02-003/12:02:37	65	NOTE: Carrier Only -- No Telemetry Modulation		
18078	MGS	02-003/12:04:41		NOTE: Enter Planetary Atmosphere 12620		02-003/11:52:05
18079	MGS	02-003/12:05:00	43	End Tracking		
18080	MGS	02-003/12:06:42		NOTE: Apoapsis 12620 -		02-003/11:54:06
18081	MGS	02-003/12:09:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/11:57:04
18082	MGS	02-003/12:09:40		NOTE: Enter Solar Eclipse 12620		02-003/11:57:05
18083	MGS	02-003/12:10:14		NOTE: Enter Earth Occultation 12620		02-003/11:57:38
18084	MGS	02-003/12:10:14	65	NOTE: Loss Of X-Band Signal		
18085	MGS	02-003/12:10:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/11:58:18
18086	MGS	02-003/12:10:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/11:58:18
18087	MGS	02-003/12:10:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/11:58:18
18088	MGS	02-003/12:10:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/11:58:18
18089	MGS	02-003/12:10:55		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/11:58:19
18090	MGS	02-003/12:10:55		NOTE: End EVP script		02-003/11:58:19
18091	MGS	02-003/12:10:59		NOTE: End fixed Sub-Reflector for Radio Science		02-003/11:58:23
18092	MGS	02-003/12:12:35		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-003/11:59:59
18093	MGS	02-003/12:20:00	43	End Post-Cal		
18094	MGS	02-003/12:29:44		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/12:17:08
18095	MGS	02-003/12:33:29		: 01:35:10	RPAONX	02-003/12:20:53
18096	MGS	02-003/12:33:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/12:20:53
18097	MGS	02-003/12:34:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/12:21:38
18098	MGS	02-003/12:34:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/12:21:38
18099	MGS	02-003/12:34:19		Set eclipse egress script address: 01DC	SWSEES	02-003/12:21:43
18100	MGS	02-003/12:34:44		: 00:00:30, 00:08:34, FALSE	RDSCIE	02-003/12:22:08
18101	MGS	02-003/12:34:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/12:22:08
18102	MGS	02-003/12:34:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/12:22:08
18103	MGS	02-003/12:34:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/12:22:08
18104	MGS	02-003/12:34:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/12:22:08
18105	MGS	02-003/12:35:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/12:22:38
18106	MGS	02-003/12:35:24		NOTE: Exit Earth Occultation 12620		02-003/12:22:48
18107	MGS	02-003/12:35:24	65	Acquisition Of X-Band Signal		
18108	MGS	02-003/12:35:24	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18109	MGS	02-003/12:35:24	65	NOTE: Carrier Only -- No Telemetry Modulation		
18110	MGS	02-003/12:41:14		NOTE: Exit Planetary Atmosphere 12620		02-003/12:28:39
18111	MGS	02-003/12:43:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/12:30:42
18112	MGS	02-003/12:43:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/12:30:42
18113	MGS	02-003/12:43:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/12:30:42
18114	MGS	02-003/12:43:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/12:30:42
18115	MGS	02-003/12:43:18	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18116	MGS	02-003/12:43:19		: RTM, MRC, 01:17:02, S&E_2A, FALSE, 00:08:18	AEMRT	02-003/12:30:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18117	MGS	02-003/12:43:19		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/12:30:43
18118	MGS	02-003/12:43:19		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/12:30:43
18119	MGS	02-003/12:43:19	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18120	MGS	02-003/12:43:23		NOTE: End fixed Sub-Reflector for Radio Science		02-003/12:30:47
18121	MGS	02-003/12:49:59		NOTE: Exit Solar Eclipse 12620		02-003/12:37:23
18122	MGS	02-003/13:05:32		NOTE: Periapsis 12621 ----------		02-003/12:52:56
18123	MGS	02-003/13:10:00	54	Begin Pre-Cal		
18124	MGS	02-003/13:10:00	54	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18125	MGS	02-003/13:10:00	54	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18126	MGS	02-003/13:10:00	54	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18127	MGS	02-003/13:10:00	54	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18128	MGS	02-003/13:10:00	54	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
18129	MGS	02-003/13:10:00	54	Config: TGC: DEST=37		
18130	MGS	02-003/13:10:00	54	Config: TGC: BAND=X, BR=42666.666667		
18131	MGS	02-003/13:10:00	54	Config: FSS: CH=2, PRI_FL=10000		
18132	MGS	02-003/13:10:00	54	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
18133	MGS	02-003/13:10:00	54	Config: BVR		
18134	MGS	02-003/13:10:00	54	Config: Doppler Extractor: BIAS=+1MHZ		
18135	MGS	02-003/13:10:00	54	Config: MDA: SMPL=0.1		
18136	MGS	02-003/13:10:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/12:58:22
18137	MGS	02-003/13:10:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/12:58:22
18138	MGS	02-003/13:10:59		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/12:58:23
18139	MGS	02-003/13:10:59		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/12:58:23
18140	MGS	02-003/13:32:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/13:20:23
18141	MGS	02-003/13:32:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/13:20:23
18142	MGS	02-003/13:42:58		NOTE: Start Block (SSRMGR)		02-003/13:30:22
18143	MGS	02-003/13:42:58		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-003/13:30:22
18144	MGS	02-003/13:42:59		SSR 1A Data Enable	CSD1AE	02-003/13:30:23
18145	MGS	02-003/13:42:59		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-003/13:30:23
18146	MGS	02-003/13:55:21		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/13:42:45
18147	MGS	02-003/13:57:27		NOTE: Start Block (MAP_PB_ODY)		02-003/13:44:51
18148	MGS	02-003/13:57:28		: 00:23:49, 01:35:11, FALSE, FALSE, FALSE, 00:01:15, 00:06:54, 01:20:24, 00:06:37	AEMINI	02-003/13:44:52
18149	MGS	02-003/13:57:28		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/13:44:52
18150	MGS	02-003/13:57:28		NOTE: Start EVP data return script		02-003/13:44:52
18151	MGS	02-003/13:57:29		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-003T14:26:50.000	AEMPBI	02-003/13:44:53
18152	MGS	02-003/14:00:21		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/13:47:45
18153	MGS	02-003/14:00:21		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8336000, DUR=00:17:22		02-003/13:47:45
18154	MGS	02-003/14:00:21		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-003/13:47:45
18155	MGS	02-003/14:00:21		: 00:08:17, FALSE	RDSCII	02-003/13:47:45
18156	MGS	02-003/14:00:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/13:47:45
18157	MGS	02-003/14:00:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/13:47:45
18158	MGS	02-003/14:00:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/13:47:45
18159	MGS	02-003/14:00:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/13:47:45
18160	MGS	02-003/14:00:21	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18161	MGS	02-003/14:00:21	65	NOTE: Carrier Only -- No Telemetry Modulation		
18162	MGS	02-003/14:02:29		NOTE: Enter Planetary Atmosphere 12621		02-003/13:49:53
18163	MGS	02-003/14:04:30		NOTE: Apoapsis 12621 -		02-003/13:51:54
18164	MGS	02-003/14:06:27		SSR 1B Data Disable	CSD1BX	02-003/13:53:51
18165	MGS	02-003/14:06:27		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-003/13:53:51
18166	MGS	02-003/14:06:28		NOTE: End Block (SSRMGR)		02-003/13:53:52
18167	MGS	02-003/14:07:28		NOTE: Enter Solar Eclipse 12621		02-003/13:54:52
18168	MGS	02-003/14:07:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/13:54:52
18169	MGS	02-003/14:08:01		NOTE: Enter Earth Occultation 12621		02-003/13:55:25
18170	MGS	02-003/14:08:01	65	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18171	MGS	02-003/14:08:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/13:56:02
18172	MGS	02-003/14:08:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/13:56:02
18173	MGS	02-003/14:08:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/13:56:02
18174	MGS	02-003/14:08:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/13:56:02
18175	MGS	02-003/14:08:39		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/13:56:03
18176	MGS	02-003/14:08:39		NOTE: End EVP script		02-003/13:56:03
18177	MGS	02-003/14:08:40		NOTE: End Block (MAP_RT)		02-003/13:56:04
18178	MGS	02-003/14:08:43		NOTE: End fixed Sub-Reflector for Radio Science		02-003/13:56:07
18179	MGS	02-003/14:31:17		: 01:35:11	RPAONX	02-003/14:18:41
18180	MGS	02-003/14:31:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/14:18:41
18181	MGS	02-003/14:31:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/14:19:23
18182	MGS	02-003/14:31:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/14:19:23
18183	MGS	02-003/14:32:03		Command the PSE with included data word: 3990	SWPSEL	02-003/14:19:27
18184	MGS	02-003/14:32:04		Set eclipse egress script address: 0158	SWSEES	02-003/14:19:28
18185	MGS	02-003/14:33:02		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/14:20:26
18186	MGS	02-003/14:33:11		NOTE: Exit Earth Occultation 12621		02-003/14:20:35
18187	MGS	02-003/14:33:11	65	Acquisition Of X-Band Signal		
18188	MGS	02-003/14:33:11	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18189	MGS	02-003/14:39:02		NOTE: Exit Planetary Atmosphere 12621		02-003/14:26:26
18190	MGS	02-003/14:39:26		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:16:23	AEMPB	02-003/14:26:50
18191	MGS	02-003/14:39:26		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-003/14:26:50
18192	MGS	02-003/14:39:26		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-003/14:26:50
18193	MGS	02-003/14:39:27		SSR 1B Data Enable	CSD1BE	02-003/14:26:51
18194	MGS	02-003/14:39:27		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-003/14:26:51
18195	MGS	02-003/14:39:27	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18196	MGS	02-003/14:40:00	54	Begin Tracking		
18197	MGS	02-003/14:40:00	54	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18198	MGS	02-003/14:47:47		NOTE: Exit Solar Eclipse 12621		02-003/14:35:10
18199	MGS	02-003/15:00:00	65	End Tracking		
18200	MGS	02-003/15:00:00	63	Begin Pre-Cal		
18201	MGS	02-003/15:00:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18202	MGS	02-003/15:00:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18203	MGS	02-003/15:00:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18204	MGS	02-003/15:00:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18205	MGS	02-003/15:00:00	63	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
18206	MGS	02-003/15:00:00	63	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
18207	MGS	02-003/15:00:00	63	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
18208	MGS	02-003/15:00:00	63	Config: TGC: DEST=37		
18209	MGS	02-003/15:00:00	63	Config: TGC: BAND=X, BR=8000.000000		
18210	MGS	02-003/15:00:00	63	Config: FSS: CH=2, PRI_FL=10000		
18211	MGS	02-003/15:00:00	63	Config: TXL		
18212	MGS	02-003/15:00:00	63	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
18213	MGS	02-003/15:00:00	63	Config: BVR		
18214	MGS	02-003/15:00:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
18215	MGS	02-003/15:00:00	63	Config: MDA: SMPL=0.1		
18216	MGS	02-003/15:00:00	63	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
18217	MGS	02-003/15:00:00	63	Config: SRA: HIGH=4, LOW=14, SERV=D		
18218	MGS	02-003/15:00:00	63	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
18219	MGS	02-003/15:03:22		NOTE: Periapsis 12622 ----------		02-003/14:50:46
18220	MGS	02-003/15:12:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/15:00:09
18221	MGS	02-003/15:12:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/15:00:09
18222	MGS	02-003/15:12:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/15:00:10
18223	MGS	02-003/15:12:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/15:00:10
18224	MGS	02-003/15:15:00	65	End Post-Cal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18225	MGS	02-003/15:34:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/15:22:10
18226	MGS	02-003/15:34:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/15:22:10
18227	MGS	02-003/15:50:05		SSR 1B Data Disable	CSD1BX	02-003/15:37:29
18228	MGS	02-003/15:50:05		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-003/15:37:29
18229	MGS	02-003/15:50:05		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-003/15:37:29
18230	MGS	02-003/15:50:05	54	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18231	MGS	02-003/15:55:14		NOTE: Start Block (MAP_RT)		02-003/15:42:38
18232	MGS	02-003/15:55:15		: 00:23:59, 01:34:53, FALSE, TRUE, FALSE, 00:01:15, 00:08:30, 01:16:54, 00:08:13	AEMINI	02-003/15:42:39
18233	MGS	02-003/15:55:15		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/15:42:39
18234	MGS	02-003/15:55:15		NOTE: Start EVP data return script		02-003/15:42:39
18235	MGS	02-003/15:55:16		: SE_2A, RTM, 01:16:53, MRC, 2002-003T16:26:24.000	AEMRTI	02-003/15:42:40
18236	MGS	02-003/16:00:00	63	Begin Tracking		
18237	MGS	02-003/16:00:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18238	MGS	02-003/16:00:16		NOTE: Enter Planetary Atmosphere 12622		02-003/15:47:39
18239	MGS	02-003/16:02:05		NOTE: Apoapsis 12622 -		02-003/15:49:29
18240	MGS	02-003/16:05:15		NOTE: Enter Solar Eclipse 12622		02-003/15:52:39
18241	MGS	02-003/16:05:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/15:52:39
18242	MGS	02-003/16:05:48		NOTE: Enter Earth Occultation 12622		02-003/15:53:12
18243	MGS	02-003/16:05:48	54	NOTE: Loss Of X-Band Signal		
18244	MGS	02-003/16:05:48	63	NOTE: Loss Of X-Band Signal		
18245	MGS	02-003/16:06:28		NOTE: End EVP script		02-003/15:53:52
18246	MGS	02-003/16:06:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/15:53:52
18247	MGS	02-003/16:06:29		NOTE: End Block (MAP_PB_ODY)		02-003/15:53:53
18248	MGS	02-003/16:10:00	63	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18249	MGS	02-003/16:12:00	63	Range Modulation On: SUP=3.0dB		
18250	MGS	02-003/16:13:00	63	Begin Ranging Acquisition		
18251	MGS	02-003/16:25:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/16:12:53
18252	MGS	02-003/16:29:14		: 01:34:53	RPAONX	02-003/16:16:38
18253	MGS	02-003/16:29:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/16:16:38
18254	MGS	02-003/16:29:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/16:17:10
18255	MGS	02-003/16:29:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/16:17:10
18256	MGS	02-003/16:29:51		Set eclipse egress script address: 019A	SWSEES	02-003/16:17:15
18257	MGS	02-003/16:30:29		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-003/16:17:53
18258	MGS	02-003/16:30:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/16:17:53
18259	MGS	02-003/16:30:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/16:17:53
18260	MGS	02-003/16:30:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/16:17:53
18261	MGS	02-003/16:30:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/16:17:53
18262	MGS	02-003/16:30:59		NOTE: Exit Earth Occultation 12622		02-003/16:18:23
18263	MGS	02-003/16:30:59	54	Acquisition Of X-Band Signal		
18264	MGS	02-003/16:30:59	54	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18265	MGS	02-003/16:30:59	54	NOTE: Carrier Only -- No Telemetry Modulation		
18266	MGS	02-003/16:30:59	63	Acquisition Of X-Band Signal		
18267	MGS	02-003/16:30:59	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18268	MGS	02-003/16:30:59	63	NOTE: Carrier Only -- No Telemetry Modulation		
18269	MGS	02-003/16:36:50		NOTE: Exit Planetary Atmosphere 12622		02-003/16:24:14
18270	MGS	02-003/16:38:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/16:26:23
18271	MGS	02-003/16:38:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/16:26:23
18272	MGS	02-003/16:38:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/16:26:23
18273	MGS	02-003/16:38:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/16:26:23
18274	MGS	02-003/16:38:59	54	Acquire D/L: X/16, 3-Way/63, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18275	MGS	02-003/16:38:59	63	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18276	MGS	02-003/16:39:00		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-003/16:26:24
18277	MGS	02-003/16:39:00		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/16:26:24
18278	MGS	02-003/16:39:00		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/16:26:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18279	MGS	02-003/16:39:00	54	D/L Change: X/16, 3-Way/63, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18280	MGS	02-003/16:39:00	63	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18281	MGS	02-003/16:39:04		NOTE: End fixed Sub-Reflector for Radio Science		02-003/16:26:28
18282	MGS	02-003/16:45:34		NOTE: Exit Solar Eclipse 12622		02-003/16:32:57
18283	MGS	02-003/17:01:04		NOTE: Periapsis 12623 ----------		02-003/16:48:27
18284	MGS	02-003/17:06:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/16:53:56
18285	MGS	02-003/17:06:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/16:53:56
18286	MGS	02-003/17:06:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/16:53:57
18287	MGS	02-003/17:06:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/16:53:57
18288	MGS	02-003/17:19:35	63	NOTE: Transmitter Off in 15 minutes		
18289	MGS	02-003/17:28:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/17:15:57
18290	MGS	02-003/17:28:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/17:15:57
18291	MGS	02-003/17:32:35	63	Range Modulation Off		
18292	MGS	02-003/17:34:35	63	Transmitter Off		
18293	MGS	02-003/17:50:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/17:38:17
18294	MGS	02-003/17:53:01		NOTE: Start EVP data return script		02-003/17:40:24
18295	MGS	02-003/17:55:54		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/17:43:17
18296	MGS	02-003/17:55:54		: 00:08:13, FALSE	RDSCII	02-003/17:43:17
18297	MGS	02-003/17:55:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/17:43:17
18298	MGS	02-003/17:55:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/17:43:17
18299	MGS	02-003/17:55:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/17:43:17
18300	MGS	02-003/17:55:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/17:43:17
18301	MGS	02-003/17:55:54	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18302	MGS	02-003/17:55:54	54	NOTE: Carrier Only -- No Telemetry Modulation		
18303	MGS	02-003/17:55:54	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18304	MGS	02-003/17:55:54	63	NOTE: Carrier Only -- No Telemetry Modulation		
18305	MGS	02-003/17:58:00		NOTE: Enter Planetary Atmosphere 12623		02-003/17:45:24
18306	MGS	02-003/17:59:33		NOTE: Apoapsis 12623 -		02-003/17:46:56
18307	MGS	02-003/18:03:00		NOTE: Enter Solar Eclipse 12623		02-003/17:50:24
18308	MGS	02-003/18:03:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/17:50:24
18309	MGS	02-003/18:03:33		NOTE: Enter Earth Occultation 12623		02-003/17:50:56
18310	MGS	02-003/18:03:33	54	NOTE: Loss Of X-Band Signal		
18311	MGS	02-003/18:03:33	63	NOTE: Loss Of X-Band Signal		
18312	MGS	02-003/18:04:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/17:51:30
18313	MGS	02-003/18:04:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/17:51:30
18314	MGS	02-003/18:04:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/17:51:30
18315	MGS	02-003/18:04:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/17:51:30
18316	MGS	02-003/18:04:07		NOTE: End EVP script		02-003/17:51:31
18317	MGS	02-003/18:04:08		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/17:51:31
18318	MGS	02-003/18:04:11		NOTE: End fixed Sub-Reflector for Radio Science		02-003/17:51:35
18319	MGS	02-003/18:07:18	63	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18320	MGS	02-003/18:09:19	63	Range Modulation On: SUP=3.0dB		
18321	MGS	02-003/18:10:19	63	Begin Ranging Acquisition		
18322	MGS	02-003/18:23:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/18:10:38
18323	MGS	02-003/18:27:00		: 01:34:53	RPAONX	02-003/18:14:23
18324	MGS	02-003/18:27:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/18:14:23
18325	MGS	02-003/18:27:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/18:14:57
18326	MGS	02-003/18:27:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/18:14:57
18327	MGS	02-003/18:27:39		Set eclipse egress script address: 01DC	SWSEES	02-003/18:15:02
18328	MGS	02-003/18:28:15		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-003/18:15:38
18329	MGS	02-003/18:28:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/18:15:38
18330	MGS	02-003/18:28:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/18:15:38
18331	MGS	02-003/18:28:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/18:15:38
18332	MGS	02-003/18:28:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/18:15:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18333	MGS	02-003/18:28:45		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/18:16:08
18334	MGS	02-003/18:28:46		NOTE: Exit Earth Occultation 12623		02-003/18:16:10
18335	MGS	02-003/18:28:46	54	Acquisition Of X-Band Signal		
18336	MGS	02-003/18:28:46	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18337	MGS	02-003/18:28:46	54	NOTE: Carrier Only -- No Telemetry Modulation		
18338	MGS	02-003/18:28:46	63	Acquisition Of X-Band Signal		
18339	MGS	02-003/18:28:46	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18340	MGS	02-003/18:28:46	63	NOTE: Carrier Only -- No Telemetry Modulation		
18341	MGS	02-003/18:34:36		NOTE: Exit Planetary Atmosphere 12623		02-003/18:22:00
18342	MGS	02-003/18:36:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/18:24:08
18343	MGS	02-003/18:36:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/18:24:08
18344	MGS	02-003/18:36:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/18:24:08
18345	MGS	02-003/18:36:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/18:24:08
18346	MGS	02-003/18:36:45	54	Acquire D/L: X/16, 3-Way/63, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18347	MGS	02-003/18:36:45	63	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18348	MGS	02-003/18:36:46		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-003/18:24:09
18349	MGS	02-003/18:36:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/18:24:09
18350	MGS	02-003/18:36:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/18:24:09
18351	MGS	02-003/18:36:46	54	D/L Change: X/16, 3-Way/63, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18352	MGS	02-003/18:36:46	63	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18353	MGS	02-003/18:36:49		NOTE: End fixed Sub-Reflector for Radio Science		02-003/18:24:13
18354	MGS	02-003/18:43:19		NOTE: Exit Solar Eclipse 12623		02-003/18:30:42
18355	MGS	02-003/18:58:49		NOTE: Periapsis 12624 ----------		02-003/18:46:13
18356	MGS	02-003/19:04:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/18:51:41
18357	MGS	02-003/19:04:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/18:51:41
18358	MGS	02-003/19:04:19		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/18:51:42
18359	MGS	02-003/19:04:19		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/18:51:42
18360	MGS	02-003/19:17:17	63	NOTE: Transmitter Off in 15 minutes		
18361	MGS	02-003/19:26:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/19:13:42
18362	MGS	02-003/19:26:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/19:13:42
18363	MGS	02-003/19:30:17	63	Range Modulation Off		
18364	MGS	02-003/19:32:17	63	Transmitter Off		
18365	MGS	02-003/19:36:10		NOTE: Start Block (SSRMGR)		02-003/19:23:33
18366	MGS	02-003/19:36:10		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-003/19:23:33
18367	MGS	02-003/19:36:11		SSR 1B Data Enable	CSD1BE	02-003/19:23:34
18368	MGS	02-003/19:36:11		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-003/19:23:34
18369	MGS	02-003/19:48:38		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/19:36:02
18370	MGS	02-003/19:50:42		NOTE: Start Block (MAP_PB_ODY)		02-003/19:38:05
18371	MGS	02-003/19:50:43		: 00:23:59, 01:34:54, FALSE, FALSE, FALSE, 00:01:15, 00:06:50, 01:20:15, 00:06:33	AEMINI	02-003/19:38:06
18372	MGS	02-003/19:50:43		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/19:38:06
18373	MGS	02-003/19:50:43		NOTE: Start EVP data return script		02-003/19:38:06
18374	MGS	02-003/19:50:44		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-003T20:20:11.000	AEMPBI	02-003/19:38:07
18375	MGS	02-003/19:53:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/19:41:02
18376	MGS	02-003/19:53:39		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8384000, DUR=00:17:28		02-003/19:41:02
18377	MGS	02-003/19:53:39		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-003/19:41:02
18378	MGS	02-003/19:53:39		: 00:08:13, FALSE	RDSCII	02-003/19:41:02
18379	MGS	02-003/19:53:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/19:41:02
18380	MGS	02-003/19:53:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/19:41:02
18381	MGS	02-003/19:53:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/19:41:02
18382	MGS	02-003/19:53:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/19:41:02
18383	MGS	02-003/19:53:39	54	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18384	MGS	02-003/19:53:39	54	NOTE: Carrier Only -- No Telemetry Modulation		
18385	MGS	02-003/19:53:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18386	MGS	02-003/19:53:39	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18387	MGS	02-003/19:55:43		NOTE: Enter Planetary Atmosphere 12624		02-003/19:43:06
18388	MGS	02-003/19:57:22		NOTE: Apoapsis 12624 -		02-003/19:44:46
18389	MGS	02-003/19:59:44		SSR 1A Data Disable	CSD1AX	02-003/19:47:07
18390	MGS	02-003/19:59:44		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180832000, DUR=06:16:44		02-003/19:47:07
18391	MGS	02-003/19:59:45		NOTE: End Block (SSRMGR)		02-003/19:47:08
18392	MGS	02-003/20:00:00	63	End Tracking		
18393	MGS	02-003/20:00:00	15	Begin Pre-Cal		
18394	MGS	02-003/20:00:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18395	MGS	02-003/20:00:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18396	MGS	02-003/20:00:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18397	MGS	02-003/20:00:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18398	MGS	02-003/20:00:00	15	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
18399	MGS	02-003/20:00:00	15	Config: TGC: DEST=37		
18400	MGS	02-003/20:00:00	15	Config: TGC: BAND=X, BR=42666.666667		
18401	MGS	02-003/20:00:00	15	Config: FSS: CH=2, PRI_FL=10000		
18402	MGS	02-003/20:00:00	15	Config: RSR		
18403	MGS	02-003/20:00:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
18404	MGS	02-003/20:00:00	15	Config: BVR		
18405	MGS	02-003/20:00:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
18406	MGS	02-003/20:00:00	15	Config: MDA: SMPL=0.1		
18407	MGS	02-003/20:00:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/19:48:06
18408	MGS	02-003/20:00:43		NOTE: Enter Solar Eclipse 12624		02-003/19:48:06
18409	MGS	02-003/20:01:15		NOTE: Enter Earth Occultation 12624		02-003/19:48:38
18410	MGS	02-003/20:01:15	54	NOTE: Loss Of X-Band Signal		
18411	MGS	02-003/20:01:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/19:49:15
18412	MGS	02-003/20:01:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/19:49:15
18413	MGS	02-003/20:01:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/19:49:15
18414	MGS	02-003/20:01:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/19:49:15
18415	MGS	02-003/20:01:52		NOTE: End EVP script		02-003/19:49:16
18416	MGS	02-003/20:01:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/19:49:16
18417	MGS	02-003/20:01:53		NOTE: End Block (MAP_RT)		02-003/19:49:17
18418	MGS	02-003/20:01:56		NOTE: End fixed Sub-Reflector for Radio Science		02-003/19:49:20
18419	MGS	02-003/20:15:00	63	End Post-Cal		
18420	MGS	02-003/20:24:42		: 01:34:54	RPAONX	02-003/20:12:05
18421	MGS	02-003/20:24:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/20:12:05
18422	MGS	02-003/20:25:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/20:12:42
18423	MGS	02-003/20:25:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/20:12:42
18424	MGS	02-003/20:25:23		Command the PSE with included data word: 3990	SWPSEL	02-003/20:12:46
18425	MGS	02-003/20:25:24		Set eclipse egress script address: 0158	SWSEES	02-003/20:12:47
18426	MGS	02-003/20:26:27		Disables autonomous command to send eclipse ingress script	SWEISX	02-003/20:13:50
18427	MGS	02-003/20:26:31		NOTE: Exit Earth Occultation 12624		02-003/20:13:54
18428	MGS	02-003/20:26:31	54	Acquisition Of X-Band Signal		
18429	MGS	02-003/20:26:31	54	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18430	MGS	02-003/20:32:21		NOTE: Exit Planetary Atmosphere 12624		02-003/20:19:44
18431	MGS	02-003/20:32:47		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:16:10	AEMPB	02-003/20:20:10
18432	MGS	02-003/20:32:47		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-003/20:20:10
18433	MGS	02-003/20:32:47		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-003/20:20:10
18434	MGS	02-003/20:32:48		SSR 1A Data Enable	CSD1AE	02-003/20:20:11
18435	MGS	02-003/20:32:48		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-003/20:20:11
18436	MGS	02-003/20:32:48	54	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18437	MGS	02-003/20:41:02		NOTE: Exit Solar Eclipse 12624		02-003/20:28:25
18438	MGS	02-003/20:56:32		NOTE: Periapsis 12625 ----------		02-003/20:43:55
18439	MGS	02-003/21:06:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/20:53:24
18440	MGS	02-003/21:06:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/20:53:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18441	MGS	02-003/21:06:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/20:53:25
18442	MGS	02-003/21:06:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/20:53:25
18443	MGS	02-003/21:28:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/21:15:25
18444	MGS	02-003/21:28:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/21:15:25
18445	MGS	02-003/21:30:00	54	End Tracking		
18446	MGS	02-003/21:30:00	15	Begin Tracking		
18447	MGS	02-003/21:30:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18448	MGS	02-003/21:43:26		SSR 1A Data Disable	CSD1AX	02-003/21:30:49
18449	MGS	02-003/21:43:26		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-003/21:30:49
18450	MGS	02-003/21:43:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-003/21:30:49
18451	MGS	02-003/21:43:26	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18452	MGS	02-003/21:45:00	54	End Post-Cal		
18453	MGS	02-003/21:48:24		NOTE: Start Block (MAP_RT)		02-003/21:35:47
18454	MGS	02-003/21:48:25		: 00:23:59, 01:34:53, FALSE, TRUE, FALSE, 00:01:15, 00:08:30, 01:16:54, 00:08:13	AEMINI	02-003/21:35:48
18455	MGS	02-003/21:48:25		Enable sending eclipse ingress script when array power disappears	SWEISE	02-003/21:35:48
18456	MGS	02-003/21:48:25		NOTE: Start EVP data return script		02-003/21:35:48
18457	MGS	02-003/21:48:26		: SE_2A, RTM, 01:16:53, MRC, 2002-003T22:19:34.000	AEMRTI	02-003/21:35:49
18458	MGS	02-003/21:53:25		NOTE: Enter Planetary Atmosphere 12625		02-003/21:40:48
18459	MGS	02-003/21:55:08		NOTE: Apoapsis 12625 -		02-003/21:42:31
18460	MGS	02-003/21:58:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/21:45:48
18461	MGS	02-003/21:58:26		NOTE: Enter Solar Eclipse 12625		02-003/21:45:48
18462	MGS	02-003/21:58:58		NOTE: Enter Earth Occultation 12625		02-003/21:46:21
18463	MGS	02-003/21:58:58	15	NOTE: Loss Of X-Band Signal		
18464	MGS	02-003/21:59:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/21:46:59
18465	MGS	02-003/21:59:37		NOTE: End EVP script		02-003/21:46:59
18466	MGS	02-003/21:59:38		NOTE: End Block (MAP_PB_ODY)		02-003/21:47:00
18467	MGS	02-003/22:18:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/22:06:02
18468	MGS	02-003/22:22:24		: 01:34:53	RPAONX	02-003/22:09:47
18469	MGS	02-003/22:22:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-003/22:09:47
18470	MGS	02-003/22:23:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-003/22:10:25
18471	MGS	02-003/22:23:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-003/22:10:25
18472	MGS	02-003/22:23:07		Set eclipse egress script address: 019A	SWSEES	02-003/22:10:30
18473	MGS	02-003/22:23:39		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-003/22:11:02
18474	MGS	02-003/22:23:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/22:11:02
18475	MGS	02-003/22:23:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/22:11:02
18476	MGS	02-003/22:23:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/22:11:02
18477	MGS	02-003/22:23:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/22:11:02
18478	MGS	02-003/22:24:13		NOTE: Exit Earth Occultation 12625		02-003/22:11:36
18479	MGS	02-003/22:24:13	15	Acquisition Of X-Band Signal		
18480	MGS	02-003/22:24:13	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18481	MGS	02-003/22:24:13	15	NOTE: Carrier Only -- No Telemetry Modulation		
18482	MGS	02-003/22:30:04		NOTE: Exit Planetary Atmosphere 12625		02-003/22:17:26
18483	MGS	02-003/22:32:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/22:19:32
18484	MGS	02-003/22:32:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/22:19:32
18485	MGS	02-003/22:32:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/22:19:32
18486	MGS	02-003/22:32:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/22:19:32
18487	MGS	02-003/22:32:09	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18488	MGS	02-003/22:32:10		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-003/22:19:33
18489	MGS	02-003/22:32:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-003/22:19:33
18490	MGS	02-003/22:32:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-003/22:19:33
18491	MGS	02-003/22:32:10	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18492	MGS	02-003/22:32:15		NOTE: End fixed Sub-Reflector for Radio Science		02-003/22:19:37
18493	MGS	02-003/22:38:44		NOTE: Exit Solar Eclipse 12625		02-003/22:26:07
18494	MGS	02-003/22:53:56		NOTE: Periapsis 12626 ----------		02-003/22:41:19

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18495	MGS	02-003/22:59:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-003/22:47:06
18496	MGS	02-003/22:59:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-003/22:47:06
18497	MGS	02-003/22:59:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-003/22:47:07
18498	MGS	02-003/22:59:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-003/22:47:07
18499	MGS	02-003/23:21:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-003/23:09:07
18500	MGS	02-003/23:21:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-003/23:09:07
18501	MGS	02-003/23:44:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-003/23:31:26
18502	MGS	02-003/23:46:08		NOTE: Start EVP data return script		02-003/23:33:31
18503	MGS	02-003/23:49:03		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-003/23:36:26
18504	MGS	02-003/23:49:03		: 00:08:13, FALSE	RDSCII	02-003/23:36:26
18505	MGS	02-003/23:49:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-003/23:36:26
18506	MGS	02-003/23:49:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-003/23:36:26
18507	MGS	02-003/23:49:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-003/23:36:26
18508	MGS	02-003/23:49:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-003/23:36:26
18509	MGS	02-003/23:49:03	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18510	MGS	02-003/23:49:03	15	NOTE: Carrier Only -- No Telemetry Modulation		
18511	MGS	02-003/23:51:09		NOTE: Enter Planetary Atmosphere 12626		02-003/23:38:31
18512	MGS	02-003/23:52:34		NOTE: Apoapsis 12626 -		02-003/23:39:57
18513	MGS	02-003/23:56:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-003/23:43:31
18514	MGS	02-003/23:56:09		NOTE: Enter Solar Eclipse 12626		02-003/23:43:31
18515	MGS	02-003/23:56:40		NOTE: Enter Earth Occultation 12626		02-003/23:44:03
18516	MGS	02-003/23:56:40	15	NOTE: Loss Of X-Band Signal		
18517	MGS	02-003/23:57:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-003/23:44:39
18518	MGS	02-003/23:57:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-003/23:44:39
18519	MGS	02-003/23:57:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-003/23:44:39
18520	MGS	02-003/23:57:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-003/23:44:39
18521	MGS	02-003/23:57:17		Turn off the MOT Exciter and RPA beam	STRPAF	02-003/23:44:40
18522	MGS	02-003/23:57:18		NOTE: End EVP script		02-003/23:44:40
18523	MGS	02-003/23:57:22		NOTE: End fixed Sub-Reflector for Radio Science		02-003/23:44:44
18524	MGS	02-004/00:00:00		Light Time: OWLT = 12:37, RTLT = 25:15		
18525	MGS	02-004/00:00:00	14	Begin Pre-Cal		
18526	MGS	02-004/00:00:00	14	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18527	MGS	02-004/00:00:00	14	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18528	MGS	02-004/00:00:00	14	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18529	MGS	02-004/00:00:00	14	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18530	MGS	02-004/00:00:00	14	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
18531	MGS	02-004/00:00:00	14	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
18532	MGS	02-004/00:00:00	14	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
18533	MGS	02-004/00:00:00	14	Config: TGC: DEST=37		
18534	MGS	02-004/00:00:00	14	Config: TGC: BAND=X, BR=40000.000000		
18535	MGS	02-004/00:00:00	14	Config: FSS: CH=2, PRI_FL=10000		
18536	MGS	02-004/00:00:00	14	Config: RSR		
18537	MGS	02-004/00:00:00	14	Config: TXL		
18538	MGS	02-004/00:00:00	14	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
18539	MGS	02-004/00:00:00	14	Config: BVR		
18540	MGS	02-004/00:00:00	14	Config: Doppler Extractor: BIAS=+1MHZ		
18541	MGS	02-004/00:00:00	14	Config: MDA: SMPL=0.1		
18542	MGS	02-004/00:00:00	14	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
18543	MGS	02-004/00:00:00	14	Config: SRA: HIGH=4, LOW=14, SERV=D		
18544	MGS	02-004/00:00:00	14	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
18545	MGS	02-004/00:16:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/00:03:45
18546	MGS	02-004/00:20:08		: 01:34:53	RPAONX	02-004/00:07:30
18547	MGS	02-004/00:20:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/00:07:30
18548	MGS	02-004/00:20:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/00:08:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18549	MGS	02-004/00:20:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/00:08:07
18550	MGS	02-004/00:20:50		Set eclipse egress script address: 01DC	SWSEES	02-004/00:08:12
18551	MGS	02-004/00:21:23		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-004/00:08:45
18552	MGS	02-004/00:21:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/00:08:45
18553	MGS	02-004/00:21:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/00:08:45
18554	MGS	02-004/00:21:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/00:08:45
18555	MGS	02-004/00:21:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/00:08:45
18556	MGS	02-004/00:21:53		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/00:09:15
18557	MGS	02-004/00:21:56		NOTE: Exit Earth Occultation 12626		02-004/00:09:19
18558	MGS	02-004/00:21:56	15	Acquisition Of X-Band Signal		
18559	MGS	02-004/00:21:56	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18560	MGS	02-004/00:21:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
18561	MGS	02-004/00:27:46		NOTE: Exit Planetary Atmosphere 12626		02-004/00:15:08
18562	MGS	02-004/00:29:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/00:17:15
18563	MGS	02-004/00:29:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/00:17:15
18564	MGS	02-004/00:29:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/00:17:15
18565	MGS	02-004/00:29:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/00:17:15
18566	MGS	02-004/00:29:53	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18567	MGS	02-004/00:29:54		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-004/00:17:16
18568	MGS	02-004/00:29:54		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/00:17:16
18569	MGS	02-004/00:29:54		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/00:17:16
18570	MGS	02-004/00:29:54	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18571	MGS	02-004/00:29:58		NOTE: End fixed Sub-Reflector for Radio Science		02-004/00:17:20
18572	MGS	02-004/00:36:27		NOTE: Exit Solar Eclipse 12626		02-004/00:23:49
18573	MGS	02-004/00:51:34		NOTE: Periapsis 12627 ----------		02-004/00:38:56
18574	MGS	02-004/00:57:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/00:44:48
18575	MGS	02-004/00:57:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/00:44:48
18576	MGS	02-004/00:57:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/00:44:49
18577	MGS	02-004/00:57:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/00:44:49
18578	MGS	02-004/01:00:00	14	Begin Tracking		
18579	MGS	02-004/01:00:00	14	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18580	MGS	02-004/01:10:00	14	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18581	MGS	02-004/01:10:22	14	NOTE: Transmitter Off in 15 minutes		
18582	MGS	02-004/01:12:00	14	Range Modulation On: SUP=3.0dB		
18583	MGS	02-004/01:13:00	14	Begin Ranging Acquisition		
18584	MGS	02-004/01:19:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/01:06:49
18585	MGS	02-004/01:19:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/01:06:49
18586	MGS	02-004/01:23:22	14	Range Modulation Off		
18587	MGS	02-004/01:25:22	14	Transmitter Off		
18588	MGS	02-004/01:29:29		NOTE: Start Block (SSRMGR)		02-004/01:16:51
18589	MGS	02-004/01:29:29		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-004/01:16:51
18590	MGS	02-004/01:29:30		SSR 1A Data Enable	CSD1AE	02-004/01:16:52
18591	MGS	02-004/01:29:30		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-004/01:16:52
18592	MGS	02-004/01:30:00	43	Begin Pre-Cal		
18593	MGS	02-004/01:30:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18594	MGS	02-004/01:30:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
18595	MGS	02-004/01:30:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18596	MGS	02-004/01:30:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18597	MGS	02-004/01:30:00	43	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
18598	MGS	02-004/01:30:00	43	Config: TGC: DEST=37		
18599	MGS	02-004/01:30:00	43	Config: TGC: BAND=X, BR=42666.666667		
18600	MGS	02-004/01:30:00	43	Config: FSS: CH=2, PRI_FL=10000		
18601	MGS	02-004/01:30:00	43	Config: RSR		
18602	MGS	02-004/01:30:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18603	MGS	02-004/01:30:00	43	Config: BVR		
18604	MGS	02-004/01:30:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
18605	MGS	02-004/01:30:00	43	Config: MDA: SMPL=0.1		
18606	MGS	02-004/01:35:15	14	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18607	MGS	02-004/01:35:15	15	Acquire D/L: X/16, 3-Way/14, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18608	MGS	02-004/01:41:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/01:29:09
18609	MGS	02-004/01:43:53		NOTE: Start Block (MAP_PB_ODY)		02-004/01:31:15
18610	MGS	02-004/01:43:54		: 00:23:59, 01:34:54, FALSE, FALSE, FALSE, 00:01:15, 00:06:50, 01:20:15, 00:06:33	AEMINI	02-004/01:31:16
18611	MGS	02-004/01:43:54		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/01:31:16
18612	MGS	02-004/01:43:54		NOTE: Start EVP data return script		02-004/01:31:16
18613	MGS	02-004/01:43:55		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-004T02:13:21.000	AEMPBI	02-004/01:31:17
18614	MGS	02-004/01:46:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/01:34:09
18615	MGS	02-004/01:46:47		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8296000, DUR=00:17:17		02-004/01:34:09
18616	MGS	02-004/01:46:47		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-004/01:34:09
18617	MGS	02-004/01:46:47		: 00:08:13, FALSE	RDSCII	02-004/01:34:09
18618	MGS	02-004/01:46:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/01:34:09
18619	MGS	02-004/01:46:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/01:34:09
18620	MGS	02-004/01:46:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/01:34:09
18621	MGS	02-004/01:46:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/01:34:09
18622	MGS	02-004/01:46:47	14	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18623	MGS	02-004/01:46:47	14	NOTE: Carrier Only -- No Telemetry Modulation		
18624	MGS	02-004/01:46:47	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18625	MGS	02-004/01:46:47	15	NOTE: Carrier Only -- No Telemetry Modulation		
18626	MGS	02-004/01:48:52		NOTE: Enter Planetary Atmosphere 12627		02-004/01:36:14
18627	MGS	02-004/01:50:21		NOTE: Apoapsis 12627 -		02-004/01:37:44
18628	MGS	02-004/01:52:55		SSR 1B Data Disable	CSD1BX	02-004/01:40:17
18629	MGS	02-004/01:52:55		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-004/01:40:17
18630	MGS	02-004/01:52:56		NOTE: End Block (SSRMGR)		02-004/01:40:18
18631	MGS	02-004/01:53:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/01:41:16
18632	MGS	02-004/01:53:54		NOTE: Enter Solar Eclipse 12627		02-004/01:41:16
18633	MGS	02-004/01:54:22		NOTE: Enter Earth Occultation 12627		02-004/01:41:45
18634	MGS	02-004/01:54:22	14	NOTE: Loss Of X-Band Signal		
18635	MGS	02-004/01:54:22	15	NOTE: Loss Of X-Band Signal		
18636	MGS	02-004/01:55:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/01:42:22
18637	MGS	02-004/01:55:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/01:42:22
18638	MGS	02-004/01:55:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/01:42:22
18639	MGS	02-004/01:55:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/01:42:22
18640	MGS	02-004/01:55:01		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/01:42:23
18641	MGS	02-004/01:55:01		NOTE: End EVP script		02-004/01:42:23
18642	MGS	02-004/01:55:02		NOTE: End Block (MAP_RT)		02-004/01:42:24
18643	MGS	02-004/01:55:05		NOTE: End fixed Sub-Reflector for Radio Science		02-004/01:42:27
18644	MGS	02-004/01:58:12	14	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18645	MGS	02-004/02:00:12	14	Range Modulation On: SUP=3.0dB		
18646	MGS	02-004/02:01:12	14	Begin Ranging Acquisition		
18647	MGS	02-004/02:17:53		: 01:34:54	RPAONX	02-004/02:05:15
18648	MGS	02-004/02:17:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/02:05:15
18649	MGS	02-004/02:18:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/02:05:49
18650	MGS	02-004/02:18:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/02:05:49
18651	MGS	02-004/02:18:31		Command the PSE with included data word: 3990	SWPSEL	02-004/02:05:53
18652	MGS	02-004/02:18:32		Set eclipse egress script address: 0158	SWSEES	02-004/02:05:54
18653	MGS	02-004/02:19:38		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/02:07:00
18654	MGS	02-004/02:19:42		NOTE: Exit Earth Occultation 12627		02-004/02:07:05
18655	MGS	02-004/02:19:42	14	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18656	MGS	02-004/02:19:42	14	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18657	MGS	02-004/02:19:42	15	Acquisition Of X-Band Signal		
18658	MGS	02-004/02:19:42	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18659	MGS	02-004/02:23:28	14	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18660	MGS	02-004/02:23:28	15	Acquire D/L: X/16, 3-Way/14, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18661	MGS	02-004/02:25:30		NOTE: Exit Planetary Atmosphere 12627		02-004/02:12:52
18662	MGS	02-004/02:25:58		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:16:10	AEMPB	02-004/02:13:20
18663	MGS	02-004/02:25:58		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-004/02:13:20
18664	MGS	02-004/02:25:58		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-004/02:13:20
18665	MGS	02-004/02:25:59		SSR 1B Data Enable	CSD1BE	02-004/02:13:21
18666	MGS	02-004/02:25:59		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-004/02:13:21
18667	MGS	02-004/02:25:59	14	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18668	MGS	02-004/02:25:59	15	D/L Change: X/16, 3-Way/14, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18669	MGS	02-004/02:34:13		NOTE: Exit Solar Eclipse 12627		02-004/02:21:35
18670	MGS	02-004/02:49:43		NOTE: Periapsis 12628 ----------		02-004/02:37:05
18671	MGS	02-004/02:59:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/02:46:34
18672	MGS	02-004/02:59:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/02:46:34
18673	MGS	02-004/02:59:13		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/02:46:35
18674	MGS	02-004/02:59:13		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/02:46:35
18675	MGS	02-004/03:00:00	43	Begin Tracking		
18676	MGS	02-004/03:00:00	43	Acquire D/L: X/16, 3-Way/14, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18677	MGS	02-004/03:00:00	14	NOTE: Transmitter Off in 15 minutes		
18678	MGS	02-004/03:13:00	14	Range Modulation Off		
18679	MGS	02-004/03:15:00	14	Transmitter Off		
18680	MGS	02-004/03:20:00	14	End Tracking		
18681	MGS	02-004/03:21:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/03:08:35
18682	MGS	02-004/03:21:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/03:08:35
18683	MGS	02-004/03:35:00	14	End Post-Cal		
18684	MGS	02-004/03:36:37		SSR 1B Data Disable	CSD1BX	02-004/03:23:59
18685	MGS	02-004/03:36:37		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-004/03:23:59
18686	MGS	02-004/03:36:37		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-004/03:23:59
18687	MGS	02-004/03:36:37	15	D/L Change: X/16, 3-Way/14, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18688	MGS	02-004/03:36:37	43	D/L Change: X/16, 3-Way/14, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18689	MGS	02-004/03:40:15	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18690	MGS	02-004/03:40:15	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18691	MGS	02-004/03:41:40		NOTE: Start Block (MAP_RT)		02-004/03:29:02
18692	MGS	02-004/03:41:41		: 00:23:59, 01:34:53, FALSE, TRUE, FALSE, 00:01:15, 00:08:30, 01:16:54, 00:08:13	AEMINI	02-004/03:29:03
18693	MGS	02-004/03:41:41		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/03:29:03
18694	MGS	02-004/03:41:41		NOTE: Start EVP data return script		02-004/03:29:03
18695	MGS	02-004/03:41:42		: SE_2A, RTM, 01:16:53, MRC, 2002-004T04:12:48.000	AEMRTI	02-004/03:29:04
18696	MGS	02-004/03:46:37		NOTE: Enter Planetary Atmosphere 12628		02-004/03:33:59
18697	MGS	02-004/03:48:40		NOTE: Apoapsis 12628 -		02-004/03:36:02
18698	MGS	02-004/03:51:41		NOTE: Enter Solar Eclipse 12628		02-004/03:39:03
18699	MGS	02-004/03:51:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/03:39:03
18700	MGS	02-004/03:52:08		NOTE: Enter Earth Occultation 12628		02-004/03:39:30
18701	MGS	02-004/03:52:08	15	NOTE: Loss Of X-Band Signal		
18702	MGS	02-004/03:52:08	43	NOTE: Loss Of X-Band Signal		
18703	MGS	02-004/03:52:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/03:40:09
18704	MGS	02-004/03:52:47		NOTE: End EVP script		02-004/03:40:09
18705	MGS	02-004/03:52:48		NOTE: End Block (MAP_PB_ODY)		02-004/03:40:10
18706	MGS	02-004/03:55:00	45	Begin Pre-Cal		
18707	MGS	02-004/03:55:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18708	MGS	02-004/03:55:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18709	MGS	02-004/03:55:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18710	MGS	02-004/03:55:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18711	MGS	02-004/03:55:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
18712	MGS	02-004/03:55:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
18713	MGS	02-004/03:55:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
18714	MGS	02-004/03:55:00	45	Config: TGC: DEST=37		
18715	MGS	02-004/03:55:00	45	Config: TGC: BAND=X, BR=40000.000000		
18716	MGS	02-004/03:55:00	45	Config: FSS: CH=2, PRI_FL=10000		
18717	MGS	02-004/03:55:00	45	Config: RSR		
18718	MGS	02-004/03:55:00	45	Config: TXL		
18719	MGS	02-004/03:55:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
18720	MGS	02-004/03:55:00	45	Config: BVR		
18721	MGS	02-004/03:55:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
18722	MGS	02-004/03:55:00	45	Config: MDA: SMPL=0.1		
18723	MGS	02-004/03:55:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
18724	MGS	02-004/03:55:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
18725	MGS	02-004/03:55:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
18726	MGS	02-004/04:11:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/03:59:17
18727	MGS	02-004/04:15:40		: 01:34:53	RPAONX	02-004/04:03:02
18728	MGS	02-004/04:15:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/04:03:02
18729	MGS	02-004/04:16:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/04:03:35
18730	MGS	02-004/04:16:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/04:03:35
18731	MGS	02-004/04:16:18		Set eclipse egress script address: 019A	SWSEES	02-004/04:03:40
18732	MGS	02-004/04:16:55		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-004/04:04:17
18733	MGS	02-004/04:16:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/04:04:17
18734	MGS	02-004/04:16:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/04:04:17
18735	MGS	02-004/04:16:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/04:04:17
18736	MGS	02-004/04:16:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/04:04:17
18737	MGS	02-004/04:17:30		NOTE: Exit Earth Occultation 12628		02-004/04:04:52
18738	MGS	02-004/04:17:30	15	Acquisition Of X-Band Signal		
18739	MGS	02-004/04:17:30	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18740	MGS	02-004/04:17:30	15	NOTE: Carrier Only -- No Telemetry Modulation		
18741	MGS	02-004/04:17:30	43	Acquisition Of X-Band Signal		
18742	MGS	02-004/04:17:30	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18743	MGS	02-004/04:17:30	43	NOTE: Carrier Only -- No Telemetry Modulation		
18744	MGS	02-004/04:23:17		NOTE: Exit Planetary Atmosphere 12628		02-004/04:10:39
18745	MGS	02-004/04:25:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/04:12:47
18746	MGS	02-004/04:25:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/04:12:47
18747	MGS	02-004/04:25:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/04:12:47
18748	MGS	02-004/04:25:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/04:12:47
18749	MGS	02-004/04:25:25	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18750	MGS	02-004/04:25:25	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18751	MGS	02-004/04:25:26		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-004/04:12:48
18752	MGS	02-004/04:25:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/04:12:48
18753	MGS	02-004/04:25:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/04:12:48
18754	MGS	02-004/04:25:26	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18755	MGS	02-004/04:25:26	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18756	MGS	02-004/04:25:30		NOTE: End fixed Sub-Reflector for Radio Science		02-004/04:12:52
18757	MGS	02-004/04:32:00		NOTE: Exit Solar Eclipse 12628		02-004/04:19:22
18758	MGS	02-004/04:47:55		NOTE: Periapsis 12629 ----------		02-004/04:35:17
18759	MGS	02-004/04:52:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/04:40:21
18760	MGS	02-004/04:52:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/04:40:21
18761	MGS	02-004/04:53:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/04:40:22
18762	MGS	02-004/04:53:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/04:40:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18763	MGS	02-004/04:55:00	45	Begin Tracking		
18764	MGS	02-004/04:55:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18765	MGS	02-004/05:05:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18766	MGS	02-004/05:05:55	45	NOTE: Transmitter Off in 15 minutes		
18767	MGS	02-004/05:07:00	45	Range Modulation On: SUP=3.0dB		
18768	MGS	02-004/05:08:00	45	Begin Ranging Acquisition		
18769	MGS	02-004/05:09:06	15	NOTE: Below Uplink Interlock Limit		
18770	MGS	02-004/05:15:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/05:02:22
18771	MGS	02-004/05:15:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/05:02:22
18772	MGS	02-004/05:18:55	45	Range Modulation Off		
18773	MGS	02-004/05:20:00	15	End Tracking		
18774	MGS	02-004/05:20:55	45	Transmitter Off		
18775	MGS	02-004/05:30:16	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18776	MGS	02-004/05:30:16	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18777	MGS	02-004/05:35:00	15	End Post-Cal		
18778	MGS	02-004/05:37:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/05:24:41
18779	MGS	02-004/05:39:28		NOTE: Start EVP data return script		02-004/05:26:50
18780	MGS	02-004/05:42:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/05:29:41
18781	MGS	02-004/05:42:19		: 00:08:13, FALSE	RDSCII	02-004/05:29:41
18782	MGS	02-004/05:42:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/05:29:41
18783	MGS	02-004/05:42:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/05:29:41
18784	MGS	02-004/05:42:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/05:29:41
18785	MGS	02-004/05:42:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/05:29:41
18786	MGS	02-004/05:42:19	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18787	MGS	02-004/05:42:19	43	NOTE: Carrier Only -- No Telemetry Modulation		
18788	MGS	02-004/05:42:19	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18789	MGS	02-004/05:42:19	45	NOTE: Carrier Only -- No Telemetry Modulation		
18790	MGS	02-004/05:44:25		NOTE: Enter Planetary Atmosphere 12629		02-004/05:31:47
18791	MGS	02-004/05:46:51		NOTE: Apoapsis 12629 -		02-004/05:34:12
18792	MGS	02-004/05:49:28		NOTE: Enter Solar Eclipse 12629		02-004/05:36:50
18793	MGS	02-004/05:49:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/05:36:50
18794	MGS	02-004/05:49:56		NOTE: Enter Earth Occultation 12629		02-004/05:37:18
18795	MGS	02-004/05:49:56	43	NOTE: Loss Of X-Band Signal		
18796	MGS	02-004/05:49:56	45	NOTE: Loss Of X-Band Signal		
18797	MGS	02-004/05:50:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/05:37:54
18798	MGS	02-004/05:50:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/05:37:54
18799	MGS	02-004/05:50:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/05:37:54
18800	MGS	02-004/05:50:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/05:37:54
18801	MGS	02-004/05:50:33		NOTE: End EVP script		02-004/05:37:55
18802	MGS	02-004/05:50:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/05:37:55
18803	MGS	02-004/05:50:37		NOTE: End fixed Sub-Reflector for Radio Science		02-004/05:37:59
18804	MGS	02-004/05:53:46	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18805	MGS	02-004/05:55:47	45	Range Modulation On: SUP=3.0dB		
18806	MGS	02-004/05:56:47	45	Begin Ranging Acquisition		
18807	MGS	02-004/06:09:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/05:57:04
18808	MGS	02-004/06:13:27		: 01:34:53	RPAONX	02-004/06:00:49
18809	MGS	02-004/06:13:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/06:00:49
18810	MGS	02-004/06:14:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/06:01:22
18811	MGS	02-004/06:14:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/06:01:22
18812	MGS	02-004/06:14:05		Set eclipse egress script address: 01DC	SWSEES	02-004/06:01:27
18813	MGS	02-004/06:14:42		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-004/06:02:04
18814	MGS	02-004/06:14:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/06:02:04
18815	MGS	02-004/06:14:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/06:02:04

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18816	MGS	02-004/06:14:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/06:02:04
18817	MGS	02-004/06:14:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/06:02:04
18818	MGS	02-004/06:15:12		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/06:02:34
18819	MGS	02-004/06:15:18		NOTE: Exit Earth Occultation 12629		02-004/06:02:40
18820	MGS	02-004/06:15:18	43	Acquisition Of X-Band Signal		
18821	MGS	02-004/06:15:18	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18822	MGS	02-004/06:15:18	43	NOTE: Carrier Only -- No Telemetry Modulation		
18823	MGS	02-004/06:15:18	45	Acquisition Of X-Band Signal		
18824	MGS	02-004/06:15:18	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18825	MGS	02-004/06:15:18	45	NOTE: Carrier Only -- No Telemetry Modulation		
18826	MGS	02-004/06:21:06		NOTE: Exit Planetary Atmosphere 12629		02-004/06:08:28
18827	MGS	02-004/06:23:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/06:10:34
18828	MGS	02-004/06:23:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/06:10:34
18829	MGS	02-004/06:23:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/06:10:34
18830	MGS	02-004/06:23:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/06:10:34
18831	MGS	02-004/06:23:12	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18832	MGS	02-004/06:23:12	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18833	MGS	02-004/06:23:13		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-004/06:10:35
18834	MGS	02-004/06:23:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/06:10:35
18835	MGS	02-004/06:23:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/06:10:35
18836	MGS	02-004/06:23:13	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18837	MGS	02-004/06:23:13	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18838	MGS	02-004/06:23:17		NOTE: End fixed Sub-Reflector for Radio Science		02-004/06:10:39
18839	MGS	02-004/06:29:48		NOTE: Exit Solar Eclipse 12629		02-004/06:17:09
18840	MGS	02-004/06:45:49		NOTE: Periapsis 12630 ----------		02-004/06:33:10
18841	MGS	02-004/06:50:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/06:38:08
18842	MGS	02-004/06:50:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/06:38:08
18843	MGS	02-004/06:50:48		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/06:38:09
18844	MGS	02-004/06:50:48		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/06:38:09
18845	MGS	02-004/07:03:41	45	NOTE: Transmitter Off in 15 minutes		
18846	MGS	02-004/07:12:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/07:00:09
18847	MGS	02-004/07:12:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/07:00:09
18848	MGS	02-004/07:16:41	45	Range Modulation Off		
18849	MGS	02-004/07:18:41	45	Transmitter Off		
18850	MGS	02-004/07:22:38		NOTE: Start Block (SSRMGR)		02-004/07:09:59
18851	MGS	02-004/07:22:38		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-004/07:09:59
18852	MGS	02-004/07:22:39		SSR 1B Data Enable	CSD1BE	02-004/07:10:00
18853	MGS	02-004/07:22:39		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-004/07:10:00
18854	MGS	02-004/07:35:06		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/07:22:28
18855	MGS	02-004/07:37:13		NOTE: Start Block (MAP_PB_ODY)		02-004/07:24:34
18856	MGS	02-004/07:37:14		: 00:23:59, 01:34:54, FALSE, FALSE, FALSE, 00:01:15, 00:06:50, 01:20:15, 00:06:33	AEMINI	02-004/07:24:35
18857	MGS	02-004/07:37:14		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/07:24:35
18858	MGS	02-004/07:37:14		NOTE: Start EVP data return script		02-004/07:24:35
18859	MGS	02-004/07:37:15		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-004T08:06:39.000	AEMPBI	02-004/07:24:36
18860	MGS	02-004/07:40:07		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/07:27:28
18861	MGS	02-004/07:40:07		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8384000, DUR=00:17:28		02-004/07:27:28
18862	MGS	02-004/07:40:07		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-004/07:27:28
18863	MGS	02-004/07:40:07		: 00:08:13, FALSE	RDSCII	02-004/07:27:28
18864	MGS	02-004/07:40:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/07:27:28
18865	MGS	02-004/07:40:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/07:27:28
18866	MGS	02-004/07:40:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/07:27:28
18867	MGS	02-004/07:40:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/07:27:28
18868	MGS	02-004/07:40:07	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18869	MGS	02-004/07:40:07	43	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18870	MGS	02-004/07:40:07	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18871	MGS	02-004/07:40:07	45	NOTE: Carrier Only -- No Telemetry Modulation		
18872	MGS	02-004/07:42:12		NOTE: Enter Planetary Atmosphere 12630		02-004/07:29:33
18873	MGS	02-004/07:44:29		NOTE: Apoapsis 12630 -		02-004/07:31:51
18874	MGS	02-004/07:46:14		SSR 1A Data Disable	CSD1AX	02-004/07:33:35
18875	MGS	02-004/07:46:14		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-004/07:33:35
18876	MGS	02-004/07:46:15		NOTE: End Block (SSRMGR)		02-004/07:33:36
18877	MGS	02-004/07:47:13		NOTE: Enter Solar Eclipse 12630		02-004/07:34:35
18878	MGS	02-004/07:47:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/07:34:35
18879	MGS	02-004/07:47:43		NOTE: Enter Earth Occultation 12630		02-004/07:35:04
18880	MGS	02-004/07:47:43	43	NOTE: Loss Of X-Band Signal		
18881	MGS	02-004/07:47:43	45	NOTE: Loss Of X-Band Signal		
18882	MGS	02-004/07:48:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/07:35:41
18883	MGS	02-004/07:48:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/07:35:41
18884	MGS	02-004/07:48:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/07:35:41
18885	MGS	02-004/07:48:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/07:35:41
18886	MGS	02-004/07:48:20		NOTE: End EVP script		02-004/07:35:42
18887	MGS	02-004/07:48:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/07:35:42
18888	MGS	02-004/07:48:21		NOTE: End Block (MAP_RT)		02-004/07:35:43
18889	MGS	02-004/07:48:24		NOTE: End fixed Sub-Reflector for Radio Science		02-004/07:35:46
18890	MGS	02-004/07:51:32	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18891	MGS	02-004/07:53:32	45	Range Modulation On: SUP=3.0dB		
18892	MGS	02-004/07:54:32	45	Begin Ranging Acquisition		
18893	MGS	02-004/08:11:13		: 01:34:54	RPAONX	02-004/07:58:34
18894	MGS	02-004/08:11:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/07:58:34
18895	MGS	02-004/08:11:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/07:59:09
18896	MGS	02-004/08:11:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/07:59:09
18897	MGS	02-004/08:11:52		Command the PSE with included data word: 3990	SWPSEL	02-004/07:59:13
18898	MGS	02-004/08:11:53		Set eclipse egress script address: 0158	SWSEES	02-004/07:59:14
18899	MGS	02-004/08:12:58		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/08:00:19
18900	MGS	02-004/08:13:04		NOTE: Exit Earth Occultation 12630		02-004/08:00:25
18901	MGS	02-004/08:13:04	43	Acquisition Of X-Band Signal		
18902	MGS	02-004/08:13:04	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18903	MGS	02-004/08:13:04	45	Acquisition Of X-Band Signal		
18904	MGS	02-004/08:13:04	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18905	MGS	02-004/08:16:49	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18906	MGS	02-004/08:16:49	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18907	MGS	02-004/08:18:53		NOTE: Exit Planetary Atmosphere 12630		02-004/08:06:14
18908	MGS	02-004/08:19:18		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:16:10	AEMPB	02-004/08:06:39
18909	MGS	02-004/08:19:18		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-004/08:06:39
18910	MGS	02-004/08:19:18		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-004/08:06:39
18911	MGS	02-004/08:19:19		SSR 1A Data Enable	CSD1AE	02-004/08:06:40
18912	MGS	02-004/08:19:19		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-004/08:06:40
18913	MGS	02-004/08:19:19	43	D/L Change: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18914	MGS	02-004/08:19:19	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18915	MGS	02-004/08:27:33		NOTE: Exit Solar Eclipse 12630		02-004/08:14:54
18916	MGS	02-004/08:43:15		NOTE: Periapsis 12631 ----------		02-004/08:30:36
18917	MGS	02-004/08:52:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/08:39:53
18918	MGS	02-004/08:52:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/08:39:53
18919	MGS	02-004/08:52:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/08:39:54
18920	MGS	02-004/08:52:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/08:39:54
18921	MGS	02-004/09:01:21	45	NOTE: Transmitter Off in 15 minutes		
18922	MGS	02-004/09:14:21	45	Range Modulation Off		
18923	MGS	02-004/09:14:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/09:01:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18924	MGS	02-004/09:14:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/09:01:54
18925	MGS	02-004/09:16:21	45	Transmitter Off		
18926	MGS	02-004/09:29:57		SSR 1A Data Disable	CSD1AX	02-004/09:17:18
18927	MGS	02-004/09:29:57		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-004/09:17:18
18928	MGS	02-004/09:29:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-004/09:17:18
18929	MGS	02-004/09:29:57	43	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18930	MGS	02-004/09:29:57	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18931	MGS	02-004/09:34:54		NOTE: Start Block (MAP_RT)		02-004/09:22:15
18932	MGS	02-004/09:34:55		: 00:23:59, 01:34:53, FALSE, TRUE, FALSE, 00:01:15, 00:08:30, 01:16:54, 00:08:13	AEMINI	02-004/09:22:16
18933	MGS	02-004/09:34:55		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/09:22:16
18934	MGS	02-004/09:34:55		NOTE: Start EVP data return script		02-004/09:22:16
18935	MGS	02-004/09:34:56		: SE_2A, RTM, 01:16:53, MRC, 2002-004T10:06:01.000	AEMRTI	02-004/09:22:17
18936	MGS	02-004/09:39:53		NOTE: Enter Planetary Atmosphere 12631		02-004/09:27:14
18937	MGS	02-004/09:41:38	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18938	MGS	02-004/09:41:38	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18939	MGS	02-004/09:41:48		NOTE: Apoapsis 12631 -		02-004/09:29:09
18940	MGS	02-004/09:44:55		NOTE: Enter Solar Eclipse 12631		02-004/09:32:16
18941	MGS	02-004/09:44:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/09:32:16
18942	MGS	02-004/09:45:23		NOTE: Enter Earth Occultation 12631		02-004/09:32:44
18943	MGS	02-004/09:45:23	43	NOTE: Loss Of X-Band Signal		
18944	MGS	02-004/09:45:23	45	NOTE: Loss Of X-Band Signal		
18945	MGS	02-004/09:46:07		NOTE: End EVP script		02-004/09:33:28
18946	MGS	02-004/09:46:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/09:33:28
18947	MGS	02-004/09:46:08		NOTE: End Block (MAP_PB_ODY)		02-004/09:33:29
18948	MGS	02-004/09:49:14	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
18949	MGS	02-004/09:51:15	45	Range Modulation On: SUP=3.0dB		
18950	MGS	02-004/09:52:15	45	Begin Ranging Acquisition		
18951	MGS	02-004/10:05:09		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/09:52:30
18952	MGS	02-004/10:08:54		: 01:34:53	RPAONX	02-004/09:56:15
18953	MGS	02-004/10:08:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/09:56:15
18954	MGS	02-004/10:09:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/09:56:54
18955	MGS	02-004/10:09:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/09:56:54
18956	MGS	02-004/10:09:38		Set eclipse egress script address: 019A	SWSEES	02-004/09:56:59
18957	MGS	02-004/10:10:00	63	Begin Pre-Cal		
18958	MGS	02-004/10:10:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
18959	MGS	02-004/10:10:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
18960	MGS	02-004/10:10:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
18961	MGS	02-004/10:10:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
18962	MGS	02-004/10:10:00	63	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
18963	MGS	02-004/10:10:00	63	Config: TGC: DEST=37		
18964	MGS	02-004/10:10:00	63	Config: TGC: BAND=X, BR=0.000000		
18965	MGS	02-004/10:10:00	63	Config: FSS: CH=2, PRI_FL=10000		
18966	MGS	02-004/10:10:00	63	Config: RSR		
18967	MGS	02-004/10:10:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
18968	MGS	02-004/10:10:00	63	Config: BVR		
18969	MGS	02-004/10:10:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
18970	MGS	02-004/10:10:00	63	Config: MDA: SMPL=0.1		
18971	MGS	02-004/10:10:09		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-004/09:57:30
18972	MGS	02-004/10:10:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/09:57:30
18973	MGS	02-004/10:10:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/09:57:30
18974	MGS	02-004/10:10:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/09:57:30
18975	MGS	02-004/10:10:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/09:57:30
18976	MGS	02-004/10:10:47		NOTE: Exit Earth Occultation 12631		02-004/09:58:08
18977	MGS	02-004/10:10:47	43	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
18978	MGS	02-004/10:10:47	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18979	MGS	02-004/10:10:47	43	NOTE: Carrier Only -- No Telemetry Modulation		
18980	MGS	02-004/10:10:47	45	Acquisition Of X-Band Signal		
18981	MGS	02-004/10:10:47	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
18982	MGS	02-004/10:10:47	45	NOTE: Carrier Only -- No Telemetry Modulation		
18983	MGS	02-004/10:16:35		NOTE: Exit Planetary Atmosphere 12631		02-004/10:03:56
18984	MGS	02-004/10:18:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/10:06:00
18985	MGS	02-004/10:18:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/10:06:00
18986	MGS	02-004/10:18:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/10:06:00
18987	MGS	02-004/10:18:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/10:06:00
18988	MGS	02-004/10:18:39	43	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18989	MGS	02-004/10:18:39	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18990	MGS	02-004/10:18:40		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-004/10:06:01
18991	MGS	02-004/10:18:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/10:06:01
18992	MGS	02-004/10:18:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/10:06:01
18993	MGS	02-004/10:18:40	43	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18994	MGS	02-004/10:18:40	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
18995	MGS	02-004/10:18:44		NOTE: End fixed Sub-Reflector for Radio Science		02-004/10:06:05
18996	MGS	02-004/10:25:13		NOTE: Exit Solar Eclipse 12631		02-004/10:12:34
18997	MGS	02-004/10:35:00	45	NOTE: Transmitter Off in 15 minutes		
18998	MGS	02-004/10:40:38		NOTE: Periapsis 12632 ----------		02-004/10:27:59
18999	MGS	02-004/10:46:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/10:33:33
19000	MGS	02-004/10:46:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/10:33:33
19001	MGS	02-004/10:46:13		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/10:33:34
19002	MGS	02-004/10:46:13		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/10:33:34
19003	MGS	02-004/10:48:00	45	Range Modulation Off		
19004	MGS	02-004/10:50:00	45	Transmitter Off		
19005	MGS	02-004/10:55:00	45	End Tracking		
19006	MGS	02-004/11:08:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/10:55:34
19007	MGS	02-004/11:08:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/10:55:34
19008	MGS	02-004/11:10:00	45	End Post-Cal		
19009	MGS	02-004/11:15:18	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19010	MGS	02-004/11:30:33		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/11:17:54
19011	MGS	02-004/11:32:36		NOTE: Start EVP data return script		02-004/11:19:57
19012	MGS	02-004/11:35:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/11:22:54
19013	MGS	02-004/11:35:33		: 00:08:13, FALSE	RDSCII	02-004/11:22:54
19014	MGS	02-004/11:35:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/11:22:54
19015	MGS	02-004/11:35:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/11:22:54
19016	MGS	02-004/11:35:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/11:22:54
19017	MGS	02-004/11:35:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/11:22:54
19018	MGS	02-004/11:35:33	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19019	MGS	02-004/11:35:33	43	NOTE: Carrier Only -- No Telemetry Modulation		
19020	MGS	02-004/11:37:33		NOTE: Enter Planetary Atmosphere 12632		02-004/11:24:53
19021	MGS	02-004/11:39:32		NOTE: Apoapsis 12632 -		02-004/11:26:53
19022	MGS	02-004/11:40:00	63	Begin Tracking		
19023	MGS	02-004/11:40:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19024	MGS	02-004/11:40:00	63	NOTE: Carrier Only -- No Telemetry Modulation		
19025	MGS	02-004/11:42:36		NOTE: Enter Solar Eclipse 12632		02-004/11:29:57
19026	MGS	02-004/11:42:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/11:29:57
19027	MGS	02-004/11:43:03		NOTE: Enter Earth Occultation 12632		02-004/11:30:23
19028	MGS	02-004/11:43:03	43	NOTE: Loss Of X-Band Signal		
19029	MGS	02-004/11:43:03	63	NOTE: Loss Of X-Band Signal		
19030	MGS	02-004/11:43:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/11:31:07
19031	MGS	02-004/11:43:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/11:31:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19032	MGS	02-004/11:43:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/11:31:07
19033	MGS	02-004/11:43:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/11:31:07
19034	MGS	02-004/11:43:47		NOTE: End EVP script		02-004/11:31:08
19035	MGS	02-004/11:43:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/11:31:08
19036	MGS	02-004/11:43:51		NOTE: End fixed Sub-Reflector for Radio Science		02-004/11:31:12
19037	MGS	02-004/11:54:00	63	NOTE: Above Uplink Interlock Limit		
19038	MGS	02-004/11:54:23	43	NOTE: Below Uplink Interlock Limit		
19039	MGS	02-004/12:00:00	43	End Tracking		
19040	MGS	02-004/12:02:50		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/11:50:11
19041	MGS	02-004/12:06:35		: 01:34:53	RPAONX	02-004/11:53:56
19042	MGS	02-004/12:06:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/11:53:56
19043	MGS	02-004/12:07:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/11:54:34
19044	MGS	02-004/12:07:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/11:54:34
19045	MGS	02-004/12:07:18		Set eclipse egress script address: 01DC	SWSEES	02-004/11:54:39
19046	MGS	02-004/12:07:50		: 00:00:30, 00:08:30, FALSE	RDSCIE	02-004/11:55:11
19047	MGS	02-004/12:07:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/11:55:11
19048	MGS	02-004/12:07:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/11:55:11
19049	MGS	02-004/12:07:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/11:55:11
19050	MGS	02-004/12:07:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/11:55:11
19051	MGS	02-004/12:08:20		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/11:55:41
19052	MGS	02-004/12:08:29		NOTE: Exit Earth Occultation 12632		02-004/11:55:50
19053	MGS	02-004/12:08:29	63	Acquisition Of X-Band Signal		
19054	MGS	02-004/12:08:29	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19055	MGS	02-004/12:08:29	63	NOTE: Carrier Only -- No Telemetry Modulation		
19056	MGS	02-004/12:12:39		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-004/12:00:00
19057	MGS	02-004/12:14:16		NOTE: Exit Planetary Atmosphere 12632		02-004/12:01:37
19058	MGS	02-004/12:15:00	43	End Post-Cal		
19059	MGS	02-004/12:16:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/12:03:41
19060	MGS	02-004/12:16:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/12:03:41
19061	MGS	02-004/12:16:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/12:03:41
19062	MGS	02-004/12:16:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/12:03:41
19063	MGS	02-004/12:16:20	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19064	MGS	02-004/12:16:21		: RTM, MRC, 01:16:53, S&E_2A, FALSE, 00:08:14	AEMRT	02-004/12:03:42
19065	MGS	02-004/12:16:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/12:03:42
19066	MGS	02-004/12:16:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/12:03:42
19067	MGS	02-004/12:16:21	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19068	MGS	02-004/12:16:25		NOTE: End fixed Sub-Reflector for Radio Science		02-004/12:03:46
19069	MGS	02-004/12:22:55		NOTE: Exit Solar Eclipse 12632		02-004/12:10:16
19070	MGS	02-004/12:38:21		NOTE: Periapsis 12633 ----------		02-004/12:25:41
19071	MGS	02-004/12:43:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/12:31:15
19072	MGS	02-004/12:43:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/12:31:15
19073	MGS	02-004/12:43:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/12:31:16
19074	MGS	02-004/12:43:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/12:31:16
19075	MGS	02-004/13:05:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/12:53:16
19076	MGS	02-004/13:05:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/12:53:16
19077	MGS	02-004/13:15:56		NOTE: Start Block (SSRMGR)		02-004/13:03:16
19078	MGS	02-004/13:15:56		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-004/13:03:16
19079	MGS	02-004/13:15:57		SSR 1A Data Enable	CSD1AE	02-004/13:03:17
19080	MGS	02-004/13:15:57		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-004/13:03:17
19081	MGS	02-004/13:28:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/13:15:35
19082	MGS	02-004/13:30:22		NOTE: Start Block (MAP_PB_ODY)		02-004/13:17:42
19083	MGS	02-004/13:30:23		: 00:23:59, 01:34:54, FALSE, FALSE, FALSE, 00:01:15, 00:06:50, 01:20:15, 00:06:33	AEMINI	02-004/13:17:43
19084	MGS	02-004/13:30:23		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/13:17:43
19085	MGS	02-004/13:30:23		NOTE: Start EVP data return script		02-004/13:17:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19086	MGS	02-004/13:30:24		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-004T13:59:47.000	AEMPBI	02-004/13:17:44
19087	MGS	02-004/13:33:15		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/13:20:35
19088	MGS	02-004/13:33:15		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8304000, DUR=00:17:18		02-004/13:20:35
19089	MGS	02-004/13:33:15		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-004/13:20:35
19090	MGS	02-004/13:33:15		: 00:08:13, FALSE	RDSCII	02-004/13:20:35
19091	MGS	02-004/13:33:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/13:20:35
19092	MGS	02-004/13:33:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/13:20:35
19093	MGS	02-004/13:33:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/13:20:35
19094	MGS	02-004/13:33:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/13:20:35
19095	MGS	02-004/13:33:15	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19096	MGS	02-004/13:33:15	63	NOTE: Carrier Only -- No Telemetry Modulation		
19097	MGS	02-004/13:35:19		NOTE: Enter Planetary Atmosphere 12633		02-004/13:22:39
19098	MGS	02-004/13:37:25		NOTE: Apoapsis 12633 -		02-004/13:24:46
19099	MGS	02-004/13:39:23		SSR 1B Data Disable	CSD1BX	02-004/13:26:43
19100	MGS	02-004/13:39:23		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-004/13:26:43
19101	MGS	02-004/13:39:24		NOTE: End Block (SSRMGR)		02-004/13:26:44
19102	MGS	02-004/13:40:22		NOTE: Enter Solar Eclipse 12633		02-004/13:27:43
19103	MGS	02-004/13:40:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/13:27:43
19104	MGS	02-004/13:40:48		NOTE: Enter Earth Occultation 12633		02-004/13:28:08
19105	MGS	02-004/13:40:48	63	NOTE: Loss Of X-Band Signal		
19106	MGS	02-004/13:41:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/13:28:48
19107	MGS	02-004/13:41:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/13:28:48
19108	MGS	02-004/13:41:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/13:28:48
19109	MGS	02-004/13:41:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/13:28:48
19110	MGS	02-004/13:41:28		NOTE: End EVP script		02-004/13:28:49
19111	MGS	02-004/13:41:29		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/13:28:49
19112	MGS	02-004/13:41:29		NOTE: End Block (MAP_RT)		02-004/13:28:50
19113	MGS	02-004/13:41:32		NOTE: End fixed Sub-Reflector for Radio Science		02-004/13:28:53
19114	MGS	02-004/14:04:22		: 01:34:54	RPAONX	02-004/13:51:42
19115	MGS	02-004/14:04:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/13:51:42
19116	MGS	02-004/14:04:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/13:52:16
19117	MGS	02-004/14:04:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/13:52:16
19118	MGS	02-004/14:05:00		Command the PSE with included data word: 3990	SWPSEL	02-004/13:52:20
19119	MGS	02-004/14:05:01		Set eclipse egress script address: 0158	SWSEES	02-004/13:52:21
19120	MGS	02-004/14:06:07		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/13:53:27
19121	MGS	02-004/14:06:15		NOTE: Exit Earth Occultation 12633		02-004/13:53:35
19122	MGS	02-004/14:06:15	63	Acquisition Of X-Band Signal		
19123	MGS	02-004/14:06:15	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19124	MGS	02-004/14:12:02		NOTE: Exit Planetary Atmosphere 12633		02-004/13:59:22
19125	MGS	02-004/14:12:27		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:16:10	AEMPB	02-004/13:59:47
19126	MGS	02-004/14:12:27		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-004/13:59:47
19127	MGS	02-004/14:12:27		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-004/13:59:47
19128	MGS	02-004/14:12:28		SSR 1B Data Enable	CSD1BE	02-004/13:59:48
19129	MGS	02-004/14:12:28		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-004/13:59:48
19130	MGS	02-004/14:12:28	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19131	MGS	02-004/14:20:41		NOTE: Exit Solar Eclipse 12633		02-004/14:08:02
19132	MGS	02-004/14:36:15		NOTE: Periapsis 12634 ----------		02-004/14:23:36
19133	MGS	02-004/14:45:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/14:33:01
19134	MGS	02-004/14:45:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/14:33:01
19135	MGS	02-004/14:45:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/14:33:02
19136	MGS	02-004/14:45:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/14:33:02
19137	MGS	02-004/15:07:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/14:55:02
19138	MGS	02-004/15:07:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/14:55:02
19139	MGS	02-004/15:23:06		SSR 1B Data Disable	CSD1BX	02-004/15:10:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19140	MGS	02-004/15:23:06		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-004/15:10:26
19141	MGS	02-004/15:23:06		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-004/15:10:26
19142	MGS	02-004/15:23:06	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19143	MGS	02-004/15:28:09		NOTE: Start Block (MAP_RT)		02-004/15:15:29
19144	MGS	02-004/15:28:10		: 00:24:08, 01:34:34, FALSE, TRUE, FALSE, 00:01:15, 00:08:26, 01:16:43, 00:08:09	AEMINI	02-004/15:15:30
19145	MGS	02-004/15:28:10		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/15:15:30
19146	MGS	02-004/15:28:10		NOTE: Start EVP data return script		02-004/15:15:30
19147	MGS	02-004/15:28:11		: SE_2A, RTM, 01:16:42, MRC, 2002-004T15:59:20.000	AEMRTI	02-004/15:15:31
19148	MGS	02-004/15:33:07		NOTE: Enter Planetary Atmosphere 12634		02-004/15:20:27
19149	MGS	02-004/15:35:09		NOTE: Apoapsis 12634 -		02-004/15:22:29
19150	MGS	02-004/15:38:10		NOTE: Enter Solar Eclipse 12634		02-004/15:25:30
19151	MGS	02-004/15:38:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/15:25:30
19152	MGS	02-004/15:38:35		NOTE: Enter Earth Occultation 12634		02-004/15:25:55
19153	MGS	02-004/15:38:35	63	NOTE: Loss Of X-Band Signal		
19154	MGS	02-004/15:39:16		NOTE: End EVP script		02-004/15:26:36
19155	MGS	02-004/15:39:16		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/15:26:36
19156	MGS	02-004/15:39:17		NOTE: End Block (MAP_PB_ODY)		02-004/15:26:37
19157	MGS	02-004/15:58:33		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/15:45:53
19158	MGS	02-004/16:02:18		: 01:34:34	RPAONX	02-004/15:49:38
19159	MGS	02-004/16:02:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/15:49:38
19160	MGS	02-004/16:02:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/15:50:02
19161	MGS	02-004/16:02:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/15:50:02
19162	MGS	02-004/16:02:47		Set eclipse egress script address: 019A	SWSEES	02-004/15:50:07
19163	MGS	02-004/16:03:33		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-004/15:50:53
19164	MGS	02-004/16:03:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/15:50:53
19165	MGS	02-004/16:03:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/15:50:53
19166	MGS	02-004/16:03:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/15:50:53
19167	MGS	02-004/16:03:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/15:50:53
19168	MGS	02-004/16:04:03		NOTE: Exit Earth Occultation 12634		02-004/15:51:23
19169	MGS	02-004/16:04:03	63	Acquisition Of X-Band Signal		
19170	MGS	02-004/16:04:03	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19171	MGS	02-004/16:04:03	63	NOTE: Carrier Only -- No Telemetry Modulation		
19172	MGS	02-004/16:09:50		NOTE: Exit Planetary Atmosphere 12634		02-004/15:57:10
19173	MGS	02-004/16:11:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/15:59:19
19174	MGS	02-004/16:11:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/15:59:19
19175	MGS	02-004/16:11:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/15:59:19
19176	MGS	02-004/16:11:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/15:59:19
19177	MGS	02-004/16:11:59	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19178	MGS	02-004/16:12:00		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-004/15:59:20
19179	MGS	02-004/16:12:00		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/15:59:20
19180	MGS	02-004/16:12:00		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/15:59:20
19181	MGS	02-004/16:12:00	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19182	MGS	02-004/16:12:04		NOTE: End fixed Sub-Reflector for Radio Science		02-004/15:59:24
19183	MGS	02-004/16:18:29		NOTE: Exit Solar Eclipse 12634		02-004/16:05:49
19184	MGS	02-004/16:34:00		NOTE: Periapsis 12635 ----------		02-004/16:21:20
19185	MGS	02-004/16:39:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/16:26:48
19186	MGS	02-004/16:39:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/16:26:48
19187	MGS	02-004/16:39:29		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/16:26:49
19188	MGS	02-004/16:39:29		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/16:26:49
19189	MGS	02-004/17:01:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/16:48:49
19190	MGS	02-004/17:01:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/16:48:49
19191	MGS	02-004/17:23:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/17:11:02
19192	MGS	02-004/17:25:56		NOTE: Start EVP data return script		02-004/17:13:16
19193	MGS	02-004/17:28:42		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/17:16:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19194	MGS	02-004/17:28:42		: 00:08:09, FALSE	RDSCII	02-004/17:16:02
19195	MGS	02-004/17:28:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/17:16:02
19196	MGS	02-004/17:28:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/17:16:02
19197	MGS	02-004/17:28:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/17:16:02
19198	MGS	02-004/17:28:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/17:16:02
19199	MGS	02-004/17:28:42	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19200	MGS	02-004/17:28:42	63	NOTE: Carrier Only -- No Telemetry Modulation		
19201	MGS	02-004/17:30:52		NOTE: Enter Planetary Atmosphere 12635		02-004/17:18:12
19202	MGS	02-004/17:32:37		NOTE: Apoapsis 12635 -		02-004/17:19:57
19203	MGS	02-004/17:35:56		NOTE: Enter Solar Eclipse 12635		02-004/17:23:16
19204	MGS	02-004/17:35:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/17:23:16
19205	MGS	02-004/17:36:21		NOTE: Enter Earth Occultation 12635		02-004/17:23:41
19206	MGS	02-004/17:36:21	63	NOTE: Loss Of X-Band Signal		
19207	MGS	02-004/17:36:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/17:24:11
19208	MGS	02-004/17:36:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/17:24:11
19209	MGS	02-004/17:36:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/17:24:11
19210	MGS	02-004/17:36:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/17:24:11
19211	MGS	02-004/17:36:52		NOTE: End EVP script		02-004/17:24:12
19212	MGS	02-004/17:36:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/17:24:12
19213	MGS	02-004/17:36:56		NOTE: End fixed Sub-Reflector for Radio Science		02-004/17:24:16
19214	MGS	02-004/17:56:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/17:43:39
19215	MGS	02-004/18:00:04		: 01:34:34	RPAONX	02-004/17:47:24
19216	MGS	02-004/18:00:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/17:47:24
19217	MGS	02-004/18:00:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/17:47:49
19218	MGS	02-004/18:00:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/17:47:49
19219	MGS	02-004/18:00:34		Set eclipse egress script address: 01DC	SWSEES	02-004/17:47:54
19220	MGS	02-004/18:01:19		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-004/17:48:39
19221	MGS	02-004/18:01:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/17:48:39
19222	MGS	02-004/18:01:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/17:48:39
19223	MGS	02-004/18:01:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/17:48:39
19224	MGS	02-004/18:01:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/17:48:39
19225	MGS	02-004/18:01:49		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/17:49:09
19226	MGS	02-004/18:01:51		NOTE: Exit Earth Occultation 12635		02-004/17:49:10
19227	MGS	02-004/18:01:51	63	Acquisition Of X-Band Signal		
19228	MGS	02-004/18:01:51	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19229	MGS	02-004/18:01:51	63	NOTE: Carrier Only -- No Telemetry Modulation		
19230	MGS	02-004/18:07:37		NOTE: Exit Planetary Atmosphere 12635		02-004/17:54:57
19231	MGS	02-004/18:09:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/17:57:05
19232	MGS	02-004/18:09:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/17:57:05
19233	MGS	02-004/18:09:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/17:57:05
19234	MGS	02-004/18:09:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/17:57:05
19235	MGS	02-004/18:09:45	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19236	MGS	02-004/18:09:46		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-004/17:57:06
19237	MGS	02-004/18:09:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/17:57:06
19238	MGS	02-004/18:09:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/17:57:06
19239	MGS	02-004/18:09:46	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19240	MGS	02-004/18:09:50		NOTE: End fixed Sub-Reflector for Radio Science		02-004/17:57:10
19241	MGS	02-004/18:16:15		NOTE: Exit Solar Eclipse 12635		02-004/18:03:35
19242	MGS	02-004/18:31:43		NOTE: Periapsis 12636 ----------		02-004/18:19:03
19243	MGS	02-004/18:37:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/18:24:34
19244	MGS	02-004/18:37:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/18:24:34
19245	MGS	02-004/18:37:15		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/18:24:35
19246	MGS	02-004/18:37:15		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/18:24:35
19247	MGS	02-004/18:59:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/18:46:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19248	MGS	02-004/18:59:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/18:46:35
19249	MGS	02-004/19:09:04		NOTE: Start Block (SSRMGR)		02-004/18:56:24
19250	MGS	02-004/19:09:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-004/18:56:24
19251	MGS	02-004/19:09:05		SSR 1B Data Enable	CSD1BE	02-004/18:56:25
19252	MGS	02-004/19:09:05		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-004/18:56:25
19253	MGS	02-004/19:21:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/19:08:48
19254	MGS	02-004/19:23:39		NOTE: Start Block (MAP_PB_ODY)		02-004/19:10:59
19255	MGS	02-004/19:23:40		: 00:24:08, 01:34:35, FALSE, FALSE, FALSE, 00:01:15, 00:06:46, 01:20:04, 00:06:29	AEMINI	02-004/19:11:00
19256	MGS	02-004/19:23:40		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/19:11:00
19257	MGS	02-004/19:23:40		NOTE: Start EVP data return script		02-004/19:11:00
19258	MGS	02-004/19:23:41		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-004T19:53:09.000	AEMPBI	02-004/19:11:01
19259	MGS	02-004/19:26:28		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/19:13:48
19260	MGS	02-004/19:26:28		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8344000, DUR=00:17:23		02-004/19:13:48
19261	MGS	02-004/19:26:28		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-004/19:13:48
19262	MGS	02-004/19:26:28		: 00:08:09, FALSE	RDSCII	02-004/19:13:48
19263	MGS	02-004/19:26:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/19:13:48
19264	MGS	02-004/19:26:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/19:13:48
19265	MGS	02-004/19:26:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/19:13:48
19266	MGS	02-004/19:26:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/19:13:48
19267	MGS	02-004/19:26:28	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19268	MGS	02-004/19:26:28	63	NOTE: Carrier Only -- No Telemetry Modulation		
19269	MGS	02-004/19:28:36		NOTE: Enter Planetary Atmosphere 12636		02-004/19:15:55
19270	MGS	02-004/19:30:00	15	Begin Pre-Cal		
19271	MGS	02-004/19:30:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
19272	MGS	02-004/19:30:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
19273	MGS	02-004/19:30:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
19274	MGS	02-004/19:30:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
19275	MGS	02-004/19:30:00	15	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
19276	MGS	02-004/19:30:00	15	Config: TGC: DEST=37		
19277	MGS	02-004/19:30:00	15	Config: TGC: BAND=X, BR=42666.666667		
19278	MGS	02-004/19:30:00	15	Config: FSS: CH=2, PRI_FL=10000		
19279	MGS	02-004/19:30:00	15	Config: RSR		
19280	MGS	02-004/19:30:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
19281	MGS	02-004/19:30:00	15	Config: BVR		
19282	MGS	02-004/19:30:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
19283	MGS	02-004/19:30:00	15	Config: MDA: SMPL=0.1		
19284	MGS	02-004/19:30:10		NOTE: Apoapsis 12636 -		02-004/19:17:30
19285	MGS	02-004/19:32:41		SSR 1A Data Disable	CSD1AX	02-004/19:20:00
19286	MGS	02-004/19:32:41		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-004/19:20:00
19287	MGS	02-004/19:32:42		NOTE: End Block (SSRMGR)		02-004/19:20:01
19288	MGS	02-004/19:33:40		NOTE: Enter Solar Eclipse 12636		02-004/19:21:00
19289	MGS	02-004/19:33:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/19:21:00
19290	MGS	02-004/19:34:04		NOTE: Enter Earth Occultation 12636		02-004/19:21:24
19291	MGS	02-004/19:34:04	63	NOTE: Loss Of X-Band Signal		
19292	MGS	02-004/19:34:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/19:21:57
19293	MGS	02-004/19:34:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/19:21:57
19294	MGS	02-004/19:34:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/19:21:57
19295	MGS	02-004/19:34:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/19:21:57
19296	MGS	02-004/19:34:38		NOTE: End EVP script		02-004/19:21:58
19297	MGS	02-004/19:34:39		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/19:21:58
19298	MGS	02-004/19:34:39		NOTE: End Block (MAP_RT)		02-004/19:21:59
19299	MGS	02-004/19:34:42		NOTE: End fixed Sub-Reflector for Radio Science		02-004/19:22:02
19300	MGS	02-004/19:57:49		: 01:34:35	RPAONX	02-004/19:45:08
19301	MGS	02-004/19:57:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/19:45:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19302	MGS	02-004/19:58:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/19:45:35
19303	MGS	02-004/19:58:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/19:45:35
19304	MGS	02-004/19:58:20		Command the PSE with included data word: 3990	SWPSEL	02-004/19:45:39
19305	MGS	02-004/19:58:21		Set eclipse egress script address: 0158	SWSEES	02-004/19:45:40
19306	MGS	02-004/19:59:34		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/19:46:53
19307	MGS	02-004/19:59:36		NOTE: Exit Earth Occultation 12636		02-004/19:46:56
19308	MGS	02-004/19:59:36	63	Acquisition Of X-Band Signal		
19309	MGS	02-004/19:59:36	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19310	MGS	02-004/20:05:23		NOTE: Exit Planetary Atmosphere 12636		02-004/19:52:42
19311	MGS	02-004/20:05:50		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:15:55	AEMPB	02-004/19:53:09
19312	MGS	02-004/20:05:50		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-004/19:53:09
19313	MGS	02-004/20:05:50		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-004/19:53:09
19314	MGS	02-004/20:05:51		SSR 1A Data Enable	CSD1AE	02-004/19:53:10
19315	MGS	02-004/20:05:51		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-004/19:53:10
19316	MGS	02-004/20:05:51	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19317	MGS	02-004/20:14:00		NOTE: Exit Solar Eclipse 12636		02-004/20:01:19
19318	MGS	02-004/20:29:28		NOTE: Periapsis 12637 ----------		02-004/20:16:47
19319	MGS	02-004/20:38:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/20:26:18
19320	MGS	02-004/20:38:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/20:26:18
19321	MGS	02-004/20:39:00		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/20:26:19
19322	MGS	02-004/20:39:00		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/20:26:19
19323	MGS	02-004/21:00:00	15	Begin Tracking		
19324	MGS	02-004/21:00:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19325	MGS	02-004/21:01:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/20:48:19
19326	MGS	02-004/21:01:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/20:48:19
19327	MGS	02-004/21:16:29		SSR 1A Data Disable	CSD1AX	02-004/21:03:48
19328	MGS	02-004/21:16:29		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-004/21:03:48
19329	MGS	02-004/21:16:29		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-004/21:03:48
19330	MGS	02-004/21:16:29	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19331	MGS	02-004/21:16:29	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19332	MGS	02-004/21:20:00	63	End Tracking		
19333	MGS	02-004/21:21:22		NOTE: Start Block (MAP_RT)		02-004/21:08:41
19334	MGS	02-004/21:21:23		: 00:24:08, 01:34:34, FALSE, TRUE, FALSE, 00:01:15, 00:08:26, 01:16:43, 00:08:09	AEMINI	02-004/21:08:42
19335	MGS	02-004/21:21:23		Enable sending eclipse ingress script when array power disappears	SWEISE	02-004/21:08:42
19336	MGS	02-004/21:21:23		NOTE: Start EVP data return script		02-004/21:08:42
19337	MGS	02-004/21:21:24		: SE_2A, RTM, 01:16:42, MRC, 2002-004T21:52:32.000	AEMRTI	02-004/21:08:43
19338	MGS	02-004/21:26:18		NOTE: Enter Planetary Atmosphere 12637		02-004/21:13:37
19339	MGS	02-004/21:28:06		NOTE: Apoapsis 12637 -		02-004/21:15:25
19340	MGS	02-004/21:31:23		NOTE: Enter Solar Eclipse 12637		02-004/21:18:42
19341	MGS	02-004/21:31:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/21:18:42
19342	MGS	02-004/21:31:47		NOTE: Enter Earth Occultation 12637		02-004/21:19:06
19343	MGS	02-004/21:31:47	15	NOTE: Loss Of X-Band Signal		
19344	MGS	02-004/21:32:24		NOTE: End EVP script		02-004/21:19:43
19345	MGS	02-004/21:32:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/21:19:43
19346	MGS	02-004/21:32:25		NOTE: End Block (MAP_PB_ODY)		02-004/21:19:44
19347	MGS	02-004/21:35:00	63	End Post-Cal		
19348	MGS	02-004/21:51:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/21:39:05
19349	MGS	02-004/21:55:31		: 01:34:34	RPAONX	02-004/21:42:50
19350	MGS	02-004/21:55:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/21:42:50
19351	MGS	02-004/21:56:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/21:43:19
19352	MGS	02-004/21:56:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/21:43:19
19353	MGS	02-004/21:56:05		Set eclipse egress script address: 019A	SWSEES	02-004/21:43:24
19354	MGS	02-004/21:56:46		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-004/21:44:05
19355	MGS	02-004/21:56:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/21:44:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19356	MGS	02-004/21:56:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/21:44:05
19357	MGS	02-004/21:56:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/21:44:05
19358	MGS	02-004/21:56:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/21:44:05
19359	MGS	02-004/21:57:20		NOTE: Exit Earth Occultation 12637		02-004/21:44:39
19360	MGS	02-004/21:57:20	15	Acquisition Of X-Band Signal		
19361	MGS	02-004/21:57:20	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19362	MGS	02-004/21:57:20	15	NOTE: Carrier Only -- No Telemetry Modulation		
19363	MGS	02-004/22:03:06		NOTE: Exit Planetary Atmosphere 12637		02-004/21:50:25
19364	MGS	02-004/22:05:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/21:52:31
19365	MGS	02-004/22:05:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/21:52:31
19366	MGS	02-004/22:05:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/21:52:31
19367	MGS	02-004/22:05:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/21:52:31
19368	MGS	02-004/22:05:12	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19369	MGS	02-004/22:05:13		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-004/21:52:32
19370	MGS	02-004/22:05:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/21:52:32
19371	MGS	02-004/22:05:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/21:52:32
19372	MGS	02-004/22:05:13	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19373	MGS	02-004/22:05:17		NOTE: End fixed Sub-Reflector for Radio Science		02-004/21:52:36
19374	MGS	02-004/22:11:42		NOTE: Exit Solar Eclipse 12637		02-004/21:59:01
19375	MGS	02-004/22:27:04		NOTE: Periapsis 12638 ----------		02-004/22:14:23
19376	MGS	02-004/22:32:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-004/22:20:00
19377	MGS	02-004/22:32:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-004/22:20:00
19378	MGS	02-004/22:32:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-004/22:20:01
19379	MGS	02-004/22:32:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-004/22:20:01
19380	MGS	02-004/22:54:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-004/22:42:01
19381	MGS	02-004/22:54:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-004/22:42:01
19382	MGS	02-004/23:16:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/23:04:14
19383	MGS	02-004/23:19:05		NOTE: Start EVP data return script		02-004/23:06:24
19384	MGS	02-004/23:21:55		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-004/23:09:14
19385	MGS	02-004/23:21:55		: 00:08:09, FALSE	RDSCII	02-004/23:09:14
19386	MGS	02-004/23:21:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/23:09:14
19387	MGS	02-004/23:21:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/23:09:14
19388	MGS	02-004/23:21:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/23:09:14
19389	MGS	02-004/23:21:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/23:09:14
19390	MGS	02-004/23:21:55	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19391	MGS	02-004/23:21:55	15	NOTE: Carrier Only -- No Telemetry Modulation		
19392	MGS	02-004/23:24:01		NOTE: Enter Planetary Atmosphere 12638		02-004/23:11:20
19393	MGS	02-004/23:25:38		NOTE: Apoapsis 12638 -		02-004/23:12:57
19394	MGS	02-004/23:29:05		NOTE: Enter Solar Eclipse 12638		02-004/23:16:24
19395	MGS	02-004/23:29:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-004/23:16:24
19396	MGS	02-004/23:29:29		NOTE: Enter Earth Occultation 12638		02-004/23:16:48
19397	MGS	02-004/23:29:29	15	NOTE: Loss Of X-Band Signal		
19398	MGS	02-004/23:30:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/23:17:23
19399	MGS	02-004/23:30:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/23:17:23
19400	MGS	02-004/23:30:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/23:17:23
19401	MGS	02-004/23:30:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/23:17:23
19402	MGS	02-004/23:30:05		NOTE: End EVP script		02-004/23:17:24
19403	MGS	02-004/23:30:05		Turn off the MOT Exciter and RPA beam	STRPAF	02-004/23:17:24
19404	MGS	02-004/23:30:09		NOTE: End fixed Sub-Reflector for Radio Science		02-004/23:17:28
19405	MGS	02-004/23:49:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-004/23:36:47
19406	MGS	02-004/23:53:13		: 01:34:34	RPAONX	02-004/23:40:32
19407	MGS	02-004/23:53:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-004/23:40:32
19408	MGS	02-004/23:53:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-004/23:41:01
19409	MGS	02-004/23:53:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-004/23:41:01

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19410	MGS	02-004/23:53:47		Set eclipse egress script address: 01DC	SWSEES	02-004/23:41:06
19411	MGS	02-004/23:54:28		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-004/23:41:47
19412	MGS	02-004/23:54:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-004/23:41:47
19413	MGS	02-004/23:54:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-004/23:41:47
19414	MGS	02-004/23:54:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-004/23:41:47
19415	MGS	02-004/23:54:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-004/23:41:47
19416	MGS	02-004/23:54:58		Disables autonomous command to send eclipse ingress script	SWEISX	02-004/23:42:17
19417	MGS	02-004/23:55:02		NOTE: Exit Earth Occultation 12638		02-004/23:42:21
19418	MGS	02-004/23:55:02	15	Acquisition Of X-Band Signal		
19419	MGS	02-004/23:55:02	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19420	MGS	02-004/23:55:02	15	NOTE: Carrier Only -- No Telemetry Modulation		
19421	MGS	02-005/00:00:00		Light Time: OWLT = 12:41, RTLT = 25:22		
19422	MGS	02-005/00:00:48		NOTE: Exit Planetary Atmosphere 12638		02-004/23:48:07
19423	MGS	02-005/00:02:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-004/23:50:13
19424	MGS	02-005/00:02:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-004/23:50:13
19425	MGS	02-005/00:02:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-004/23:50:13
19426	MGS	02-005/00:02:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-004/23:50:13
19427	MGS	02-005/00:02:54	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19428	MGS	02-005/00:02:55		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-004/23:50:14
19429	MGS	02-005/00:02:55		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-004/23:50:14
19430	MGS	02-005/00:02:55		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-004/23:50:14
19431	MGS	02-005/00:02:55	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19432	MGS	02-005/00:02:59		NOTE: End fixed Sub-Reflector for Radio Science		02-004/23:50:18
19433	MGS	02-005/00:09:24		NOTE: Exit Solar Eclipse 12638		02-004/23:56:43
19434	MGS	02-005/00:24:24		NOTE: Periapsis 12639 ----------		02-005/00:11:42
19435	MGS	02-005/00:30:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/00:17:42
19436	MGS	02-005/00:30:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/00:17:42
19437	MGS	02-005/00:30:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/00:17:43
19438	MGS	02-005/00:30:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/00:17:43
19439	MGS	02-005/00:52:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/00:39:43
19440	MGS	02-005/00:52:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/00:39:43
19441	MGS	02-005/01:02:23		NOTE: Start Block (SSRMGR)		02-005/00:49:42
19442	MGS	02-005/01:02:23		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-005/00:49:42
19443	MGS	02-005/01:02:24		SSR 1A Data Enable	CSD1AE	02-005/00:49:43
19444	MGS	02-005/01:02:24		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-005/00:49:43
19445	MGS	02-005/01:14:37		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/01:01:56
19446	MGS	02-005/01:16:47		NOTE: Start Block (MAP_PB_ODY)		02-005/01:04:06
19447	MGS	02-005/01:16:48		: 00:24:08, 01:34:35, FALSE, FALSE, FALSE, 00:01:15, 00:06:46, 01:20:04, 00:06:29	AEMINI	02-005/01:04:07
19448	MGS	02-005/01:16:48		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/01:04:07
19449	MGS	02-005/01:16:48		NOTE: Start EVP data return script		02-005/01:04:07
19450	MGS	02-005/01:16:49		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-005T01:46:17.000	AEMPBI	02-005/01:04:08
19451	MGS	02-005/01:19:37		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/01:06:56
19452	MGS	02-005/01:19:37		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8264000, DUR=00:17:13		02-005/01:06:56
19453	MGS	02-005/01:19:37		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-005/01:06:56
19454	MGS	02-005/01:19:37		: 00:08:09, FALSE	RDSCII	02-005/01:06:56
19455	MGS	02-005/01:19:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/01:06:56
19456	MGS	02-005/01:19:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/01:06:56
19457	MGS	02-005/01:19:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/01:06:56
19458	MGS	02-005/01:19:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/01:06:56
19459	MGS	02-005/01:19:37	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19460	MGS	02-005/01:19:37	15	NOTE: Carrier Only -- No Telemetry Modulation		
19461	MGS	02-005/01:21:44		NOTE: Enter Planetary Atmosphere 12639		02-005/01:09:03
19462	MGS	02-005/01:23:04		NOTE: Apoapsis 12639 -		02-005/01:10:22
19463	MGS	02-005/01:25:49		SSR 1B Data Disable	CSD1BX	02-005/01:13:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19464	MGS	02-005/01:25:49		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-005/01:13:08
19465	MGS	02-005/01:25:50		NOTE: End Block (SSRMGR)		02-005/01:13:09
19466	MGS	02-005/01:26:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/01:14:07
19467	MGS	02-005/01:26:49		NOTE: Enter Solar Eclipse 12639		02-005/01:14:07
19468	MGS	02-005/01:27:11		NOTE: Enter Earth Occultation 12639		02-005/01:14:30
19469	MGS	02-005/01:27:11	15	NOTE: Loss Of X-Band Signal		
19470	MGS	02-005/01:27:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/01:15:05
19471	MGS	02-005/01:27:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/01:15:05
19472	MGS	02-005/01:27:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/01:15:05
19473	MGS	02-005/01:27:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/01:15:05
19474	MGS	02-005/01:27:47		NOTE: End EVP script		02-005/01:15:06
19475	MGS	02-005/01:27:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/01:15:06
19476	MGS	02-005/01:27:48		NOTE: End Block (MAP_RT)		02-005/01:15:07
19477	MGS	02-005/01:27:51		NOTE: End fixed Sub-Reflector for Radio Science		02-005/01:15:10
19478	MGS	02-005/01:45:00	45	Begin Pre-Cal		
19479	MGS	02-005/01:45:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
19480	MGS	02-005/01:45:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
19481	MGS	02-005/01:45:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
19482	MGS	02-005/01:45:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
19483	MGS	02-005/01:45:00	45	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
19484	MGS	02-005/01:45:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
19485	MGS	02-005/01:45:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
19486	MGS	02-005/01:45:00	45	Config: TGC: DEST=37		
19487	MGS	02-005/01:45:00	45	Config: TGC: BAND=X, BR=42666.666667		
19488	MGS	02-005/01:45:00	45	Config: FSS: CH=2, PRI_FL=10000		
19489	MGS	02-005/01:45:00	45	Config: RSR		
19490	MGS	02-005/01:45:00	45	Config: TXL		
19491	MGS	02-005/01:45:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
19492	MGS	02-005/01:45:00	45	Config: BVR		
19493	MGS	02-005/01:45:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
19494	MGS	02-005/01:45:00	45	Config: MDA: SMPL=0.1		
19495	MGS	02-005/01:45:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
19496	MGS	02-005/01:45:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
19497	MGS	02-005/01:45:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
19498	MGS	02-005/01:50:56		: 01:34:35	RPAONX	02-005/01:38:15
19499	MGS	02-005/01:50:56		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/01:38:15
19500	MGS	02-005/01:51:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/01:38:43
19501	MGS	02-005/01:51:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/01:38:43
19502	MGS	02-005/01:51:28		Command the PSE with included data word: 3990	SWPSEL	02-005/01:38:47
19503	MGS	02-005/01:51:29		Set eclipse egress script address: 0158	SWSEES	02-005/01:38:48
19504	MGS	02-005/01:52:41		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/01:40:00
19505	MGS	02-005/01:52:46		NOTE: Exit Earth Occultation 12639		02-005/01:40:05
19506	MGS	02-005/01:52:46	15	Acquisition Of X-Band Signal		
19507	MGS	02-005/01:52:46	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19508	MGS	02-005/01:58:31		NOTE: Exit Planetary Atmosphere 12639		02-005/01:45:50
19509	MGS	02-005/01:58:57		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:15:55	AEMPB	02-005/01:46:16
19510	MGS	02-005/01:58:57		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-005/01:46:16
19511	MGS	02-005/01:58:57		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-005/01:46:16
19512	MGS	02-005/01:58:58		SSR 1B Data Enable	CSD1BE	02-005/01:46:17
19513	MGS	02-005/01:58:58		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-005/01:46:17
19514	MGS	02-005/01:58:58	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19515	MGS	02-005/02:07:08		NOTE: Exit Solar Eclipse 12639		02-005/01:54:26
19516	MGS	02-005/02:22:17		NOTE: Periapsis 12640 ----------		02-005/02:09:35
19517	MGS	02-005/02:32:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/02:19:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19518	MGS	02-005/02:32:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/02:19:25
19519	MGS	02-005/02:32:08		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/02:19:26
19520	MGS	02-005/02:32:08		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/02:19:26
19521	MGS	02-005/02:45:00	45	Begin Tracking		
19522	MGS	02-005/02:45:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19523	MGS	02-005/02:54:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/02:41:26
19524	MGS	02-005/02:54:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/02:41:26
19525	MGS	02-005/03:09:37		SSR 1B Data Disable	CSD1BX	02-005/02:56:55
19526	MGS	02-005/03:09:37		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-005/02:56:55
19527	MGS	02-005/03:09:37		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-005/02:56:55
19528	MGS	02-005/03:09:37	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19529	MGS	02-005/03:09:37	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19530	MGS	02-005/03:14:34		NOTE: Start Block (MAP_RT)		02-005/03:01:52
19531	MGS	02-005/03:14:35		: 00:24:08, 01:34:34, FALSE, TRUE, FALSE, 00:01:15, 00:08:26, 01:16:43, 00:08:09	AEMINI	02-005/03:01:53
19532	MGS	02-005/03:14:35		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/03:01:53
19533	MGS	02-005/03:14:35		NOTE: Start EVP data return script		02-005/03:01:53
19534	MGS	02-005/03:14:36		: SE_2A, RTM, 01:16:42, MRC, 2002-005T03:45:43.000	AEMRTI	02-005/03:01:54
19535	MGS	02-005/03:19:28		NOTE: Enter Planetary Atmosphere 12640		02-005/03:06:46
19536	MGS	02-005/03:21:07		NOTE: Apoapsis 12640 -		02-005/03:08:26
19537	MGS	02-005/03:24:35		NOTE: Enter Solar Eclipse 12640		02-005/03:11:53
19538	MGS	02-005/03:24:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/03:11:53
19539	MGS	02-005/03:24:55		NOTE: Enter Earth Occultation 12640		02-005/03:12:13
19540	MGS	02-005/03:24:55	15	NOTE: Loss Of X-Band Signal		
19541	MGS	02-005/03:24:55	45	NOTE: Loss Of X-Band Signal		
19542	MGS	02-005/03:25:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/03:12:50
19543	MGS	02-005/03:25:32		NOTE: End EVP script		02-005/03:12:50
19544	MGS	02-005/03:25:33		NOTE: End Block (MAP_PB_ODY)		02-005/03:12:51
19545	MGS	02-005/03:28:54	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
19546	MGS	02-005/03:30:55	45	Range Modulation On: SUP=3.0dB		
19547	MGS	02-005/03:31:55	45	Begin Ranging Acquisition		
19548	MGS	02-005/03:44:58		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/03:32:16
19549	MGS	02-005/03:48:43		: 01:34:34	RPAONX	02-005/03:36:01
19550	MGS	02-005/03:48:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/03:36:01
19551	MGS	02-005/03:49:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/03:36:26
19552	MGS	02-005/03:49:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/03:36:26
19553	MGS	02-005/03:49:13		Set eclipse egress script address: 019A	SWSEES	02-005/03:36:31
19554	MGS	02-005/03:49:58		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-005/03:37:16
19555	MGS	02-005/03:49:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/03:37:16
19556	MGS	02-005/03:49:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/03:37:16
19557	MGS	02-005/03:49:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/03:37:16
19558	MGS	02-005/03:49:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/03:37:16
19559	MGS	02-005/03:50:33		NOTE: Exit Earth Occultation 12640		02-005/03:37:51
19560	MGS	02-005/03:50:33	15	Acquisition Of X-Band Signal		
19561	MGS	02-005/03:50:33	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19562	MGS	02-005/03:50:33	15	NOTE: Carrier Only -- No Telemetry Modulation		
19563	MGS	02-005/03:50:33	45	Acquisition Of X-Band Signal		
19564	MGS	02-005/03:50:33	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19565	MGS	02-005/03:50:33	45	NOTE: Carrier Only -- No Telemetry Modulation		
19566	MGS	02-005/03:56:17		NOTE: Exit Planetary Atmosphere 12640		02-005/03:43:35
19567	MGS	02-005/03:58:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/03:45:42
19568	MGS	02-005/03:58:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/03:45:42
19569	MGS	02-005/03:58:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/03:45:42
19570	MGS	02-005/03:58:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/03:45:42
19571	MGS	02-005/03:58:24	15	Acquire D/L: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19572	MGS	02-005/03:58:24	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19573	MGS	02-005/03:58:25		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-005/03:45:43
19574	MGS	02-005/03:58:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/03:45:43
19575	MGS	02-005/03:58:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/03:45:43
19576	MGS	02-005/03:58:25	15	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19577	MGS	02-005/03:58:25	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19578	MGS	02-005/03:58:29		NOTE: End fixed Sub-Reflector for Radio Science		02-005/03:45:47
19579	MGS	02-005/04:04:54		NOTE: Exit Solar Eclipse 12640		02-005/03:52:12
19580	MGS	02-005/04:20:30		NOTE: Periapsis 12641 ----------		02-005/04:07:48
19581	MGS	02-005/04:25:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/04:13:11
19582	MGS	02-005/04:25:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/04:13:11
19583	MGS	02-005/04:25:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/04:13:12
19584	MGS	02-005/04:25:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/04:13:12
19585	MGS	02-005/04:38:32	45	NOTE: Transmitter Off in 15 minutes		
19586	MGS	02-005/04:47:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/04:35:12
19587	MGS	02-005/04:47:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/04:35:12
19588	MGS	02-005/04:51:33	45	Range Modulation Off		
19589	MGS	02-005/04:53:32	45	Transmitter Off		
19590	MGS	02-005/05:00:00	15	End Tracking		
19591	MGS	02-005/05:10:07		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/04:57:25
19592	MGS	02-005/05:12:22		NOTE: Start EVP data return script		02-005/04:59:40
19593	MGS	02-005/05:15:00	15	End Post-Cal		
19594	MGS	02-005/05:15:07		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/05:02:25
19595	MGS	02-005/05:15:07		: 00:08:09, FALSE	RDSCII	02-005/05:02:25
19596	MGS	02-005/05:15:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/05:02:25
19597	MGS	02-005/05:15:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/05:02:25
19598	MGS	02-005/05:15:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/05:02:25
19599	MGS	02-005/05:15:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/05:02:25
19600	MGS	02-005/05:15:07	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19601	MGS	02-005/05:15:07	45	NOTE: Carrier Only -- No Telemetry Modulation		
19602	MGS	02-005/05:17:14		NOTE: Enter Planetary Atmosphere 12641		02-005/05:04:32
19603	MGS	02-005/05:19:28		NOTE: Apoapsis 12641 -		02-005/05:06:46
19604	MGS	02-005/05:22:22		NOTE: Enter Solar Eclipse 12641		02-005/05:09:40
19605	MGS	02-005/05:22:22		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/05:09:40
19606	MGS	02-005/05:22:41		NOTE: Enter Earth Occultation 12641		02-005/05:09:59
19607	MGS	02-005/05:22:41	45	NOTE: Loss Of X-Band Signal		
19608	MGS	02-005/05:23:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/05:10:34
19609	MGS	02-005/05:23:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/05:10:34
19610	MGS	02-005/05:23:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/05:10:34
19611	MGS	02-005/05:23:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/05:10:34
19612	MGS	02-005/05:23:17		NOTE: End EVP script		02-005/05:10:35
19613	MGS	02-005/05:23:17		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/05:10:35
19614	MGS	02-005/05:23:21		NOTE: End fixed Sub-Reflector for Radio Science		02-005/05:10:39
19615	MGS	02-005/05:26:41	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
19616	MGS	02-005/05:28:42	45	Range Modulation On: SUP=3.0dB		
19617	MGS	02-005/05:29:42	45	Begin Ranging Acquisition		
19618	MGS	02-005/05:42:45		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/05:30:03
19619	MGS	02-005/05:46:30		: 01:34:34	RPAONX	02-005/05:33:48
19620	MGS	02-005/05:46:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/05:33:48
19621	MGS	02-005/05:46:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/05:34:12
19622	MGS	02-005/05:46:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/05:34:12
19623	MGS	02-005/05:46:59		Set eclipse egress script address: 01DC	SWSEES	02-005/05:34:17
19624	MGS	02-005/05:47:45		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-005/05:35:03
19625	MGS	02-005/05:47:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/05:35:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19626	MGS	02-005/05:47:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/05:35:03
19627	MGS	02-005/05:47:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/05:35:03
19628	MGS	02-005/05:47:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/05:35:03
19629	MGS	02-005/05:48:15		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/05:35:33
19630	MGS	02-005/05:48:20		NOTE: Exit Earth Occultation 12641		02-005/05:35:38
19631	MGS	02-005/05:48:20	45	Acquisition Of X-Band Signal		
19632	MGS	02-005/05:48:20	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19633	MGS	02-005/05:48:20	45	NOTE: Carrier Only -- No Telemetry Modulation		
19634	MGS	02-005/05:54:04		NOTE: Exit Planetary Atmosphere 12641		02-005/05:41:22
19635	MGS	02-005/05:56:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/05:43:29
19636	MGS	02-005/05:56:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/05:43:29
19637	MGS	02-005/05:56:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/05:43:29
19638	MGS	02-005/05:56:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/05:43:29
19639	MGS	02-005/05:56:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19640	MGS	02-005/05:56:12		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-005/05:43:30
19641	MGS	02-005/05:56:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/05:43:30
19642	MGS	02-005/05:56:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/05:43:30
19643	MGS	02-005/05:56:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19644	MGS	02-005/05:56:16		NOTE: End fixed Sub-Reflector for Radio Science		02-005/05:43:34
19645	MGS	02-005/06:02:41		NOTE: Exit Solar Eclipse 12641		02-005/05:49:59
19646	MGS	02-005/06:18:36		NOTE: Periapsis 12642 ----------		02-005/06:05:54
19647	MGS	02-005/06:23:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/06:10:58
19648	MGS	02-005/06:23:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/06:10:58
19649	MGS	02-005/06:23:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/06:10:59
19650	MGS	02-005/06:23:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/06:10:59
19651	MGS	02-005/06:36:20	45	NOTE: Transmitter Off in 15 minutes		
19652	MGS	02-005/06:45:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/06:32:59
19653	MGS	02-005/06:45:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/06:32:59
19654	MGS	02-005/06:49:20	45	Range Modulation Off		
19655	MGS	02-005/06:51:20	45	Transmitter Off		
19656	MGS	02-005/06:55:31		NOTE: Start Block (SSRMGR)		02-005/06:42:49
19657	MGS	02-005/06:55:31		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-005/06:42:49
19658	MGS	02-005/06:55:32		SSR 1B Data Enable	CSD1BE	02-005/06:42:50
19659	MGS	02-005/06:55:32		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-005/06:42:50
19660	MGS	02-005/07:07:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/06:55:12
19661	MGS	02-005/07:10:07		NOTE: Start Block (MAP_PB_ODY)		02-005/06:57:25
19662	MGS	02-005/07:10:08		: 00:24:08, 01:34:35, FALSE, FALSE, FALSE, 00:01:15, 00:06:46, 01:20:04, 00:06:29	AEMINI	02-005/06:57:26
19663	MGS	02-005/07:10:08		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/06:57:26
19664	MGS	02-005/07:10:08		NOTE: Start EVP data return script		02-005/06:57:26
19665	MGS	02-005/07:10:09		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-005T07:39:35.000	AEMPBI	02-005/06:57:27
19666	MGS	02-005/07:12:54		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/07:00:12
19667	MGS	02-005/07:12:54		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8336000, DUR=00:17:22		02-005/07:00:12
19668	MGS	02-005/07:12:54		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-005/07:00:12
19669	MGS	02-005/07:12:54		: 00:08:09, FALSE	RDSCII	02-005/07:00:12
19670	MGS	02-005/07:12:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/07:00:12
19671	MGS	02-005/07:12:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/07:00:12
19672	MGS	02-005/07:12:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/07:00:12
19673	MGS	02-005/07:12:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/07:00:12
19674	MGS	02-005/07:12:54	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19675	MGS	02-005/07:12:54	45	NOTE: Carrier Only -- No Telemetry Modulation		
19676	MGS	02-005/07:15:02		NOTE: Enter Planetary Atmosphere 12642		02-005/07:02:20
19677	MGS	02-005/07:17:24		NOTE: Apoapsis 12642 -		02-005/07:04:41
19678	MGS	02-005/07:19:08		SSR 1A Data Disable	CSD1AX	02-005/07:06:26
19679	MGS	02-005/07:19:08		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-005/07:06:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19680	MGS	02-005/07:19:09		NOTE: End Block (SSRMGR)		02-005/07:06:27
19681	MGS	02-005/07:20:08		NOTE: Enter Solar Eclipse 12642		02-005/07:07:26
19682	MGS	02-005/07:20:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/07:07:26
19683	MGS	02-005/07:20:29		NOTE: Enter Earth Occultation 12642		02-005/07:07:47
19684	MGS	02-005/07:20:29	45	NOTE: Loss Of X-Band Signal		
19685	MGS	02-005/07:21:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/07:08:21
19686	MGS	02-005/07:21:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/07:08:21
19687	MGS	02-005/07:21:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/07:08:21
19688	MGS	02-005/07:21:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/07:08:21
19689	MGS	02-005/07:21:04		NOTE: End EVP script		02-005/07:08:22
19690	MGS	02-005/07:21:04		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/07:08:22
19691	MGS	02-005/07:21:05		NOTE: End Block (MAP_RT)		02-005/07:08:23
19692	MGS	02-005/07:21:08		NOTE: End fixed Sub-Reflector for Radio Science		02-005/07:08:26
19693	MGS	02-005/07:24:28	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
19694	MGS	02-005/07:26:29	45	Range Modulation On: SUP=3.0dB		
19695	MGS	02-005/07:27:29	45	Begin Ranging Acquisition		
19696	MGS	02-005/07:44:16		: 01:34:35	RPAONX	02-005/07:31:34
19697	MGS	02-005/07:44:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/07:31:34
19698	MGS	02-005/07:44:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/07:31:59
19699	MGS	02-005/07:44:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/07:31:59
19700	MGS	02-005/07:44:45		Command the PSE with included data word: 3990	SWPSEL	02-005/07:32:03
19701	MGS	02-005/07:44:46		Set eclipse egress script address: 0158	SWSEES	02-005/07:32:04
19702	MGS	02-005/07:46:01		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/07:33:19
19703	MGS	02-005/07:46:08		NOTE: Exit Earth Occultation 12642		02-005/07:33:25
19704	MGS	02-005/07:46:08	45	Acquisition Of X-Band Signal		
19705	MGS	02-005/07:46:08	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19706	MGS	02-005/07:49:53	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19707	MGS	02-005/07:51:52		NOTE: Exit Planetary Atmosphere 12642		02-005/07:39:10
19708	MGS	02-005/07:52:17		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:15:55	AEMPB	02-005/07:39:35
19709	MGS	02-005/07:52:17		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-005/07:39:35
19710	MGS	02-005/07:52:17		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-005/07:39:35
19711	MGS	02-005/07:52:18		SSR 1A Data Enable	CSD1AE	02-005/07:39:36
19712	MGS	02-005/07:52:18		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-005/07:39:36
19713	MGS	02-005/07:52:18	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19714	MGS	02-005/08:00:28		NOTE: Exit Solar Eclipse 12642		02-005/07:47:45
19715	MGS	02-005/08:16:16		NOTE: Periapsis 12643 ----------		02-005/08:03:33
19716	MGS	02-005/08:25:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/08:12:45
19717	MGS	02-005/08:25:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/08:12:45
19718	MGS	02-005/08:25:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/08:12:46
19719	MGS	02-005/08:25:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/08:12:46
19720	MGS	02-005/08:34:03	45	NOTE: Transmitter Off in 15 minutes		
19721	MGS	02-005/08:47:04	45	Range Modulation Off		
19722	MGS	02-005/08:47:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/08:34:46
19723	MGS	02-005/08:47:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/08:34:46
19724	MGS	02-005/08:49:03	45	Transmitter Off		
19725	MGS	02-005/09:02:57		SSR 1A Data Disable	CSD1AX	02-005/08:50:14
19726	MGS	02-005/09:02:57		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-005/08:50:14
19727	MGS	02-005/09:02:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-005/08:50:14
19728	MGS	02-005/09:02:57	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19729	MGS	02-005/09:07:51		NOTE: Start Block (MAP_RT)		02-005/08:55:08
19730	MGS	02-005/09:07:52		: 00:24:08, 01:34:34, FALSE, TRUE, FALSE, 00:01:15, 00:08:26, 01:16:43, 00:08:09	AEMINI	02-005/08:55:09
19731	MGS	02-005/09:07:52		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/08:55:09
19732	MGS	02-005/09:07:52		NOTE: Start EVP data return script		02-005/08:55:09
19733	MGS	02-005/09:07:53		: SE_2A, RTM, 01:16:42, MRC, 2002-005T09:38:59.000	AEMRTI	02-005/08:55:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19734	MGS	02-005/09:12:46		NOTE: Enter Planetary Atmosphere 12643		02-005/09:00:04
19735	MGS	02-005/09:14:28	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19736	MGS	02-005/09:14:48		NOTE: Apoapsis 12643 -		02-005/09:02:06
19737	MGS	02-005/09:17:51		NOTE: Enter Solar Eclipse 12643		02-005/09:05:09
19738	MGS	02-005/09:17:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/09:05:09
19739	MGS	02-005/09:18:13		NOTE: Enter Earth Occultation 12643		02-005/09:05:31
19740	MGS	02-005/09:18:13	45	NOTE: Loss Of X-Band Signal		
19741	MGS	02-005/09:18:51		NOTE: End EVP script		02-005/09:06:09
19742	MGS	02-005/09:18:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/09:06:09
19743	MGS	02-005/09:18:52		NOTE: End Block (MAP_PB_ODY)		02-005/09:06:10
19744	MGS	02-005/09:22:12	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
19745	MGS	02-005/09:24:13	45	Range Modulation On: SUP=3.0dB		
19746	MGS	02-005/09:25:13	45	Begin Ranging Acquisition		
19747	MGS	02-005/09:38:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/09:25:32
19748	MGS	02-005/09:42:00		: 01:34:34	RPAONX	02-005/09:29:17
19749	MGS	02-005/09:42:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/09:29:17
19750	MGS	02-005/09:42:29		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/09:29:46
19751	MGS	02-005/09:42:29		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/09:29:46
19752	MGS	02-005/09:42:34		Set eclipse egress script address: 019A	SWSEES	02-005/09:29:51
19753	MGS	02-005/09:43:15		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-005/09:30:32
19754	MGS	02-005/09:43:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/09:30:32
19755	MGS	02-005/09:43:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/09:30:32
19756	MGS	02-005/09:43:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/09:30:32
19757	MGS	02-005/09:43:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/09:30:32
19758	MGS	02-005/09:43:52		NOTE: Exit Earth Occultation 12643		02-005/09:31:10
19759	MGS	02-005/09:43:52	45	Acquisition Of X-Band Signal		
19760	MGS	02-005/09:43:52	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19761	MGS	02-005/09:43:52	45	NOTE: Carrier Only -- No Telemetry Modulation		
19762	MGS	02-005/09:49:37		NOTE: Exit Planetary Atmosphere 12643		02-005/09:36:55
19763	MGS	02-005/09:51:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/09:38:58
19764	MGS	02-005/09:51:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/09:38:58
19765	MGS	02-005/09:51:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/09:38:58
19766	MGS	02-005/09:51:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/09:38:58
19767	MGS	02-005/09:51:41	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19768	MGS	02-005/09:51:42		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-005/09:38:59
19769	MGS	02-005/09:51:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/09:38:59
19770	MGS	02-005/09:51:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/09:38:59
19771	MGS	02-005/09:51:42	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19772	MGS	02-005/09:51:46		NOTE: End fixed Sub-Reflector for Radio Science		02-005/09:39:03
19773	MGS	02-005/09:58:11		NOTE: Exit Solar Eclipse 12643		02-005/09:45:28
19774	MGS	02-005/10:10:00	63	Begin Pre-Cal		
19775	MGS	02-005/10:10:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
19776	MGS	02-005/10:10:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
19777	MGS	02-005/10:10:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
19778	MGS	02-005/10:10:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
19779	MGS	02-005/10:10:00	63	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=HIGH, MI=80.0		
19780	MGS	02-005/10:10:00	63	Config: TGC: DEST=37		
19781	MGS	02-005/10:10:00	63	Config: TGC: BAND=X, BR=0.000000		
19782	MGS	02-005/10:10:00	63	Config: FSS: CH=2, PRI_FL=10000		
19783	MGS	02-005/10:10:00	63	Config: RSR		
19784	MGS	02-005/10:10:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
19785	MGS	02-005/10:10:00	63	Config: BVR		
19786	MGS	02-005/10:10:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
19787	MGS	02-005/10:10:00	63	Config: MDA: SMPL=0.1		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19788	MGS	02-005/10:13:36		NOTE: Periapsis 12644 ----------		02-005/10:00:53
19789	MGS	02-005/10:19:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/10:06:27
19790	MGS	02-005/10:19:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/10:06:27
19791	MGS	02-005/10:19:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/10:06:28
19792	MGS	02-005/10:19:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/10:06:28
19793	MGS	02-005/10:31:41	45	NOTE: Transmitter Off in 15 minutes		
19794	MGS	02-005/10:41:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/10:28:28
19795	MGS	02-005/10:41:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/10:28:28
19796	MGS	02-005/10:44:42	45	Range Modulation Off		
19797	MGS	02-005/10:46:41	45	Transmitter Off		
19798	MGS	02-005/11:03:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/10:50:41
19799	MGS	02-005/11:05:32		NOTE: Start EVP data return script		02-005/10:52:49
19800	MGS	02-005/11:08:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/10:55:41
19801	MGS	02-005/11:08:24		: 00:08:09, FALSE	RDSCII	02-005/10:55:41
19802	MGS	02-005/11:08:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/10:55:41
19803	MGS	02-005/11:08:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/10:55:41
19804	MGS	02-005/11:08:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/10:55:41
19805	MGS	02-005/11:08:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/10:55:41
19806	MGS	02-005/11:08:24	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19807	MGS	02-005/11:08:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
19808	MGS	02-005/11:10:25		NOTE: Enter Planetary Atmosphere 12644		02-005/10:57:42
19809	MGS	02-005/11:12:16		NOTE: Apoapsis 12644 -		02-005/10:59:33
19810	MGS	02-005/11:15:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/11:02:49
19811	MGS	02-005/11:15:32		NOTE: Enter Solar Eclipse 12644		02-005/11:02:49
19812	MGS	02-005/11:15:52		NOTE: Enter Earth Occultation 12644		02-005/11:03:09
19813	MGS	02-005/11:15:52	45	NOTE: Loss Of X-Band Signal		
19814	MGS	02-005/11:16:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/11:03:50
19815	MGS	02-005/11:16:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/11:03:50
19816	MGS	02-005/11:16:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/11:03:50
19817	MGS	02-005/11:16:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/11:03:50
19818	MGS	02-005/11:16:34		NOTE: End EVP script		02-005/11:03:51
19819	MGS	02-005/11:16:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/11:03:51
19820	MGS	02-005/11:16:38		NOTE: End fixed Sub-Reflector for Radio Science		02-005/11:03:55
19821	MGS	02-005/11:19:53	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
19822	MGS	02-005/11:21:54	45	Range Modulation On: SUP=3.0dB		
19823	MGS	02-005/11:22:54	45	Begin Ranging Acquisition		
19824	MGS	02-005/11:25:00	45	NOTE: Transmitter Off in 15 minutes		
19825	MGS	02-005/11:35:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/11:23:12
19826	MGS	02-005/11:38:00	45	Range Modulation Off		
19827	MGS	02-005/11:39:40		: 01:34:34	RPAONX	02-005/11:26:57
19828	MGS	02-005/11:39:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/11:26:57
19829	MGS	02-005/11:40:00	63	Begin Tracking		
19830	MGS	02-005/11:40:00	45	Transmitter Off		
19831	MGS	02-005/11:40:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/11:27:28
19832	MGS	02-005/11:40:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/11:27:28
19833	MGS	02-005/11:40:16		Set eclipse egress script address: 01DC	SWSEES	02-005/11:27:33
19834	MGS	02-005/11:40:55		: 00:00:30, 00:08:26, FALSE	RDSCIE	02-005/11:28:12
19835	MGS	02-005/11:40:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/11:28:12
19836	MGS	02-005/11:40:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/11:28:12
19837	MGS	02-005/11:40:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/11:28:12
19838	MGS	02-005/11:40:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/11:28:12
19839	MGS	02-005/11:41:25		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/11:28:42
19840	MGS	02-005/11:41:34		NOTE: Exit Earth Occultation 12644		02-005/11:28:51
19841	MGS	02-005/11:41:34	45	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19842	MGS	02-005/11:41:34	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19843	MGS	02-005/11:41:34	45	NOTE: Carrier Only -- No Telemetry Modulation		
19844	MGS	02-005/11:41:34	63	Acquisition Of X-Band Signal		
19845	MGS	02-005/11:41:34	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19846	MGS	02-005/11:41:34	63	NOTE: Carrier Only -- No Telemetry Modulation		
19847	MGS	02-005/11:47:18		NOTE: Exit Planetary Atmosphere 12644		02-005/11:34:35
19848	MGS	02-005/11:49:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/11:36:38
19849	MGS	02-005/11:49:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/11:36:38
19850	MGS	02-005/11:49:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/11:36:38
19851	MGS	02-005/11:49:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/11:36:38
19852	MGS	02-005/11:49:21	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19853	MGS	02-005/11:49:21	63	Acquire D/L: X/16, 3-Way/45, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19854	MGS	02-005/11:49:22		: RTM, MRC, 01:16:42, S&E_2A, FALSE, 00:08:10	AEMRT	02-005/11:36:39
19855	MGS	02-005/11:49:22		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/11:36:39
19856	MGS	02-005/11:49:22		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/11:36:39
19857	MGS	02-005/11:49:22	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19858	MGS	02-005/11:49:22	63	D/L Change: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19859	MGS	02-005/11:49:26		NOTE: End fixed Sub-Reflector for Radio Science		02-005/11:36:43
19860	MGS	02-005/11:50:47	45	NOTE: Below Uplink Interlock Limit		
19861	MGS	02-005/11:51:37	63	NOTE: Above Uplink Interlock Limit		
19862	MGS	02-005/11:55:51		NOTE: Exit Solar Eclipse 12644		02-005/11:43:08
19863	MGS	02-005/12:00:00	45	End Tracking		
19864	MGS	02-005/12:05:26	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19865	MGS	02-005/12:11:07		NOTE: Periapsis 12645 ----------		02-005/11:58:24
19866	MGS	02-005/12:12:43		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-005/12:00:00
19867	MGS	02-005/12:15:00	45	End Post-Cal		
19868	MGS	02-005/12:16:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/12:04:07
19869	MGS	02-005/12:16:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/12:04:07
19870	MGS	02-005/12:16:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/12:04:08
19871	MGS	02-005/12:16:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/12:04:08
19872	MGS	02-005/12:38:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/12:26:08
19873	MGS	02-005/12:38:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/12:26:08
19874	MGS	02-005/12:48:51		NOTE: Start Block (SSRMGR)		02-005/12:36:08
19875	MGS	02-005/12:48:51		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-005/12:36:08
19876	MGS	02-005/12:48:52		SSR 1A Data Enable	CSD1AE	02-005/12:36:09
19877	MGS	02-005/12:48:52		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-005/12:36:09
19878	MGS	02-005/13:01:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/12:48:21
19879	MGS	02-005/13:03:14		NOTE: Start Block (MAP_PB_ODY)		02-005/12:50:31
19880	MGS	02-005/13:03:15		: 00:24:08, 01:34:35, FALSE, FALSE, FALSE, 00:01:15, 00:06:46, 01:20:04, 00:06:29	AEMINI	02-005/12:50:32
19881	MGS	02-005/13:03:15		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/12:50:32
19882	MGS	02-005/13:03:15		NOTE: Start EVP data return script		02-005/12:50:32
19883	MGS	02-005/13:03:16		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-005T13:32:42.000	AEMPBI	02-005/12:50:33
19884	MGS	02-005/13:06:04		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/12:53:21
19885	MGS	02-005/13:06:04		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8256000, DUR=00:17:12		02-005/12:53:21
19886	MGS	02-005/13:06:04		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-005/12:53:21
19887	MGS	02-005/13:06:04		: 00:08:09, FALSE	RDSCII	02-005/12:53:21
19888	MGS	02-005/13:06:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/12:53:21
19889	MGS	02-005/13:06:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/12:53:21
19890	MGS	02-005/13:06:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/12:53:21
19891	MGS	02-005/13:06:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/12:53:21
19892	MGS	02-005/13:06:04	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19893	MGS	02-005/13:06:04	63	NOTE: Carrier Only -- No Telemetry Modulation		
19894	MGS	02-005/13:08:08		NOTE: Enter Planetary Atmosphere 12645		02-005/12:55:25
19895	MGS	02-005/13:10:11		NOTE: Apoapsis 12645 -		02-005/12:57:27

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19896	MGS	02-005/13:12:16		SSR 1B Data Disable	CSD1BX	02-005/12:59:33
19897	MGS	02-005/13:12:16		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-005/12:59:33
19898	MGS	02-005/13:12:17		NOTE: End Block (SSRMGR)		02-005/12:59:34
19899	MGS	02-005/13:13:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/13:00:32
19900	MGS	02-005/13:13:16		NOTE: Enter Solar Eclipse 12645		02-005/13:00:32
19901	MGS	02-005/13:13:34		NOTE: Enter Earth Occultation 12645		02-005/13:00:51
19902	MGS	02-005/13:13:34	63	NOTE: Loss Of X-Band Signal		
19903	MGS	02-005/13:14:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/13:01:30
19904	MGS	02-005/13:14:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/13:01:30
19905	MGS	02-005/13:14:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/13:01:30
19906	MGS	02-005/13:14:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/13:01:30
19907	MGS	02-005/13:14:14		NOTE: End EVP script		02-005/13:01:31
19908	MGS	02-005/13:14:14		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/13:01:31
19909	MGS	02-005/13:14:15		NOTE: End Block (MAP_RT)		02-005/13:01:32
19910	MGS	02-005/13:14:18		NOTE: End fixed Sub-Reflector for Radio Science		02-005/13:01:35
19911	MGS	02-005/13:37:23		: 01:34:35	RPAONX	02-005/13:24:40
19912	MGS	02-005/13:37:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/13:24:40
19913	MGS	02-005/13:37:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/13:25:08
19914	MGS	02-005/13:37:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/13:25:08
19915	MGS	02-005/13:37:55		Command the PSE with included data word: 3990	SWPSEL	02-005/13:25:12
19916	MGS	02-005/13:37:56		Set eclipse egress script address: 0158	SWSEES	02-005/13:25:13
19917	MGS	02-005/13:39:08		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/13:26:25
19918	MGS	02-005/13:39:18		NOTE: Exit Earth Occultation 12645		02-005/13:26:34
19919	MGS	02-005/13:39:18	63	Acquisition Of X-Band Signal		
19920	MGS	02-005/13:39:18	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19921	MGS	02-005/13:45:01		NOTE: Exit Planetary Atmosphere 12645		02-005/13:32:17
19922	MGS	02-005/13:45:24		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:15:55	AEMPB	02-005/13:32:41
19923	MGS	02-005/13:45:24		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-005/13:32:41
19924	MGS	02-005/13:45:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-005/13:32:41
19925	MGS	02-005/13:45:25		SSR 1B Data Enable	CSD1BE	02-005/13:32:42
19926	MGS	02-005/13:45:25		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-005/13:32:42
19927	MGS	02-005/13:45:25	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19928	MGS	02-005/13:53:35		NOTE: Exit Solar Eclipse 12645		02-005/13:40:52
19929	MGS	02-005/14:09:00		NOTE: Periapsis 12646 ----------		02-005/13:56:17
19930	MGS	02-005/14:18:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/14:05:51
19931	MGS	02-005/14:18:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/14:05:51
19932	MGS	02-005/14:18:35		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/14:05:52
19933	MGS	02-005/14:18:35		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/14:05:52
19934	MGS	02-005/14:40:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/14:27:52
19935	MGS	02-005/14:40:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/14:27:52
19936	MGS	02-005/14:56:04		SSR 1B Data Disable	CSD1BX	02-005/14:43:20
19937	MGS	02-005/14:56:04		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-005/14:43:20
19938	MGS	02-005/14:56:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-005/14:43:20
19939	MGS	02-005/14:56:04	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19940	MGS	02-005/15:01:02		NOTE: Start Block (MAP_RT)		02-005/14:48:18
19941	MGS	02-005/15:01:03		: 00:24:17, 01:34:16, FALSE, TRUE, FALSE, 00:01:15, 00:08:23, 01:16:31, 00:08:06	AEMINI	02-005/14:48:19
19942	MGS	02-005/15:01:03		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/14:48:19
19943	MGS	02-005/15:01:03		NOTE: Start EVP data return script		02-005/14:48:19
19944	MGS	02-005/15:01:04		: SE_2A, RTM, 01:16:30, MRC, 2002-005T15:32:16.000	AEMRTI	02-005/14:48:20
19945	MGS	02-005/15:05:56		NOTE: Enter Planetary Atmosphere 12646		02-005/14:53:12
19946	MGS	02-005/15:08:00		NOTE: Apoapsis 12646 -		02-005/14:55:17
19947	MGS	02-005/15:11:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/14:58:19
19948	MGS	02-005/15:11:03		NOTE: Enter Solar Eclipse 12646		02-005/14:58:19
19949	MGS	02-005/15:11:21		NOTE: Enter Earth Occultation 12646		02-005/14:58:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
19950	MGS	02-005/15:11:21	63	NOTE: Loss Of X-Band Signal		
19951	MGS	02-005/15:11:59		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/14:59:15
19952	MGS	02-005/15:11:59		NOTE: End EVP script		02-005/14:59:15
19953	MGS	02-005/15:12:00		NOTE: End Block (MAP_PB_ODY)		02-005/14:59:16
19954	MGS	02-005/15:31:35		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/15:18:51
19955	MGS	02-005/15:35:20		: 01:34:16	RPAONX	02-005/15:22:36
19956	MGS	02-005/15:35:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/15:22:36
19957	MGS	02-005/15:35:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/15:22:52
19958	MGS	02-005/15:35:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/15:22:52
19959	MGS	02-005/15:35:41		Set eclipse egress script address: 019A	SWSEES	02-005/15:22:57
19960	MGS	02-005/15:36:35		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-005/15:23:51
19961	MGS	02-005/15:36:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/15:23:51
19962	MGS	02-005/15:36:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/15:23:51
19963	MGS	02-005/15:36:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/15:23:51
19964	MGS	02-005/15:36:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/15:23:51
19965	MGS	02-005/15:37:05		NOTE: Exit Earth Occultation 12646		02-005/15:24:21
19966	MGS	02-005/15:37:05	63	Acquisition Of X-Band Signal		
19967	MGS	02-005/15:37:05	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19968	MGS	02-005/15:37:05	63	NOTE: Carrier Only -- No Telemetry Modulation		
19969	MGS	02-005/15:42:48		NOTE: Exit Planetary Atmosphere 12646		02-005/15:30:04
19970	MGS	02-005/15:44:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/15:32:14
19971	MGS	02-005/15:44:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/15:32:14
19972	MGS	02-005/15:44:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/15:32:14
19973	MGS	02-005/15:44:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/15:32:14
19974	MGS	02-005/15:44:58	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19975	MGS	02-005/15:44:59		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-005/15:32:15
19976	MGS	02-005/15:44:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/15:32:15
19977	MGS	02-005/15:44:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/15:32:15
19978	MGS	02-005/15:44:59	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
19979	MGS	02-005/15:45:03		NOTE: End fixed Sub-Reflector for Radio Science		02-005/15:32:19
19980	MGS	02-005/15:51:23		NOTE: Exit Solar Eclipse 12646		02-005/15:38:39
19981	MGS	02-005/16:06:52		NOTE: Periapsis 12647 ----------		02-005/15:54:08
19982	MGS	02-005/16:12:22		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/15:59:38
19983	MGS	02-005/16:12:22		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/15:59:38
19984	MGS	02-005/16:12:23		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/15:59:39
19985	MGS	02-005/16:12:23		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/15:59:39
19986	MGS	02-005/16:34:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/16:21:39
19987	MGS	02-005/16:34:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/16:21:39
19988	MGS	02-005/16:56:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/16:43:45
19989	MGS	02-005/16:58:50		NOTE: Start EVP data return script		02-005/16:46:06
19990	MGS	02-005/17:01:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/16:48:45
19991	MGS	02-005/17:01:29		: 00:08:06, FALSE	RDSCII	02-005/16:48:45
19992	MGS	02-005/17:01:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/16:48:45
19993	MGS	02-005/17:01:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/16:48:45
19994	MGS	02-005/17:01:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/16:48:45
19995	MGS	02-005/17:01:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/16:48:45
19996	MGS	02-005/17:01:29	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
19997	MGS	02-005/17:01:29	63	NOTE: Carrier Only -- No Telemetry Modulation		
19998	MGS	02-005/17:03:43		NOTE: Enter Planetary Atmosphere 12647		02-005/16:50:59
19999	MGS	02-005/17:05:38		NOTE: Apoapsis 12647 -		02-005/16:52:54
20000	MGS	02-005/17:08:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/16:56:06
20001	MGS	02-005/17:08:50		NOTE: Enter Solar Eclipse 12647		02-005/16:56:06
20002	MGS	02-005/17:09:08		NOTE: Enter Earth Occultation 12647		02-005/16:56:24
20003	MGS	02-005/17:09:08	63	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20004	MGS	02-005/17:09:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/16:56:51
20005	MGS	02-005/17:09:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/16:56:51
20006	MGS	02-005/17:09:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/16:56:51
20007	MGS	02-005/17:09:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/16:56:51
20008	MGS	02-005/17:09:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/16:56:52
20009	MGS	02-005/17:09:36		NOTE: End EVP script		02-005/16:56:52
20010	MGS	02-005/17:09:40		NOTE: End fixed Sub-Reflector for Radio Science		02-005/16:56:56
20011	MGS	02-005/17:29:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/17:16:38
20012	MGS	02-005/17:33:07		: 01:34:16	RPAONX	02-005/17:20:23
20013	MGS	02-005/17:33:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/17:20:23
20014	MGS	02-005/17:33:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/17:20:39
20015	MGS	02-005/17:33:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/17:20:39
20016	MGS	02-005/17:33:28		Set eclipse egress script address: 01DC	SWSEES	02-005/17:20:44
20017	MGS	02-005/17:34:22		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-005/17:21:38
20018	MGS	02-005/17:34:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/17:21:38
20019	MGS	02-005/17:34:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/17:21:38
20020	MGS	02-005/17:34:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/17:21:38
20021	MGS	02-005/17:34:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/17:21:38
20022	MGS	02-005/17:34:52		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/17:22:08
20023	MGS	02-005/17:34:53		NOTE: Exit Earth Occultation 12647		02-005/17:22:09
20024	MGS	02-005/17:34:53	63	Acquisition Of X-Band Signal		
20025	MGS	02-005/17:34:53	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20026	MGS	02-005/17:34:53	63	NOTE: Carrier Only -- No Telemetry Modulation		
20027	MGS	02-005/17:40:36		NOTE: Exit Planetary Atmosphere 12647		02-005/17:27:52
20028	MGS	02-005/17:42:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/17:30:01
20029	MGS	02-005/17:42:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/17:30:01
20030	MGS	02-005/17:42:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/17:30:01
20031	MGS	02-005/17:42:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/17:30:01
20032	MGS	02-005/17:42:45	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20033	MGS	02-005/17:42:46		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-005/17:30:02
20034	MGS	02-005/17:42:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/17:30:02
20035	MGS	02-005/17:42:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/17:30:02
20036	MGS	02-005/17:42:46	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20037	MGS	02-005/17:42:50		NOTE: End fixed Sub-Reflector for Radio Science		02-005/17:30:06
20038	MGS	02-005/17:49:10		NOTE: Exit Solar Eclipse 12647		02-005/17:36:26
20039	MGS	02-005/18:04:34		NOTE: Periapsis 12648 ----------		02-005/17:51:50
20040	MGS	02-005/18:10:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/17:57:25
20041	MGS	02-005/18:10:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/17:57:25
20042	MGS	02-005/18:10:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/17:57:26
20043	MGS	02-005/18:10:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/17:57:26
20044	MGS	02-005/18:15:00	25	Begin Pre-Cal		
20045	MGS	02-005/18:15:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
20046	MGS	02-005/18:15:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
20047	MGS	02-005/18:15:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
20048	MGS	02-005/18:15:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
20049	MGS	02-005/18:15:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
20050	MGS	02-005/18:15:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
20051	MGS	02-005/18:15:00	25	Config: TGC: DEST=37		
20052	MGS	02-005/18:15:00	25	Config: TGC: BAND=X, BR=0.000000		
20053	MGS	02-005/18:15:00	25	Config: FSS: CH=2, PRI_FL=10000		
20054	MGS	02-005/18:15:00	25	Config: RSR		
20055	MGS	02-005/18:15:00	25	Config: TXL		
20056	MGS	02-005/18:15:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
20057	MGS	02-005/18:15:00	25	Config: BVR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20058	MGS	02-005/18:15:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
20059	MGS	02-005/18:15:00	25	Config: MDA: SMPL=0.1		
20060	MGS	02-005/18:15:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
20061	MGS	02-005/18:15:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
20062	MGS	02-005/18:15:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
20063	MGS	02-005/18:32:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/18:19:26
20064	MGS	02-005/18:32:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/18:19:26
20065	MGS	02-005/18:42:00		NOTE: Start Block (SSRMGR)		02-005/18:29:16
20066	MGS	02-005/18:42:00		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-005/18:29:16
20067	MGS	02-005/18:42:01		SSR 1B Data Enable	CSD1BE	02-005/18:29:17
20068	MGS	02-005/18:42:01		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-005/18:29:17
20069	MGS	02-005/18:54:16		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/18:41:32
20070	MGS	02-005/18:56:35		NOTE: Start Block (MAP_PB_ODY)		02-005/18:43:51
20071	MGS	02-005/18:56:36		: 00:24:17, 01:34:17, FALSE, FALSE, FALSE, 00:01:15, 00:06:43, 01:19:52, 00:06:26	AEMINI	02-005/18:43:52
20072	MGS	02-005/18:56:36		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/18:43:52
20073	MGS	02-005/18:56:36		NOTE: Start EVP data return script		02-005/18:43:52
20074	MGS	02-005/18:56:37		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-005T19:26:07.000	AEMPBI	02-005/18:43:53
20075	MGS	02-005/18:59:16		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/18:46:32
20076	MGS	02-005/18:59:16		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8280000, DUR=00:17:15		02-005/18:46:32
20077	MGS	02-005/18:59:16		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-005/18:46:32
20078	MGS	02-005/18:59:16		: 00:08:06, FALSE	RDSCII	02-005/18:46:32
20079	MGS	02-005/18:59:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/18:46:32
20080	MGS	02-005/18:59:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/18:46:32
20081	MGS	02-005/18:59:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/18:46:32
20082	MGS	02-005/18:59:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/18:46:32
20083	MGS	02-005/18:59:16	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20084	MGS	02-005/18:59:16	63	NOTE: Carrier Only -- No Telemetry Modulation		
20085	MGS	02-005/19:01:28		NOTE: Enter Planetary Atmosphere 12648		02-005/18:48:44
20086	MGS	02-005/19:03:05		NOTE: Apoapsis 12648 -		02-005/18:50:21
20087	MGS	02-005/19:05:36		SSR 1A Data Disable	CSD1AX	02-005/18:52:52
20088	MGS	02-005/19:05:36		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-005/18:52:52
20089	MGS	02-005/19:05:37		NOTE: End Block (SSRMGR)		02-005/18:52:53
20090	MGS	02-005/19:06:36		NOTE: Enter Solar Eclipse 12648		02-005/18:53:52
20091	MGS	02-005/19:06:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/18:53:52
20092	MGS	02-005/19:06:53		NOTE: Enter Earth Occultation 12648		02-005/18:54:09
20093	MGS	02-005/19:06:53	63	NOTE: Loss Of X-Band Signal		
20094	MGS	02-005/19:07:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/18:54:38
20095	MGS	02-005/19:07:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/18:54:38
20096	MGS	02-005/19:07:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/18:54:38
20097	MGS	02-005/19:07:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/18:54:38
20098	MGS	02-005/19:07:23		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/18:54:39
20099	MGS	02-005/19:07:24		NOTE: End EVP script		02-005/18:54:39
20100	MGS	02-005/19:07:25		NOTE: End Block (MAP_RT)		02-005/18:54:40
20101	MGS	02-005/19:07:28		NOTE: End fixed Sub-Reflector for Radio Science		02-005/18:54:43
20102	MGS	02-005/19:15:00	25	Begin Tracking		
20103	MGS	02-005/19:16:35	25	NOTE: Above Uplink Interlock Limit		
20104	MGS	02-005/19:25:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
20105	MGS	02-005/19:27:00	25	Range Modulation On: SUP=3.0dB		
20106	MGS	02-005/19:28:00	25	Begin Ranging Acquisition		
20107	MGS	02-005/19:30:53		: 01:34:17	RPAONX	02-005/19:18:09
20108	MGS	02-005/19:30:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/19:18:09
20109	MGS	02-005/19:31:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/19:18:26
20110	MGS	02-005/19:31:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/19:18:26
20111	MGS	02-005/19:31:14		Command the PSE with included data word: 3990	SWPSEL	02-005/19:18:30

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20112	MGS	02-005/19:31:15		Set eclipse egress script address: 0158	SWSEES	02-005/19:18:31
20113	MGS	02-005/19:32:38		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/19:19:54
20114	MGS	02-005/19:32:40		NOTE: Exit Earth Occultation 12648		02-005/19:19:56
20115	MGS	02-005/19:32:40	25	Acquisition Of X-Band Signal		
20116	MGS	02-005/19:32:40	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20117	MGS	02-005/19:32:40	63	Acquisition Of X-Band Signal		
20118	MGS	02-005/19:32:40	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20119	MGS	02-005/19:35:00	63	End Tracking		
20120	MGS	02-005/19:38:23		NOTE: Exit Planetary Atmosphere 12648		02-005/19:25:38
20121	MGS	02-005/19:38:51		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:15:40	AEMPB	02-005/19:26:07
20122	MGS	02-005/19:38:51		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-005/19:26:07
20123	MGS	02-005/19:38:51		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-005/19:26:07
20124	MGS	02-005/19:38:52		SSR 1A Data Enable	CSD1AE	02-005/19:26:08
20125	MGS	02-005/19:38:52		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-005/19:26:08
20126	MGS	02-005/19:38:52	25	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20127	MGS	02-005/19:46:56		NOTE: Exit Solar Eclipse 12648		02-005/19:34:11
20128	MGS	02-005/19:50:00	63	End Post-Cal		
20129	MGS	02-005/19:50:28	25	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20130	MGS	02-005/20:02:20		NOTE: Periapsis 12649 ----------		02-005/19:49:36
20131	MGS	02-005/20:11:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/19:59:10
20132	MGS	02-005/20:11:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/19:59:10
20133	MGS	02-005/20:11:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/19:59:11
20134	MGS	02-005/20:11:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/19:59:11
20135	MGS	02-005/20:20:22	25	NOTE: Transmitter Off in 15 minutes		
20136	MGS	02-005/20:33:23	25	Range Modulation Off		
20137	MGS	02-005/20:33:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/20:21:11
20138	MGS	02-005/20:33:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/20:21:11
20139	MGS	02-005/20:35:22	25	Transmitter Off		
20140	MGS	02-005/20:49:30		SSR 1A Data Disable	CSD1AX	02-005/20:36:46
20141	MGS	02-005/20:49:30		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-005/20:36:46
20142	MGS	02-005/20:49:30		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-005/20:36:46
20143	MGS	02-005/20:49:30	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20144	MGS	02-005/20:54:18		NOTE: Start Block (MAP_RT)		02-005/20:41:34
20145	MGS	02-005/20:54:19		: 00:24:17, 01:34:16, FALSE, TRUE, FALSE, 00:01:15, 00:08:23, 01:16:31, 00:08:06	AEMINI	02-005/20:41:35
20146	MGS	02-005/20:54:19		Enable sending eclipse ingress script when array power disappears	SWEISE	02-005/20:41:35
20147	MGS	02-005/20:54:19		NOTE: Start EVP data return script		02-005/20:41:35
20148	MGS	02-005/20:54:20		: SE_2A, RTM, 01:16:30, MRC, 2002-005T21:25:31.000	AEMRTI	02-005/20:41:36
20149	MGS	02-005/20:59:11		NOTE: Enter Planetary Atmosphere 12649		02-005/20:46:26
20150	MGS	02-005/21:00:51	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20151	MGS	02-005/21:00:52		NOTE: Apoapsis 12649 -		02-005/20:48:08
20152	MGS	02-005/21:04:19		NOTE: Enter Solar Eclipse 12649		02-005/20:51:35
20153	MGS	02-005/21:04:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/20:51:35
20154	MGS	02-005/21:04:36		NOTE: Enter Earth Occultation 12649		02-005/20:51:51
20155	MGS	02-005/21:04:36	25	NOTE: Loss Of X-Band Signal		
20156	MGS	02-005/21:05:10		NOTE: End EVP script		02-005/20:52:26
20157	MGS	02-005/21:05:10		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/20:52:26
20158	MGS	02-005/21:05:11		NOTE: End Block (MAP_PB_ODY)		02-005/20:52:27
20159	MGS	02-005/21:08:41	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
20160	MGS	02-005/21:10:41	25	Range Modulation On: SUP=3.0dB		
20161	MGS	02-005/21:11:41	25	Begin Ranging Acquisition		
20162	MGS	02-005/21:24:51		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/21:12:07
20163	MGS	02-005/21:28:37		: 01:34:16	RPAONX	02-005/21:15:52
20164	MGS	02-005/21:28:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/21:15:52
20165	MGS	02-005/21:28:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/21:16:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20166	MGS	02-005/21:28:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/21:16:11
20167	MGS	02-005/21:29:01		Set eclipse egress script address: 019A	SWSEES	02-005/21:16:16
20168	MGS	02-005/21:29:52		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-005/21:17:07
20169	MGS	02-005/21:29:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/21:17:07
20170	MGS	02-005/21:29:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/21:17:07
20171	MGS	02-005/21:29:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/21:17:07
20172	MGS	02-005/21:29:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/21:17:07
20173	MGS	02-005/21:30:25		NOTE: Exit Earth Occultation 12649		02-005/21:17:40
20174	MGS	02-005/21:30:25	25	Acquisition Of X-Band Signal		
20175	MGS	02-005/21:30:25	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20176	MGS	02-005/21:30:25	25	NOTE: Carrier Only -- No Telemetry Modulation		
20177	MGS	02-005/21:36:07		NOTE: Exit Planetary Atmosphere 12649		02-005/21:23:23
20178	MGS	02-005/21:38:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/21:25:30
20179	MGS	02-005/21:38:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/21:25:30
20180	MGS	02-005/21:38:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/21:25:30
20181	MGS	02-005/21:38:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/21:25:30
20182	MGS	02-005/21:38:15	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20183	MGS	02-005/21:38:16		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-005/21:25:31
20184	MGS	02-005/21:38:16		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/21:25:31
20185	MGS	02-005/21:38:16		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/21:25:31
20186	MGS	02-005/21:38:16	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20187	MGS	02-005/21:38:19		NOTE: End fixed Sub-Reflector for Radio Science		02-005/21:25:35
20188	MGS	02-005/21:44:39		NOTE: Exit Solar Eclipse 12649		02-005/21:31:54
20189	MGS	02-005/22:00:04		NOTE: Periapsis 12650 ----------		02-005/21:47:19
20190	MGS	02-005/22:05:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/21:52:53
20191	MGS	02-005/22:05:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/21:52:53
20192	MGS	02-005/22:05:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/21:52:54
20193	MGS	02-005/22:05:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/21:52:54
20194	MGS	02-005/22:18:04	25	NOTE: Transmitter Off in 15 minutes		
20195	MGS	02-005/22:27:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-005/22:14:54
20196	MGS	02-005/22:27:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-005/22:14:54
20197	MGS	02-005/22:31:05	25	Range Modulation Off		
20198	MGS	02-005/22:33:04	25	Transmitter Off		
20199	MGS	02-005/22:49:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/22:37:01
20200	MGS	02-005/22:52:02		NOTE: Start EVP data return script		02-005/22:39:17
20201	MGS	02-005/22:54:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-005/22:42:01
20202	MGS	02-005/22:54:46		: 00:08:06, FALSE	RDSCII	02-005/22:42:01
20203	MGS	02-005/22:54:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/22:42:01
20204	MGS	02-005/22:54:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/22:42:01
20205	MGS	02-005/22:54:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/22:42:01
20206	MGS	02-005/22:54:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/22:42:01
20207	MGS	02-005/22:54:46	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20208	MGS	02-005/22:54:46	25	NOTE: Carrier Only -- No Telemetry Modulation		
20209	MGS	02-005/22:56:54		NOTE: Enter Planetary Atmosphere 12650		02-005/22:44:09
20210	MGS	02-005/22:58:41		NOTE: Apoapsis 12650 -		02-005/22:45:56
20211	MGS	02-005/23:02:01		NOTE: Enter Solar Eclipse 12650		02-005/22:49:17
20212	MGS	02-005/23:02:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-005/22:49:17
20213	MGS	02-005/23:02:19		NOTE: Enter Earth Occultation 12650		02-005/22:49:34
20214	MGS	02-005/23:02:19	25	NOTE: Loss Of X-Band Signal		
20215	MGS	02-005/23:02:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/22:50:07
20216	MGS	02-005/23:02:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/22:50:07
20217	MGS	02-005/23:02:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/22:50:07
20218	MGS	02-005/23:02:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/22:50:07
20219	MGS	02-005/23:02:53		NOTE: End EVP script		02-005/22:50:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20220	MGS	02-005/23:02:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-005/22:50:08
20221	MGS	02-005/23:02:57		NOTE: End fixed Sub-Reflector for Radio Science		02-005/22:50:12
20222	MGS	02-005/23:06:23	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
20223	MGS	02-005/23:08:23	25	Range Modulation On: SUP=3.0dB		
20224	MGS	02-005/23:09:23	25	Begin Ranging Acquisition		
20225	MGS	02-005/23:22:34		NOTE: Begin fixed Sub-Reflector for Radio Science		02-005/23:09:49
20226	MGS	02-005/23:26:19		: 01:34:16	RPAONX	02-005/23:13:34
20227	MGS	02-005/23:26:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-005/23:13:34
20228	MGS	02-005/23:26:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-005/23:13:54
20229	MGS	02-005/23:26:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-005/23:13:54
20230	MGS	02-005/23:26:44		Set eclipse egress script address: 01DC	SWSEES	02-005/23:13:59
20231	MGS	02-005/23:27:34		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-005/23:14:49
20232	MGS	02-005/23:27:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-005/23:14:49
20233	MGS	02-005/23:27:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-005/23:14:49
20234	MGS	02-005/23:27:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-005/23:14:49
20235	MGS	02-005/23:27:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-005/23:14:49
20236	MGS	02-005/23:28:04		Disables autonomous command to send eclipse ingress script	SWEISX	02-005/23:15:19
20237	MGS	02-005/23:28:07		NOTE: Exit Earth Occultation 12650		02-005/23:15:22
20238	MGS	02-005/23:28:07	25	Acquisition Of X-Band Signal		
20239	MGS	02-005/23:28:07	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20240	MGS	02-005/23:28:07	25	NOTE: Carrier Only -- No Telemetry Modulation		
20241	MGS	02-005/23:33:50		NOTE: Exit Planetary Atmosphere 12650		02-005/23:21:05
20242	MGS	02-005/23:35:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-005/23:23:12
20243	MGS	02-005/23:35:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-005/23:23:12
20244	MGS	02-005/23:35:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-005/23:23:12
20245	MGS	02-005/23:35:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-005/23:23:12
20246	MGS	02-005/23:35:57	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20247	MGS	02-005/23:35:58		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-005/23:23:13
20248	MGS	02-005/23:35:58		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-005/23:23:13
20249	MGS	02-005/23:35:58		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-005/23:23:13
20250	MGS	02-005/23:35:58	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20251	MGS	02-005/23:36:02		NOTE: End fixed Sub-Reflector for Radio Science		02-005/23:23:17
20252	MGS	02-005/23:42:21		NOTE: Exit Solar Eclipse 12650		02-005/23:29:36
20253	MGS	02-005/23:57:31		NOTE: Periapsis 12651 ----------		02-005/23:44:46
20254	MGS	02-006/00:00:00		Light Time: OWLT = 12:44, RTLT = 25:29		
20255	MGS	02-006/00:03:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-005/23:50:35
20256	MGS	02-006/00:03:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-005/23:50:35
20257	MGS	02-006/00:03:21		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-005/23:50:36
20258	MGS	02-006/00:03:21		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-005/23:50:36
20259	MGS	02-006/00:15:46	25	NOTE: Transmitter Off in 15 minutes		
20260	MGS	02-006/00:25:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/00:12:36
20261	MGS	02-006/00:25:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/00:12:36
20262	MGS	02-006/00:28:46	25	Range Modulation Off		
20263	MGS	02-006/00:30:46	25	Transmitter Off		
20264	MGS	02-006/00:35:18		NOTE: Start Block (SSRMGR)		02-006/00:22:33
20265	MGS	02-006/00:35:18		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-006/00:22:33
20266	MGS	02-006/00:35:19		SSR 1A Data Enable	CSD1AE	02-006/00:22:34
20267	MGS	02-006/00:35:19		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-006/00:22:34
20268	MGS	02-006/00:47:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/00:34:43
20269	MGS	02-006/00:49:43		NOTE: Start Block (MAP_PB_ODY)		02-006/00:36:58
20270	MGS	02-006/00:49:44		: 00:24:17, 01:34:17, FALSE, FALSE, FALSE, 00:01:15, 00:06:43, 01:19:52, 00:06:26	AEMINI	02-006/00:36:59
20271	MGS	02-006/00:49:44		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/00:36:59
20272	MGS	02-006/00:49:44		NOTE: Start EVP data return script		02-006/00:36:59
20273	MGS	02-006/00:49:45		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-006T01:19:15.000	AEMPBI	02-006/00:37:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20274	MGS	02-006/00:52:28		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/00:39:43
20275	MGS	02-006/00:52:28		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8232000, DUR=00:17:09		02-006/00:39:43
20276	MGS	02-006/00:52:28		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-006/00:39:43
20277	MGS	02-006/00:52:28		: 00:08:06, FALSE	RDSCII	02-006/00:39:43
20278	MGS	02-006/00:52:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/00:39:43
20279	MGS	02-006/00:52:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/00:39:43
20280	MGS	02-006/00:52:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/00:39:43
20281	MGS	02-006/00:52:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/00:39:43
20282	MGS	02-006/00:52:28	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20283	MGS	02-006/00:52:28	25	NOTE: Carrier Only -- No Telemetry Modulation		
20284	MGS	02-006/00:54:37		NOTE: Enter Planetary Atmosphere 12651		02-006/00:41:52
20285	MGS	02-006/00:56:09		NOTE: Apoapsis 12651 -		02-006/00:43:23
20286	MGS	02-006/00:58:45		SSR 1B Data Disable	CSD1BX	02-006/00:46:00
20287	MGS	02-006/00:58:45		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-006/00:46:00
20288	MGS	02-006/00:58:46		NOTE: End Block (SSRMGR)		02-006/00:46:01
20289	MGS	02-006/00:59:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/00:46:59
20290	MGS	02-006/00:59:44		NOTE: Enter Solar Eclipse 12651		02-006/00:46:59
20291	MGS	02-006/01:00:01		NOTE: Enter Earth Occultation 12651		02-006/00:47:16
20292	MGS	02-006/01:00:01	25	NOTE: Loss Of X-Band Signal		
20293	MGS	02-006/01:00:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/00:47:49
20294	MGS	02-006/01:00:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/00:47:49
20295	MGS	02-006/01:00:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/00:47:49
20296	MGS	02-006/01:00:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/00:47:49
20297	MGS	02-006/01:00:35		NOTE: End EVP script		02-006/00:47:50
20298	MGS	02-006/01:00:35		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/00:47:50
20299	MGS	02-006/01:00:36		NOTE: End Block (MAP_RT)		02-006/00:47:51
20300	MGS	02-006/01:00:39		NOTE: End fixed Sub-Reflector for Radio Science		02-006/00:47:54
20301	MGS	02-006/01:04:05	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
20302	MGS	02-006/01:06:06	25	Range Modulation On: SUP=3.0dB		
20303	MGS	02-006/01:07:06	25	Begin Ranging Acquisition		
20304	MGS	02-006/01:24:01		: 01:34:17	RPAONX	02-006/01:11:16
20305	MGS	02-006/01:24:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/01:11:16
20306	MGS	02-006/01:24:21		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/01:11:36
20307	MGS	02-006/01:24:21		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/01:11:36
20308	MGS	02-006/01:24:25		Command the PSE with included data word: 3990	SWPSEL	02-006/01:11:40
20309	MGS	02-006/01:24:26		Set eclipse egress script address: 0158	SWSEES	02-006/01:11:41
20310	MGS	02-006/01:25:46		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/01:13:01
20311	MGS	02-006/01:25:50		NOTE: Exit Earth Occultation 12651		02-006/01:13:05
20312	MGS	02-006/01:25:50	25	Acquisition Of X-Band Signal		
20313	MGS	02-006/01:25:50	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20314	MGS	02-006/01:29:35	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20315	MGS	02-006/01:31:32		NOTE: Exit Planetary Atmosphere 12651		02-006/01:18:47
20316	MGS	02-006/01:31:59		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:15:40	AEMPB	02-006/01:19:14
20317	MGS	02-006/01:31:59		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-006/01:19:14
20318	MGS	02-006/01:31:59		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-006/01:19:14
20319	MGS	02-006/01:32:00		SSR 1B Data Enable	CSD1BE	02-006/01:19:15
20320	MGS	02-006/01:32:00		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-006/01:19:15
20321	MGS	02-006/01:32:00	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20322	MGS	02-006/01:40:00	15	Begin Pre-Cal		
20323	MGS	02-006/01:40:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
20324	MGS	02-006/01:40:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
20325	MGS	02-006/01:40:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
20326	MGS	02-006/01:40:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
20327	MGS	02-006/01:40:00	15	Config: TGC: DEST=37		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20328	MGS	02-006/01:40:00	15	Config: TGC: BAND=X, BR=8000.000000		
20329	MGS	02-006/01:40:00	15	Config: FSS: CH=2, PRI_FL=10000		
20330	MGS	02-006/01:40:00	15	Config: RSR		
20331	MGS	02-006/01:40:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
20332	MGS	02-006/01:40:00	15	Config: BVR		
20333	MGS	02-006/01:40:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
20334	MGS	02-006/01:40:00	15	Config: MDA: SMPL=0.1		
20335	MGS	02-006/01:40:04		NOTE: Exit Solar Eclipse 12651		02-006/01:27:18
20336	MGS	02-006/01:55:02		NOTE: Periapsis 12652 ----------		02-006/01:42:17
20337	MGS	02-006/02:05:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/01:52:17
20338	MGS	02-006/02:05:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/01:52:17
20339	MGS	02-006/02:05:03		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/01:52:18
20340	MGS	02-006/02:05:03		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/01:52:18
20341	MGS	02-006/02:13:27	25	NOTE: Transmitter Off in 15 minutes		
20342	MGS	02-006/02:26:28	25	Range Modulation Off		
20343	MGS	02-006/02:27:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/02:14:18
20344	MGS	02-006/02:27:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/02:14:18
20345	MGS	02-006/02:28:27	25	Transmitter Off		
20346	MGS	02-006/02:42:38		SSR 1B Data Disable	CSD1BX	02-006/02:29:53
20347	MGS	02-006/02:42:38		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-006/02:29:53
20348	MGS	02-006/02:42:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-006/02:29:53
20349	MGS	02-006/02:42:38	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20350	MGS	02-006/02:47:28		NOTE: Start Block (MAP_RT)		02-006/02:34:43
20351	MGS	02-006/02:47:29		: 00:24:17, 01:34:16, FALSE, TRUE, FALSE, 00:01:15, 00:08:23, 01:16:31, 00:08:06	AEMINI	02-006/02:34:44
20352	MGS	02-006/02:47:29		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/02:34:44
20353	MGS	02-006/02:47:29		NOTE: Start EVP data return script		02-006/02:34:44
20354	MGS	02-006/02:47:30		: SE_2A, RTM, 01:16:30, MRC, 2002-006T03:18:40.000	AEMRTI	02-006/02:34:45
20355	MGS	02-006/02:52:20		NOTE: Enter Planetary Atmosphere 12652		02-006/02:39:34
20356	MGS	02-006/02:53:49		NOTE: Apoapsis 12652 -		02-006/02:41:03
20357	MGS	02-006/02:53:58	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20358	MGS	02-006/02:57:29		NOTE: Enter Solar Eclipse 12652		02-006/02:44:44
20359	MGS	02-006/02:57:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/02:44:44
20360	MGS	02-006/02:57:43		NOTE: Enter Earth Occultation 12652		02-006/02:44:58
20361	MGS	02-006/02:57:43	25	NOTE: Loss Of X-Band Signal		
20362	MGS	02-006/02:58:18		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/02:45:33
20363	MGS	02-006/02:58:19		NOTE: End EVP script		02-006/02:45:33
20364	MGS	02-006/02:58:20		NOTE: End Block (MAP_PB_ODY)		02-006/02:45:34
20365	MGS	02-006/03:01:50	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
20366	MGS	02-006/03:03:51	25	Range Modulation On: SUP=3.0dB		
20367	MGS	02-006/03:04:51	25	Begin Ranging Acquisition		
20368	MGS	02-006/03:10:00	15	Begin Tracking		
20369	MGS	02-006/03:10:00	25	NOTE: Transmitter Off in 15 minutes		
20370	MGS	02-006/03:18:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/03:05:16
20371	MGS	02-006/03:21:46		: 01:34:16	RPAONX	02-006/03:09:01
20372	MGS	02-006/03:21:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/03:09:01
20373	MGS	02-006/03:22:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/03:09:18
20374	MGS	02-006/03:22:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/03:09:18
20375	MGS	02-006/03:22:08		Set eclipse egress script address: 019A	SWSEES	02-006/03:09:23
20376	MGS	02-006/03:23:00	25	Range Modulation Off		
20377	MGS	02-006/03:23:01		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-006/03:10:16
20378	MGS	02-006/03:23:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/03:10:16
20379	MGS	02-006/03:23:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/03:10:16
20380	MGS	02-006/03:23:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/03:10:16
20381	MGS	02-006/03:23:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/03:10:16

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20382	MGS	02-006/03:23:36		NOTE: Exit Earth Occultation 12652		02-006/03:10:50
20383	MGS	02-006/03:23:36	15	Acquisition Of X-Band Signal		
20384	MGS	02-006/03:23:36	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20385	MGS	02-006/03:23:36	15	NOTE: Carrier Only -- No Telemetry Modulation		
20386	MGS	02-006/03:23:36	25	Acquisition Of X-Band Signal		
20387	MGS	02-006/03:23:36	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20388	MGS	02-006/03:23:36	25	NOTE: Carrier Only -- No Telemetry Modulation		
20389	MGS	02-006/03:25:00	25	Transmitter Off		
20390	MGS	02-006/03:25:00	43	Begin Pre-Cal		
20391	MGS	02-006/03:25:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
20392	MGS	02-006/03:25:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
20393	MGS	02-006/03:25:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
20394	MGS	02-006/03:25:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
20395	MGS	02-006/03:25:00	43	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
20396	MGS	02-006/03:25:00	43	Config: TGC: DEST=37		
20397	MGS	02-006/03:25:00	43	Config: TGC: BAND=X, BR=0.000000		
20398	MGS	02-006/03:25:00	43	Config: FSS: CH=2, PRI_FL=10000		
20399	MGS	02-006/03:25:00	43	Config: RSR		
20400	MGS	02-006/03:25:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
20401	MGS	02-006/03:25:00	43	Config: BVR		
20402	MGS	02-006/03:25:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
20403	MGS	02-006/03:25:00	43	Config: MDA: SMPL=0.1		
20404	MGS	02-006/03:29:16		NOTE: Exit Planetary Atmosphere 12652		02-006/03:16:31
20405	MGS	02-006/03:30:00	25	End Tracking		
20406	MGS	02-006/03:31:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/03:18:39
20407	MGS	02-006/03:31:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/03:18:39
20408	MGS	02-006/03:31:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/03:18:39
20409	MGS	02-006/03:31:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/03:18:39
20410	MGS	02-006/03:31:24	15	Acquire D/L: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20411	MGS	02-006/03:31:25		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-006/03:18:40
20412	MGS	02-006/03:31:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/03:18:40
20413	MGS	02-006/03:31:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/03:18:40
20414	MGS	02-006/03:31:25	15	D/L Change: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20415	MGS	02-006/03:31:29		NOTE: End fixed Sub-Reflector for Radio Science		02-006/03:18:44
20416	MGS	02-006/03:37:49		NOTE: Exit Solar Eclipse 12652		02-006/03:25:03
20417	MGS	02-006/03:45:00	25	End Post-Cal		
20418	MGS	02-006/03:50:30	15	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20419	MGS	02-006/03:53:08		NOTE: Periapsis 12653 ----------		02-006/03:40:23
20420	MGS	02-006/03:58:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/03:46:02
20421	MGS	02-006/03:58:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/03:46:02
20422	MGS	02-006/03:58:49		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/03:46:03
20423	MGS	02-006/03:58:49		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/03:46:03
20424	MGS	02-006/04:20:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/04:08:03
20425	MGS	02-006/04:20:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/04:08:03
20426	MGS	02-006/04:42:56		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/04:30:10
20427	MGS	02-006/04:45:16		NOTE: Start EVP data return script		02-006/04:32:30
20428	MGS	02-006/04:47:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/04:35:10
20429	MGS	02-006/04:47:56		: 00:08:06, FALSE	RDSCII	02-006/04:35:10
20430	MGS	02-006/04:47:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/04:35:10
20431	MGS	02-006/04:47:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/04:35:10
20432	MGS	02-006/04:47:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/04:35:10
20433	MGS	02-006/04:47:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/04:35:10
20434	MGS	02-006/04:47:56	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20435	MGS	02-006/04:47:56	15	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20436	MGS	02-006/04:50:05		NOTE: Enter Planetary Atmosphere 12653		02-006/04:37:19
20437	MGS	02-006/04:52:05		NOTE: Apoapsis 12653 -		02-006/04:39:19
20438	MGS	02-006/04:55:00	43	Begin Tracking		
20439	MGS	02-006/04:55:00	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20440	MGS	02-006/04:55:00	43	NOTE: Carrier Only -- No Telemetry Modulation		
20441	MGS	02-006/04:55:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/04:42:30
20442	MGS	02-006/04:55:16		NOTE: Enter Solar Eclipse 12653		02-006/04:42:30
20443	MGS	02-006/04:55:28		NOTE: Enter Earth Occultation 12653		02-006/04:42:42
20444	MGS	02-006/04:55:28	15	NOTE: Loss Of X-Band Signal		
20445	MGS	02-006/04:55:28	43	NOTE: Loss Of X-Band Signal		
20446	MGS	02-006/04:56:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/04:43:16
20447	MGS	02-006/04:56:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/04:43:16
20448	MGS	02-006/04:56:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/04:43:16
20449	MGS	02-006/04:56:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/04:43:16
20450	MGS	02-006/04:56:03		NOTE: End EVP script		02-006/04:43:17
20451	MGS	02-006/04:56:03		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/04:43:17
20452	MGS	02-006/04:56:07		NOTE: End fixed Sub-Reflector for Radio Science		02-006/04:43:21
20453	MGS	02-006/05:08:25	15	NOTE: Below Uplink Interlock Limit		
20454	MGS	02-006/05:15:00	15	End Tracking		
20455	MGS	02-006/05:15:48		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/05:03:02
20456	MGS	02-006/05:19:33		: 01:34:16	RPAONX	02-006/05:06:47
20457	MGS	02-006/05:19:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/05:06:47
20458	MGS	02-006/05:19:49		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/05:07:03
20459	MGS	02-006/05:19:49		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/05:07:03
20460	MGS	02-006/05:19:54		Set eclipse egress script address: 01DC	SWSEES	02-006/05:07:08
20461	MGS	02-006/05:20:48		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-006/05:08:02
20462	MGS	02-006/05:20:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/05:08:02
20463	MGS	02-006/05:20:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/05:08:02
20464	MGS	02-006/05:20:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/05:08:02
20465	MGS	02-006/05:20:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/05:08:02
20466	MGS	02-006/05:21:18		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/05:08:32
20467	MGS	02-006/05:21:23		NOTE: Exit Earth Occultation 12653		02-006/05:08:37
20468	MGS	02-006/05:21:23	43	Acquisition Of X-Band Signal		
20469	MGS	02-006/05:21:23	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20470	MGS	02-006/05:21:23	43	NOTE: Carrier Only -- No Telemetry Modulation		
20471	MGS	02-006/05:27:03		NOTE: Exit Planetary Atmosphere 12653		02-006/05:14:17
20472	MGS	02-006/05:29:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/05:16:25
20473	MGS	02-006/05:29:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/05:16:25
20474	MGS	02-006/05:29:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/05:16:25
20475	MGS	02-006/05:29:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/05:16:25
20476	MGS	02-006/05:29:11	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20477	MGS	02-006/05:29:12		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-006/05:16:26
20478	MGS	02-006/05:29:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/05:16:26
20479	MGS	02-006/05:29:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/05:16:26
20480	MGS	02-006/05:29:12	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20481	MGS	02-006/05:29:16		NOTE: End fixed Sub-Reflector for Radio Science		02-006/05:16:30
20482	MGS	02-006/05:30:00	15	End Post-Cal		
20483	MGS	02-006/05:35:36		NOTE: Exit Solar Eclipse 12653		02-006/05:22:50
20484	MGS	02-006/05:51:22		NOTE: Periapsis 12654 ----------		02-006/05:38:36
20485	MGS	02-006/05:56:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/05:43:49
20486	MGS	02-006/05:56:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/05:43:49
20487	MGS	02-006/05:56:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/05:43:50
20488	MGS	02-006/05:56:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/05:43:50
20489	MGS	02-006/06:18:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/06:05:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20490	MGS	02-006/06:18:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/06:05:50
20491	MGS	02-006/06:28:27		NOTE: Start Block (SSRMGR)		02-006/06:15:41
20492	MGS	02-006/06:28:27		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-006/06:15:41
20493	MGS	02-006/06:28:28		SSR 1B Data Enable	CSD1BE	02-006/06:15:42
20494	MGS	02-006/06:28:28		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-006/06:15:42
20495	MGS	02-006/06:40:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/06:27:56
20496	MGS	02-006/06:43:02		NOTE: Start Block (MAP_PB_ODY)		02-006/06:30:16
20497	MGS	02-006/06:43:03		: 00:24:17, 01:34:17, FALSE, FALSE, FALSE, 00:01:15, 00:06:43, 01:19:52, 00:06:26	AEMINI	02-006/06:30:17
20498	MGS	02-006/06:43:03		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/06:30:17
20499	MGS	02-006/06:43:03		NOTE: Start EVP data return script		02-006/06:30:17
20500	MGS	02-006/06:43:04		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-006T07:12:33.000	AEMPBI	02-006/06:30:18
20501	MGS	02-006/06:45:42		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/06:32:56
20502	MGS	02-006/06:45:42		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8272000, DUR=00:17:14		02-006/06:32:56
20503	MGS	02-006/06:45:42		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-006/06:32:56
20504	MGS	02-006/06:45:42		: 00:08:06, FALSE	RDSCII	02-006/06:32:56
20505	MGS	02-006/06:45:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/06:32:56
20506	MGS	02-006/06:45:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/06:32:56
20507	MGS	02-006/06:45:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/06:32:56
20508	MGS	02-006/06:45:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/06:32:56
20509	MGS	02-006/06:45:42	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20510	MGS	02-006/06:45:42	43	NOTE: Carrier Only -- No Telemetry Modulation		
20511	MGS	02-006/06:47:53		NOTE: Enter Planetary Atmosphere 12654		02-006/06:35:07
20512	MGS	02-006/06:50:18		NOTE: Apoapsis 12654 -		02-006/06:37:32
20513	MGS	02-006/06:52:03		SSR 1A Data Disable	CSD1AX	02-006/06:39:17
20514	MGS	02-006/06:52:03		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-006/06:39:17
20515	MGS	02-006/06:52:04		NOTE: End Block (SSRMGR)		02-006/06:39:18
20516	MGS	02-006/06:53:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/06:40:17
20517	MGS	02-006/06:53:03		NOTE: Enter Solar Eclipse 12654		02-006/06:40:17
20518	MGS	02-006/06:53:16		NOTE: Enter Earth Occultation 12654		02-006/06:40:30
20519	MGS	02-006/06:53:16	43	NOTE: Loss Of X-Band Signal		
20520	MGS	02-006/06:53:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/06:41:02
20521	MGS	02-006/06:53:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/06:41:02
20522	MGS	02-006/06:53:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/06:41:02
20523	MGS	02-006/06:53:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/06:41:02
20524	MGS	02-006/06:53:49		NOTE: End EVP script		02-006/06:41:03
20525	MGS	02-006/06:53:49		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/06:41:03
20526	MGS	02-006/06:53:50		NOTE: End Block (MAP_RT)		02-006/06:41:04
20527	MGS	02-006/06:53:53		NOTE: End fixed Sub-Reflector for Radio Science		02-006/06:41:07
20528	MGS	02-006/07:17:20		: 01:34:17	RPAONX	02-006/07:04:34
20529	MGS	02-006/07:17:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/07:04:34
20530	MGS	02-006/07:17:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/07:04:50
20531	MGS	02-006/07:17:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/07:04:50
20532	MGS	02-006/07:17:40		Command the PSE with included data word: 3990	SWPSEL	02-006/07:04:54
20533	MGS	02-006/07:17:41		Set eclipse egress script address: 0158	SWSEES	02-006/07:04:55
20534	MGS	02-006/07:19:05		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/07:06:19
20535	MGS	02-006/07:19:11		NOTE: Exit Earth Occultation 12654		02-006/07:06:25
20536	MGS	02-006/07:19:11	43	Acquisition Of X-Band Signal		
20537	MGS	02-006/07:19:11	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20538	MGS	02-006/07:24:52		NOTE: Exit Planetary Atmosphere 12654		02-006/07:12:06
20539	MGS	02-006/07:25:18		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:15:40	AEMPB	02-006/07:12:32
20540	MGS	02-006/07:25:18		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-006/07:12:32
20541	MGS	02-006/07:25:18		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-006/07:12:32
20542	MGS	02-006/07:25:19		SSR 1A Data Enable	CSD1AE	02-006/07:12:33
20543	MGS	02-006/07:25:19		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-006/07:12:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20544	MGS	02-006/07:25:19	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20545	MGS	02-006/07:33:24		NOTE: Exit Solar Eclipse 12654		02-006/07:20:38
20546	MGS	02-006/07:49:19		NOTE: Periapsis 12655 ----------		02-006/07:36:33
20547	MGS	02-006/07:58:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/07:45:37
20548	MGS	02-006/07:58:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/07:45:37
20549	MGS	02-006/07:58:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/07:45:38
20550	MGS	02-006/07:58:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/07:45:38
20551	MGS	02-006/08:20:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/08:07:38
20552	MGS	02-006/08:20:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/08:07:38
20553	MGS	02-006/08:35:57		SSR 1A Data Disable	CSD1AX	02-006/08:23:11
20554	MGS	02-006/08:35:57		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-006/08:23:11
20555	MGS	02-006/08:35:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-006/08:23:11
20556	MGS	02-006/08:35:57	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20557	MGS	02-006/08:40:48		NOTE: Start Block (MAP_RT)		02-006/08:28:02
20558	MGS	02-006/08:40:49		: 00:24:17, 01:34:16, FALSE, TRUE, FALSE, 00:01:15, 00:08:23, 01:16:31, 00:08:06	AEMINI	02-006/08:28:03
20559	MGS	02-006/08:40:49		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/08:28:03
20560	MGS	02-006/08:40:49		NOTE: Start EVP data return script		02-006/08:28:03
20561	MGS	02-006/08:40:50		: SE_2A, RTM, 01:16:30, MRC, 2002-006T09:11:59.000	AEMRTI	02-006/08:28:04
20562	MGS	02-006/08:45:40		NOTE: Enter Planetary Atmosphere 12655		02-006/08:32:53
20563	MGS	02-006/08:48:02		NOTE: Apoapsis 12655 -		02-006/08:35:16
20564	MGS	02-006/08:50:49		NOTE: Enter Solar Eclipse 12655		02-006/08:38:02
20565	MGS	02-006/08:50:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/08:38:03
20566	MGS	02-006/08:51:03		NOTE: Enter Earth Occultation 12655		02-006/08:38:17
20567	MGS	02-006/08:51:03	43	NOTE: Loss Of X-Band Signal		
20568	MGS	02-006/08:51:37		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/08:38:51
20569	MGS	02-006/08:51:38		NOTE: End EVP script		02-006/08:38:51
20570	MGS	02-006/08:51:39		NOTE: End Block (MAP_PB_ODY)		02-006/08:38:52
20571	MGS	02-006/09:11:21		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/08:58:34
20572	MGS	02-006/09:15:06		: 01:34:16	RPAONX	02-006/09:02:20
20573	MGS	02-006/09:15:06		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/09:02:20
20574	MGS	02-006/09:15:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/09:02:38
20575	MGS	02-006/09:15:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/09:02:38
20576	MGS	02-006/09:15:29		Set eclipse egress script address: 019A	SWSEES	02-006/09:02:43
20577	MGS	02-006/09:16:21		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-006/09:03:35
20578	MGS	02-006/09:16:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/09:03:35
20579	MGS	02-006/09:16:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/09:03:35
20580	MGS	02-006/09:16:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/09:03:35
20581	MGS	02-006/09:16:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/09:03:35
20582	MGS	02-006/09:16:58		NOTE: Exit Earth Occultation 12655		02-006/09:04:11
20583	MGS	02-006/09:16:58	43	Acquisition Of X-Band Signal		
20584	MGS	02-006/09:16:58	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20585	MGS	02-006/09:16:58	43	NOTE: Carrier Only -- No Telemetry Modulation		
20586	MGS	02-006/09:22:39		NOTE: Exit Planetary Atmosphere 12655		02-006/09:09:53
20587	MGS	02-006/09:24:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/09:11:58
20588	MGS	02-006/09:24:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/09:11:58
20589	MGS	02-006/09:24:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/09:11:58
20590	MGS	02-006/09:24:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/09:11:58
20591	MGS	02-006/09:24:44	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20592	MGS	02-006/09:24:45		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-006/09:11:59
20593	MGS	02-006/09:24:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/09:11:59
20594	MGS	02-006/09:24:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/09:11:59
20595	MGS	02-006/09:24:45	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20596	MGS	02-006/09:24:49		NOTE: End fixed Sub-Reflector for Radio Science		02-006/09:12:02
20597	MGS	02-006/09:31:09		NOTE: Exit Solar Eclipse 12655		02-006/09:18:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20598	MGS	02-006/09:46:48		NOTE: Periapsis 12656 ----------		02-006/09:34:01
20599	MGS	02-006/09:52:08		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/09:39:22
20600	MGS	02-006/09:52:08		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/09:39:22
20601	MGS	02-006/09:52:09		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/09:39:23
20602	MGS	02-006/09:52:09		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/09:39:23
20603	MGS	02-006/10:14:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/10:01:23
20604	MGS	02-006/10:14:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/10:01:23
20605	MGS	02-006/10:36:15		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/10:23:28
20606	MGS	02-006/10:38:32		NOTE: Start EVP data return script		02-006/10:25:45
20607	MGS	02-006/10:40:00	65	Begin Pre-Cal		
20608	MGS	02-006/10:40:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
20609	MGS	02-006/10:40:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
20610	MGS	02-006/10:40:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
20611	MGS	02-006/10:40:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
20612	MGS	02-006/10:40:00	65	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
20613	MGS	02-006/10:40:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
20614	MGS	02-006/10:40:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
20615	MGS	02-006/10:40:00	65	Config: TGC: DEST=37		
20616	MGS	02-006/10:40:00	65	Config: TGC: BAND=X, BR=40000.000000		
20617	MGS	02-006/10:40:00	65	Config: FSS: CH=2, PRI_FL=10000		
20618	MGS	02-006/10:40:00	65	Config: RSR		
20619	MGS	02-006/10:40:00	65	Config: TXL		
20620	MGS	02-006/10:40:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
20621	MGS	02-006/10:40:00	65	Config: BVR		
20622	MGS	02-006/10:40:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
20623	MGS	02-006/10:40:00	65	Config: MDA: SMPL=0.1		
20624	MGS	02-006/10:40:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
20625	MGS	02-006/10:40:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
20626	MGS	02-006/10:40:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
20627	MGS	02-006/10:41:16		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/10:28:29
20628	MGS	02-006/10:41:16		: 00:08:06, FALSE	RDSCII	02-006/10:28:29
20629	MGS	02-006/10:41:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/10:28:29
20630	MGS	02-006/10:41:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/10:28:29
20631	MGS	02-006/10:41:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/10:28:29
20632	MGS	02-006/10:41:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/10:28:29
20633	MGS	02-006/10:41:16	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20634	MGS	02-006/10:41:16	43	NOTE: Carrier Only -- No Telemetry Modulation		
20635	MGS	02-006/10:43:21		NOTE: Enter Planetary Atmosphere 12656		02-006/10:30:35
20636	MGS	02-006/10:45:21		NOTE: Apoapsis 12656 -		02-006/10:32:35
20637	MGS	02-006/10:48:31		NOTE: Enter Solar Eclipse 12656		02-006/10:35:44
20638	MGS	02-006/10:48:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/10:35:45
20639	MGS	02-006/10:48:45		NOTE: Enter Earth Occultation 12656		02-006/10:35:58
20640	MGS	02-006/10:48:45	43	NOTE: Loss Of X-Band Signal		
20641	MGS	02-006/10:49:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/10:36:35
20642	MGS	02-006/10:49:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/10:36:35
20643	MGS	02-006/10:49:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/10:36:35
20644	MGS	02-006/10:49:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/10:36:35
20645	MGS	02-006/10:49:22		NOTE: End EVP script		02-006/10:36:35
20646	MGS	02-006/10:49:23		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/10:36:36
20647	MGS	02-006/10:49:26		NOTE: End fixed Sub-Reflector for Radio Science		02-006/10:36:39
20648	MGS	02-006/11:09:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/10:56:16
20649	MGS	02-006/11:12:49		: 01:34:16	RPAONX	02-006/11:00:02
20650	MGS	02-006/11:12:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/11:00:02
20651	MGS	02-006/11:13:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/11:00:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20652	MGS	02-006/11:13:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/11:00:23
20653	MGS	02-006/11:13:15		Set eclipse egress script address: 01DC	SWSEES	02-006/11:00:28
20654	MGS	02-006/11:14:04		: 00:00:30, 00:08:23, FALSE	RDSCIE	02-006/11:01:17
20655	MGS	02-006/11:14:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/11:01:17
20656	MGS	02-006/11:14:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/11:01:17
20657	MGS	02-006/11:14:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/11:01:17
20658	MGS	02-006/11:14:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/11:01:17
20659	MGS	02-006/11:14:34		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/11:01:47
20660	MGS	02-006/11:14:41		NOTE: Exit Earth Occultation 12656		02-006/11:01:54
20661	MGS	02-006/11:14:41	43	Acquisition Of X-Band Signal		
20662	MGS	02-006/11:14:41	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20663	MGS	02-006/11:14:41	43	NOTE: Carrier Only -- No Telemetry Modulation		
20664	MGS	02-006/11:20:22		NOTE: Exit Planetary Atmosphere 12656		02-006/11:07:35
20665	MGS	02-006/11:22:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/11:09:40
20666	MGS	02-006/11:22:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/11:09:40
20667	MGS	02-006/11:22:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/11:09:40
20668	MGS	02-006/11:22:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/11:09:40
20669	MGS	02-006/11:22:27	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20670	MGS	02-006/11:22:28		: RTM, MRC, 01:16:30, S&E_2A, FALSE, 00:08:07	AEMRT	02-006/11:09:41
20671	MGS	02-006/11:22:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/11:09:41
20672	MGS	02-006/11:22:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/11:09:41
20673	MGS	02-006/11:22:28	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20674	MGS	02-006/11:22:31		NOTE: End fixed Sub-Reflector for Radio Science		02-006/11:09:44
20675	MGS	02-006/11:28:50		NOTE: Exit Solar Eclipse 12656		02-006/11:16:04
20676	MGS	02-006/11:40:00	65	Begin Tracking		
20677	MGS	02-006/11:40:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20678	MGS	02-006/11:44:11		NOTE: Periapsis 12657 ----------		02-006/11:31:24
20679	MGS	02-006/11:49:46	65	NOTE: Above Uplink Interlock Limit		
20680	MGS	02-006/11:49:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/11:37:03
20681	MGS	02-006/11:49:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/11:37:03
20682	MGS	02-006/11:49:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/11:37:04
20683	MGS	02-006/11:49:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/11:37:04
20684	MGS	02-006/11:50:00	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
20685	MGS	02-006/11:50:07	43	NOTE: Below Uplink Interlock Limit		
20686	MGS	02-006/11:52:00	65	Range Modulation On: SUP=3.0dB		
20687	MGS	02-006/11:53:00	65	Begin Ranging Acquisition		
20688	MGS	02-006/12:00:00	43	End Tracking		
20689	MGS	02-006/12:02:05	65	NOTE: Transmitter Off in 15 minutes		
20690	MGS	02-006/12:11:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/11:59:04
20691	MGS	02-006/12:11:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/11:59:04
20692	MGS	02-006/12:12:47		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-006/12:00:00
20693	MGS	02-006/12:15:00	43	End Post-Cal		
20694	MGS	02-006/12:15:05	65	Range Modulation Off		
20695	MGS	02-006/12:15:33	65	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20696	MGS	02-006/12:17:05	65	Transmitter Off		
20697	MGS	02-006/12:21:47		NOTE: Start Block (SSRMGR)		02-006/12:09:00
20698	MGS	02-006/12:21:47		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-006/12:09:00
20699	MGS	02-006/12:21:48		SSR 1A Data Enable	CSD1AE	02-006/12:09:01
20700	MGS	02-006/12:21:48		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-006/12:09:01
20701	MGS	02-006/12:33:57		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/12:21:10
20702	MGS	02-006/12:36:11		NOTE: Start Block (MAP_PB_ODY)		02-006/12:23:24
20703	MGS	02-006/12:36:12		: 00:24:17, 01:34:17, FALSE, FALSE, FALSE, 00:01:15, 00:06:43, 01:19:52, 00:06:26	AEMINI	02-006/12:23:25
20704	MGS	02-006/12:36:12		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/12:23:25
20705	MGS	02-006/12:36:12		NOTE: Start EVP data return script		02-006/12:23:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20706	MGS	02-006/12:36:13		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-006T13:05:40.000	AEMPBI	02-006/12:23:26
20707	MGS	02-006/12:38:58		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/12:26:11
20708	MGS	02-006/12:38:58		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8240000, DUR=00:17:10		02-006/12:26:11
20709	MGS	02-006/12:38:58		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-006/12:26:11
20710	MGS	02-006/12:38:58		: 00:08:06, FALSE	RDSCII	02-006/12:26:11
20711	MGS	02-006/12:38:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/12:26:11
20712	MGS	02-006/12:38:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/12:26:11
20713	MGS	02-006/12:38:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/12:26:11
20714	MGS	02-006/12:38:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/12:26:11
20715	MGS	02-006/12:38:58	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20716	MGS	02-006/12:38:58	65	NOTE: Carrier Only -- No Telemetry Modulation		
20717	MGS	02-006/12:41:01		NOTE: Enter Planetary Atmosphere 12657		02-006/12:28:14
20718	MGS	02-006/12:43:07		NOTE: Apoapsis 12657 -		02-006/12:30:20
20719	MGS	02-006/12:45:12		SSR 1B Data Disable	CSD1BX	02-006/12:32:25
20720	MGS	02-006/12:45:12		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-006/12:32:25
20721	MGS	02-006/12:45:13		NOTE: End Block (SSRMGR)		02-006/12:32:26
20722	MGS	02-006/12:46:12		NOTE: Enter Solar Eclipse 12657		02-006/12:33:25
20723	MGS	02-006/12:46:12		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/12:33:25
20724	MGS	02-006/12:46:24		NOTE: Enter Earth Occultation 12657		02-006/12:33:37
20725	MGS	02-006/12:46:24	65	NOTE: Loss Of X-Band Signal		
20726	MGS	02-006/12:47:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/12:34:17
20727	MGS	02-006/12:47:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/12:34:17
20728	MGS	02-006/12:47:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/12:34:17
20729	MGS	02-006/12:47:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/12:34:17
20730	MGS	02-006/12:47:04		NOTE: End EVP script		02-006/12:34:17
20731	MGS	02-006/12:47:05		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/12:34:18
20732	MGS	02-006/12:47:05		NOTE: End Block (MAP_RT)		02-006/12:34:18
20733	MGS	02-006/12:47:08		NOTE: End fixed Sub-Reflector for Radio Science		02-006/12:34:21
20734	MGS	02-006/12:50:34	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
20735	MGS	02-006/12:52:34	65	Range Modulation On: SUP=3.0dB		
20736	MGS	02-006/12:53:34	65	Begin Ranging Acquisition		
20737	MGS	02-006/13:10:29		: 01:34:17	RPAONX	02-006/12:57:42
20738	MGS	02-006/13:10:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/12:57:42
20739	MGS	02-006/13:10:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/12:58:04
20740	MGS	02-006/13:10:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/12:58:04
20741	MGS	02-006/13:10:55		Command the PSE with included data word: 3990	SWPSEL	02-006/12:58:08
20742	MGS	02-006/13:10:56		Set eclipse egress script address: 0158	SWSEES	02-006/12:58:09
20743	MGS	02-006/13:12:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/12:59:27
20744	MGS	02-006/13:12:23		NOTE: Exit Earth Occultation 12657		02-006/12:59:36
20745	MGS	02-006/13:12:23	65	Acquisition Of X-Band Signal		
20746	MGS	02-006/13:12:23	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20747	MGS	02-006/13:16:08	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20748	MGS	02-006/13:18:02		NOTE: Exit Planetary Atmosphere 12657		02-006/13:05:15
20749	MGS	02-006/13:18:27		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:15:40	AEMPB	02-006/13:05:40
20750	MGS	02-006/13:18:27		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-006/13:05:40
20751	MGS	02-006/13:18:27		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-006/13:05:40
20752	MGS	02-006/13:18:28		SSR 1B Data Enable	CSD1BE	02-006/13:05:41
20753	MGS	02-006/13:18:28		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-006/13:05:41
20754	MGS	02-006/13:18:28	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20755	MGS	02-006/13:26:32		NOTE: Exit Solar Eclipse 12657		02-006/13:13:44
20756	MGS	02-006/13:41:53		NOTE: Periapsis 12658 ----------		02-006/13:29:06
20757	MGS	02-006/13:51:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/13:38:44
20758	MGS	02-006/13:51:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/13:38:44
20759	MGS	02-006/13:51:32		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/13:38:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20760	MGS	02-006/13:51:32		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/13:38:45
20761	MGS	02-006/13:59:49	65	NOTE: Transmitter Off in 15 minutes		
20762	MGS	02-006/14:12:50	65	Range Modulation Off		
20763	MGS	02-006/14:13:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/14:00:45
20764	MGS	02-006/14:13:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/14:00:45
20765	MGS	02-006/14:14:49	65	Transmitter Off		
20766	MGS	02-006/14:29:06		SSR 1B Data Disable	CSD1BX	02-006/14:16:19
20767	MGS	02-006/14:29:06		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-006/14:16:19
20768	MGS	02-006/14:29:06		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-006/14:16:19
20769	MGS	02-006/14:29:06	65	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20770	MGS	02-006/14:33:56		NOTE: Start Block (MAP_RT)		02-006/14:21:09
20771	MGS	02-006/14:33:57		: 00:24:26, 01:33:58, FALSE, TRUE, FALSE, 00:01:15, 00:08:20, 01:16:19, 00:08:03	AEMINI	02-006/14:21:10
20772	MGS	02-006/14:33:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/14:21:10
20773	MGS	02-006/14:33:57		NOTE: Start EVP data return script		02-006/14:21:10
20774	MGS	02-006/14:33:58		: SE_2A, RTM, 01:16:18, MRC, 2002-006T15:05:13.000	AEMRTI	02-006/14:21:11
20775	MGS	02-006/14:38:47		NOTE: Enter Planetary Atmosphere 12658		02-006/14:26:00
20776	MGS	02-006/14:40:24	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20777	MGS	02-006/14:41:00		NOTE: Apoapsis 12658 -		02-006/14:28:13
20778	MGS	02-006/14:43:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/14:31:10
20779	MGS	02-006/14:43:58		NOTE: Enter Solar Eclipse 12658		02-006/14:31:10
20780	MGS	02-006/14:44:09		NOTE: Enter Earth Occultation 12658		02-006/14:31:21
20781	MGS	02-006/14:44:09	65	NOTE: Loss Of X-Band Signal		
20782	MGS	02-006/14:44:46		NOTE: End EVP script		02-006/14:31:59
20783	MGS	02-006/14:44:46		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/14:31:59
20784	MGS	02-006/14:44:47		NOTE: End Block (MAP_PB_ODY)		02-006/14:32:00
20785	MGS	02-006/14:48:19	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
20786	MGS	02-006/14:50:19	65	Range Modulation On: SUP=3.0dB		
20787	MGS	02-006/14:51:19	65	Begin Ranging Acquisition		
20788	MGS	02-006/15:04:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/14:51:51
20789	MGS	02-006/15:08:23		: 01:33:58	RPAONX	02-006/14:55:36
20790	MGS	02-006/15:08:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/14:55:36
20791	MGS	02-006/15:08:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/14:55:45
20792	MGS	02-006/15:08:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/14:55:45
20793	MGS	02-006/15:08:37		Set eclipse egress script address: 019A	SWSEES	02-006/14:55:50
20794	MGS	02-006/15:09:38		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-006/14:56:51
20795	MGS	02-006/15:09:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/14:56:51
20796	MGS	02-006/15:09:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/14:56:51
20797	MGS	02-006/15:09:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/14:56:51
20798	MGS	02-006/15:09:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/14:56:51
20799	MGS	02-006/15:10:08		NOTE: Exit Earth Occultation 12658		02-006/14:57:21
20800	MGS	02-006/15:10:08	65	Acquisition Of X-Band Signal		
20801	MGS	02-006/15:10:08	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20802	MGS	02-006/15:10:08	65	NOTE: Carrier Only -- No Telemetry Modulation		
20803	MGS	02-006/15:15:48		NOTE: Exit Planetary Atmosphere 12658		02-006/15:03:00
20804	MGS	02-006/15:17:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/15:05:11
20805	MGS	02-006/15:17:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/15:05:11
20806	MGS	02-006/15:17:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/15:05:11
20807	MGS	02-006/15:17:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/15:05:11
20808	MGS	02-006/15:17:58	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20809	MGS	02-006/15:17:59		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-006/15:05:12
20810	MGS	02-006/15:17:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/15:05:12
20811	MGS	02-006/15:17:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/15:05:12
20812	MGS	02-006/15:17:59	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20813	MGS	02-006/15:18:04		NOTE: End fixed Sub-Reflector for Radio Science		02-006/15:05:16

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20814	MGS	02-006/15:24:18		NOTE: Exit Solar Eclipse 12658		02-006/15:11:30
20815	MGS	02-006/15:39:48		NOTE: Periapsis 12659 ----------		02-006/15:27:01
20816	MGS	02-006/15:45:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/15:32:29
20817	MGS	02-006/15:45:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/15:32:29
20818	MGS	02-006/15:45:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/15:32:30
20819	MGS	02-006/15:45:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/15:32:30
20820	MGS	02-006/15:57:36	65	NOTE: Transmitter Off in 15 minutes		
20821	MGS	02-006/16:07:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/15:54:30
20822	MGS	02-006/16:07:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/15:54:30
20823	MGS	02-006/16:10:36	65	Range Modulation Off		
20824	MGS	02-006/16:12:36	65	Transmitter Off		
20825	MGS	02-006/16:29:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/16:16:30
20826	MGS	02-006/16:31:44		NOTE: Start EVP data return script		02-006/16:18:57
20827	MGS	02-006/16:34:17		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/16:21:30
20828	MGS	02-006/16:34:17		: 00:08:03, FALSE	RDSCII	02-006/16:21:30
20829	MGS	02-006/16:34:17		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/16:21:30
20830	MGS	02-006/16:34:17		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/16:21:30
20831	MGS	02-006/16:34:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/16:21:30
20832	MGS	02-006/16:34:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/16:21:30
20833	MGS	02-006/16:34:17	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20834	MGS	02-006/16:34:17	65	NOTE: Carrier Only -- No Telemetry Modulation		
20835	MGS	02-006/16:36:34		NOTE: Enter Planetary Atmosphere 12659		02-006/16:23:47
20836	MGS	02-006/16:38:45		NOTE: Apoapsis 12659 -		02-006/16:25:57
20837	MGS	02-006/16:41:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/16:28:57
20838	MGS	02-006/16:41:45		NOTE: Enter Solar Eclipse 12659		02-006/16:28:57
20839	MGS	02-006/16:41:56		NOTE: Enter Earth Occultation 12659		02-006/16:29:08
20840	MGS	02-006/16:41:56	65	NOTE: Loss Of X-Band Signal		
20841	MGS	02-006/16:42:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/16:29:33
20842	MGS	02-006/16:42:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/16:29:33
20843	MGS	02-006/16:42:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/16:29:33
20844	MGS	02-006/16:42:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/16:29:33
20845	MGS	02-006/16:42:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/16:29:34
20846	MGS	02-006/16:42:22		NOTE: End EVP script		02-006/16:29:34
20847	MGS	02-006/16:42:26		NOTE: End fixed Sub-Reflector for Radio Science		02-006/16:29:38
20848	MGS	02-006/16:46:06	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
20849	MGS	02-006/16:48:07	65	Range Modulation On: SUP=3.0dB		
20850	MGS	02-006/16:49:07	65	Begin Ranging Acquisition		
20851	MGS	02-006/17:02:26		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/16:49:38
20852	MGS	02-006/17:06:11		: 01:33:58	RPAONX	02-006/16:53:23
20853	MGS	02-006/17:06:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/16:53:23
20854	MGS	02-006/17:06:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/16:53:30
20855	MGS	02-006/17:06:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/16:53:30
20856	MGS	02-006/17:06:23		Set eclipse egress script address: 01DC	SWSEES	02-006/16:53:35
20857	MGS	02-006/17:07:26		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-006/16:54:38
20858	MGS	02-006/17:07:26		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/16:54:38
20859	MGS	02-006/17:07:26		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/16:54:38
20860	MGS	02-006/17:07:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/16:54:38
20861	MGS	02-006/17:07:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/16:54:38
20862	MGS	02-006/17:07:56		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/16:55:08
20863	MGS	02-006/17:07:56		NOTE: Exit Earth Occultation 12659		02-006/16:55:08
20864	MGS	02-006/17:07:56	65	Acquisition Of X-Band Signal		
20865	MGS	02-006/17:07:56	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20866	MGS	02-006/17:07:56	65	NOTE: Carrier Only -- No Telemetry Modulation		
20867	MGS	02-006/17:13:35		NOTE: Exit Planetary Atmosphere 12659		02-006/17:00:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20868	MGS	02-006/17:15:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/17:02:58
20869	MGS	02-006/17:15:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/17:02:58
20870	MGS	02-006/17:15:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/17:02:58
20871	MGS	02-006/17:15:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/17:02:58
20872	MGS	02-006/17:15:46	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20873	MGS	02-006/17:15:47		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-006/17:02:59
20874	MGS	02-006/17:15:47		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/17:02:59
20875	MGS	02-006/17:15:47		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/17:02:59
20876	MGS	02-006/17:15:47	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20877	MGS	02-006/17:15:51		NOTE: End fixed Sub-Reflector for Radio Science		02-006/17:03:03
20878	MGS	02-006/17:22:05		NOTE: Exit Solar Eclipse 12659		02-006/17:09:18
20879	MGS	02-006/17:37:34		NOTE: Periapsis 12660 ----------		02-006/17:24:47
20880	MGS	02-006/17:43:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/17:30:17
20881	MGS	02-006/17:43:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/17:30:17
20882	MGS	02-006/17:43:06		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/17:30:18
20883	MGS	02-006/17:43:06		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/17:30:18
20884	MGS	02-006/17:55:21	65	NOTE: Transmitter Off in 15 minutes		
20885	MGS	02-006/18:05:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/17:52:18
20886	MGS	02-006/18:05:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/17:52:18
20887	MGS	02-006/18:08:22	65	Range Modulation Off		
20888	MGS	02-006/18:10:21	65	Transmitter Off		
20889	MGS	02-006/18:14:56		NOTE: Start Block (SSRMGR)		02-006/18:02:08
20890	MGS	02-006/18:14:56		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-006/18:02:08
20891	MGS	02-006/18:14:57		SSR 1B Data Enable	CSD1BE	02-006/18:02:09
20892	MGS	02-006/18:14:57		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-006/18:02:09
20893	MGS	02-006/18:20:00	25	Begin Pre-Cal		
20894	MGS	02-006/18:20:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
20895	MGS	02-006/18:20:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
20896	MGS	02-006/18:20:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
20897	MGS	02-006/18:20:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
20898	MGS	02-006/18:20:00	25	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
20899	MGS	02-006/18:20:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
20900	MGS	02-006/18:20:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
20901	MGS	02-006/18:20:00	25	Config: TGC: DEST=37		
20902	MGS	02-006/18:20:00	25	Config: TGC: BAND=X, BR=42666.666667		
20903	MGS	02-006/18:20:00	25	Config: FSS: CH=2, PRI_FL=10000		
20904	MGS	02-006/18:20:00	25	Config: RSR		
20905	MGS	02-006/18:20:00	25	Config: TXL		
20906	MGS	02-006/18:20:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
20907	MGS	02-006/18:20:00	25	Config: BVR		
20908	MGS	02-006/18:20:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
20909	MGS	02-006/18:20:00	25	Config: MDA: SMPL=0.1		
20910	MGS	02-006/18:20:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
20911	MGS	02-006/18:20:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
20912	MGS	02-006/18:20:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
20913	MGS	02-006/18:27:05		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/18:14:17
20914	MGS	02-006/18:29:31		NOTE: Start Block (MAP_PB_ODY)		02-006/18:16:43
20915	MGS	02-006/18:29:32		: 00:24:26, 01:33:59, FALSE, FALSE, FALSE, 00:01:15, 00:06:40, 01:19:40, 00:06:23	AEMINI	02-006/18:16:44
20916	MGS	02-006/18:29:32		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/18:16:44
20917	MGS	02-006/18:29:32		NOTE: Start EVP data return script		02-006/18:16:44
20918	MGS	02-006/18:29:33		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-006T18:59:05.000	AEMPBI	02-006/18:16:45
20919	MGS	02-006/18:32:05		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/18:19:17
20920	MGS	02-006/18:32:05		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8224000, DUR=00:17:08		02-006/18:19:17
20921	MGS	02-006/18:32:05		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-006/18:19:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20922	MGS	02-006/18:32:05		: 00:08:03, FALSE	RDSCII	02-006/18:19:17
20923	MGS	02-006/18:32:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/18:19:17
20924	MGS	02-006/18:32:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/18:19:17
20925	MGS	02-006/18:32:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/18:19:17
20926	MGS	02-006/18:32:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/18:19:17
20927	MGS	02-006/18:32:05	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
20928	MGS	02-006/18:32:05	65	NOTE: Carrier Only -- No Telemetry Modulation		
20929	MGS	02-006/18:34:21		NOTE: Enter Planetary Atmosphere 12660		02-006/18:21:33
20930	MGS	02-006/18:36:14		NOTE: Apoapsis 12660 -		02-006/18:23:26
20931	MGS	02-006/18:38:32		SSR 1A Data Disable	CSD1AX	02-006/18:25:44
20932	MGS	02-006/18:38:32		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-006/18:25:44
20933	MGS	02-006/18:38:33		NOTE: End Block (SSRMGR)		02-006/18:25:45
20934	MGS	02-006/18:39:32		NOTE: Enter Solar Eclipse 12660		02-006/18:26:44
20935	MGS	02-006/18:39:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/18:26:44
20936	MGS	02-006/18:39:42		NOTE: Enter Earth Occultation 12660		02-006/18:26:54
20937	MGS	02-006/18:39:42	65	NOTE: Loss Of X-Band Signal		
20938	MGS	02-006/18:40:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/18:27:20
20939	MGS	02-006/18:40:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/18:27:20
20940	MGS	02-006/18:40:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/18:27:20
20941	MGS	02-006/18:40:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/18:27:20
20942	MGS	02-006/18:40:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/18:27:21
20943	MGS	02-006/18:40:09		NOTE: End EVP script		02-006/18:27:21
20944	MGS	02-006/18:40:10		NOTE: End Block (MAP_RT)		02-006/18:27:22
20945	MGS	02-006/18:40:13		NOTE: End fixed Sub-Reflector for Radio Science		02-006/18:27:25
20946	MGS	02-006/18:43:53	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
20947	MGS	02-006/18:45:54	65	Range Modulation On: SUP=3.0dB		
20948	MGS	02-006/18:46:54	65	Begin Ranging Acquisition		
20949	MGS	02-006/19:03:58		: 01:33:59	RPAONX	02-006/18:51:10
20950	MGS	02-006/19:03:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/18:51:10
20951	MGS	02-006/19:04:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/18:51:18
20952	MGS	02-006/19:04:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/18:51:18
20953	MGS	02-006/19:04:10		Command the PSE with included data word: 3990	SWPSEL	02-006/18:51:22
20954	MGS	02-006/19:04:11		Set eclipse egress script address: 0158	SWSEES	02-006/18:51:23
20955	MGS	02-006/19:05:43		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/18:52:55
20956	MGS	02-006/19:05:44		NOTE: Exit Earth Occultation 12660		02-006/18:52:56
20957	MGS	02-006/19:05:44	65	Acquisition Of X-Band Signal		
20958	MGS	02-006/19:05:44	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20959	MGS	02-006/19:09:29	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20960	MGS	02-006/19:11:23		NOTE: Exit Planetary Atmosphere 12660		02-006/18:58:35
20961	MGS	02-006/19:11:53		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:15:25	AEMPB	02-006/18:59:05
20962	MGS	02-006/19:11:53		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-006/18:59:05
20963	MGS	02-006/19:11:53		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-006/18:59:05
20964	MGS	02-006/19:11:54		SSR 1A Data Enable	CSD1AE	02-006/18:59:06
20965	MGS	02-006/19:11:54		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-006/18:59:06
20966	MGS	02-006/19:11:54	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20967	MGS	02-006/19:19:52		NOTE: Exit Solar Eclipse 12660		02-006/19:07:04
20968	MGS	02-006/19:20:00	25	Begin Tracking		
20969	MGS	02-006/19:20:00	25	Acquire D/L: X/16, 3-Way/65, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20970	MGS	02-006/19:28:00	65	Range Modulation Off		
20971	MGS	02-006/19:30:00	25	U/L Transfer From DSS-65 to DSS-25: PWR=4.0, BR=125.0, CS=5.82dB		
20972	MGS	02-006/19:32:00	25	Range Modulation On: SUP=3.0dB		
20973	MGS	02-006/19:33:00	25	Begin Ranging Acquisition		
20974	MGS	02-006/19:35:16		NOTE: Periapsis 12661 ----------		02-006/19:22:28

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
20975	MGS	02-006/19:40:00	65	End Tracking		
20976	MGS	02-006/19:44:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/19:32:03
20977	MGS	02-006/19:44:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/19:32:03
20978	MGS	02-006/19:44:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/19:32:04
20979	MGS	02-006/19:44:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/19:32:04
20980	MGS	02-006/19:53:05	25	NOTE: Transmitter Off in 15 minutes		
20981	MGS	02-006/19:55:00	65	End Post-Cal		
20982	MGS	02-006/19:55:35	25	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20983	MGS	02-006/20:06:05	25	Range Modulation Off		
20984	MGS	02-006/20:06:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/19:54:04
20985	MGS	02-006/20:06:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/19:54:04
20986	MGS	02-006/20:08:05	25	Transmitter Off		
20987	MGS	02-006/20:22:32		SSR 1A Data Disable	CSD1AX	02-006/20:09:44
20988	MGS	02-006/20:22:32		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-006/20:09:44
20989	MGS	02-006/20:22:32		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-006/20:09:44
20990	MGS	02-006/20:22:32	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20991	MGS	02-006/20:27:15		NOTE: Start Block (MAP_RT)		02-006/20:14:27
20992	MGS	02-006/20:27:16		: 00:24:26, 01:33:58, FALSE, TRUE, FALSE, 00:01:15, 00:08:20, 01:16:19, 00:08:03	AEMINI	02-006/20:14:28
20993	MGS	02-006/20:27:16		Enable sending eclipse ingress script when array power disappears	SWEISE	02-006/20:14:28
20994	MGS	02-006/20:27:16		NOTE: Start EVP data return script		02-006/20:14:28
20995	MGS	02-006/20:27:17		: SE_2A, RTM, 01:16:18, MRC, 2002-006T20:58:30.000	AEMRTI	02-006/20:14:29
20996	MGS	02-006/20:32:04		NOTE: Enter Planetary Atmosphere 12661		02-006/20:19:16
20997	MGS	02-006/20:33:41	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
20998	MGS	02-006/20:33:44		NOTE: Apoapsis 12661 -		02-006/20:20:56
20999	MGS	02-006/20:37:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/20:24:28
21000	MGS	02-006/20:37:16		NOTE: Enter Solar Eclipse 12661		02-006/20:24:28
21001	MGS	02-006/20:37:26		NOTE: Enter Earth Occultation 12661		02-006/20:24:38
21002	MGS	02-006/20:37:26	25	NOTE: Loss Of X-Band Signal		
21003	MGS	02-006/20:37:57		NOTE: End EVP script		02-006/20:25:09
21004	MGS	02-006/20:37:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/20:25:09
21005	MGS	02-006/20:37:58		NOTE: End Block (MAP_PB_ODY)		02-006/20:25:10
21006	MGS	02-006/20:41:38	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21007	MGS	02-006/20:43:39	25	Range Modulation On: SUP=3.0dB		
21008	MGS	02-006/20:44:39	25	Begin Ranging Acquisition		
21009	MGS	02-006/20:57:57		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/20:45:09
21010	MGS	02-006/21:01:42		: 01:33:58	RPAONX	02-006/20:48:54
21011	MGS	02-006/21:01:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/20:48:54
21012	MGS	02-006/21:01:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/20:49:04
21013	MGS	02-006/21:01:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/20:49:04
21014	MGS	02-006/21:01:57		Set eclipse egress script address: 019A	SWSEES	02-006/20:49:09
21015	MGS	02-006/21:02:57		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-006/20:50:09
21016	MGS	02-006/21:02:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/20:50:09
21017	MGS	02-006/21:02:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/20:50:09
21018	MGS	02-006/21:02:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/20:50:09
21019	MGS	02-006/21:02:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/20:50:09
21020	MGS	02-006/21:03:30		NOTE: Exit Earth Occultation 12661		02-006/20:50:41
21021	MGS	02-006/21:03:30	25	Acquisition Of X-Band Signal		
21022	MGS	02-006/21:03:30	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21023	MGS	02-006/21:03:30	25	NOTE: Carrier Only -- No Telemetry Modulation		
21024	MGS	02-006/21:09:08		NOTE: Exit Planetary Atmosphere 12661		02-006/20:56:20
21025	MGS	02-006/21:11:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/20:58:29
21026	MGS	02-006/21:11:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/20:58:29
21027	MGS	02-006/21:11:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/20:58:29
21028	MGS	02-006/21:11:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/20:58:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21029	MGS	02-006/21:11:17	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21030	MGS	02-006/21:11:18		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-006/20:58:30
21031	MGS	02-006/21:11:18		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/20:58:30
21032	MGS	02-006/21:11:18		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/20:58:30
21033	MGS	02-006/21:11:18	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21034	MGS	02-006/21:11:22		NOTE: End fixed Sub-Reflector for Radio Science		02-006/20:58:34
21035	MGS	02-006/21:17:36		NOTE: Exit Solar Eclipse 12661		02-006/21:04:48
21036	MGS	02-006/21:33:00		NOTE: Periapsis 12662 ----------		02-006/21:20:12
21037	MGS	02-006/21:38:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/21:25:47
21038	MGS	02-006/21:38:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/21:25:47
21039	MGS	02-006/21:38:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/21:25:48
21040	MGS	02-006/21:38:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/21:25:48
21041	MGS	02-006/21:50:46	25	NOTE: Transmitter Off in 15 minutes		
21042	MGS	02-006/22:00:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/21:47:48
21043	MGS	02-006/22:00:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/21:47:48
21044	MGS	02-006/22:03:47	25	Range Modulation Off		
21045	MGS	02-006/22:05:46	25	Transmitter Off		
21046	MGS	02-006/22:22:36		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/22:09:48
21047	MGS	02-006/22:24:58		NOTE: Start EVP data return script		02-006/22:12:10
21048	MGS	02-006/22:27:36		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-006/22:14:48
21049	MGS	02-006/22:27:36		: 00:08:03, FALSE	RDSCII	02-006/22:14:48
21050	MGS	02-006/22:27:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/22:14:48
21051	MGS	02-006/22:27:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/22:14:48
21052	MGS	02-006/22:27:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/22:14:48
21053	MGS	02-006/22:27:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/22:14:48
21054	MGS	02-006/22:27:36	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21055	MGS	02-006/22:27:36	25	NOTE: Carrier Only -- No Telemetry Modulation		
21056	MGS	02-006/22:29:47		NOTE: Enter Planetary Atmosphere 12662		02-006/22:16:58
21057	MGS	02-006/22:31:39		NOTE: Apoapsis 12662 -		02-006/22:18:50
21058	MGS	02-006/22:34:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-006/22:22:10
21059	MGS	02-006/22:34:59		NOTE: Enter Solar Eclipse 12662		02-006/22:22:10
21060	MGS	02-006/22:35:08		NOTE: Enter Earth Occultation 12662		02-006/22:22:20
21061	MGS	02-006/22:35:08	25	NOTE: Loss Of X-Band Signal		
21062	MGS	02-006/22:35:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/22:22:51
21063	MGS	02-006/22:35:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/22:22:51
21064	MGS	02-006/22:35:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/22:22:51
21065	MGS	02-006/22:35:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/22:22:51
21066	MGS	02-006/22:35:40		Turn off the MOT Exciter and RPA beam	STRPAF	02-006/22:22:52
21067	MGS	02-006/22:35:40		NOTE: End EVP script		02-006/22:22:52
21068	MGS	02-006/22:35:44		NOTE: End fixed Sub-Reflector for Radio Science		02-006/22:22:56
21069	MGS	02-006/22:39:21	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21070	MGS	02-006/22:41:22	25	Range Modulation On: SUP=3.0dB		
21071	MGS	02-006/22:42:22	25	Begin Ranging Acquisition		
21072	MGS	02-006/22:55:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-006/22:42:51
21073	MGS	02-006/22:59:24		: 01:33:58	RPAONX	02-006/22:46:36
21074	MGS	02-006/22:59:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-006/22:46:36
21075	MGS	02-006/22:59:36		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-006/22:46:48
21076	MGS	02-006/22:59:36		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-006/22:46:48
21077	MGS	02-006/22:59:41		Set eclipse egress script address: 01DC	SWSEES	02-006/22:46:53
21078	MGS	02-006/23:00:39		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-006/22:47:51
21079	MGS	02-006/23:00:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-006/22:47:51
21080	MGS	02-006/23:00:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-006/22:47:51
21081	MGS	02-006/23:00:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-006/22:47:51
21082	MGS	02-006/23:00:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-006/22:47:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21083	MGS	02-006/23:01:09		Disables autonomous command to send eclipse ingress script	SWEISX	02-006/22:48:21
21084	MGS	02-006/23:01:13		NOTE: Exit Earth Occultation 12662		02-006/22:48:25
21085	MGS	02-006/23:01:13	25	Acquisition Of X-Band Signal		
21086	MGS	02-006/23:01:13	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21087	MGS	02-006/23:01:13	25	NOTE: Carrier Only -- No Telemetry Modulation		
21088	MGS	02-006/23:06:52		NOTE: Exit Planetary Atmosphere 12662		02-006/22:54:04
21089	MGS	02-006/23:08:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-006/22:56:11
21090	MGS	02-006/23:08:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-006/22:56:11
21091	MGS	02-006/23:08:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-006/22:56:11
21092	MGS	02-006/23:08:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-006/22:56:11
21093	MGS	02-006/23:08:59	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21094	MGS	02-006/23:09:00		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-006/22:56:12
21095	MGS	02-006/23:09:00		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-006/22:56:12
21096	MGS	02-006/23:09:00		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-006/22:56:12
21097	MGS	02-006/23:09:00	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21098	MGS	02-006/23:09:04		NOTE: End fixed Sub-Reflector for Radio Science		02-006/22:56:16
21099	MGS	02-006/23:15:19		NOTE: Exit Solar Eclipse 12662		02-006/23:02:30
21100	MGS	02-006/23:30:39		NOTE: Periapsis 12663 ----------		02-006/23:17:50
21101	MGS	02-006/23:36:18		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-006/23:23:29
21102	MGS	02-006/23:36:18		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-006/23:23:29
21103	MGS	02-006/23:36:19		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-006/23:23:30
21104	MGS	02-006/23:36:19		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-006/23:23:30
21105	MGS	02-006/23:48:28	25	NOTE: Transmitter Off in 15 minutes		
21106	MGS	02-006/23:58:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-006/23:45:30
21107	MGS	02-006/23:58:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-006/23:45:30
21108	MGS	02-007/00:00:00		Light Time: OWLT = 12:48, RTLT = 25:37		
21109	MGS	02-007/00:01:29	25	Range Modulation Off		
21110	MGS	02-007/00:03:28	25	Transmitter Off		
21111	MGS	02-007/00:08:12		NOTE: Start Block (SSRMGR)		02-006/23:55:23
21112	MGS	02-007/00:08:12		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-006/23:55:23
21113	MGS	02-007/00:08:13		SSR 1A Data Enable	CSD1AE	02-006/23:55:24
21114	MGS	02-007/00:08:13		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-006/23:55:24
21115	MGS	02-007/00:20:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/00:07:30
21116	MGS	02-007/00:22:40		NOTE: Start Block (MAP_PB_ODY)		02-007/00:09:51
21117	MGS	02-007/00:22:41		: 00:24:26, 01:33:59, FALSE, FALSE, FALSE, 00:01:15, 00:06:40, 01:19:40, 00:06:23	AEMINI	02-007/00:09:52
21118	MGS	02-007/00:22:41		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/00:09:52
21119	MGS	02-007/00:22:41		NOTE: Start EVP data return script		02-007/00:09:52
21120	MGS	02-007/00:22:42		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-007T00:52:13.000	AEMPBI	02-007/00:09:53
21121	MGS	02-007/00:25:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/00:12:30
21122	MGS	02-007/00:25:19		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8208000, DUR=00:17:06		02-007/00:12:30
21123	MGS	02-007/00:25:19		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-007/00:12:30
21124	MGS	02-007/00:25:19		: 00:08:03, FALSE	RDSCII	02-007/00:12:30
21125	MGS	02-007/00:25:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/00:12:30
21126	MGS	02-007/00:25:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/00:12:30
21127	MGS	02-007/00:25:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/00:12:30
21128	MGS	02-007/00:25:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/00:12:30
21129	MGS	02-007/00:25:19	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21130	MGS	02-007/00:25:19	25	NOTE: Carrier Only -- No Telemetry Modulation		
21131	MGS	02-007/00:27:30		NOTE: Enter Planetary Atmosphere 12663		02-007/00:14:41
21132	MGS	02-007/00:29:15		NOTE: Apoapsis 12663 -		02-007/00:16:27
21133	MGS	02-007/00:31:41		SSR 1B Data Disable	CSD1BX	02-007/00:18:52
21134	MGS	02-007/00:31:41		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-007/00:18:52
21135	MGS	02-007/00:31:42		NOTE: End Block (SSRMGR)		02-007/00:18:53
21136	MGS	02-007/00:32:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/00:19:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21137	MGS	02-007/00:32:41		NOTE: Enter Solar Eclipse 12663		02-007/00:19:52
21138	MGS	02-007/00:32:51		NOTE: Enter Earth Occultation 12663		02-007/00:20:02
21139	MGS	02-007/00:32:51	25	NOTE: Loss Of X-Band Signal		
21140	MGS	02-007/00:33:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/00:20:33
21141	MGS	02-007/00:33:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/00:20:33
21142	MGS	02-007/00:33:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/00:20:33
21143	MGS	02-007/00:33:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/00:20:33
21144	MGS	02-007/00:33:23		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/00:20:34
21145	MGS	02-007/00:33:23		NOTE: End EVP script		02-007/00:20:34
21146	MGS	02-007/00:33:24		NOTE: End Block (MAP_RT)		02-007/00:20:35
21147	MGS	02-007/00:33:27		NOTE: End fixed Sub-Reflector for Radio Science		02-007/00:20:38
21148	MGS	02-007/00:37:03	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21149	MGS	02-007/00:39:04	25	Range Modulation On: SUP=3.0dB		
21150	MGS	02-007/00:40:04	25	Begin Ranging Acquisition		
21151	MGS	02-007/00:57:07		: 01:33:59	RPAONX	02-007/00:44:18
21152	MGS	02-007/00:57:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/00:44:18
21153	MGS	02-007/00:57:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/00:44:30
21154	MGS	02-007/00:57:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/00:44:30
21155	MGS	02-007/00:57:23		Command the PSE with included data word: 3990	SWPSEL	02-007/00:44:34
21156	MGS	02-007/00:57:24		Set eclipse egress script address: 0158	SWSEES	02-007/00:44:35
21157	MGS	02-007/00:58:52		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/00:46:03
21158	MGS	02-007/00:58:55		NOTE: Exit Earth Occultation 12663		02-007/00:46:07
21159	MGS	02-007/00:58:55	25	Acquisition Of X-Band Signal		
21160	MGS	02-007/00:58:55	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21161	MGS	02-007/01:02:41	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21162	MGS	02-007/01:04:34		NOTE: Exit Planetary Atmosphere 12663		02-007/00:51:46
21163	MGS	02-007/01:05:02		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:15:25	AEMPB	02-007/00:52:13
21164	MGS	02-007/01:05:02		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-007/00:52:13
21165	MGS	02-007/01:05:02		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-007/00:52:13
21166	MGS	02-007/01:05:03		SSR 1B Data Enable	CSD1BE	02-007/00:52:14
21167	MGS	02-007/01:05:03		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-007/00:52:14
21168	MGS	02-007/01:05:03	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21169	MGS	02-007/01:13:01		NOTE: Exit Solar Eclipse 12663		02-007/01:00:12
21170	MGS	02-007/01:28:00		NOTE: Periapsis 12664 ----------		02-007/01:15:11
21171	MGS	02-007/01:38:00		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/01:25:11
21172	MGS	02-007/01:38:00		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/01:25:11
21173	MGS	02-007/01:38:01		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/01:25:12
21174	MGS	02-007/01:38:01		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/01:25:12
21175	MGS	02-007/01:46:10	25	NOTE: Transmitter Off in 15 minutes		
21176	MGS	02-007/01:59:10	25	Range Modulation Off		
21177	MGS	02-007/02:00:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/01:47:12
21178	MGS	02-007/02:00:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/01:47:12
21179	MGS	02-007/02:01:10	25	Transmitter Off		
21180	MGS	02-007/02:15:41		SSR 1B Data Disable	CSD1BX	02-007/02:02:52
21181	MGS	02-007/02:15:41		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-007/02:02:52
21182	MGS	02-007/02:15:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-007/02:02:52
21183	MGS	02-007/02:15:41	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21184	MGS	02-007/02:20:23		NOTE: Start Block (MAP_RT)		02-007/02:07:34
21185	MGS	02-007/02:20:24		: 00:24:26, 01:33:58, FALSE, TRUE, FALSE, 00:01:15, 00:08:20, 01:16:19, 00:08:03	AEMINI	02-007/02:07:35
21186	MGS	02-007/02:20:24		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/02:07:35
21187	MGS	02-007/02:20:24		NOTE: Start EVP data return script		02-007/02:07:35
21188	MGS	02-007/02:20:25		: SE_2A, RTM, 01:16:18, MRC, 2002-007T02:51:38.000	AEMRTI	02-007/02:07:36
21189	MGS	02-007/02:25:12		NOTE: Enter Planetary Atmosphere 12664		02-007/02:12:23
21190	MGS	02-007/02:26:42		NOTE: Apoapsis 12664 -		02-007/02:13:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21191	MGS	02-007/02:26:47	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21192	MGS	02-007/02:30:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/02:17:35
21193	MGS	02-007/02:30:24		NOTE: Enter Solar Eclipse 12664		02-007/02:17:35
21194	MGS	02-007/02:30:32		NOTE: Enter Earth Occultation 12664		02-007/02:17:43
21195	MGS	02-007/02:30:32	25	NOTE: Loss Of X-Band Signal		
21196	MGS	02-007/02:31:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/02:18:17
21197	MGS	02-007/02:31:06		NOTE: End EVP script		02-007/02:18:17
21198	MGS	02-007/02:31:07		NOTE: End Block (MAP_PB_ODY)		02-007/02:18:18
21199	MGS	02-007/02:34:46	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21200	MGS	02-007/02:36:47	25	Range Modulation On: SUP=3.0dB		
21201	MGS	02-007/02:37:47	25	Begin Ranging Acquisition		
21202	MGS	02-007/02:51:05		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/02:38:16
21203	MGS	02-007/02:54:50		: 01:33:58	RPAONX	02-007/02:42:01
21204	MGS	02-007/02:54:50		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/02:42:01
21205	MGS	02-007/02:55:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/02:42:12
21206	MGS	02-007/02:55:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/02:42:12
21207	MGS	02-007/02:55:06		Set eclipse egress script address: 019A	SWSEES	02-007/02:42:17
21208	MGS	02-007/02:56:05		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-007/02:43:16
21209	MGS	02-007/02:56:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/02:43:16
21210	MGS	02-007/02:56:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/02:43:16
21211	MGS	02-007/02:56:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/02:43:16
21212	MGS	02-007/02:56:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/02:43:16
21213	MGS	02-007/02:56:39		NOTE: Exit Earth Occultation 12664		02-007/02:43:50
21214	MGS	02-007/02:56:39	25	Acquisition Of X-Band Signal		
21215	MGS	02-007/02:56:39	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21216	MGS	02-007/02:56:39	25	NOTE: Carrier Only -- No Telemetry Modulation		
21217	MGS	02-007/03:02:17		NOTE: Exit Planetary Atmosphere 12664		02-007/02:49:28
21218	MGS	02-007/03:04:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/02:51:36
21219	MGS	02-007/03:04:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/02:51:36
21220	MGS	02-007/03:04:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/02:51:36
21221	MGS	02-007/03:04:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/02:51:36
21222	MGS	02-007/03:04:25	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21223	MGS	02-007/03:04:26		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-007/02:51:37
21224	MGS	02-007/03:04:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/02:51:37
21225	MGS	02-007/03:04:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/02:51:37
21226	MGS	02-007/03:04:26	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21227	MGS	02-007/03:04:30		NOTE: End fixed Sub-Reflector for Radio Science		02-007/02:51:41
21228	MGS	02-007/03:10:44		NOTE: Exit Solar Eclipse 12664		02-007/02:57:55
21229	MGS	02-007/03:25:49		NOTE: Periapsis 12665 ----------		02-007/03:13:00
21230	MGS	02-007/03:31:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/03:18:54
21231	MGS	02-007/03:31:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/03:18:54
21232	MGS	02-007/03:31:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/03:18:55
21233	MGS	02-007/03:31:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/03:18:55
21234	MGS	02-007/03:43:52	25	NOTE: Transmitter Off in 15 minutes		
21235	MGS	02-007/03:53:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/03:40:55
21236	MGS	02-007/03:53:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/03:40:55
21237	MGS	02-007/03:56:52	25	Range Modulation Off		
21238	MGS	02-007/03:58:52	25	Transmitter Off		
21239	MGS	02-007/04:00:00	45	Begin Pre-Cal		
21240	MGS	02-007/04:00:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
21241	MGS	02-007/04:00:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
21242	MGS	02-007/04:00:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
21243	MGS	02-007/04:00:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
21244	MGS	02-007/04:00:00	45	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21245	MGS	02-007/04:00:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
21246	MGS	02-007/04:00:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
21247	MGS	02-007/04:00:00	45	Config: TGC: DEST=37		
21248	MGS	02-007/04:00:00	45	Config: TGC: BAND=X, BR=0.000000		
21249	MGS	02-007/04:00:00	45	Config: FSS: CH=2, PRI_FL=10000		
21250	MGS	02-007/04:00:00	45	Config: RSR		
21251	MGS	02-007/04:00:00	45	Config: TXL		
21252	MGS	02-007/04:00:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
21253	MGS	02-007/04:00:00	45	Config: BVR		
21254	MGS	02-007/04:00:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
21255	MGS	02-007/04:00:00	45	Config: MDA: SMPL=0.1		
21256	MGS	02-007/04:00:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
21257	MGS	02-007/04:00:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
21258	MGS	02-007/04:00:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
21259	MGS	02-007/04:15:45		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/04:02:55
21260	MGS	02-007/04:18:09		NOTE: Start EVP data return script		02-007/04:05:20
21261	MGS	02-007/04:20:44		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/04:07:55
21262	MGS	02-007/04:20:44		: 00:08:03, FALSE	RDSCII	02-007/04:07:55
21263	MGS	02-007/04:20:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/04:07:55
21264	MGS	02-007/04:20:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/04:07:55
21265	MGS	02-007/04:20:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/04:07:55
21266	MGS	02-007/04:20:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/04:07:55
21267	MGS	02-007/04:20:44	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21268	MGS	02-007/04:20:44	25	NOTE: Carrier Only -- No Telemetry Modulation		
21269	MGS	02-007/04:22:56		NOTE: Enter Planetary Atmosphere 12665		02-007/04:10:06
21270	MGS	02-007/04:24:41		NOTE: Apoapsis 12665 -		02-007/04:11:52
21271	MGS	02-007/04:28:09		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/04:15:20
21272	MGS	02-007/04:28:10		NOTE: Enter Solar Eclipse 12665		02-007/04:15:20
21273	MGS	02-007/04:28:15		NOTE: Enter Earth Occultation 12665		02-007/04:15:26
21274	MGS	02-007/04:28:15	25	NOTE: Loss Of X-Band Signal		
21275	MGS	02-007/04:28:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/04:15:58
21276	MGS	02-007/04:28:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/04:15:58
21277	MGS	02-007/04:28:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/04:15:58
21278	MGS	02-007/04:28:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/04:15:58
21279	MGS	02-007/04:28:48		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/04:15:59
21280	MGS	02-007/04:28:49		NOTE: End EVP script		02-007/04:15:59
21281	MGS	02-007/04:28:53		NOTE: End fixed Sub-Reflector for Radio Science		02-007/04:16:03
21282	MGS	02-007/04:32:32	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21283	MGS	02-007/04:34:32	25	Range Modulation On: SUP=3.0dB		
21284	MGS	02-007/04:35:32	25	Begin Ranging Acquisition		
21285	MGS	02-007/04:40:00	25	NOTE: Transmitter Off in 15 minutes		
21286	MGS	02-007/04:48:51		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/04:36:01
21287	MGS	02-007/04:52:35		: 01:33:58	RPAONX	02-007/04:39:46
21288	MGS	02-007/04:52:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/04:39:46
21289	MGS	02-007/04:52:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/04:39:55
21290	MGS	02-007/04:52:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/04:39:55
21291	MGS	02-007/04:52:49		Set eclipse egress script address: 01DC	SWSEES	02-007/04:40:00
21292	MGS	02-007/04:53:00	25	Range Modulation Off		
21293	MGS	02-007/04:53:50		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-007/04:41:01
21294	MGS	02-007/04:53:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/04:41:01
21295	MGS	02-007/04:53:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/04:41:01
21296	MGS	02-007/04:53:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/04:41:01
21297	MGS	02-007/04:53:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/04:41:01
21298	MGS	02-007/04:54:20		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/04:41:31

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21299	MGS	02-007/04:54:25		NOTE: Exit Earth Occultation 12665		02-007/04:41:36
21300	MGS	02-007/04:54:25	25	Acquisition Of X-Band Signal		
21301	MGS	02-007/04:54:25	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21302	MGS	02-007/04:54:25	25	NOTE: Carrier Only -- No Telemetry Modulation		
21303	MGS	02-007/04:55:00	25	Transmitter Off		
21304	MGS	02-007/05:00:00	45	Begin Tracking		
21305	MGS	02-007/05:00:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21306	MGS	02-007/05:00:00	45	NOTE: Carrier Only -- No Telemetry Modulation		
21307	MGS	02-007/05:00:02		NOTE: Exit Planetary Atmosphere 12665		02-007/04:47:12
21308	MGS	02-007/05:02:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/04:49:21
21309	MGS	02-007/05:02:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/04:49:21
21310	MGS	02-007/05:02:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/04:49:21
21311	MGS	02-007/05:02:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/04:49:21
21312	MGS	02-007/05:02:10	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21313	MGS	02-007/05:02:10	45	Acquire D/L: X/16, 3-Way/25, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21314	MGS	02-007/05:02:11		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-007/04:49:22
21315	MGS	02-007/05:02:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/04:49:22
21316	MGS	02-007/05:02:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/04:49:22
21317	MGS	02-007/05:02:11	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21318	MGS	02-007/05:02:11	45	D/L Change: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21319	MGS	02-007/05:02:16		NOTE: End fixed Sub-Reflector for Radio Science		02-007/04:49:26
21320	MGS	02-007/05:07:36	25	NOTE: Below Uplink Interlock Limit		
21321	MGS	02-007/05:08:30		NOTE: Exit Solar Eclipse 12665		02-007/04:55:40
21322	MGS	02-007/05:10:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21323	MGS	02-007/05:12:00	45	Range Modulation On: SUP=3.0dB		
21324	MGS	02-007/05:13:00	45	Begin Ranging Acquisition		
21325	MGS	02-007/05:20:00	25	End Tracking		
21326	MGS	02-007/05:20:38	45	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21327	MGS	02-007/05:24:02		NOTE: Periapsis 12666 ----------		02-007/05:11:13
21328	MGS	02-007/05:29:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/05:16:39
21329	MGS	02-007/05:29:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/05:16:39
21330	MGS	02-007/05:29:29		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/05:16:40
21331	MGS	02-007/05:29:29		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/05:16:40
21332	MGS	02-007/05:35:00	25	End Post-Cal		
21333	MGS	02-007/05:35:38	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21334	MGS	02-007/05:41:37	45	NOTE: Transmitter Off in 15 minutes		
21335	MGS	02-007/05:51:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/05:38:40
21336	MGS	02-007/05:51:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/05:38:40
21337	MGS	02-007/05:54:38	45	Range Modulation Off		
21338	MGS	02-007/05:56:37	45	Transmitter Off		
21339	MGS	02-007/06:01:24		NOTE: Start Block (SSRMGR)		02-007/05:48:34
21340	MGS	02-007/06:01:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-007/05:48:34
21341	MGS	02-007/06:01:25		SSR 1B Data Enable	CSD1BE	02-007/05:48:35
21342	MGS	02-007/06:01:25		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-007/05:48:35
21343	MGS	02-007/06:13:30		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/06:00:40
21344	MGS	02-007/06:15:56		NOTE: Start Block (MAP_PB_ODY)		02-007/06:03:06
21345	MGS	02-007/06:15:57		: 00:24:26, 01:33:59, FALSE, FALSE, FALSE, 00:01:15, 00:06:40, 01:19:40, 00:06:23	AEMINI	02-007/06:03:07
21346	MGS	02-007/06:15:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/06:03:07
21347	MGS	02-007/06:15:57		NOTE: Start EVP data return script		02-007/06:03:07
21348	MGS	02-007/06:15:58		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-007T06:45:28.000	AEMPBI	02-007/06:03:08
21349	MGS	02-007/06:18:30		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/06:05:40
21350	MGS	02-007/06:18:30		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8200000, DUR=00:17:05		02-007/06:05:40
21351	MGS	02-007/06:18:30		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-007/06:05:40
21352	MGS	02-007/06:18:30		: 00:08:03, FALSE	RDSCII	02-007/06:05:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21353	MGS	02-007/06:18:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/06:05:40
21354	MGS	02-007/06:18:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/06:05:40
21355	MGS	02-007/06:18:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/06:05:40
21356	MGS	02-007/06:18:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/06:05:40
21357	MGS	02-007/06:18:30	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21358	MGS	02-007/06:18:30	45	NOTE: Carrier Only -- No Telemetry Modulation		
21359	MGS	02-007/06:20:42		NOTE: Enter Planetary Atmosphere 12666		02-007/06:07:52
21360	MGS	02-007/06:23:03		NOTE: Apoapsis 12666 -		02-007/06:10:13
21361	MGS	02-007/06:24:57		SSR 1A Data Disable	CSD1AX	02-007/06:12:07
21362	MGS	02-007/06:24:57		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-007/06:12:07
21363	MGS	02-007/06:24:58		NOTE: End Block (SSRMGR)		02-007/06:12:08
21364	MGS	02-007/06:25:57		NOTE: Enter Solar Eclipse 12666		02-007/06:13:07
21365	MGS	02-007/06:25:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/06:13:07
21366	MGS	02-007/06:26:02		NOTE: Enter Earth Occultation 12666		02-007/06:13:12
21367	MGS	02-007/06:26:02	45	NOTE: Loss Of X-Band Signal		
21368	MGS	02-007/06:26:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/06:13:43
21369	MGS	02-007/06:26:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/06:13:43
21370	MGS	02-007/06:26:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/06:13:43
21371	MGS	02-007/06:26:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/06:13:43
21372	MGS	02-007/06:26:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/06:13:44
21373	MGS	02-007/06:26:34		NOTE: End EVP script		02-007/06:13:44
21374	MGS	02-007/06:26:35		NOTE: End Block (MAP_RT)		02-007/06:13:45
21375	MGS	02-007/06:26:38		NOTE: End fixed Sub-Reflector for Radio Science		02-007/06:13:48
21376	MGS	02-007/06:30:19	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21377	MGS	02-007/06:32:19	45	Range Modulation On: SUP=3.0dB		
21378	MGS	02-007/06:33:19	45	Begin Ranging Acquisition		
21379	MGS	02-007/06:50:23		: 01:33:59	RPAONX	02-007/06:37:33
21380	MGS	02-007/06:50:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/06:37:33
21381	MGS	02-007/06:50:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/06:37:40
21382	MGS	02-007/06:50:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/06:37:40
21383	MGS	02-007/06:50:34		Command the PSE with included data word: 3990	SWPSEL	02-007/06:37:44
21384	MGS	02-007/06:50:35		Set eclipse egress script address: 0158	SWSEES	02-007/06:37:45
21385	MGS	02-007/06:52:08		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/06:39:18
21386	MGS	02-007/06:52:13		NOTE: Exit Earth Occultation 12666		02-007/06:39:23
21387	MGS	02-007/06:52:13	45	Acquisition Of X-Band Signal		
21388	MGS	02-007/06:52:13	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21389	MGS	02-007/06:55:58	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21390	MGS	02-007/06:57:49		NOTE: Exit Planetary Atmosphere 12666		02-007/06:45:00
21391	MGS	02-007/06:58:18		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:15:25	AEMPB	02-007/06:45:28
21392	MGS	02-007/06:58:18		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-007/06:45:28
21393	MGS	02-007/06:58:18		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-007/06:45:28
21394	MGS	02-007/06:58:19		SSR 1A Data Enable	CSD1AE	02-007/06:45:29
21395	MGS	02-007/06:58:19		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-007/06:45:29
21396	MGS	02-007/06:58:19	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21397	MGS	02-007/07:06:17		NOTE: Exit Solar Eclipse 12666		02-007/06:53:27
21398	MGS	02-007/07:22:10		NOTE: Periapsis 12667 ----------		02-007/07:09:20
21399	MGS	02-007/07:31:16		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/07:18:26
21400	MGS	02-007/07:31:16		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/07:18:26
21401	MGS	02-007/07:31:17		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/07:18:27
21402	MGS	02-007/07:31:17		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/07:18:27
21403	MGS	02-007/07:39:25	45	NOTE: Transmitter Off in 15 minutes		
21404	MGS	02-007/07:52:26	45	Range Modulation Off		
21405	MGS	02-007/07:53:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/07:40:27
21406	MGS	02-007/07:53:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/07:40:27

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21407	MGS	02-007/07:54:25	45	Transmitter Off		
21408	MGS	02-007/08:08:57		SSR 1A Data Disable	CSD1AX	02-007/07:56:07
21409	MGS	02-007/08:08:57		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-007/07:56:07
21410	MGS	02-007/08:08:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-007/07:56:07
21411	MGS	02-007/08:08:57	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21412	MGS	02-007/08:13:42		NOTE: Start Block (MAP_RT)		02-007/08:00:52
21413	MGS	02-007/08:13:43		: 00:24:26, 01:33:58, FALSE, TRUE, FALSE, 00:01:15, 00:08:20, 01:16:19, 00:08:03	AEMINI	02-007/08:00:53
21414	MGS	02-007/08:13:43		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/08:00:53
21415	MGS	02-007/08:13:43		NOTE: Start EVP data return script		02-007/08:00:53
21416	MGS	02-007/08:13:44		: SE_2A, RTM, 01:16:18, MRC, 2002-007T08:44:56.000	AEMRTI	02-007/08:00:54
21417	MGS	02-007/08:18:30		NOTE: Enter Planetary Atmosphere 12667		02-007/08:05:40
21418	MGS	02-007/08:20:05	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21419	MGS	02-007/08:21:03		NOTE: Apoapsis 12667 -		02-007/08:08:13
21420	MGS	02-007/08:23:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/08:10:53
21421	MGS	02-007/08:23:43		NOTE: Enter Solar Eclipse 12667		02-007/08:10:53
21422	MGS	02-007/08:23:50		NOTE: Enter Earth Occultation 12667		02-007/08:11:00
21423	MGS	02-007/08:23:50	45	NOTE: Loss Of X-Band Signal		
21424	MGS	02-007/08:24:22		NOTE: End EVP script		02-007/08:11:32
21425	MGS	02-007/08:24:22		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/08:11:32
21426	MGS	02-007/08:24:23		NOTE: End Block (MAP_PB_ODY)		02-007/08:11:33
21427	MGS	02-007/08:28:06	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21428	MGS	02-007/08:30:06	45	Range Modulation On: SUP=3.0dB		
21429	MGS	02-007/08:31:06	45	Begin Ranging Acquisition		
21430	MGS	02-007/08:44:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/08:31:34
21431	MGS	02-007/08:48:09		: 01:33:58	RPAONX	02-007/08:35:19
21432	MGS	02-007/08:48:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/08:35:19
21433	MGS	02-007/08:48:17		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/08:35:27
21434	MGS	02-007/08:48:17		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/08:35:27
21435	MGS	02-007/08:48:22		Set eclipse egress script address: 019A	SWSEES	02-007/08:35:32
21436	MGS	02-007/08:49:24		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-007/08:36:34
21437	MGS	02-007/08:49:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/08:36:34
21438	MGS	02-007/08:49:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/08:36:34
21439	MGS	02-007/08:49:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/08:36:34
21440	MGS	02-007/08:49:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/08:36:34
21441	MGS	02-007/08:50:01		NOTE: Exit Earth Occultation 12667		02-007/08:37:11
21442	MGS	02-007/08:50:01	45	Acquisition Of X-Band Signal		
21443	MGS	02-007/08:50:01	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21444	MGS	02-007/08:50:01	45	NOTE: Carrier Only -- No Telemetry Modulation		
21445	MGS	02-007/08:55:38		NOTE: Exit Planetary Atmosphere 12667		02-007/08:42:48
21446	MGS	02-007/08:57:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/08:44:54
21447	MGS	02-007/08:57:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/08:44:54
21448	MGS	02-007/08:57:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/08:44:54
21449	MGS	02-007/08:57:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/08:44:54
21450	MGS	02-007/08:57:44	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21451	MGS	02-007/08:57:45		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-007/08:44:55
21452	MGS	02-007/08:57:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/08:44:55
21453	MGS	02-007/08:57:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/08:44:55
21454	MGS	02-007/08:57:45	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21455	MGS	02-007/08:57:49		NOTE: End fixed Sub-Reflector for Radio Science		02-007/08:44:59
21456	MGS	02-007/09:04:04		NOTE: Exit Solar Eclipse 12667		02-007/08:51:14
21457	MGS	02-007/09:19:53		NOTE: Periapsis 12668 ----------		02-007/09:07:03
21458	MGS	02-007/09:25:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/09:12:13
21459	MGS	02-007/09:25:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/09:12:13
21460	MGS	02-007/09:25:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/09:12:14

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21461	MGS	02-007/09:25:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/09:12:14
21462	MGS	02-007/09:37:09	45	NOTE: Transmitter Off in 15 minutes		
21463	MGS	02-007/09:47:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/09:34:14
21464	MGS	02-007/09:47:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/09:34:14
21465	MGS	02-007/09:50:10	45	Range Modulation Off		
21466	MGS	02-007/09:52:09	45	Transmitter Off		
21467	MGS	02-007/10:09:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/09:56:13
21468	MGS	02-007/10:11:26		NOTE: Start EVP data return script		02-007/09:58:36
21469	MGS	02-007/10:14:03		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/10:01:13
21470	MGS	02-007/10:14:03		: 00:08:03, FALSE	RDSCII	02-007/10:01:13
21471	MGS	02-007/10:14:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/10:01:13
21472	MGS	02-007/10:14:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/10:01:13
21473	MGS	02-007/10:14:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/10:01:13
21474	MGS	02-007/10:14:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/10:01:13
21475	MGS	02-007/10:14:03	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21476	MGS	02-007/10:14:03	45	NOTE: Carrier Only -- No Telemetry Modulation		
21477	MGS	02-007/10:16:15		NOTE: Enter Planetary Atmosphere 12668		02-007/10:03:24
21478	MGS	02-007/10:18:30		NOTE: Apoapsis 12668 -		02-007/10:05:40
21479	MGS	02-007/10:21:26		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/10:08:36
21480	MGS	02-007/10:21:27		NOTE: Enter Solar Eclipse 12668		02-007/10:08:37
21481	MGS	02-007/10:21:35		NOTE: Enter Earth Occultation 12668		02-007/10:08:45
21482	MGS	02-007/10:21:35	45	NOTE: Loss Of X-Band Signal		
21483	MGS	02-007/10:22:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/10:09:16
21484	MGS	02-007/10:22:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/10:09:16
21485	MGS	02-007/10:22:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/10:09:16
21486	MGS	02-007/10:22:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/10:09:16
21487	MGS	02-007/10:22:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/10:09:17
21488	MGS	02-007/10:22:08		NOTE: End EVP script		02-007/10:09:17
21489	MGS	02-007/10:22:12		NOTE: End fixed Sub-Reflector for Radio Science		02-007/10:09:21
21490	MGS	02-007/10:25:50	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21491	MGS	02-007/10:27:50	45	Range Modulation On: SUP=3.0dB		
21492	MGS	02-007/10:28:50	45	Begin Ranging Acquisition		
21493	MGS	02-007/10:35:00	65	Begin Pre-Cal		
21494	MGS	02-007/10:35:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
21495	MGS	02-007/10:35:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
21496	MGS	02-007/10:35:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
21497	MGS	02-007/10:35:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
21498	MGS	02-007/10:35:00	65	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
21499	MGS	02-007/10:35:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
21500	MGS	02-007/10:35:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
21501	MGS	02-007/10:35:00	65	Config: TGC: DEST=37		
21502	MGS	02-007/10:35:00	65	Config: TGC: BAND=X, BR=40000.000000		
21503	MGS	02-007/10:35:00	65	Config: FSS: CH=2, PRI_FL=10000		
21504	MGS	02-007/10:35:00	65	Config: RSR		
21505	MGS	02-007/10:35:00	65	Config: TXL		
21506	MGS	02-007/10:35:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
21507	MGS	02-007/10:35:00	65	Config: BVR		
21508	MGS	02-007/10:35:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
21509	MGS	02-007/10:35:00	65	Config: MDA: SMPL=0.1		
21510	MGS	02-007/10:35:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
21511	MGS	02-007/10:35:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
21512	MGS	02-007/10:35:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
21513	MGS	02-007/10:42:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/10:29:17
21514	MGS	02-007/10:45:52		: 01:33:58	RPAONX	02-007/10:33:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21515	MGS	02-007/10:45:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/10:33:02
21516	MGS	02-007/10:46:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/10:33:14
21517	MGS	02-007/10:46:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/10:33:14
21518	MGS	02-007/10:46:09		Set eclipse egress script address: 01DC	SWSEES	02-007/10:33:19
21519	MGS	02-007/10:47:07		: 00:00:30, 00:08:20, FALSE	RDSCIE	02-007/10:34:17
21520	MGS	02-007/10:47:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/10:34:17
21521	MGS	02-007/10:47:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/10:34:17
21522	MGS	02-007/10:47:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/10:34:17
21523	MGS	02-007/10:47:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/10:34:17
21524	MGS	02-007/10:47:37		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/10:34:47
21525	MGS	02-007/10:47:45		NOTE: Exit Earth Occultation 12668		02-007/10:34:55
21526	MGS	02-007/10:47:45	45	Acquisition Of X-Band Signal		
21527	MGS	02-007/10:47:45	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21528	MGS	02-007/10:47:45	45	NOTE: Carrier Only -- No Telemetry Modulation		
21529	MGS	02-007/10:53:23		NOTE: Exit Planetary Atmosphere 12668		02-007/10:40:33
21530	MGS	02-007/10:55:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/10:42:37
21531	MGS	02-007/10:55:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/10:42:37
21532	MGS	02-007/10:55:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/10:42:37
21533	MGS	02-007/10:55:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/10:42:37
21534	MGS	02-007/10:55:27	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21535	MGS	02-007/10:55:28		: RTM, MRC, 01:16:18, S&E_2A, FALSE, 00:08:04	AEMRT	02-007/10:42:38
21536	MGS	02-007/10:55:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/10:42:38
21537	MGS	02-007/10:55:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/10:42:38
21538	MGS	02-007/10:55:28	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21539	MGS	02-007/10:55:33		NOTE: End fixed Sub-Reflector for Radio Science		02-007/10:42:42
21540	MGS	02-007/11:01:48		NOTE: Exit Solar Eclipse 12668		02-007/10:48:57
21541	MGS	02-007/11:17:14		NOTE: Periapsis 12669 ----------		02-007/11:04:23
21542	MGS	02-007/11:20:00	45	NOTE: Transmitter Off in 15 minutes		
21543	MGS	02-007/11:22:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/11:09:56
21544	MGS	02-007/11:22:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/11:09:56
21545	MGS	02-007/11:22:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/11:09:57
21546	MGS	02-007/11:22:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/11:09:57
21547	MGS	02-007/11:33:00	45	Range Modulation Off		
21548	MGS	02-007/11:35:00	65	Begin Tracking		
21549	MGS	02-007/11:35:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21550	MGS	02-007/11:35:00	45	Transmitter Off		
21551	MGS	02-007/11:44:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/11:31:57
21552	MGS	02-007/11:44:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/11:31:57
21553	MGS	02-007/11:46:30	45	NOTE: Below Uplink Interlock Limit		
21554	MGS	02-007/11:47:23	65	NOTE: Above Uplink Interlock Limit		
21555	MGS	02-007/11:54:39		NOTE: Start Block (SSRMGR)		02-007/11:41:49
21556	MGS	02-007/11:54:39		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-007/11:41:49
21557	MGS	02-007/11:54:40		SSR 1A Data Enable	CSD1AE	02-007/11:41:50
21558	MGS	02-007/11:54:40		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-007/11:41:50
21559	MGS	02-007/11:55:00	45	End Tracking		
21560	MGS	02-007/12:00:40	65	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21561	MGS	02-007/12:06:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/11:53:56
21562	MGS	02-007/12:09:07		NOTE: Start Block (MAP_PB_ODY)		02-007/11:56:16
21563	MGS	02-007/12:09:08		: 00:24:26, 01:33:59, FALSE, FALSE, FALSE, 00:01:15, 00:06:40, 01:19:40, 00:06:23	AEMINI	02-007/11:56:17
21564	MGS	02-007/12:09:08		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/11:56:17
21565	MGS	02-007/12:09:08		NOTE: Start EVP data return script		02-007/11:56:17
21566	MGS	02-007/12:09:09		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-007T12:38:38.000	AEMPBI	02-007/11:56:18
21567	MGS	02-007/12:10:00	45	End Post-Cal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21568	MGS	02-007/12:11:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/11:58:56
21569	MGS	02-007/12:11:47		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8208000, DUR=00:17:06		02-007/11:58:56
21570	MGS	02-007/12:11:47		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-007/11:58:56
21571	MGS	02-007/12:11:47		: 00:08:03, FALSE	RDSCII	02-007/11:58:56
21572	MGS	02-007/12:11:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/11:58:56
21573	MGS	02-007/12:11:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/11:58:56
21574	MGS	02-007/12:11:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/11:58:56
21575	MGS	02-007/12:11:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/11:58:56
21576	MGS	02-007/12:11:47	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21577	MGS	02-007/12:11:47	65	NOTE: Carrier Only -- No Telemetry Modulation		
21578	MGS	02-007/12:12:51		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-007/12:00:00
21579	MGS	02-007/12:13:54		NOTE: Enter Planetary Atmosphere 12669		02-007/12:01:03
21580	MGS	02-007/12:15:53		NOTE: Apoapsis 12669 -		02-007/12:03:03
21581	MGS	02-007/12:18:09		SSR 1B Data Disable	CSD1BX	02-007/12:05:18
21582	MGS	02-007/12:18:09		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-007/12:05:18
21583	MGS	02-007/12:18:10		NOTE: End Block (SSRMGR)		02-007/12:05:19
21584	MGS	02-007/12:19:07		NOTE: Enter Solar Eclipse 12669		02-007/12:06:17
21585	MGS	02-007/12:19:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/12:06:17
21586	MGS	02-007/12:19:14		NOTE: Enter Earth Occultation 12669		02-007/12:06:23
21587	MGS	02-007/12:19:14	65	NOTE: Loss Of X-Band Signal		
21588	MGS	02-007/12:19:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/12:06:59
21589	MGS	02-007/12:19:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/12:06:59
21590	MGS	02-007/12:19:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/12:06:59
21591	MGS	02-007/12:19:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/12:06:59
21592	MGS	02-007/12:19:51		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/12:07:00
21593	MGS	02-007/12:19:51		NOTE: End EVP script		02-007/12:07:00
21594	MGS	02-007/12:19:52		NOTE: End Block (MAP_RT)		02-007/12:07:01
21595	MGS	02-007/12:19:55		NOTE: End fixed Sub-Reflector for Radio Science		02-007/12:07:04
21596	MGS	02-007/12:23:31	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21597	MGS	02-007/12:25:31	65	Range Modulation On: SUP=3.0dB		
21598	MGS	02-007/12:26:31	65	Begin Ranging Acquisition		
21599	MGS	02-007/12:43:34		: 01:33:59	RPAONX	02-007/12:30:43
21600	MGS	02-007/12:43:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/12:30:43
21601	MGS	02-007/12:43:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/12:30:57
21602	MGS	02-007/12:43:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/12:30:57
21603	MGS	02-007/12:43:52		Command the PSE with included data word: 3990	SWPSEL	02-007/12:31:01
21604	MGS	02-007/12:43:53		Set eclipse egress script address: 0158	SWSEES	02-007/12:31:02
21605	MGS	02-007/12:45:19		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/12:32:28
21606	MGS	02-007/12:45:27		NOTE: Exit Earth Occultation 12669		02-007/12:32:36
21607	MGS	02-007/12:45:27	65	Acquisition Of X-Band Signal		
21608	MGS	02-007/12:45:27	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21609	MGS	02-007/12:49:12	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21610	MGS	02-007/12:51:04		NOTE: Exit Planetary Atmosphere 12669		02-007/12:38:13
21611	MGS	02-007/12:51:29		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:15:25	AEMPB	02-007/12:38:38
21612	MGS	02-007/12:51:29		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-007/12:38:38
21613	MGS	02-007/12:51:29		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-007/12:38:38
21614	MGS	02-007/12:51:30		SSR 1B Data Enable	CSD1BE	02-007/12:38:39
21615	MGS	02-007/12:51:30		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-007/12:38:39
21616	MGS	02-007/12:51:30	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21617	MGS	02-007/12:59:28		NOTE: Exit Solar Eclipse 12669		02-007/12:46:37
21618	MGS	02-007/13:14:42		NOTE: Periapsis 12670 ----------		02-007/13:01:52
21619	MGS	02-007/13:24:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/13:11:36
21620	MGS	02-007/13:24:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/13:11:36
21621	MGS	02-007/13:24:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/13:11:37

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21622	MGS	02-007/13:24:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/13:11:37
21623	MGS	02-007/13:32:28	65	NOTE: Transmitter Off in 15 minutes		
21624	MGS	02-007/13:45:28	65	Range Modulation Off		
21625	MGS	02-007/13:46:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/13:33:37
21626	MGS	02-007/13:46:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/13:33:37
21627	MGS	02-007/13:47:28	65	Transmitter Off		
21628	MGS	02-007/14:02:08		SSR 1B Data Disable	CSD1BX	02-007/13:49:17
21629	MGS	02-007/14:02:08		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-007/13:49:17
21630	MGS	02-007/14:02:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-007/13:49:17
21631	MGS	02-007/14:02:08	65	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21632	MGS	02-007/14:06:49		NOTE: Start Block (MAP_RT)		02-007/13:53:58
21633	MGS	02-007/14:06:50		: 00:24:34, 01:33:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:17, 01:16:10, 00:08:00	AEMINI	02-007/13:53:59
21634	MGS	02-007/14:06:50		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/13:53:59
21635	MGS	02-007/14:06:50		NOTE: Start EVP data return script		02-007/13:53:59
21636	MGS	02-007/14:06:51		: SE_2A, RTM, 01:16:09, MRC, 2002-007T14:38:07.000	AEMRTI	02-007/13:54:00
21637	MGS	02-007/14:11:36		NOTE: Enter Planetary Atmosphere 12670		02-007/13:58:45
21638	MGS	02-007/14:13:09	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21639	MGS	02-007/14:13:44		NOTE: Apoapsis 12670 -		02-007/14:00:53
21640	MGS	02-007/14:16:50		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/14:03:59
21641	MGS	02-007/14:16:50		NOTE: Enter Solar Eclipse 12670		02-007/14:03:59
21642	MGS	02-007/14:16:54		NOTE: Enter Earth Occultation 12670		02-007/14:04:03
21643	MGS	02-007/14:16:54	65	NOTE: Loss Of X-Band Signal		
21644	MGS	02-007/14:17:33		NOTE: End EVP script		02-007/14:04:42
21645	MGS	02-007/14:17:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/14:04:42
21646	MGS	02-007/14:17:34		NOTE: End Block (MAP_PB_ODY)		02-007/14:04:43
21647	MGS	02-007/14:21:13	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21648	MGS	02-007/14:23:14	65	Range Modulation On: SUP=3.0dB		
21649	MGS	02-007/14:24:14	65	Begin Ranging Acquisition		
21650	MGS	02-007/14:37:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/14:24:48
21651	MGS	02-007/14:41:24		: 01:33:43	RPAONX	02-007/14:28:33
21652	MGS	02-007/14:41:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/14:28:33
21653	MGS	02-007/14:41:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/14:28:37
21654	MGS	02-007/14:41:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/14:28:37
21655	MGS	02-007/14:41:33		Set eclipse egress script address: 019A	SWSEES	02-007/14:28:42
21656	MGS	02-007/14:42:39		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-007/14:29:48
21657	MGS	02-007/14:42:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/14:29:48
21658	MGS	02-007/14:42:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/14:29:48
21659	MGS	02-007/14:42:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/14:29:48
21660	MGS	02-007/14:42:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/14:29:48
21661	MGS	02-007/14:43:10		NOTE: Exit Earth Occultation 12670		02-007/14:30:19
21662	MGS	02-007/14:43:10	65	Acquisition Of X-Band Signal		
21663	MGS	02-007/14:43:10	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21664	MGS	02-007/14:43:10	65	NOTE: Carrier Only -- No Telemetry Modulation		
21665	MGS	02-007/14:48:46		NOTE: Exit Planetary Atmosphere 12670		02-007/14:35:55
21666	MGS	02-007/14:50:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/14:38:05
21667	MGS	02-007/14:50:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/14:38:05
21668	MGS	02-007/14:50:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/14:38:05
21669	MGS	02-007/14:50:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/14:38:05
21670	MGS	02-007/14:50:56	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21671	MGS	02-007/14:50:57		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-007/14:38:06
21672	MGS	02-007/14:50:57		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/14:38:06
21673	MGS	02-007/14:50:57		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/14:38:06
21674	MGS	02-007/14:50:57	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21675	MGS	02-007/14:51:01		NOTE: End fixed Sub-Reflector for Radio Science		02-007/14:38:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21676	MGS	02-007/14:57:10		NOTE: Exit Solar Eclipse 12670		02-007/14:44:19
21677	MGS	02-007/15:12:31		NOTE: Periapsis 12671 ----------		02-007/14:59:40
21678	MGS	02-007/15:18:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/15:05:19
21679	MGS	02-007/15:18:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/15:05:19
21680	MGS	02-007/15:18:11		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/15:05:20
21681	MGS	02-007/15:18:11		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/15:05:20
21682	MGS	02-007/15:30:14	65	NOTE: Transmitter Off in 15 minutes		
21683	MGS	02-007/15:40:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/15:27:20
21684	MGS	02-007/15:40:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/15:27:20
21685	MGS	02-007/15:43:14	65	Range Modulation Off		
21686	MGS	02-007/15:45:14	65	Transmitter Off		
21687	MGS	02-007/16:02:07		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/15:49:15
21688	MGS	02-007/16:04:37		NOTE: Start EVP data return script		02-007/15:51:46
21689	MGS	02-007/16:07:06		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/15:54:15
21690	MGS	02-007/16:07:06		: 00:08:00, FALSE	RDSCII	02-007/15:54:15
21691	MGS	02-007/16:07:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/15:54:15
21692	MGS	02-007/16:07:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/15:54:15
21693	MGS	02-007/16:07:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/15:54:15
21694	MGS	02-007/16:07:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/15:54:15
21695	MGS	02-007/16:07:06	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21696	MGS	02-007/16:07:06	65	NOTE: Carrier Only -- No Telemetry Modulation		
21697	MGS	02-007/16:09:23		NOTE: Enter Planetary Atmosphere 12671		02-007/15:56:32
21698	MGS	02-007/16:11:35		NOTE: Apoapsis 12671 -		02-007/15:58:43
21699	MGS	02-007/16:14:37		NOTE: Enter Solar Eclipse 12671		02-007/16:01:46
21700	MGS	02-007/16:14:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/16:01:46
21701	MGS	02-007/16:14:41		NOTE: Enter Earth Occultation 12671		02-007/16:01:50
21702	MGS	02-007/16:14:41	65	NOTE: Loss Of X-Band Signal		
21703	MGS	02-007/16:15:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/16:02:15
21704	MGS	02-007/16:15:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/16:02:15
21705	MGS	02-007/16:15:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/16:02:15
21706	MGS	02-007/16:15:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/16:02:15
21707	MGS	02-007/16:15:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/16:02:16
21708	MGS	02-007/16:15:08		NOTE: End EVP script		02-007/16:02:16
21709	MGS	02-007/16:15:12		NOTE: End fixed Sub-Reflector for Radio Science		02-007/16:02:20
21710	MGS	02-007/16:18:59	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21711	MGS	02-007/16:21:00	65	Range Modulation On: SUP=3.0dB		
21712	MGS	02-007/16:22:00	65	Begin Ranging Acquisition		
21713	MGS	02-007/16:35:27		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/16:22:35
21714	MGS	02-007/16:39:11		: 01:33:43	RPAONX	02-007/16:26:20
21715	MGS	02-007/16:39:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/16:26:20
21716	MGS	02-007/16:39:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/16:26:20
21717	MGS	02-007/16:39:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/16:26:20
21718	MGS	02-007/16:39:16		Set eclipse egress script address: 01DC	SWSEES	02-007/16:26:25
21719	MGS	02-007/16:40:26		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-007/16:27:35
21720	MGS	02-007/16:40:26		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/16:27:35
21721	MGS	02-007/16:40:26		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/16:27:35
21722	MGS	02-007/16:40:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/16:27:35
21723	MGS	02-007/16:40:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/16:27:35
21724	MGS	02-007/16:40:56		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/16:28:05
21725	MGS	02-007/16:40:57		NOTE: Exit Earth Occultation 12671		02-007/16:28:06
21726	MGS	02-007/16:40:57	65	Acquisition Of X-Band Signal		
21727	MGS	02-007/16:40:57	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21728	MGS	02-007/16:40:57	65	NOTE: Carrier Only -- No Telemetry Modulation		
21729	MGS	02-007/16:46:32		NOTE: Exit Planetary Atmosphere 12671		02-007/16:33:41

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21730	MGS	02-007/16:48:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/16:35:52
21731	MGS	02-007/16:48:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/16:35:52
21732	MGS	02-007/16:48:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/16:35:52
21733	MGS	02-007/16:48:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/16:35:52
21734	MGS	02-007/16:48:43	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21735	MGS	02-007/16:48:44		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-007/16:35:53
21736	MGS	02-007/16:48:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/16:35:53
21737	MGS	02-007/16:48:44		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/16:35:53
21738	MGS	02-007/16:48:44	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21739	MGS	02-007/16:48:49		NOTE: End fixed Sub-Reflector for Radio Science		02-007/16:35:57
21740	MGS	02-007/16:54:58		NOTE: Exit Solar Eclipse 12671		02-007/16:42:06
21741	MGS	02-007/17:10:24		NOTE: Periapsis 12672 ----------		02-007/16:57:33
21742	MGS	02-007/17:15:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/17:03:06
21743	MGS	02-007/17:15:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/17:03:06
21744	MGS	02-007/17:15:58		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/17:03:07
21745	MGS	02-007/17:15:58		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/17:03:07
21746	MGS	02-007/17:28:00	65	NOTE: Transmitter Off in 15 minutes		
21747	MGS	02-007/17:37:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/17:25:07
21748	MGS	02-007/17:37:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/17:25:07
21749	MGS	02-007/17:41:01	65	Range Modulation Off		
21750	MGS	02-007/17:43:00	65	Transmitter Off		
21751	MGS	02-007/17:47:52		NOTE: Start Block (SSRMGR)		02-007/17:35:01
21752	MGS	02-007/17:47:52		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-007/17:35:01
21753	MGS	02-007/17:47:53		SSR 1B Data Enable	CSD1BE	02-007/17:35:02
21754	MGS	02-007/17:47:53		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-007/17:35:02
21755	MGS	02-007/17:59:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/17:47:02
21756	MGS	02-007/18:02:23		NOTE: Start Block (MAP_PB_ODY)		02-007/17:49:32
21757	MGS	02-007/18:02:24		: 00:24:34, 01:33:44, FALSE, FALSE, FALSE, 00:01:15, 00:06:37, 01:19:31, 00:06:20	AEMINI	02-007/17:49:33
21758	MGS	02-007/18:02:24		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/17:49:33
21759	MGS	02-007/18:02:24		NOTE: Start EVP data return script		02-007/17:49:33
21760	MGS	02-007/18:02:25		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-007T18:31:59.000	AEMPBI	02-007/17:49:34
21761	MGS	02-007/18:04:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/17:52:02
21762	MGS	02-007/18:04:53		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8160000, DUR=00:17:00		02-007/17:52:02
21763	MGS	02-007/18:04:53		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-007/17:52:02
21764	MGS	02-007/18:04:53		: 00:08:00, FALSE	RDSCII	02-007/17:52:02
21765	MGS	02-007/18:04:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/17:52:02
21766	MGS	02-007/18:04:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/17:52:02
21767	MGS	02-007/18:04:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/17:52:02
21768	MGS	02-007/18:04:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/17:52:02
21769	MGS	02-007/18:04:53	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21770	MGS	02-007/18:04:53	65	NOTE: Carrier Only -- No Telemetry Modulation		
21771	MGS	02-007/18:07:10		NOTE: Enter Planetary Atmosphere 12672		02-007/17:54:19
21772	MGS	02-007/18:09:14		NOTE: Apoapsis 12672 -		02-007/17:56:23
21773	MGS	02-007/18:11:24		SSR 1A Data Disable	CSD1AX	02-007/17:58:33
21774	MGS	02-007/18:11:24		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-007/17:58:33
21775	MGS	02-007/18:11:25		NOTE: End Block (SSRMGR)		02-007/17:58:34
21776	MGS	02-007/18:12:24		NOTE: Enter Solar Eclipse 12672		02-007/17:59:33
21777	MGS	02-007/18:12:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/17:59:33
21778	MGS	02-007/18:12:28		NOTE: Enter Earth Occultation 12672		02-007/17:59:37
21779	MGS	02-007/18:12:28	65	NOTE: Loss Of X-Band Signal		
21780	MGS	02-007/18:12:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/18:00:02
21781	MGS	02-007/18:12:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/18:00:02
21782	MGS	02-007/18:12:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/18:00:02
21783	MGS	02-007/18:12:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/18:00:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21784	MGS	02-007/18:12:54		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/18:00:03
21785	MGS	02-007/18:12:55		NOTE: End EVP script		02-007/18:00:03
21786	MGS	02-007/18:12:56		NOTE: End Block (MAP_RT)		02-007/18:00:04
21787	MGS	02-007/18:12:59		NOTE: End fixed Sub-Reflector for Radio Science		02-007/18:00:07
21788	MGS	02-007/18:16:47	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21789	MGS	02-007/18:18:47	65	Range Modulation On: SUP=3.0dB		
21790	MGS	02-007/18:19:47	65	Begin Ranging Acquisition		
21791	MGS	02-007/18:36:59		: 01:33:44	RPAONX	02-007/18:24:07
21792	MGS	02-007/18:36:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/18:24:07
21793	MGS	02-007/18:36:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/18:24:07
21794	MGS	02-007/18:36:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/18:24:07
21795	MGS	02-007/18:37:03		Command the PSE with included data word: 3990	SWPSEL	02-007/18:24:11
21796	MGS	02-007/18:37:04		Set eclipse egress script address: 0158	SWSEES	02-007/18:24:12
21797	MGS	02-007/18:38:44		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/18:25:52
21798	MGS	02-007/18:38:45		NOTE: Exit Earth Occultation 12672		02-007/18:25:53
21799	MGS	02-007/18:38:45	65	Acquisition Of X-Band Signal		
21800	MGS	02-007/18:38:45	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21801	MGS	02-007/18:42:30	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21802	MGS	02-007/18:44:20		NOTE: Exit Planetary Atmosphere 12672		02-007/18:31:29
21803	MGS	02-007/18:44:51		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:15:13	AEMPB	02-007/18:31:59
21804	MGS	02-007/18:44:51		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-007/18:31:59
21805	MGS	02-007/18:44:51		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-007/18:31:59
21806	MGS	02-007/18:44:52		SSR 1A Data Enable	CSD1AE	02-007/18:32:00
21807	MGS	02-007/18:44:52		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-007/18:32:00
21808	MGS	02-007/18:44:52	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21809	MGS	02-007/18:52:45		NOTE: Exit Solar Eclipse 12672		02-007/18:39:54
21810	MGS	02-007/19:08:07		NOTE: Periapsis 12673 ----------		02-007/18:55:15
21811	MGS	02-007/19:17:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/19:04:53
21812	MGS	02-007/19:17:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/19:04:53
21813	MGS	02-007/19:17:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/19:04:54
21814	MGS	02-007/19:17:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/19:04:54
21815	MGS	02-007/19:25:45	65	NOTE: Transmitter Off in 15 minutes		
21816	MGS	02-007/19:38:45	65	Range Modulation Off		
21817	MGS	02-007/19:39:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/19:26:54
21818	MGS	02-007/19:39:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/19:26:54
21819	MGS	02-007/19:40:45	65	Transmitter Off		
21820	MGS	02-007/19:55:30		SSR 1A Data Disable	CSD1AX	02-007/19:42:38
21821	MGS	02-007/19:55:30		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-007/19:42:38
21822	MGS	02-007/19:55:30		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-007/19:42:38
21823	MGS	02-007/19:55:30	65	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21824	MGS	02-007/20:00:10		NOTE: Start Block (MAP_RT)		02-007/19:47:18
21825	MGS	02-007/20:00:11		: 00:24:34, 01:33:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:17, 01:16:10, 00:08:00	AEMINI	02-007/19:47:19
21826	MGS	02-007/20:00:11		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/19:47:19
21827	MGS	02-007/20:00:11		NOTE: Start EVP data return script		02-007/19:47:19
21828	MGS	02-007/20:00:12		: SE_2A, RTM, 01:16:09, MRC, 2002-007T20:31:26.000	AEMRTI	02-007/19:47:20
21829	MGS	02-007/20:04:56		NOTE: Enter Planetary Atmosphere 12673		02-007/19:52:04
21830	MGS	02-007/20:06:28	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21831	MGS	02-007/20:06:42		NOTE: Apoapsis 12673 -		02-007/19:53:50
21832	MGS	02-007/20:10:00	25	Begin Pre-Cal		
21833	MGS	02-007/20:10:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
21834	MGS	02-007/20:10:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
21835	MGS	02-007/20:10:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
21836	MGS	02-007/20:10:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
21837	MGS	02-007/20:10:00	25	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21838	MGS	02-007/20:10:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
21839	MGS	02-007/20:10:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
21840	MGS	02-007/20:10:00	25	Config: TGC: DEST=37		
21841	MGS	02-007/20:10:00	25	Config: TGC: BAND=X, BR=40000.000000		
21842	MGS	02-007/20:10:00	25	Config: FSS: CH=2, PRI_FL=10000		
21843	MGS	02-007/20:10:00	25	Config: RSR		
21844	MGS	02-007/20:10:00	25	Config: TXL		
21845	MGS	02-007/20:10:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
21846	MGS	02-007/20:10:00	25	Config: BVR		
21847	MGS	02-007/20:10:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
21848	MGS	02-007/20:10:00	25	Config: MDA: SMPL=0.1		
21849	MGS	02-007/20:10:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
21850	MGS	02-007/20:10:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
21851	MGS	02-007/20:10:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
21852	MGS	02-007/20:10:10		NOTE: Enter Solar Eclipse 12673		02-007/19:57:19
21853	MGS	02-007/20:10:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/19:57:19
21854	MGS	02-007/20:10:13		NOTE: Enter Earth Occultation 12673		02-007/19:57:21
21855	MGS	02-007/20:10:13	65	NOTE: Loss Of X-Band Signal		
21856	MGS	02-007/20:10:43		NOTE: End EVP script		02-007/19:57:51
21857	MGS	02-007/20:10:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/19:57:51
21858	MGS	02-007/20:10:44		NOTE: End Block (MAP_PB_ODY)		02-007/19:57:52
21859	MGS	02-007/20:14:33	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
21860	MGS	02-007/20:16:34	65	Range Modulation On: SUP=3.0dB		
21861	MGS	02-007/20:17:34	65	Begin Ranging Acquisition		
21862	MGS	02-007/20:30:59		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/20:18:08
21863	MGS	02-007/20:34:45		: 01:33:43	RPAONX	02-007/20:21:53
21864	MGS	02-007/20:34:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/20:21:53
21865	MGS	02-007/20:34:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/20:21:54
21866	MGS	02-007/20:34:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/20:21:54
21867	MGS	02-007/20:34:51		Set eclipse egress script address: 019A	SWSEES	02-007/20:21:59
21868	MGS	02-007/20:36:00		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-007/20:23:08
21869	MGS	02-007/20:36:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/20:23:08
21870	MGS	02-007/20:36:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/20:23:08
21871	MGS	02-007/20:36:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/20:23:08
21872	MGS	02-007/20:36:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/20:23:08
21873	MGS	02-007/20:36:32		NOTE: Exit Earth Occultation 12673		02-007/20:23:40
21874	MGS	02-007/20:36:32	65	Acquisition Of X-Band Signal		
21875	MGS	02-007/20:36:32	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21876	MGS	02-007/20:36:32	65	NOTE: Carrier Only -- No Telemetry Modulation		
21877	MGS	02-007/20:42:07		NOTE: Exit Planetary Atmosphere 12673		02-007/20:29:15
21878	MGS	02-007/20:44:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/20:31:25
21879	MGS	02-007/20:44:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/20:31:25
21880	MGS	02-007/20:44:17		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/20:31:25
21881	MGS	02-007/20:44:17		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/20:31:25
21882	MGS	02-007/20:44:17	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21883	MGS	02-007/20:44:18		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-007/20:31:26
21884	MGS	02-007/20:44:18		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/20:31:26
21885	MGS	02-007/20:44:18		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/20:31:26
21886	MGS	02-007/20:44:18	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21887	MGS	02-007/20:44:21		NOTE: End fixed Sub-Reflector for Radio Science		02-007/20:31:30
21888	MGS	02-007/20:50:31		NOTE: Exit Solar Eclipse 12673		02-007/20:37:39
21889	MGS	02-007/21:05:53		NOTE: Periapsis 12674 ----------		02-007/20:53:01
21890	MGS	02-007/21:10:00	25	Begin Tracking		
21891	MGS	02-007/21:10:00	25	Acquire D/L: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0,		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
				ANT=HGA		
21892	MGS	02-007/21:11:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/20:58:38
21893	MGS	02-007/21:11:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/20:58:38
21894	MGS	02-007/21:11:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/20:58:39
21895	MGS	02-007/21:11:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/20:58:39
21896	MGS	02-007/21:18:00	65	Range Modulation Off		
21897	MGS	02-007/21:20:00	25	U/L Transfer From DSS-65 to DSS-25: PWR=4.0, BR=125.0, CS=5.82dB		
21898	MGS	02-007/21:22:00	25	Range Modulation On: SUP=3.0dB		
21899	MGS	02-007/21:23:00	25	Begin Ranging Acquisition		
21900	MGS	02-007/21:23:27	25	NOTE: Transmitter Off in 15 minutes		
21901	MGS	02-007/21:30:00	65	End Tracking		
21902	MGS	02-007/21:33:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/21:20:39
21903	MGS	02-007/21:33:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/21:20:39
21904	MGS	02-007/21:36:28	25	Range Modulation Off		
21905	MGS	02-007/21:38:27	25	Transmitter Off		
21906	MGS	02-007/21:45:00	65	End Post-Cal		
21907	MGS	02-007/21:45:43	25	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21908	MGS	02-007/21:55:27		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/21:42:35
21909	MGS	02-007/21:57:54		NOTE: Start EVP data return script		02-007/21:45:02
21910	MGS	02-007/22:00:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/21:47:35
21911	MGS	02-007/22:00:27		: 00:08:00, FALSE	RDSCII	02-007/21:47:35
21912	MGS	02-007/22:00:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/21:47:35
21913	MGS	02-007/22:00:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/21:47:35
21914	MGS	02-007/22:00:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/21:47:35
21915	MGS	02-007/22:00:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/21:47:35
21916	MGS	02-007/22:00:27	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21917	MGS	02-007/22:00:27	25	NOTE: Carrier Only -- No Telemetry Modulation		
21918	MGS	02-007/22:02:38		NOTE: Enter Planetary Atmosphere 12674		02-007/21:49:46
21919	MGS	02-007/22:04:26		NOTE: Apoapsis 12674 -		02-007/21:51:34
21920	MGS	02-007/22:07:54		NOTE: Enter Solar Eclipse 12674		02-007/21:55:02
21921	MGS	02-007/22:07:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/21:55:02
21922	MGS	02-007/22:07:56		NOTE: Enter Earth Occultation 12674		02-007/21:55:04
21923	MGS	02-007/22:07:56	25	NOTE: Loss Of X-Band Signal		
21924	MGS	02-007/22:08:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/21:55:35
21925	MGS	02-007/22:08:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/21:55:35
21926	MGS	02-007/22:08:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/21:55:35
21927	MGS	02-007/22:08:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/21:55:35
21928	MGS	02-007/22:08:28		NOTE: End EVP script		02-007/21:55:36
21929	MGS	02-007/22:08:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/21:55:36
21930	MGS	02-007/22:08:32		NOTE: End fixed Sub-Reflector for Radio Science		02-007/21:55:40
21931	MGS	02-007/22:12:18	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
21932	MGS	02-007/22:14:18	25	Range Modulation On: SUP=3.0dB		
21933	MGS	02-007/22:15:18	25	Begin Ranging Acquisition		
21934	MGS	02-007/22:28:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/22:15:51
21935	MGS	02-007/22:32:28		: 01:33:43	RPAONX	02-007/22:19:36
21936	MGS	02-007/22:32:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-007/22:19:36
21937	MGS	02-007/22:32:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-007/22:19:39
21938	MGS	02-007/22:32:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-007/22:19:39
21939	MGS	02-007/22:32:36		Set eclipse egress script address: 01DC	SWSEES	02-007/22:19:44
21940	MGS	02-007/22:33:43		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-007/22:20:51
21941	MGS	02-007/22:33:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/22:20:51
21942	MGS	02-007/22:33:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/22:20:51
21943	MGS	02-007/22:33:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/22:20:51
21944	MGS	02-007/22:33:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/22:20:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21945	MGS	02-007/22:34:13		Disables autonomous command to send eclipse ingress script	SWEISX	02-007/22:21:21
21946	MGS	02-007/22:34:17		NOTE: Exit Earth Occultation 12674		02-007/22:21:24
21947	MGS	02-007/22:34:17	25	Acquisition Of X-Band Signal		
21948	MGS	02-007/22:34:17	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21949	MGS	02-007/22:34:17	25	NOTE: Carrier Only -- No Telemetry Modulation		
21950	MGS	02-007/22:39:52		NOTE: Exit Planetary Atmosphere 12674		02-007/22:27:00
21951	MGS	02-007/22:42:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/22:29:08
21952	MGS	02-007/22:42:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/22:29:08
21953	MGS	02-007/22:42:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/22:29:08
21954	MGS	02-007/22:42:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/22:29:08
21955	MGS	02-007/22:42:00	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21956	MGS	02-007/22:42:01		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-007/22:29:09
21957	MGS	02-007/22:42:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-007/22:29:09
21958	MGS	02-007/22:42:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-007/22:29:09
21959	MGS	02-007/22:42:01	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
21960	MGS	02-007/22:42:05		NOTE: End fixed Sub-Reflector for Radio Science		02-007/22:29:13
21961	MGS	02-007/22:48:14		NOTE: Exit Solar Eclipse 12674		02-007/22:35:22
21962	MGS	02-007/23:03:37		NOTE: Periapsis 12675 ----------		02-007/22:50:45
21963	MGS	02-007/23:09:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-007/22:56:21
21964	MGS	02-007/23:09:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-007/22:56:21
21965	MGS	02-007/23:09:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-007/22:56:22
21966	MGS	02-007/23:09:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-007/22:56:22
21967	MGS	02-007/23:21:09	25	NOTE: Transmitter Off in 15 minutes		
21968	MGS	02-007/23:31:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-007/23:18:22
21969	MGS	02-007/23:31:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-007/23:18:22
21970	MGS	02-007/23:34:10	25	Range Modulation Off		
21971	MGS	02-007/23:36:09	25	Transmitter Off		
21972	MGS	02-007/23:41:05		NOTE: Start Block (SSRMGR)		02-007/23:28:13
21973	MGS	02-007/23:41:05		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-007/23:28:13
21974	MGS	02-007/23:41:06		SSR 1A Data Enable	CSD1AE	02-007/23:28:14
21975	MGS	02-007/23:41:06		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-007/23:28:14
21976	MGS	02-007/23:53:10		NOTE: Begin fixed Sub-Reflector for Radio Science		02-007/23:40:18
21977	MGS	02-007/23:55:35		NOTE: Start Block (MAP_PB_ODY)		02-007/23:42:43
21978	MGS	02-007/23:55:36		: 00:24:34, 01:33:44, FALSE, FALSE, FALSE, 00:01:15, 00:06:37, 01:19:31, 00:06:20	AEMINI	02-007/23:42:44
21979	MGS	02-007/23:55:36		Enable sending eclipse ingress script when array power disappears	SWEISE	02-007/23:42:44
21980	MGS	02-007/23:55:36		NOTE: Start EVP data return script		02-007/23:42:44
21981	MGS	02-007/23:55:37		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-008T00:25:10.000	AEMPBI	02-007/23:42:45
21982	MGS	02-007/23:58:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-007/23:45:18
21983	MGS	02-007/23:58:10		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8192000, DUR=00:17:04		02-007/23:45:18
21984	MGS	02-007/23:58:10		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-007/23:45:18
21985	MGS	02-007/23:58:10		: 00:08:00, FALSE	RDSCII	02-007/23:45:18
21986	MGS	02-007/23:58:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-007/23:45:18
21987	MGS	02-007/23:58:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-007/23:45:18
21988	MGS	02-007/23:58:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-007/23:45:18
21989	MGS	02-007/23:58:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-007/23:45:18
21990	MGS	02-007/23:58:10	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
21991	MGS	02-007/23:58:10	25	NOTE: Carrier Only -- No Telemetry Modulation		
21992	MGS	02-008/00:00:00		Light Time: OWLT = 12:52, RTLT = 25:44		
21993	MGS	02-008/00:00:21		NOTE: Enter Planetary Atmosphere 12675		02-007/23:47:29
21994	MGS	02-008/00:02:18		NOTE: Apoapsis 12675 -		02-007/23:49:26
21995	MGS	02-008/00:04:37		SSR 1B Data Disable	CSD1BX	02-007/23:51:45
21996	MGS	02-008/00:04:37		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-007/23:51:45
21997	MGS	02-008/00:04:38		NOTE: End Block (SSRMGR)		02-007/23:51:46
21998	MGS	02-008/00:05:36		NOTE: Enter Solar Eclipse 12675		02-007/23:52:44

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
21999	MGS	02-008/00:05:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-007/23:52:44
22000	MGS	02-008/00:05:39		NOTE: Enter Earth Occultation 12675		02-007/23:52:47
22001	MGS	02-008/00:05:39	25	NOTE: Loss Of X-Band Signal		
22002	MGS	02-008/00:06:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-007/23:53:18
22003	MGS	02-008/00:06:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-007/23:53:18
22004	MGS	02-008/00:06:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-007/23:53:18
22005	MGS	02-008/00:06:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-007/23:53:18
22006	MGS	02-008/00:06:11		NOTE: End EVP script		02-007/23:53:19
22007	MGS	02-008/00:06:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-007/23:53:19
22008	MGS	02-008/00:06:12		NOTE: End Block (MAP_RT)		02-007/23:53:20
22009	MGS	02-008/00:06:15		NOTE: End fixed Sub-Reflector for Radio Science		02-007/23:53:23
22010	MGS	02-008/00:10:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22011	MGS	02-008/00:12:00	25	Range Modulation On: SUP=3.0dB		
22012	MGS	02-008/00:13:00	25	Begin Ranging Acquisition		
22013	MGS	02-008/00:30:10		: 01:33:44	RPAONX	02-008/00:17:18
22014	MGS	02-008/00:30:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/00:17:18
22015	MGS	02-008/00:30:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/00:17:22
22016	MGS	02-008/00:30:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/00:17:22
22017	MGS	02-008/00:30:18		Command the PSE with included data word: 3990	SWPSEL	02-008/00:17:26
22018	MGS	02-008/00:30:19		Set eclipse egress script address: 0158	SWSEES	02-008/00:17:27
22019	MGS	02-008/00:31:55		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/00:19:03
22020	MGS	02-008/00:31:59		NOTE: Exit Earth Occultation 12675		02-008/00:19:07
22021	MGS	02-008/00:31:59	25	Acquisition Of X-Band Signal		
22022	MGS	02-008/00:31:59	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22023	MGS	02-008/00:35:44	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22024	MGS	02-008/00:37:35		NOTE: Exit Planetary Atmosphere 12675		02-008/00:24:42
22025	MGS	02-008/00:38:02		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:15:13	AEMPB	02-008/00:25:10
22026	MGS	02-008/00:38:02		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-008/00:25:10
22027	MGS	02-008/00:38:02		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-008/00:25:10
22028	MGS	02-008/00:38:03		SSR 1B Data Enable	CSD1BE	02-008/00:25:11
22029	MGS	02-008/00:38:03		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-008/00:25:11
22030	MGS	02-008/00:38:03	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22031	MGS	02-008/00:45:57		NOTE: Exit Solar Eclipse 12675		02-008/00:33:04
22032	MGS	02-008/01:01:08		NOTE: Periapsis 12676 ----------		02-008/00:48:15
22033	MGS	02-008/01:10:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/00:58:03
22034	MGS	02-008/01:10:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/00:58:03
22035	MGS	02-008/01:10:57		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/00:58:04
22036	MGS	02-008/01:10:57		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/00:58:04
22037	MGS	02-008/01:18:51	25	NOTE: Transmitter Off in 15 minutes		
22038	MGS	02-008/01:31:52	25	Range Modulation Off		
22039	MGS	02-008/01:32:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/01:20:04
22040	MGS	02-008/01:32:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/01:20:04
22041	MGS	02-008/01:33:51	25	Transmitter Off		
22042	MGS	02-008/01:48:42		SSR 1B Data Disable	CSD1BX	02-008/01:35:49
22043	MGS	02-008/01:48:42		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-008/01:35:49
22044	MGS	02-008/01:48:42		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-008/01:35:49
22045	MGS	02-008/01:48:42	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22046	MGS	02-008/01:53:18		NOTE: Start Block (MAP_RT)		02-008/01:40:25
22047	MGS	02-008/01:53:19		: 00:24:34, 01:33:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:17, 01:16:10, 00:08:00	AEMINI	02-008/01:40:26
22048	MGS	02-008/01:53:19		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/01:40:26
22049	MGS	02-008/01:53:19		NOTE: Start EVP data return script		02-008/01:40:26
22050	MGS	02-008/01:53:20		: SE_2A, RTM, 01:16:09, MRC, 2002-008T02:24:33.000	AEMRTI	02-008/01:40:27
22051	MGS	02-008/01:58:04		NOTE: Enter Planetary Atmosphere 12676		02-008/01:45:11
22052	MGS	02-008/01:59:36	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22053	MGS	02-008/01:59:46		NOTE: Apoapsis 12676 -		02-008/01:46:53
22054	MGS	02-008/02:03:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/01:50:26
22055	MGS	02-008/02:03:19		NOTE: Enter Solar Eclipse 12676		02-008/01:50:26
22056	MGS	02-008/02:03:21		NOTE: Enter Earth Occultation 12676		02-008/01:50:29
22057	MGS	02-008/02:03:21	25	NOTE: Loss Of X-Band Signal		
22058	MGS	02-008/02:03:54		NOTE: End EVP script		02-008/01:51:02
22059	MGS	02-008/02:03:55		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/01:51:02
22060	MGS	02-008/02:03:55		NOTE: End Block (MAP_PB_ODY)		02-008/01:51:03
22061	MGS	02-008/02:07:42	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22062	MGS	02-008/02:09:42	25	Range Modulation On: SUP=3.0dB		
22063	MGS	02-008/02:10:42	25	Begin Ranging Acquisition		
22064	MGS	02-008/02:24:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/02:11:15
22065	MGS	02-008/02:27:53		: 01:33:43	RPAONX	02-008/02:15:00
22066	MGS	02-008/02:27:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/02:15:00
22067	MGS	02-008/02:27:57		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/02:15:04
22068	MGS	02-008/02:27:57		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/02:15:04
22069	MGS	02-008/02:28:02		Set eclipse egress script address: 019A	SWSEES	02-008/02:15:09
22070	MGS	02-008/02:29:08		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-008/02:16:15
22071	MGS	02-008/02:29:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/02:16:15
22072	MGS	02-008/02:29:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/02:16:15
22073	MGS	02-008/02:29:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/02:16:15
22074	MGS	02-008/02:29:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/02:16:15
22075	MGS	02-008/02:29:42		NOTE: Exit Earth Occultation 12676		02-008/02:16:49
22076	MGS	02-008/02:29:42	25	Acquisition Of X-Band Signal		
22077	MGS	02-008/02:29:42	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22078	MGS	02-008/02:29:42	25	NOTE: Carrier Only -- No Telemetry Modulation		
22079	MGS	02-008/02:35:17		NOTE: Exit Planetary Atmosphere 12676		02-008/02:22:24
22080	MGS	02-008/02:37:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/02:24:32
22081	MGS	02-008/02:37:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/02:24:32
22082	MGS	02-008/02:37:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/02:24:32
22083	MGS	02-008/02:37:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/02:24:32
22084	MGS	02-008/02:37:25	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22085	MGS	02-008/02:37:26		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-008/02:24:33
22086	MGS	02-008/02:37:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/02:24:33
22087	MGS	02-008/02:37:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/02:24:33
22088	MGS	02-008/02:37:26	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22089	MGS	02-008/02:37:30		NOTE: End fixed Sub-Reflector for Radio Science		02-008/02:24:37
22090	MGS	02-008/02:43:39		NOTE: Exit Solar Eclipse 12676		02-008/02:30:46
22091	MGS	02-008/02:58:33		NOTE: Periapsis 12677 ----------		02-008/02:45:40
22092	MGS	02-008/03:04:38		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/02:51:45
22093	MGS	02-008/03:04:38		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/02:51:45
22094	MGS	02-008/03:04:39		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/02:51:46
22095	MGS	02-008/03:04:39		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/02:51:46
22096	MGS	02-008/03:16:33	25	NOTE: Transmitter Off in 15 minutes		
22097	MGS	02-008/03:26:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/03:13:46
22098	MGS	02-008/03:26:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/03:13:46
22099	MGS	02-008/03:29:33	25	Range Modulation Off		
22100	MGS	02-008/03:31:33	25	Transmitter Off		
22101	MGS	02-008/03:48:35		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/03:35:42
22102	MGS	02-008/03:51:03		NOTE: Start EVP data return script		02-008/03:38:10
22103	MGS	02-008/03:53:35		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/03:40:42
22104	MGS	02-008/03:53:35		: 00:08:00, FALSE	RDSCII	02-008/03:40:42
22105	MGS	02-008/03:53:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/03:40:42
22106	MGS	02-008/03:53:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/03:40:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22107	MGS	02-008/03:53:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/03:40:42
22108	MGS	02-008/03:53:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/03:40:42
22109	MGS	02-008/03:53:35	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22110	MGS	02-008/03:53:35	25	NOTE: Carrier Only -- No Telemetry Modulation		
22111	MGS	02-008/03:55:47		NOTE: Enter Planetary Atmosphere 12677		02-008/03:42:54
22112	MGS	02-008/03:57:19		NOTE: Apoapsis 12677 -		02-008/03:44:26
22113	MGS	02-008/04:01:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/03:48:10
22114	MGS	02-008/04:01:03		NOTE: Enter Solar Eclipse 12677		02-008/03:48:10
22115	MGS	02-008/04:01:04		NOTE: Enter Earth Occultation 12677		02-008/03:48:10
22116	MGS	02-008/04:01:04	25	NOTE: Loss Of X-Band Signal		
22117	MGS	02-008/04:01:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/03:48:42
22118	MGS	02-008/04:01:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/03:48:42
22119	MGS	02-008/04:01:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/03:48:42
22120	MGS	02-008/04:01:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/03:48:42
22121	MGS	02-008/04:01:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/03:48:43
22122	MGS	02-008/04:01:36		NOTE: End EVP script		02-008/03:48:43
22123	MGS	02-008/04:01:40		NOTE: End fixed Sub-Reflector for Radio Science		02-008/03:48:47
22124	MGS	02-008/04:05:26	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22125	MGS	02-008/04:07:27	25	Range Modulation On: SUP=3.0dB		
22126	MGS	02-008/04:08:27	25	Begin Ranging Acquisition		
22127	MGS	02-008/04:15:00	34	Begin Pre-Cal		
22128	MGS	02-008/04:15:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
22129	MGS	02-008/04:15:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
22130	MGS	02-008/04:15:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
22131	MGS	02-008/04:15:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
22132	MGS	02-008/04:15:00	34	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
22133	MGS	02-008/04:15:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
22134	MGS	02-008/04:15:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
22135	MGS	02-008/04:15:00	34	Config: TGC: DEST=37		
22136	MGS	02-008/04:15:00	34	Config: TGC: BAND=X, BR=40000.000000		
22137	MGS	02-008/04:15:00	34	Config: FSS: CH=2, PRI_FL=10000		
22138	MGS	02-008/04:15:00	34	Config: RSR		
22139	MGS	02-008/04:15:00	34	Config: TXL		
22140	MGS	02-008/04:15:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
22141	MGS	02-008/04:15:00	34	Config: BVR		
22142	MGS	02-008/04:15:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
22143	MGS	02-008/04:15:00	34	Config: MDA: SMPL=0.1		
22144	MGS	02-008/04:21:52		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/04:08:59
22145	MGS	02-008/04:25:37		: 01:33:43	RPAONX	02-008/04:12:44
22146	MGS	02-008/04:25:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/04:12:44
22147	MGS	02-008/04:25:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/04:12:46
22148	MGS	02-008/04:25:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/04:12:46
22149	MGS	02-008/04:25:44		Set eclipse egress script address: 01DC	SWSEES	02-008/04:12:51
22150	MGS	02-008/04:26:52		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-008/04:13:59
22151	MGS	02-008/04:26:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/04:13:59
22152	MGS	02-008/04:26:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/04:13:59
22153	MGS	02-008/04:26:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/04:13:59
22154	MGS	02-008/04:26:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/04:13:59
22155	MGS	02-008/04:27:22		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/04:14:29
22156	MGS	02-008/04:27:27		NOTE: Exit Earth Occultation 12677		02-008/04:14:34
22157	MGS	02-008/04:27:27	25	Acquisition Of X-Band Signal		
22158	MGS	02-008/04:27:27	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22159	MGS	02-008/04:27:27	25	NOTE: Carrier Only -- No Telemetry Modulation		
22160	MGS	02-008/04:33:01		NOTE: Exit Planetary Atmosphere 12677		02-008/04:20:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22161	MGS	02-008/04:35:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/04:22:16
22162	MGS	02-008/04:35:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/04:22:16
22163	MGS	02-008/04:35:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/04:22:16
22164	MGS	02-008/04:35:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/04:22:16
22165	MGS	02-008/04:35:09	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22166	MGS	02-008/04:35:10		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-008/04:22:17
22167	MGS	02-008/04:35:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/04:22:17
22168	MGS	02-008/04:35:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/04:22:17
22169	MGS	02-008/04:35:10	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22170	MGS	02-008/04:35:14		NOTE: End fixed Sub-Reflector for Radio Science		02-008/04:22:21
22171	MGS	02-008/04:40:00	25	NOTE: Transmitter Off in 15 minutes		
22172	MGS	02-008/04:41:24		NOTE: Exit Solar Eclipse 12677		02-008/04:28:31
22173	MGS	02-008/04:53:00	25	Range Modulation Off		
22174	MGS	02-008/04:55:00	25	Transmitter Off		
22175	MGS	02-008/04:56:35		NOTE: Periapsis 12678 ----------		02-008/04:43:42
22176	MGS	02-008/05:00:00	34	Begin Tracking		
22177	MGS	02-008/05:00:00	34	Acquire D/L: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22178	MGS	02-008/05:02:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/04:49:30
22179	MGS	02-008/05:02:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/04:49:30
22180	MGS	02-008/05:02:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/04:49:31
22181	MGS	02-008/05:02:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/04:49:31
22182	MGS	02-008/05:07:15	25	NOTE: Below Uplink Interlock Limit		
22183	MGS	02-008/05:10:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22184	MGS	02-008/05:14:17	34	NOTE: Transmitter Off in 15 minutes		
22185	MGS	02-008/05:15:00	25	End Tracking		
22186	MGS	02-008/05:20:46	34	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22187	MGS	02-008/05:24:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/05:11:31
22188	MGS	02-008/05:24:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/05:11:31
22189	MGS	02-008/05:29:17	34	Transmitter Off		
22190	MGS	02-008/05:30:00	25	End Post-Cal		
22191	MGS	02-008/05:34:21		NOTE: Start Block (SSRMGR)		02-008/05:21:28
22192	MGS	02-008/05:34:21		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-008/05:21:28
22193	MGS	02-008/05:34:22		SSR 1B Data Enable	CSD1BE	02-008/05:21:29
22194	MGS	02-008/05:34:22		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-008/05:21:29
22195	MGS	02-008/05:35:46	34	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22196	MGS	02-008/05:46:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/05:33:26
22197	MGS	02-008/05:48:48		NOTE: Start Block (MAP_PB_ODY)		02-008/05:35:55
22198	MGS	02-008/05:48:49		: 00:24:34, 01:33:44, FALSE, FALSE, FALSE, 00:01:15, 00:06:37, 01:19:31, 00:06:20	AEMINI	02-008/05:35:56
22199	MGS	02-008/05:48:49		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/05:35:56
22200	MGS	02-008/05:48:49		NOTE: Start EVP data return script		02-008/05:35:56
22201	MGS	02-008/05:48:50		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-008T06:18:23.000	AEMPBI	02-008/05:35:57
22202	MGS	02-008/05:51:19		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/05:38:26
22203	MGS	02-008/05:51:19		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8136000, DUR=00:16:57		02-008/05:38:26
22204	MGS	02-008/05:51:19		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-008/05:38:26
22205	MGS	02-008/05:51:19		: 00:08:00, FALSE	RDSCII	02-008/05:38:26
22206	MGS	02-008/05:51:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/05:38:26
22207	MGS	02-008/05:51:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/05:38:26
22208	MGS	02-008/05:51:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/05:38:26
22209	MGS	02-008/05:51:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/05:38:26
22210	MGS	02-008/05:51:19	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22211	MGS	02-008/05:51:19	34	NOTE: Carrier Only -- No Telemetry Modulation		
22212	MGS	02-008/05:53:32		NOTE: Enter Planetary Atmosphere 12678		02-008/05:40:39
22213	MGS	02-008/05:55:31		NOTE: Apoapsis 12678 -		02-008/05:42:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22214	MGS	02-008/05:57:50		SSR 1A Data Disable	CSD1AX	02-008/05:44:57
22215	MGS	02-008/05:57:50		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-008/05:44:57
22216	MGS	02-008/05:57:51		NOTE: End Block (SSRMGR)		02-008/05:44:58
22217	MGS	02-008/05:58:48		NOTE: Enter Earth Occultation 12678		02-008/05:45:55
22218	MGS	02-008/05:58:48	34	NOTE: Loss Of X-Band Signal		
22219	MGS	02-008/05:58:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/05:45:56
22220	MGS	02-008/05:58:50		NOTE: Enter Solar Eclipse 12678		02-008/05:45:56
22221	MGS	02-008/05:59:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/05:46:26
22222	MGS	02-008/05:59:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/05:46:26
22223	MGS	02-008/05:59:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/05:46:26
22224	MGS	02-008/05:59:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/05:46:26
22225	MGS	02-008/05:59:20		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/05:46:27
22226	MGS	02-008/05:59:20		NOTE: End EVP script		02-008/05:46:27
22227	MGS	02-008/05:59:21		NOTE: End Block (MAP_RT)		02-008/05:46:28
22228	MGS	02-008/05:59:24		NOTE: End fixed Sub-Reflector for Radio Science		02-008/05:46:31
22229	MGS	02-008/06:03:13	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22230	MGS	02-008/06:23:23		: 01:33:44	RPAONX	02-008/06:10:30
22231	MGS	02-008/06:23:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/06:10:30
22232	MGS	02-008/06:23:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/06:10:31
22233	MGS	02-008/06:23:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/06:10:31
22234	MGS	02-008/06:23:28		Command the PSE with included data word: 3990	SWPSEL	02-008/06:10:35
22235	MGS	02-008/06:23:29		Set eclipse egress script address: 0158	SWSEES	02-008/06:10:36
22236	MGS	02-008/06:25:08		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/06:12:15
22237	MGS	02-008/06:25:14		NOTE: Exit Earth Occultation 12678		02-008/06:12:21
22238	MGS	02-008/06:25:14	34	Acquisition Of X-Band Signal		
22239	MGS	02-008/06:25:14	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22240	MGS	02-008/06:28:59	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22241	MGS	02-008/06:30:47		NOTE: Exit Planetary Atmosphere 12678		02-008/06:17:54
22242	MGS	02-008/06:31:15		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:15:13	AEMPB	02-008/06:18:22
22243	MGS	02-008/06:31:15		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-008/06:18:22
22244	MGS	02-008/06:31:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-008/06:18:22
22245	MGS	02-008/06:31:16		SSR 1A Data Enable	CSD1AE	02-008/06:18:23
22246	MGS	02-008/06:31:16		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-008/06:18:23
22247	MGS	02-008/06:31:16	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22248	MGS	02-008/06:39:11		NOTE: Exit Solar Eclipse 12678		02-008/06:26:17
22249	MGS	02-008/06:54:49		NOTE: Periapsis 12679 ----------		02-008/06:41:56
22250	MGS	02-008/07:04:09		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/06:51:16
22251	MGS	02-008/07:04:09		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/06:51:16
22252	MGS	02-008/07:04:10		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/06:51:17
22253	MGS	02-008/07:04:10		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/06:51:17
22254	MGS	02-008/07:12:04	34	NOTE: Transmitter Off in 15 minutes		
22255	MGS	02-008/07:26:10		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/07:13:17
22256	MGS	02-008/07:26:10		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/07:13:17
22257	MGS	02-008/07:27:04	34	Transmitter Off		
22258	MGS	02-008/07:41:55		SSR 1A Data Disable	CSD1AX	02-008/07:29:01
22259	MGS	02-008/07:41:55		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-008/07:29:01
22260	MGS	02-008/07:41:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-008/07:29:01
22261	MGS	02-008/07:41:55	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22262	MGS	02-008/07:46:37		NOTE: Start Block (MAP_RT)		02-008/07:33:43
22263	MGS	02-008/07:46:38		: 00:24:34, 01:33:43, FALSE, TRUE, FALSE, 00:01:15, 00:08:17, 01:16:10, 00:08:00	AEMINI	02-008/07:33:44
22264	MGS	02-008/07:46:38		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/07:33:44
22265	MGS	02-008/07:46:38		NOTE: Start EVP data return script		02-008/07:33:44
22266	MGS	02-008/07:46:39		: SE_2A, RTM, 01:16:09, MRC, 2002-008T08:17:51.000	AEMRTI	02-008/07:33:45
22267	MGS	02-008/07:51:20		NOTE: Enter Planetary Atmosphere 12679		02-008/07:38:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22268	MGS	02-008/07:52:51	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22269	MGS	02-008/07:53:49		NOTE: Apoapsis 12679 -		02-008/07:40:55
22270	MGS	02-008/07:56:36		NOTE: Enter Earth Occultation 12679		02-008/07:43:42
22271	MGS	02-008/07:56:36	34	NOTE: Loss Of X-Band Signal		
22272	MGS	02-008/07:56:37		NOTE: Enter Solar Eclipse 12679		02-008/07:43:44
22273	MGS	02-008/07:56:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/07:43:44
22274	MGS	02-008/07:57:08		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/07:44:14
22275	MGS	02-008/07:57:08		NOTE: End EVP script		02-008/07:44:14
22276	MGS	02-008/07:57:09		NOTE: End Block (MAP_PB_ODY)		02-008/07:44:15
22277	MGS	02-008/08:01:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22278	MGS	02-008/08:17:26		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/08:04:33
22279	MGS	02-008/08:21:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/08:08:17
22280	MGS	02-008/08:21:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/08:08:17
22281	MGS	02-008/08:21:12		: 01:33:43	RPAONX	02-008/08:08:18
22282	MGS	02-008/08:21:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/08:08:18
22283	MGS	02-008/08:21:16		Set eclipse egress script address: 019A	SWSEES	02-008/08:08:22
22284	MGS	02-008/08:22:27		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-008/08:09:33
22285	MGS	02-008/08:22:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/08:09:33
22286	MGS	02-008/08:22:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/08:09:33
22287	MGS	02-008/08:22:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/08:09:33
22288	MGS	02-008/08:22:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/08:09:33
22289	MGS	02-008/08:23:02		NOTE: Exit Earth Occultation 12679		02-008/08:10:08
22290	MGS	02-008/08:23:02	34	Acquisition Of X-Band Signal		
22291	MGS	02-008/08:23:02	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22292	MGS	02-008/08:23:02	34	NOTE: Carrier Only -- No Telemetry Modulation		
22293	MGS	02-008/08:28:35		NOTE: Exit Planetary Atmosphere 12679		02-008/08:15:42
22294	MGS	02-008/08:30:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/08:17:50
22295	MGS	02-008/08:30:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/08:17:50
22296	MGS	02-008/08:30:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/08:17:50
22297	MGS	02-008/08:30:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/08:17:50
22298	MGS	02-008/08:30:44	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22299	MGS	02-008/08:30:45		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-008/08:17:51
22300	MGS	02-008/08:30:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/08:17:51
22301	MGS	02-008/08:30:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/08:17:51
22302	MGS	02-008/08:30:45	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22303	MGS	02-008/08:30:48		NOTE: End fixed Sub-Reflector for Radio Science		02-008/08:17:55
22304	MGS	02-008/08:36:58		NOTE: Exit Solar Eclipse 12679		02-008/08:24:05
22305	MGS	02-008/08:52:51		NOTE: Periapsis 12680 ----------		02-008/08:39:57
22306	MGS	02-008/08:57:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/08:45:04
22307	MGS	02-008/08:57:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/08:45:04
22308	MGS	02-008/08:57:59		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/08:45:05
22309	MGS	02-008/08:57:59		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/08:45:05
22310	MGS	02-008/09:09:50	34	NOTE: Transmitter Off in 15 minutes		
22311	MGS	02-008/09:19:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/09:07:05
22312	MGS	02-008/09:19:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/09:07:05
22313	MGS	02-008/09:24:50	34	Transmitter Off		
22314	MGS	02-008/09:41:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/09:29:00
22315	MGS	02-008/09:44:23		NOTE: Start EVP data return script		02-008/09:31:29
22316	MGS	02-008/09:46:54		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/09:34:00
22317	MGS	02-008/09:46:54		: 00:08:00, FALSE	RDSCII	02-008/09:34:00
22318	MGS	02-008/09:46:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/09:34:00
22319	MGS	02-008/09:46:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/09:34:00
22320	MGS	02-008/09:46:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/09:34:00
22321	MGS	02-008/09:46:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/09:34:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22322	MGS	02-008/09:46:54	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22323	MGS	02-008/09:46:54	34	NOTE: Carrier Only -- No Telemetry Modulation		
22324	MGS	02-008/09:49:07		NOTE: Enter Planetary Atmosphere 12680		02-008/09:36:13
22325	MGS	02-008/09:51:36		NOTE: Apoapsis 12680 -		02-008/09:38:42
22326	MGS	02-008/09:54:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/09:41:29
22327	MGS	02-008/09:54:23		NOTE: Enter Solar Eclipse 12680		02-008/09:41:29
22328	MGS	02-008/09:54:23		NOTE: Enter Earth Occultation 12680		02-008/09:41:29
22329	MGS	02-008/09:54:23	34	NOTE: Loss Of X-Band Signal		
22330	MGS	02-008/09:54:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/09:42:00
22331	MGS	02-008/09:54:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/09:42:00
22332	MGS	02-008/09:54:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/09:42:00
22333	MGS	02-008/09:54:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/09:42:00
22334	MGS	02-008/09:54:54		NOTE: End EVP script		02-008/09:42:01
22335	MGS	02-008/09:54:55		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/09:42:01
22336	MGS	02-008/09:54:58		NOTE: End fixed Sub-Reflector for Radio Science		02-008/09:42:05
22337	MGS	02-008/09:58:46	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22338	MGS	02-008/10:05:00	63	Begin Pre-Cal		
22339	MGS	02-008/10:05:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
22340	MGS	02-008/10:05:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
22341	MGS	02-008/10:05:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
22342	MGS	02-008/10:05:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
22343	MGS	02-008/10:05:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
22344	MGS	02-008/10:05:00	63	Config: TGC: DEST=37		
22345	MGS	02-008/10:05:00	63	Config: TGC: BAND=X, BR=40000.000000		
22346	MGS	02-008/10:05:00	63	Config: FSS: CH=2, PRI_FL=10000		
22347	MGS	02-008/10:05:00	63	Config: RSR		
22348	MGS	02-008/10:05:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
22349	MGS	02-008/10:05:00	63	Config: BVR		
22350	MGS	02-008/10:05:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
22351	MGS	02-008/10:05:00	63	Config: MDA: SMPL=0.1		
22352	MGS	02-008/10:15:12		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/10:02:18
22353	MGS	02-008/10:18:57		: 01:33:43	RPAONX	02-008/10:06:03
22354	MGS	02-008/10:18:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/10:06:03
22355	MGS	02-008/10:18:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/10:06:05
22356	MGS	02-008/10:18:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/10:06:05
22357	MGS	02-008/10:19:04		Set eclipse egress script address: 01DC	SWSEES	02-008/10:06:10
22358	MGS	02-008/10:20:12		: 00:00:30, 00:08:17, FALSE	RDSCIE	02-008/10:07:18
22359	MGS	02-008/10:20:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/10:07:18
22360	MGS	02-008/10:20:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/10:07:18
22361	MGS	02-008/10:20:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/10:07:18
22362	MGS	02-008/10:20:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/10:07:18
22363	MGS	02-008/10:20:42		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/10:07:48
22364	MGS	02-008/10:20:49		NOTE: Exit Earth Occultation 12680		02-008/10:07:55
22365	MGS	02-008/10:20:49	34	Acquisition Of X-Band Signal		
22366	MGS	02-008/10:20:49	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22367	MGS	02-008/10:20:49	34	NOTE: Carrier Only -- No Telemetry Modulation		
22368	MGS	02-008/10:26:23		NOTE: Exit Planetary Atmosphere 12680		02-008/10:13:29
22369	MGS	02-008/10:28:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/10:15:35
22370	MGS	02-008/10:28:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/10:15:35
22371	MGS	02-008/10:28:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/10:15:35
22372	MGS	02-008/10:28:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/10:15:35
22373	MGS	02-008/10:28:29	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22374	MGS	02-008/10:28:30		: RTM, MRC, 01:16:09, S&E_2A, FALSE, 00:08:01	AEMRT	02-008/10:15:36
22375	MGS	02-008/10:28:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/10:15:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22376	MGS	02-008/10:28:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/10:15:36
22377	MGS	02-008/10:28:30	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22378	MGS	02-008/10:28:34		NOTE: End fixed Sub-Reflector for Radio Science		02-008/10:15:40
22379	MGS	02-008/10:34:44		NOTE: Exit Solar Eclipse 12680		02-008/10:21:50
22380	MGS	02-008/10:50:22		NOTE: Periapsis 12681 ----------		02-008/10:37:28
22381	MGS	02-008/10:55:43		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/10:42:49
22382	MGS	02-008/10:55:43		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/10:42:49
22383	MGS	02-008/10:55:44		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/10:42:50
22384	MGS	02-008/10:55:44		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/10:42:50
22385	MGS	02-008/11:07:32	34	NOTE: Transmitter Off in 15 minutes		
22386	MGS	02-008/11:17:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/11:04:50
22387	MGS	02-008/11:17:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/11:04:50
22388	MGS	02-008/11:22:32	34	Transmitter Off		
22389	MGS	02-008/11:27:35		NOTE: Start Block (SSRMGR)		02-008/11:14:41
22390	MGS	02-008/11:27:35		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-008/11:14:41
22391	MGS	02-008/11:27:36		SSR 1A Data Enable	CSD1AE	02-008/11:14:42
22392	MGS	02-008/11:27:36		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-008/11:14:42
22393	MGS	02-008/11:35:00	63	Begin Tracking		
22394	MGS	02-008/11:35:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22395	MGS	02-008/11:39:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/11:26:45
22396	MGS	02-008/11:42:04		NOTE: Start Block (MAP_PB_ODY)		02-008/11:29:10
22397	MGS	02-008/11:42:05		: 00:24:34, 01:33:44, FALSE, FALSE, FALSE, 00:01:15, 00:06:37, 01:19:31, 00:06:20	AEMINI	02-008/11:29:11
22398	MGS	02-008/11:42:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/11:29:11
22399	MGS	02-008/11:42:05		NOTE: Start EVP data return script		02-008/11:29:11
22400	MGS	02-008/11:42:06		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-008T12:11:38.000	AEMPBI	02-008/11:29:12
22401	MGS	02-008/11:44:21	34	NOTE: Below Uplink Interlock Limit		
22402	MGS	02-008/11:44:27	63	NOTE: Above Uplink Interlock Limit		
22403	MGS	02-008/11:44:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/11:31:45
22404	MGS	02-008/11:44:39		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8184000, DUR=00:17:03		02-008/11:31:45
22405	MGS	02-008/11:44:39		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-008/11:31:45
22406	MGS	02-008/11:44:39		: 00:08:00, FALSE	RDSCII	02-008/11:31:45
22407	MGS	02-008/11:44:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/11:31:45
22408	MGS	02-008/11:44:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/11:31:45
22409	MGS	02-008/11:44:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/11:31:45
22410	MGS	02-008/11:44:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/11:31:45
22411	MGS	02-008/11:44:39	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22412	MGS	02-008/11:44:39	34	NOTE: Carrier Only -- No Telemetry Modulation		
22413	MGS	02-008/11:44:39	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22414	MGS	02-008/11:44:39	63	NOTE: Carrier Only -- No Telemetry Modulation		
22415	MGS	02-008/11:46:49		NOTE: Enter Planetary Atmosphere 12681		02-008/11:33:55
22416	MGS	02-008/11:48:57		NOTE: Apoapsis 12681 -		02-008/11:36:02
22417	MGS	02-008/11:51:06		SSR 1B Data Disable	CSD1BX	02-008/11:38:12
22418	MGS	02-008/11:51:06		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-008/11:38:12
22419	MGS	02-008/11:51:07		NOTE: End Block (SSRMGR)		02-008/11:38:13
22420	MGS	02-008/11:52:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/11:39:11
22421	MGS	02-008/11:52:05		NOTE: Enter Solar Eclipse 12681		02-008/11:39:11
22422	MGS	02-008/11:52:06		NOTE: Enter Earth Occultation 12681		02-008/11:39:11
22423	MGS	02-008/11:52:06	34	NOTE: Loss Of X-Band Signal		
22424	MGS	02-008/11:52:06	63	NOTE: Loss Of X-Band Signal		
22425	MGS	02-008/11:52:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/11:39:45
22426	MGS	02-008/11:52:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/11:39:45
22427	MGS	02-008/11:52:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/11:39:45
22428	MGS	02-008/11:52:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/11:39:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22429	MGS	02-008/11:52:40		NOTE: End EVP script		02-008/11:39:46
22430	MGS	02-008/11:52:40		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/11:39:46
22431	MGS	02-008/11:52:41		NOTE: End Block (MAP_RT)		02-008/11:39:47
22432	MGS	02-008/11:52:44		NOTE: End fixed Sub-Reflector for Radio Science		02-008/11:39:50
22433	MGS	02-008/11:55:00	34	End Tracking		
22434	MGS	02-008/12:10:00	34	End Post-Cal		
22435	MGS	02-008/12:12:54		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-008/12:00:00
22436	MGS	02-008/12:16:39		: 01:33:44	RPAONX	02-008/12:03:45
22437	MGS	02-008/12:16:39		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/12:03:45
22438	MGS	02-008/12:16:44		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/12:03:50
22439	MGS	02-008/12:16:44		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/12:03:50
22440	MGS	02-008/12:16:48		Command the PSE with included data word: 3990	SWPSEL	02-008/12:03:54
22441	MGS	02-008/12:16:49		Set eclipse egress script address: 0158	SWSEES	02-008/12:03:55
22442	MGS	02-008/12:18:24		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/12:05:30
22443	MGS	02-008/12:18:33		NOTE: Exit Earth Occultation 12681		02-008/12:05:38
22444	MGS	02-008/12:18:33	63	Acquisition Of X-Band Signal		
22445	MGS	02-008/12:18:33	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22446	MGS	02-008/12:24:07		NOTE: Exit Planetary Atmosphere 12681		02-008/12:11:12
22447	MGS	02-008/12:24:31		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:15:13	AEMPB	02-008/12:11:37
22448	MGS	02-008/12:24:31		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-008/12:11:37
22449	MGS	02-008/12:24:31		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-008/12:11:37
22450	MGS	02-008/12:24:32		SSR 1B Data Enable	CSD1BE	02-008/12:11:38
22451	MGS	02-008/12:24:32		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-008/12:11:38
22452	MGS	02-008/12:24:32	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22453	MGS	02-008/12:32:26		NOTE: Exit Solar Eclipse 12681		02-008/12:19:32
22454	MGS	02-008/12:47:44		NOTE: Periapsis 12682 ----------		02-008/12:34:50
22455	MGS	02-008/12:57:25		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/12:44:31
22456	MGS	02-008/12:57:25		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/12:44:31
22457	MGS	02-008/12:57:26		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/12:44:32
22458	MGS	02-008/12:57:26		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/12:44:32
22459	MGS	02-008/13:19:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/13:06:32
22460	MGS	02-008/13:19:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/13:06:32
22461	MGS	02-008/13:35:10		SSR 1B Data Disable	CSD1BX	02-008/13:22:16
22462	MGS	02-008/13:35:10		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-008/13:22:16
22463	MGS	02-008/13:35:10		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-008/13:22:16
22464	MGS	02-008/13:35:10	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22465	MGS	02-008/13:39:45		NOTE: Start Block (MAP_RT)		02-008/13:26:51
22466	MGS	02-008/13:39:46		: 00:24:42, 01:33:31, FALSE, TRUE, FALSE, 00:01:15, 00:08:14, 01:16:04, 00:07:57	AEMINI	02-008/13:26:52
22467	MGS	02-008/13:39:46		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/13:26:52
22468	MGS	02-008/13:39:46		NOTE: Start EVP data return script		02-008/13:26:52
22469	MGS	02-008/13:39:47		: SE_2A, RTM, 01:16:03, MRC, 2002-008T14:11:04.000	AEMRTI	02-008/13:26:53
22470	MGS	02-008/13:44:29		NOTE: Enter Planetary Atmosphere 12682		02-008/13:31:34
22471	MGS	02-008/13:46:39		NOTE: Apoapsis 12682 -		02-008/13:33:44
22472	MGS	02-008/13:49:45		NOTE: Enter Earth Occultation 12682		02-008/13:36:50
22473	MGS	02-008/13:49:45	63	NOTE: Loss Of X-Band Signal		
22474	MGS	02-008/13:49:46		NOTE: Enter Solar Eclipse 12682		02-008/13:36:52
22475	MGS	02-008/13:49:46		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/13:36:52
22476	MGS	02-008/13:50:23		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/13:37:29
22477	MGS	02-008/13:50:24		NOTE: End EVP script		02-008/13:37:29
22478	MGS	02-008/13:50:25		NOTE: End Block (MAP_PB_ODY)		02-008/13:37:30
22479	MGS	02-008/14:10:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/13:57:49
22480	MGS	02-008/14:14:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/14:01:32
22481	MGS	02-008/14:14:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/14:01:32
22482	MGS	02-008/14:14:29		: 01:33:31	RPAONX	02-008/14:01:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22483	MGS	02-008/14:14:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/14:01:34
22484	MGS	02-008/14:14:32		Set eclipse egress script address: 019A	SWSEES	02-008/14:01:37
22485	MGS	02-008/14:15:44		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-008/14:02:49
22486	MGS	02-008/14:15:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/14:02:49
22487	MGS	02-008/14:15:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/14:02:49
22488	MGS	02-008/14:15:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/14:02:49
22489	MGS	02-008/14:15:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/14:02:49
22490	MGS	02-008/14:16:14		NOTE: Exit Earth Occultation 12682		02-008/14:03:20
22491	MGS	02-008/14:16:14	63	Acquisition Of X-Band Signal		
22492	MGS	02-008/14:16:14	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22493	MGS	02-008/14:16:14	63	NOTE: Carrier Only -- No Telemetry Modulation		
22494	MGS	02-008/14:21:47		NOTE: Exit Planetary Atmosphere 12682		02-008/14:08:52
22495	MGS	02-008/14:23:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/14:11:03
22496	MGS	02-008/14:23:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/14:11:03
22497	MGS	02-008/14:23:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/14:11:03
22498	MGS	02-008/14:23:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/14:11:03
22499	MGS	02-008/14:23:58	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22500	MGS	02-008/14:23:59		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-008/14:11:04
22501	MGS	02-008/14:23:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/14:11:04
22502	MGS	02-008/14:23:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/14:11:04
22503	MGS	02-008/14:23:59	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22504	MGS	02-008/14:24:02		NOTE: End fixed Sub-Reflector for Radio Science		02-008/14:11:08
22505	MGS	02-008/14:30:07		NOTE: Exit Solar Eclipse 12682		02-008/14:17:12
22506	MGS	02-008/14:45:24		NOTE: Periapsis 12683 ----------		02-008/14:32:29
22507	MGS	02-008/14:51:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/14:38:11
22508	MGS	02-008/14:51:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/14:38:11
22509	MGS	02-008/14:51:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/14:38:12
22510	MGS	02-008/14:51:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/14:38:12
22511	MGS	02-008/15:13:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/15:00:12
22512	MGS	02-008/15:13:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/15:00:12
22513	MGS	02-008/15:35:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/15:22:07
22514	MGS	02-008/15:37:32		NOTE: Start EVP data return script		02-008/15:24:37
22515	MGS	02-008/15:40:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/15:27:07
22516	MGS	02-008/15:40:02		: 00:07:57, FALSE	RDSCII	02-008/15:27:07
22517	MGS	02-008/15:40:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/15:27:07
22518	MGS	02-008/15:40:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/15:27:07
22519	MGS	02-008/15:40:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/15:27:07
22520	MGS	02-008/15:40:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/15:27:07
22521	MGS	02-008/15:40:02	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22522	MGS	02-008/15:40:02	63	NOTE: Carrier Only -- No Telemetry Modulation		
22523	MGS	02-008/15:42:14		NOTE: Enter Planetary Atmosphere 12683		02-008/15:29:19
22524	MGS	02-008/15:44:34		NOTE: Apoapsis 12683 -		02-008/15:31:39
22525	MGS	02-008/15:47:29		NOTE: Enter Earth Occultation 12683		02-008/15:34:34
22526	MGS	02-008/15:47:29	63	NOTE: Loss Of X-Band Signal		
22527	MGS	02-008/15:47:31		NOTE: Enter Solar Eclipse 12683		02-008/15:34:37
22528	MGS	02-008/15:47:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/15:34:37
22529	MGS	02-008/15:47:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/15:35:04
22530	MGS	02-008/15:47:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/15:35:04
22531	MGS	02-008/15:47:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/15:35:04
22532	MGS	02-008/15:47:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/15:35:04
22533	MGS	02-008/15:47:59		NOTE: End EVP script		02-008/15:35:05
22534	MGS	02-008/15:48:00		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/15:35:05
22535	MGS	02-008/15:48:03		NOTE: End fixed Sub-Reflector for Radio Science		02-008/15:35:09
22536	MGS	02-008/16:08:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/15:55:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22537	MGS	02-008/16:12:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/15:59:12
22538	MGS	02-008/16:12:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/15:59:12
22539	MGS	02-008/16:12:12		Set eclipse egress script address: 01DC	SWSEES	02-008/15:59:17
22540	MGS	02-008/16:12:14		: 01:33:31	RPAONX	02-008/15:59:19
22541	MGS	02-008/16:12:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/15:59:19
22542	MGS	02-008/16:13:29		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-008/16:00:34
22543	MGS	02-008/16:13:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/16:00:34
22544	MGS	02-008/16:13:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/16:00:34
22545	MGS	02-008/16:13:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/16:00:34
22546	MGS	02-008/16:13:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/16:00:34
22547	MGS	02-008/16:13:59		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/16:01:04
22548	MGS	02-008/16:13:59		NOTE: Exit Earth Occultation 12683		02-008/16:01:04
22549	MGS	02-008/16:13:59	63	Acquisition Of X-Band Signal		
22550	MGS	02-008/16:13:59	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22551	MGS	02-008/16:13:59	63	NOTE: Carrier Only -- No Telemetry Modulation		
22552	MGS	02-008/16:19:32		NOTE: Exit Planetary Atmosphere 12683		02-008/16:06:37
22553	MGS	02-008/16:21:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/16:08:48
22554	MGS	02-008/16:21:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/16:08:48
22555	MGS	02-008/16:21:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/16:08:48
22556	MGS	02-008/16:21:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/16:08:48
22557	MGS	02-008/16:21:43	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22558	MGS	02-008/16:21:44		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-008/16:08:49
22559	MGS	02-008/16:21:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/16:08:49
22560	MGS	02-008/16:21:44		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/16:08:49
22561	MGS	02-008/16:21:44	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22562	MGS	02-008/16:21:48		NOTE: End fixed Sub-Reflector for Radio Science		02-008/16:08:53
22563	MGS	02-008/16:27:52		NOTE: Exit Solar Eclipse 12683		02-008/16:14:57
22564	MGS	02-008/16:43:19		NOTE: Periapsis 12684 ----------		02-008/16:30:24
22565	MGS	02-008/16:48:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/16:35:56
22566	MGS	02-008/16:48:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/16:35:56
22567	MGS	02-008/16:48:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/16:35:57
22568	MGS	02-008/16:48:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/16:35:57
22569	MGS	02-008/17:10:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/16:57:57
22570	MGS	02-008/17:10:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/16:57:57
22571	MGS	02-008/17:20:49		NOTE: Start Block (SSRMGR)		02-008/17:07:54
22572	MGS	02-008/17:20:49		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-008/17:07:54
22573	MGS	02-008/17:20:50		SSR 1B Data Enable	CSD1BE	02-008/17:07:55
22574	MGS	02-008/17:20:50		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-008/17:07:55
22575	MGS	02-008/17:32:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/17:19:52
22576	MGS	02-008/17:35:18		NOTE: Start Block (MAP_PB_ODY)		02-008/17:22:23
22577	MGS	02-008/17:35:19		: 00:24:42, 01:33:32, FALSE, FALSE, FALSE, 00:01:15, 00:06:34, 01:19:25, 00:06:17	AEMINI	02-008/17:22:24
22578	MGS	02-008/17:35:19		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/17:22:24
22579	MGS	02-008/17:35:19		NOTE: Start EVP data return script		02-008/17:22:24
22580	MGS	02-008/17:35:20		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-008T18:04:55.000	AEMPBI	02-008/17:22:25
22581	MGS	02-008/17:37:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/17:24:52
22582	MGS	02-008/17:37:47		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8136000, DUR=00:16:57		02-008/17:24:52
22583	MGS	02-008/17:37:47		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-008/17:24:52
22584	MGS	02-008/17:37:47		: 00:07:57, FALSE	RDSCII	02-008/17:24:52
22585	MGS	02-008/17:37:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/17:24:52
22586	MGS	02-008/17:37:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/17:24:52
22587	MGS	02-008/17:37:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/17:24:52
22588	MGS	02-008/17:37:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/17:24:52
22589	MGS	02-008/17:37:47	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22590	MGS	02-008/17:37:47	63	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22591	MGS	02-008/17:40:02		NOTE: Enter Planetary Atmosphere 12684		02-008/17:27:06
22592	MGS	02-008/17:42:19		NOTE: Apoapsis 12684 -		02-008/17:29:24
22593	MGS	02-008/17:44:20		SSR 1A Data Disable	CSD1AX	02-008/17:31:25
22594	MGS	02-008/17:44:20		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-008/17:31:25
22595	MGS	02-008/17:44:21		NOTE: End Block (SSRMGR)		02-008/17:31:26
22596	MGS	02-008/17:45:16		NOTE: Enter Earth Occultation 12684		02-008/17:32:21
22597	MGS	02-008/17:45:16	63	NOTE: Loss Of X-Band Signal		
22598	MGS	02-008/17:45:19		NOTE: Enter Solar Eclipse 12684		02-008/17:32:24
22599	MGS	02-008/17:45:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/17:32:24
22600	MGS	02-008/17:45:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/17:32:49
22601	MGS	02-008/17:45:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/17:32:49
22602	MGS	02-008/17:45:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/17:32:49
22603	MGS	02-008/17:45:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/17:32:49
22604	MGS	02-008/17:45:45		NOTE: End EVP script		02-008/17:32:50
22605	MGS	02-008/17:45:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/17:32:50
22606	MGS	02-008/17:45:46		NOTE: End Block (MAP_RT)		02-008/17:32:51
22607	MGS	02-008/17:45:49		NOTE: End fixed Sub-Reflector for Radio Science		02-008/17:32:54
22608	MGS	02-008/18:09:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/17:56:57
22609	MGS	02-008/18:09:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/17:56:57
22610	MGS	02-008/18:09:56		Command the PSE with included data word: 3990	SWPSEL	02-008/17:57:01
22611	MGS	02-008/18:09:57		Set eclipse egress script address: 0158	SWSEES	02-008/17:57:02
22612	MGS	02-008/18:10:01		: 01:33:32	RPAONX	02-008/17:57:06
22613	MGS	02-008/18:10:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/17:57:06
22614	MGS	02-008/18:11:46		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/17:58:51
22615	MGS	02-008/18:11:47		NOTE: Exit Earth Occultation 12684		02-008/17:58:52
22616	MGS	02-008/18:11:47	63	Acquisition Of X-Band Signal		
22617	MGS	02-008/18:11:47	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22618	MGS	02-008/18:17:19		NOTE: Exit Planetary Atmosphere 12684		02-008/18:04:24
22619	MGS	02-008/18:17:50		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:15:04	AEMPB	02-008/18:04:55
22620	MGS	02-008/18:17:50		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-008/18:04:55
22621	MGS	02-008/18:17:50		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-008/18:04:55
22622	MGS	02-008/18:17:51		SSR 1A Data Enable	CSD1AE	02-008/18:04:56
22623	MGS	02-008/18:17:51		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-008/18:04:56
22624	MGS	02-008/18:17:51	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22625	MGS	02-008/18:25:40		NOTE: Exit Solar Eclipse 12684		02-008/18:12:45
22626	MGS	02-008/18:41:07		NOTE: Periapsis 12685 ----------		02-008/18:28:12
22627	MGS	02-008/18:50:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/18:37:44
22628	MGS	02-008/18:50:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/18:37:44
22629	MGS	02-008/18:50:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/18:37:45
22630	MGS	02-008/18:50:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/18:37:45
22631	MGS	02-008/19:12:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/18:59:45
22632	MGS	02-008/19:12:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/18:59:45
22633	MGS	02-008/19:28:29		SSR 1A Data Disable	CSD1AX	02-008/19:15:34
22634	MGS	02-008/19:28:29		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-008/19:15:34
22635	MGS	02-008/19:28:29		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-008/19:15:34
22636	MGS	02-008/19:28:29	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22637	MGS	02-008/19:33:04		NOTE: Start Block (MAP_RT)		02-008/19:20:09
22638	MGS	02-008/19:33:05		: 00:24:42, 01:33:31, FALSE, TRUE, FALSE, 00:01:15, 00:08:14, 01:16:04, 00:07:57	AEMINI	02-008/19:20:10
22639	MGS	02-008/19:33:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/19:20:10
22640	MGS	02-008/19:33:05		NOTE: Start EVP data return script		02-008/19:20:10
22641	MGS	02-008/19:33:06		: SE_2A, RTM, 01:16:03, MRC, 2002-008T20:04:23.000	AEMRTI	02-008/19:20:11
22642	MGS	02-008/19:37:48		NOTE: Enter Planetary Atmosphere 12685		02-008/19:24:53
22643	MGS	02-008/19:39:51		NOTE: Apoapsis 12685 -		02-008/19:26:55
22644	MGS	02-008/19:43:03		NOTE: Enter Earth Occultation 12685		02-008/19:30:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22645	MGS	02-008/19:43:03	63	NOTE: Loss Of X-Band Signal		
22646	MGS	02-008/19:43:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/19:30:10
22647	MGS	02-008/19:43:06		NOTE: Enter Solar Eclipse 12685		02-008/19:30:10
22648	MGS	02-008/19:43:33		NOTE: End EVP script		02-008/19:30:38
22649	MGS	02-008/19:43:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/19:30:38
22650	MGS	02-008/19:43:34		NOTE: End Block (MAP_PB_ODY)		02-008/19:30:39
22651	MGS	02-008/20:04:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/19:51:07
22652	MGS	02-008/20:07:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/19:54:45
22653	MGS	02-008/20:07:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/19:54:45
22654	MGS	02-008/20:07:45		Set eclipse egress script address: 019A	SWSEES	02-008/19:54:50
22655	MGS	02-008/20:07:47		: 01:33:31	RPAONX	02-008/19:54:52
22656	MGS	02-008/20:07:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/19:54:52
22657	MGS	02-008/20:09:02		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-008/19:56:07
22658	MGS	02-008/20:09:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/19:56:07
22659	MGS	02-008/20:09:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/19:56:07
22660	MGS	02-008/20:09:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/19:56:07
22661	MGS	02-008/20:09:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/19:56:07
22662	MGS	02-008/20:09:35		NOTE: Exit Earth Occultation 12685		02-008/19:56:39
22663	MGS	02-008/20:09:35	63	Acquisition Of X-Band Signal		
22664	MGS	02-008/20:09:35	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22665	MGS	02-008/20:09:35	63	NOTE: Carrier Only -- No Telemetry Modulation		
22666	MGS	02-008/20:15:00	25	Begin Pre-Cal		
22667	MGS	02-008/20:15:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
22668	MGS	02-008/20:15:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
22669	MGS	02-008/20:15:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
22670	MGS	02-008/20:15:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
22671	MGS	02-008/20:15:00	25	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
22672	MGS	02-008/20:15:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
22673	MGS	02-008/20:15:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
22674	MGS	02-008/20:15:00	25	Config: TGC: DEST=37		
22675	MGS	02-008/20:15:00	25	Config: TGC: BAND=X, BR=40000.000000		
22676	MGS	02-008/20:15:00	25	Config: FSS: CH=2, PRI_FL=10000		
22677	MGS	02-008/20:15:00	25	Config: RSR		
22678	MGS	02-008/20:15:00	25	Config: TXL		
22679	MGS	02-008/20:15:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
22680	MGS	02-008/20:15:00	25	Config: BVR		
22681	MGS	02-008/20:15:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
22682	MGS	02-008/20:15:00	25	Config: MDA: SMPL=0.1		
22683	MGS	02-008/20:15:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
22684	MGS	02-008/20:15:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
22685	MGS	02-008/20:15:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
22686	MGS	02-008/20:15:07		NOTE: Exit Planetary Atmosphere 12685		02-008/20:02:11
22687	MGS	02-008/20:17:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/20:04:21
22688	MGS	02-008/20:17:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/20:04:21
22689	MGS	02-008/20:17:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/20:04:21
22690	MGS	02-008/20:17:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/20:04:21
22691	MGS	02-008/20:17:16	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22692	MGS	02-008/20:17:17		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-008/20:04:22
22693	MGS	02-008/20:17:17		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/20:04:22
22694	MGS	02-008/20:17:17		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/20:04:22
22695	MGS	02-008/20:17:17	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22696	MGS	02-008/20:17:22		NOTE: End fixed Sub-Reflector for Radio Science		02-008/20:04:26
22697	MGS	02-008/20:23:27		NOTE: Exit Solar Eclipse 12685		02-008/20:10:31
22698	MGS	02-008/20:38:48		NOTE: Periapsis 12686 ----------		02-008/20:25:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22699	MGS	02-008/20:44:26		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/20:31:30
22700	MGS	02-008/20:44:26		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/20:31:30
22701	MGS	02-008/20:44:27		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/20:31:31
22702	MGS	02-008/20:44:27		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/20:31:31
22703	MGS	02-008/21:06:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/20:53:31
22704	MGS	02-008/21:06:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/20:53:31
22705	MGS	02-008/21:15:00	25	Begin Tracking		
22706	MGS	02-008/21:15:00	25	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22707	MGS	02-008/21:28:21		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/21:15:25
22708	MGS	02-008/21:30:51		NOTE: Start EVP data return script		02-008/21:17:55
22709	MGS	02-008/21:32:17	63	NOTE: Below Uplink Interlock Limit		
22710	MGS	02-008/21:33:21		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/21:20:25
22711	MGS	02-008/21:33:21		: 00:07:57, FALSE	RDSCII	02-008/21:20:25
22712	MGS	02-008/21:33:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/21:20:25
22713	MGS	02-008/21:33:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/21:20:25
22714	MGS	02-008/21:33:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/21:20:25
22715	MGS	02-008/21:33:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/21:20:25
22716	MGS	02-008/21:33:21	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22717	MGS	02-008/21:33:21	25	NOTE: Carrier Only -- No Telemetry Modulation		
22718	MGS	02-008/21:33:21	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22719	MGS	02-008/21:33:21	63	NOTE: Carrier Only -- No Telemetry Modulation		
22720	MGS	02-008/21:35:00	63	End Tracking		
22721	MGS	02-008/21:35:32		NOTE: Enter Planetary Atmosphere 12686		02-008/21:22:36
22722	MGS	02-008/21:37:20		NOTE: Apoapsis 12686 -		02-008/21:24:24
22723	MGS	02-008/21:40:47		NOTE: Enter Earth Occultation 12686		02-008/21:27:51
22724	MGS	02-008/21:40:47	25	NOTE: Loss Of X-Band Signal		
22725	MGS	02-008/21:40:51		NOTE: Enter Solar Eclipse 12686		02-008/21:27:55
22726	MGS	02-008/21:40:51		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/21:27:55
22727	MGS	02-008/21:41:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/21:28:22
22728	MGS	02-008/21:41:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/21:28:22
22729	MGS	02-008/21:41:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/21:28:22
22730	MGS	02-008/21:41:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/21:28:22
22731	MGS	02-008/21:41:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/21:28:23
22732	MGS	02-008/21:41:19		NOTE: End EVP script		02-008/21:28:23
22733	MGS	02-008/21:41:23		NOTE: End fixed Sub-Reflector for Radio Science		02-008/21:28:27
22734	MGS	02-008/21:45:15	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22735	MGS	02-008/21:47:15	25	Range Modulation On: SUP=3.0dB		
22736	MGS	02-008/21:48:15	25	Begin Ranging Acquisition		
22737	MGS	02-008/21:50:00	63	End Post-Cal		
22738	MGS	02-008/22:01:48		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/21:48:52
22739	MGS	02-008/22:05:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/21:52:31
22740	MGS	02-008/22:05:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/21:52:31
22741	MGS	02-008/22:05:32		Set eclipse egress script address: 01DC	SWSEES	02-008/21:52:36
22742	MGS	02-008/22:05:33		: 01:33:31	RPAONX	02-008/21:52:37
22743	MGS	02-008/22:05:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/21:52:37
22744	MGS	02-008/22:06:48		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-008/21:53:52
22745	MGS	02-008/22:06:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/21:53:52
22746	MGS	02-008/22:06:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/21:53:52
22747	MGS	02-008/22:06:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/21:53:52
22748	MGS	02-008/22:06:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/21:53:52
22749	MGS	02-008/22:07:18		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/21:54:22
22750	MGS	02-008/22:07:21		NOTE: Exit Earth Occultation 12686		02-008/21:54:25
22751	MGS	02-008/22:07:21	25	Acquisition Of X-Band Signal		
22752	MGS	02-008/22:07:21	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22753	MGS	02-008/22:07:21	25	NOTE: Carrier Only -- No Telemetry Modulation		
22754	MGS	02-008/22:12:53		NOTE: Exit Planetary Atmosphere 12686		02-008/21:59:57
22755	MGS	02-008/22:15:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/22:02:06
22756	MGS	02-008/22:15:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/22:02:06
22757	MGS	02-008/22:15:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/22:02:06
22758	MGS	02-008/22:15:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/22:02:06
22759	MGS	02-008/22:15:02	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22760	MGS	02-008/22:15:03		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-008/22:02:07
22761	MGS	02-008/22:15:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-008/22:02:07
22762	MGS	02-008/22:15:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-008/22:02:07
22763	MGS	02-008/22:15:03	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22764	MGS	02-008/22:15:07		NOTE: End fixed Sub-Reflector for Radio Science		02-008/22:02:11
22765	MGS	02-008/22:21:12		NOTE: Exit Solar Eclipse 12686		02-008/22:08:16
22766	MGS	02-008/22:36:33		NOTE: Periapsis 12687 ----------		02-008/22:23:37
22767	MGS	02-008/22:42:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-008/22:29:15
22768	MGS	02-008/22:42:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-008/22:29:15
22769	MGS	02-008/22:42:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-008/22:29:16
22770	MGS	02-008/22:42:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-008/22:29:16
22771	MGS	02-008/22:53:52	25	NOTE: Transmitter Off in 15 minutes		
22772	MGS	02-008/23:04:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-008/22:51:16
22773	MGS	02-008/23:04:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-008/22:51:16
22774	MGS	02-008/23:06:53	25	Range Modulation Off		
22775	MGS	02-008/23:08:52	25	Transmitter Off		
22776	MGS	02-008/23:14:00		NOTE: Start Block (SSRMGR)		02-008/23:01:04
22777	MGS	02-008/23:14:00		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-008/23:01:04
22778	MGS	02-008/23:14:01		SSR 1A Data Enable	CSD1AE	02-008/23:01:05
22779	MGS	02-008/23:14:01		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-008/23:01:05
22780	MGS	02-008/23:26:06		NOTE: Begin fixed Sub-Reflector for Radio Science		02-008/23:13:10
22781	MGS	02-008/23:28:32		NOTE: Start Block (MAP_PB_ODY)		02-008/23:15:36
22782	MGS	02-008/23:28:33		: 00:24:42, 01:33:32, FALSE, FALSE, FALSE, 00:01:15, 00:06:34, 01:19:25, 00:06:17	AEMINI	02-008/23:15:37
22783	MGS	02-008/23:28:33		Enable sending eclipse ingress script when array power disappears	SWEISE	02-008/23:15:37
22784	MGS	02-008/23:28:33		NOTE: Start EVP data return script		02-008/23:15:37
22785	MGS	02-008/23:28:34		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-008T23:58:09.000	AEMPBI	02-008/23:15:38
22786	MGS	02-008/23:31:06		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-008/23:18:10
22787	MGS	02-008/23:31:06		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8200000, DUR=00:17:05		02-008/23:18:10
22788	MGS	02-008/23:31:06		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-008/23:18:10
22789	MGS	02-008/23:31:06		: 00:07:57, FALSE	RDSCII	02-008/23:18:10
22790	MGS	02-008/23:31:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-008/23:18:10
22791	MGS	02-008/23:31:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-008/23:18:10
22792	MGS	02-008/23:31:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-008/23:18:10
22793	MGS	02-008/23:31:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-008/23:18:10
22794	MGS	02-008/23:31:06	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22795	MGS	02-008/23:31:06	25	NOTE: Carrier Only -- No Telemetry Modulation		
22796	MGS	02-008/23:33:15		NOTE: Enter Planetary Atmosphere 12687		02-008/23:20:19
22797	MGS	02-008/23:35:13		NOTE: Apoapsis 12687 -		02-008/23:22:17
22798	MGS	02-008/23:37:34		SSR 1B Data Disable	CSD1BX	02-008/23:24:38
22799	MGS	02-008/23:37:34		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-008/23:24:38
22800	MGS	02-008/23:37:35		NOTE: End Block (SSRMGR)		02-008/23:24:39
22801	MGS	02-008/23:38:29		NOTE: Enter Earth Occultation 12687		02-008/23:25:33
22802	MGS	02-008/23:38:29	25	NOTE: Loss Of X-Band Signal		
22803	MGS	02-008/23:38:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-008/23:25:37
22804	MGS	02-008/23:38:33		NOTE: Enter Solar Eclipse 12687		02-008/23:25:37
22805	MGS	02-008/23:39:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-008/23:26:07
22806	MGS	02-008/23:39:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-008/23:26:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22807	MGS	02-008/23:39:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-008/23:26:07
22808	MGS	02-008/23:39:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-008/23:26:07
22809	MGS	02-008/23:39:04		Turn off the MOT Exciter and RPA beam	STRPAF	02-008/23:26:08
22810	MGS	02-008/23:39:04		NOTE: End EVP script		02-008/23:26:08
22811	MGS	02-008/23:39:05		NOTE: End Block (MAP_RT)		02-008/23:26:09
22812	MGS	02-008/23:39:08		NOTE: End fixed Sub-Reflector for Radio Science		02-008/23:26:12
22813	MGS	02-008/23:42:58	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
22814	MGS	02-008/23:44:58	25	Range Modulation On: SUP=3.0dB		
22815	MGS	02-008/23:45:58	25	Begin Ranging Acquisition		
22816	MGS	02-009/00:00:00		Light Time: OWLT = 12:56, RTLT = 25:52		
22817	MGS	02-009/00:03:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-008/23:50:16
22818	MGS	02-009/00:03:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-008/23:50:16
22819	MGS	02-009/00:03:15		: 01:33:32	RPAONX	02-008/23:50:19
22820	MGS	02-009/00:03:15		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-008/23:50:19
22821	MGS	02-009/00:03:16		Command the PSE with included data word: 3990	SWPSEL	02-008/23:50:20
22822	MGS	02-009/00:03:17		Set eclipse egress script address: 0158	SWSEES	02-008/23:50:21
22823	MGS	02-009/00:05:00	45	Begin Pre-Cal		
22824	MGS	02-009/00:05:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
22825	MGS	02-009/00:05:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
22826	MGS	02-009/00:05:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
22827	MGS	02-009/00:05:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
22828	MGS	02-009/00:05:00	45	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
22829	MGS	02-009/00:05:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
22830	MGS	02-009/00:05:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
22831	MGS	02-009/00:05:00	45	Config: TGC: DEST=37		
22832	MGS	02-009/00:05:00	45	Config: TGC: BAND=X, BR=42666.666667		
22833	MGS	02-009/00:05:00	45	Config: FSS: CH=2, PRI_FL=10000		
22834	MGS	02-009/00:05:00	45	Config: RSR		
22835	MGS	02-009/00:05:00	45	Config: TXL		
22836	MGS	02-009/00:05:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
22837	MGS	02-009/00:05:00	45	Config: BVR		
22838	MGS	02-009/00:05:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
22839	MGS	02-009/00:05:00	45	Config: MDA: SMPL=0.1		
22840	MGS	02-009/00:05:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
22841	MGS	02-009/00:05:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
22842	MGS	02-009/00:05:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
22843	MGS	02-009/00:05:00		Disables autonomous command to send eclipse ingress script	SWEISX	02-008/23:52:04
22844	MGS	02-009/00:05:05		NOTE: Exit Earth Occultation 12687		02-008/23:52:09
22845	MGS	02-009/00:05:05	25	Acquisition Of X-Band Signal		
22846	MGS	02-009/00:05:05	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22847	MGS	02-009/00:08:50	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22848	MGS	02-009/00:10:37		NOTE: Exit Planetary Atmosphere 12687		02-008/23:57:41
22849	MGS	02-009/00:11:04		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:15:04	AEMPB	02-008/23:58:08
22850	MGS	02-009/00:11:04		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-008/23:58:08
22851	MGS	02-009/00:11:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-008/23:58:08
22852	MGS	02-009/00:11:05		SSR 1B Data Enable	CSD1BE	02-008/23:58:09
22853	MGS	02-009/00:11:05		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-008/23:58:09
22854	MGS	02-009/00:11:05	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22855	MGS	02-009/00:18:54		NOTE: Exit Solar Eclipse 12687		02-009/00:05:58
22856	MGS	02-009/00:34:14		NOTE: Periapsis 12688 ----------		02-009/00:21:18
22857	MGS	02-009/00:43:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/00:30:57
22858	MGS	02-009/00:43:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/00:30:57
22859	MGS	02-009/00:43:54		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/00:30:58
22860	MGS	02-009/00:43:54		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/00:30:58

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22861	MGS	02-009/00:51:34	25	NOTE: Transmitter Off in 15 minutes		
22862	MGS	02-009/01:04:35	25	Range Modulation Off		
22863	MGS	02-009/01:05:00	45	Begin Tracking		
22864	MGS	02-009/01:05:00	45	Acquire D/L: X/16, 3-Way/25, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22865	MGS	02-009/01:05:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/00:52:58
22866	MGS	02-009/01:05:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/00:52:58
22867	MGS	02-009/01:06:24	45	NOTE: Above Uplink Interlock Limit		
22868	MGS	02-009/01:06:34	25	Transmitter Off		
22869	MGS	02-009/01:21:43		SSR 1B Data Disable	CSD1BX	02-009/01:08:47
22870	MGS	02-009/01:21:43		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-009/01:08:47
22871	MGS	02-009/01:21:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-009/01:08:47
22872	MGS	02-009/01:21:43	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22873	MGS	02-009/01:21:43	45	D/L Change: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22874	MGS	02-009/01:25:00	25	End Tracking		
22875	MGS	02-009/01:26:14		NOTE: Start Block (MAP_RT)		02-009/01:13:18
22876	MGS	02-009/01:26:15		: 00:24:42, 01:33:31, FALSE, TRUE, FALSE, 00:01:15, 00:08:14, 01:16:04, 00:07:57	AEMINI	02-009/01:13:19
22877	MGS	02-009/01:26:15		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/01:13:19
22878	MGS	02-009/01:26:15		NOTE: Start EVP data return script		02-009/01:13:19
22879	MGS	02-009/01:26:16		: SE_2A, RTM, 01:16:03, MRC, 2002-009T01:57:32.000	AEMRTI	02-009/01:13:20
22880	MGS	02-009/01:30:57		NOTE: Enter Planetary Atmosphere 12688		02-009/01:18:01
22881	MGS	02-009/01:32:27	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22882	MGS	02-009/01:32:54		NOTE: Apoapsis 12688 -		02-009/01:19:57
22883	MGS	02-009/01:36:12		NOTE: Enter Earth Occultation 12688		02-009/01:23:16
22884	MGS	02-009/01:36:12	45	NOTE: Loss Of X-Band Signal		
22885	MGS	02-009/01:36:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/01:23:19
22886	MGS	02-009/01:36:15		NOTE: Enter Solar Eclipse 12688		02-009/01:23:19
22887	MGS	02-009/01:36:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/01:23:51
22888	MGS	02-009/01:36:48		NOTE: End EVP script		02-009/01:23:51
22889	MGS	02-009/01:36:49		NOTE: End Block (MAP_PB_ODY)		02-009/01:23:52
22890	MGS	02-009/01:40:00	25	End Post-Cal		
22891	MGS	02-009/01:40:39	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
22892	MGS	02-009/01:42:40	45	Range Modulation On: SUP=3.0dB		
22893	MGS	02-009/01:43:40	45	Begin Ranging Acquisition		
22894	MGS	02-009/01:57:12		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/01:44:16
22895	MGS	02-009/02:00:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/01:47:58
22896	MGS	02-009/02:00:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/01:47:58
22897	MGS	02-009/02:00:57		: 01:33:31	RPAONX	02-009/01:48:01
22898	MGS	02-009/02:00:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/01:48:01
22899	MGS	02-009/02:00:59		Set eclipse egress script address: 019A	SWSEES	02-009/01:48:03
22900	MGS	02-009/02:02:12		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-009/01:49:16
22901	MGS	02-009/02:02:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/01:49:16
22902	MGS	02-009/02:02:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/01:49:16
22903	MGS	02-009/02:02:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/01:49:16
22904	MGS	02-009/02:02:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/01:49:16
22905	MGS	02-009/02:02:47		NOTE: Exit Earth Occultation 12688		02-009/01:49:51
22906	MGS	02-009/02:02:47	45	Acquisition Of X-Band Signal		
22907	MGS	02-009/02:02:47	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22908	MGS	02-009/02:02:47	45	NOTE: Carrier Only -- No Telemetry Modulation		
22909	MGS	02-009/02:08:19		NOTE: Exit Planetary Atmosphere 12688		02-009/01:55:23
22910	MGS	02-009/02:10:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/01:57:30
22911	MGS	02-009/02:10:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/01:57:30
22912	MGS	02-009/02:10:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/01:57:30
22913	MGS	02-009/02:10:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/01:57:30

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22914	MGS	02-009/02:10:26	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22915	MGS	02-009/02:10:27		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-009/01:57:31
22916	MGS	02-009/02:10:27		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/01:57:31
22917	MGS	02-009/02:10:27		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/01:57:31
22918	MGS	02-009/02:10:27	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22919	MGS	02-009/02:10:32		NOTE: End fixed Sub-Reflector for Radio Science		02-009/01:57:35
22920	MGS	02-009/02:16:36		NOTE: Exit Solar Eclipse 12688		02-009/02:03:40
22921	MGS	02-009/02:31:36		NOTE: Periapsis 12689 ----------		02-009/02:18:39
22922	MGS	02-009/02:37:35		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/02:24:39
22923	MGS	02-009/02:37:35		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/02:24:39
22924	MGS	02-009/02:37:36		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/02:24:40
22925	MGS	02-009/02:37:36		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/02:24:40
22926	MGS	02-009/02:49:16	45	NOTE: Transmitter Off in 15 minutes		
22927	MGS	02-009/02:59:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/02:46:40
22928	MGS	02-009/02:59:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/02:46:40
22929	MGS	02-009/03:02:16	45	Range Modulation Off		
22930	MGS	02-009/03:04:16	45	Transmitter Off		
22931	MGS	02-009/03:21:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/03:08:34
22932	MGS	02-009/03:23:59		NOTE: Start EVP data return script		02-009/03:11:02
22933	MGS	02-009/03:26:31		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/03:13:34
22934	MGS	02-009/03:26:31		: 00:07:57, FALSE	RDSCII	02-009/03:13:34
22935	MGS	02-009/03:26:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/03:13:34
22936	MGS	02-009/03:26:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/03:13:34
22937	MGS	02-009/03:26:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/03:13:34
22938	MGS	02-009/03:26:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/03:13:34
22939	MGS	02-009/03:26:31	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22940	MGS	02-009/03:26:31	45	NOTE: Carrier Only -- No Telemetry Modulation		
22941	MGS	02-009/03:28:40		NOTE: Enter Planetary Atmosphere 12689		02-009/03:15:44
22942	MGS	02-009/03:30:19		NOTE: Apoapsis 12689 -		02-009/03:17:22
22943	MGS	02-009/03:33:54		NOTE: Enter Earth Occultation 12689		02-009/03:20:57
22944	MGS	02-009/03:33:54	45	NOTE: Loss Of X-Band Signal		
22945	MGS	02-009/03:33:59		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/03:21:02
22946	MGS	02-009/03:33:59		NOTE: Enter Solar Eclipse 12689		02-009/03:21:02
22947	MGS	02-009/03:34:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/03:21:31
22948	MGS	02-009/03:34:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/03:21:31
22949	MGS	02-009/03:34:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/03:21:31
22950	MGS	02-009/03:34:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/03:21:31
22951	MGS	02-009/03:34:29		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/03:21:32
22952	MGS	02-009/03:34:29		NOTE: End EVP script		02-009/03:21:32
22953	MGS	02-009/03:34:33		NOTE: End fixed Sub-Reflector for Radio Science		02-009/03:21:36
22954	MGS	02-009/03:38:22	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
22955	MGS	02-009/03:40:23	45	Range Modulation On: SUP=3.0dB		
22956	MGS	02-009/03:41:23	45	Begin Ranging Acquisition		
22957	MGS	02-009/03:54:56		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/03:41:59
22958	MGS	02-009/03:58:37		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/03:45:40
22959	MGS	02-009/03:58:37		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/03:45:40
22960	MGS	02-009/03:58:41		: 01:33:31	RPAONX	02-009/03:45:44
22961	MGS	02-009/03:58:41		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/03:45:44
22962	MGS	02-009/03:58:42		Set eclipse egress script address: 01DC	SWSEES	02-009/03:45:45
22963	MGS	02-009/03:59:56		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-009/03:46:59
22964	MGS	02-009/03:59:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/03:46:59
22965	MGS	02-009/03:59:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/03:46:59
22966	MGS	02-009/03:59:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/03:46:59
22967	MGS	02-009/03:59:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/03:46:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
22968	MGS	02-009/04:00:26		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/03:47:29
22969	MGS	02-009/04:00:31		NOTE: Exit Earth Occultation 12689		02-009/03:47:34
22970	MGS	02-009/04:00:31	45	Acquisition Of X-Band Signal		
22971	MGS	02-009/04:00:31	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
22972	MGS	02-009/04:00:31	45	NOTE: Carrier Only -- No Telemetry Modulation		
22973	MGS	02-009/04:06:01		NOTE: Exit Planetary Atmosphere 12689		02-009/03:53:05
22974	MGS	02-009/04:08:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/03:55:13
22975	MGS	02-009/04:08:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/03:55:13
22976	MGS	02-009/04:08:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/03:55:13
22977	MGS	02-009/04:08:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/03:55:13
22978	MGS	02-009/04:08:10	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22979	MGS	02-009/04:08:11		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-009/03:55:14
22980	MGS	02-009/04:08:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/03:55:14
22981	MGS	02-009/04:08:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/03:55:14
22982	MGS	02-009/04:08:11	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
22983	MGS	02-009/04:08:15		NOTE: End fixed Sub-Reflector for Radio Science		02-009/03:55:18
22984	MGS	02-009/04:14:19		NOTE: Exit Solar Eclipse 12689		02-009/04:01:23
22985	MGS	02-009/04:29:20		NOTE: Periapsis 12690 ----------		02-009/04:16:24
22986	MGS	02-009/04:35:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/04:22:22
22987	MGS	02-009/04:35:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/04:22:22
22988	MGS	02-009/04:35:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/04:22:23
22989	MGS	02-009/04:35:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/04:22:23
22990	MGS	02-009/04:46:58	45	NOTE: Transmitter Off in 15 minutes		
22991	MGS	02-009/04:57:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/04:44:23
22992	MGS	02-009/04:57:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/04:44:23
22993	MGS	02-009/04:59:58	45	Range Modulation Off		
22994	MGS	02-009/05:01:58	45	Transmitter Off		
22995	MGS	02-009/05:07:18		NOTE: Start Block (SSRMGR)		02-009/04:54:21
22996	MGS	02-009/05:07:18		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-009/04:54:21
22997	MGS	02-009/05:07:19		SSR 1B Data Enable	CSD1BE	02-009/04:54:22
22998	MGS	02-009/05:07:19		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-009/04:54:22
22999	MGS	02-009/05:19:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/05:06:17
23000	MGS	02-009/05:21:43		NOTE: Start Block (MAP_PB_ODY)		02-009/05:08:46
23001	MGS	02-009/05:21:44		: 00:24:42, 01:33:32, FALSE, FALSE, FALSE, 00:01:15, 00:06:34, 01:19:25, 00:06:17	AEMINI	02-009/05:08:47
23002	MGS	02-009/05:21:44		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/05:08:47
23003	MGS	02-009/05:21:44		NOTE: Start EVP data return script		02-009/05:08:47
23004	MGS	02-009/05:21:45		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-009T05:51:19.000	AEMPBI	02-009/05:08:48
23005	MGS	02-009/05:24:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/05:11:17
23006	MGS	02-009/05:24:14		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8120000, DUR=00:16:55		02-009/05:11:17
23007	MGS	02-009/05:24:14		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-009/05:11:17
23008	MGS	02-009/05:24:14		: 00:07:57, FALSE	RDSCII	02-009/05:11:17
23009	MGS	02-009/05:24:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/05:11:17
23010	MGS	02-009/05:24:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/05:11:17
23011	MGS	02-009/05:24:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/05:11:17
23012	MGS	02-009/05:24:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/05:11:17
23013	MGS	02-009/05:24:14	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23014	MGS	02-009/05:24:14	45	NOTE: Carrier Only -- No Telemetry Modulation		
23015	MGS	02-009/05:26:24		NOTE: Enter Planetary Atmosphere 12690		02-009/05:13:27
23016	MGS	02-009/05:28:14		NOTE: Apoapsis 12690 -		02-009/05:15:17
23017	MGS	02-009/05:30:45		SSR 1A Data Disable	CSD1AX	02-009/05:17:48
23018	MGS	02-009/05:30:45		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-009/05:17:48
23019	MGS	02-009/05:30:46		NOTE: End Block (SSRMGR)		02-009/05:17:49
23020	MGS	02-009/05:31:37		NOTE: Enter Earth Occultation 12690		02-009/05:18:40
23021	MGS	02-009/05:31:37	45	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23022	MGS	02-009/05:31:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/05:18:47
23023	MGS	02-009/05:31:44		NOTE: Enter Solar Eclipse 12690		02-009/05:18:47
23024	MGS	02-009/05:32:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/05:19:14
23025	MGS	02-009/05:32:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/05:19:14
23026	MGS	02-009/05:32:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/05:19:14
23027	MGS	02-009/05:32:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/05:19:14
23028	MGS	02-009/05:32:12		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/05:19:15
23029	MGS	02-009/05:32:12		NOTE: End EVP script		02-009/05:19:15
23030	MGS	02-009/05:32:13		NOTE: End Block (MAP_RT)		02-009/05:19:16
23031	MGS	02-009/05:32:16		NOTE: End fixed Sub-Reflector for Radio Science		02-009/05:19:19
23032	MGS	02-009/05:36:08	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23033	MGS	02-009/05:38:08	45	Range Modulation On: SUP=3.0dB		
23034	MGS	02-009/05:39:08	45	Begin Ranging Acquisition		
23035	MGS	02-009/05:56:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/05:43:23
23036	MGS	02-009/05:56:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/05:43:23
23037	MGS	02-009/05:56:24		Command the PSE with included data word: 3990	SWPSEL	02-009/05:43:27
23038	MGS	02-009/05:56:25		Set eclipse egress script address: 0158	SWSEES	02-009/05:43:28
23039	MGS	02-009/05:56:26		: 01:33:32	RPAONX	02-009/05:43:29
23040	MGS	02-009/05:56:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/05:43:29
23041	MGS	02-009/05:58:11		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/05:45:14
23042	MGS	02-009/05:58:17		NOTE: Exit Earth Occultation 12690		02-009/05:45:20
23043	MGS	02-009/05:58:17	45	Acquisition Of X-Band Signal		
23044	MGS	02-009/05:58:17	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23045	MGS	02-009/06:02:02	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23046	MGS	02-009/06:03:46		NOTE: Exit Planetary Atmosphere 12690		02-009/05:50:49
23047	MGS	02-009/06:04:15		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:15:04	AEMPB	02-009/05:51:18
23048	MGS	02-009/06:04:15		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-009/05:51:18
23049	MGS	02-009/06:04:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-009/05:51:18
23050	MGS	02-009/06:04:16		SSR 1A Data Enable	CSD1AE	02-009/05:51:19
23051	MGS	02-009/06:04:16		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-009/05:51:19
23052	MGS	02-009/06:04:16	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23053	MGS	02-009/06:12:05		NOTE: Exit Solar Eclipse 12690		02-009/05:59:08
23054	MGS	02-009/06:27:33		NOTE: Periapsis 12691 ----------		02-009/06:14:35
23055	MGS	02-009/06:37:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/06:24:07
23056	MGS	02-009/06:37:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/06:24:07
23057	MGS	02-009/06:37:05		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/06:24:08
23058	MGS	02-009/06:37:05		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/06:24:08
23059	MGS	02-009/06:44:43	45	NOTE: Transmitter Off in 15 minutes		
23060	MGS	02-009/06:57:44	45	Range Modulation Off		
23061	MGS	02-009/06:59:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/06:46:08
23062	MGS	02-009/06:59:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/06:46:08
23063	MGS	02-009/06:59:43	45	Transmitter Off		
23064	MGS	02-009/07:14:54		SSR 1A Data Disable	CSD1AX	02-009/07:01:57
23065	MGS	02-009/07:14:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-009/07:01:57
23066	MGS	02-009/07:14:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-009/07:01:57
23067	MGS	02-009/07:14:54	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23068	MGS	02-009/07:19:30		NOTE: Start Block (MAP_RT)		02-009/07:06:33
23069	MGS	02-009/07:19:31		: 00:24:42, 01:33:31, FALSE, TRUE, FALSE, 00:01:15, 00:08:14, 01:16:04, 00:07:57	AEMINI	02-009/07:06:34
23070	MGS	02-009/07:19:31		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/07:06:34
23071	MGS	02-009/07:19:31		NOTE: Start EVP data return script		02-009/07:06:34
23072	MGS	02-009/07:19:32		: SE_2A, RTM, 01:16:03, MRC, 2002-009T07:50:46.000	AEMRTI	02-009/07:06:35
23073	MGS	02-009/07:24:10		NOTE: Enter Planetary Atmosphere 12691		02-009/07:11:12
23074	MGS	02-009/07:25:38	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23075	MGS	02-009/07:26:36		NOTE: Apoapsis 12691 -		02-009/07:13:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23076	MGS	02-009/07:29:23		NOTE: Enter Earth Occultation 12691		02-009/07:16:25
23077	MGS	02-009/07:29:23	45	NOTE: Loss Of X-Band Signal		
23078	MGS	02-009/07:29:31		NOTE: Enter Solar Eclipse 12691		02-009/07:16:34
23079	MGS	02-009/07:29:31		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/07:16:34
23080	MGS	02-009/07:29:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/07:17:01
23081	MGS	02-009/07:29:59		NOTE: End EVP script		02-009/07:17:01
23082	MGS	02-009/07:30:00		NOTE: End Block (MAP_PB_ODY)		02-009/07:17:02
23083	MGS	02-009/07:33:55	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23084	MGS	02-009/07:35:55	45	Range Modulation On: SUP=3.0dB		
23085	MGS	02-009/07:36:55	45	Begin Ranging Acquisition		
23086	MGS	02-009/07:50:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/07:37:31
23087	MGS	02-009/07:54:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/07:41:08
23088	MGS	02-009/07:54:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/07:41:08
23089	MGS	02-009/07:54:10		Set eclipse egress script address: 019A	SWSEES	02-009/07:41:13
23090	MGS	02-009/07:54:13		: 01:33:31	RPAONX	02-009/07:41:16
23091	MGS	02-009/07:54:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/07:41:16
23092	MGS	02-009/07:55:28		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-009/07:42:31
23093	MGS	02-009/07:55:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/07:42:31
23094	MGS	02-009/07:55:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/07:42:31
23095	MGS	02-009/07:55:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/07:42:31
23096	MGS	02-009/07:55:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/07:42:31
23097	MGS	02-009/07:56:04		NOTE: Exit Earth Occultation 12691		02-009/07:43:07
23098	MGS	02-009/07:56:04	45	Acquisition Of X-Band Signal		
23099	MGS	02-009/07:56:04	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23100	MGS	02-009/07:56:04	45	NOTE: Carrier Only -- No Telemetry Modulation		
23101	MGS	02-009/08:01:33		NOTE: Exit Planetary Atmosphere 12691		02-009/07:48:36
23102	MGS	02-009/08:03:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/07:50:45
23103	MGS	02-009/08:03:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/07:50:45
23104	MGS	02-009/08:03:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/07:50:45
23105	MGS	02-009/08:03:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/07:50:45
23106	MGS	02-009/08:03:42	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23107	MGS	02-009/08:03:43		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-009/07:50:46
23108	MGS	02-009/08:03:43		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/07:50:46
23109	MGS	02-009/08:03:43		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/07:50:46
23110	MGS	02-009/08:03:43	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23111	MGS	02-009/08:03:47		NOTE: End fixed Sub-Reflector for Radio Science		02-009/07:50:50
23112	MGS	02-009/08:09:52		NOTE: Exit Solar Eclipse 12691		02-009/07:56:55
23113	MGS	02-009/08:25:43		NOTE: Periapsis 12692 ----------		02-009/08:12:45
23114	MGS	02-009/08:30:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/08:17:54
23115	MGS	02-009/08:30:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/08:17:54
23116	MGS	02-009/08:30:52		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/08:17:55
23117	MGS	02-009/08:30:52		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/08:17:55
23118	MGS	02-009/08:42:31	45	NOTE: Transmitter Off in 15 minutes		
23119	MGS	02-009/08:52:52		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/08:39:55
23120	MGS	02-009/08:52:52		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/08:39:55
23121	MGS	02-009/08:55:31	45	Range Modulation Off		
23122	MGS	02-009/08:57:31	45	Transmitter Off		
23123	MGS	02-009/09:14:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/09:01:49
23124	MGS	02-009/09:17:19		NOTE: Start EVP data return script		02-009/09:04:21
23125	MGS	02-009/09:19:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/09:06:49
23126	MGS	02-009/09:19:47		: 00:07:57, FALSE	RDSCII	02-009/09:06:49
23127	MGS	02-009/09:19:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/09:06:49
23128	MGS	02-009/09:19:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/09:06:49
23129	MGS	02-009/09:19:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/09:06:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23130	MGS	02-009/09:19:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/09:06:49
23131	MGS	02-009/09:19:47	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23132	MGS	02-009/09:19:47	45	NOTE: Carrier Only -- No Telemetry Modulation		
23133	MGS	02-009/09:21:58		NOTE: Enter Planetary Atmosphere 12692		02-009/09:09:00
23134	MGS	02-009/09:24:41		NOTE: Apoapsis 12692 -		02-009/09:11:43
23135	MGS	02-009/09:27:11		NOTE: Enter Earth Occultation 12692		02-009/09:14:13
23136	MGS	02-009/09:27:11	45	NOTE: Loss Of X-Band Signal		
23137	MGS	02-009/09:27:18		NOTE: Enter Solar Eclipse 12692		02-009/09:14:21
23138	MGS	02-009/09:27:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/09:14:21
23139	MGS	02-009/09:27:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/09:14:46
23140	MGS	02-009/09:27:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/09:14:46
23141	MGS	02-009/09:27:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/09:14:46
23142	MGS	02-009/09:27:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/09:14:46
23143	MGS	02-009/09:27:44		NOTE: End EVP script		02-009/09:14:47
23144	MGS	02-009/09:27:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/09:14:47
23145	MGS	02-009/09:27:48		NOTE: End fixed Sub-Reflector for Radio Science		02-009/09:14:51
23146	MGS	02-009/09:31:42	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23147	MGS	02-009/09:33:42	45	Range Modulation On: SUP=3.0dB		
23148	MGS	02-009/09:34:42	45	Begin Ranging Acquisition		
23149	MGS	02-009/09:48:15		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/09:35:18
23150	MGS	02-009/09:51:53		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/09:38:55
23151	MGS	02-009/09:51:53		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/09:38:55
23152	MGS	02-009/09:51:58		Set eclipse egress script address: 01DC	SWSEES	02-009/09:39:00
23153	MGS	02-009/09:52:01		: 01:33:31	RPAONX	02-009/09:39:03
23154	MGS	02-009/09:52:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/09:39:03
23155	MGS	02-009/09:53:16		: 00:00:30, 00:08:14, FALSE	RDSCIE	02-009/09:40:18
23156	MGS	02-009/09:53:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/09:40:18
23157	MGS	02-009/09:53:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/09:40:18
23158	MGS	02-009/09:53:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/09:40:18
23159	MGS	02-009/09:53:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/09:40:18
23160	MGS	02-009/09:53:46		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/09:40:48
23161	MGS	02-009/09:53:52		NOTE: Exit Earth Occultation 12692		02-009/09:40:54
23162	MGS	02-009/09:53:52	45	Acquisition Of X-Band Signal		
23163	MGS	02-009/09:53:52	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23164	MGS	02-009/09:53:52	45	NOTE: Carrier Only -- No Telemetry Modulation		
23165	MGS	02-009/09:59:22		NOTE: Exit Planetary Atmosphere 12692		02-009/09:46:24
23166	MGS	02-009/10:01:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/09:48:32
23167	MGS	02-009/10:01:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/09:48:32
23168	MGS	02-009/10:01:30		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/09:48:32
23169	MGS	02-009/10:01:30		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/09:48:32
23170	MGS	02-009/10:01:30	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23171	MGS	02-009/10:01:31		: RTM, MRC, 01:16:03, S&E_2A, FALSE, 00:07:58	AEMRT	02-009/09:48:33
23172	MGS	02-009/10:01:31		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/09:48:33
23173	MGS	02-009/10:01:31		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/09:48:33
23174	MGS	02-009/10:01:31	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23175	MGS	02-009/10:01:34		NOTE: End fixed Sub-Reflector for Radio Science		02-009/09:48:37
23176	MGS	02-009/10:07:40		NOTE: Exit Solar Eclipse 12692		02-009/09:54:42
23177	MGS	02-009/10:10:00	65	Begin Pre-Cal		
23178	MGS	02-009/10:10:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
23179	MGS	02-009/10:10:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
23180	MGS	02-009/10:10:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
23181	MGS	02-009/10:10:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
23182	MGS	02-009/10:10:00	65	Config: TGC: DEST=37		
23183	MGS	02-009/10:10:00	65	Config: TGC: BAND=X, BR=0.000000		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23184	MGS	02-009/10:10:00	65	Config: FSS: CH=2, PRI_FL=10000		
23185	MGS	02-009/10:10:00	65	Config: RSR		
23186	MGS	02-009/10:10:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
23187	MGS	02-009/10:10:00	65	Config: BVR		
23188	MGS	02-009/10:10:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
23189	MGS	02-009/10:10:00	65	Config: MDA: SMPL=0.1		
23190	MGS	02-009/10:23:31		NOTE: Periapsis 12693 ----------		02-009/10:10:33
23191	MGS	02-009/10:28:39		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/10:15:41
23192	MGS	02-009/10:28:39		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/10:15:41
23193	MGS	02-009/10:28:40		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/10:15:42
23194	MGS	02-009/10:28:40		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/10:15:42
23195	MGS	02-009/10:40:16	45	NOTE: Transmitter Off in 15 minutes		
23196	MGS	02-009/10:50:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/10:37:42
23197	MGS	02-009/10:50:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/10:37:42
23198	MGS	02-009/10:53:17	45	Range Modulation Off		
23199	MGS	02-009/10:55:16	45	Transmitter Off		
23200	MGS	02-009/11:00:27		NOTE: Start Block (SSRMGR)		02-009/10:47:29
23201	MGS	02-009/11:00:27		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-009/10:47:29
23202	MGS	02-009/11:00:28		SSR 1A Data Enable	CSD1AE	02-009/10:47:30
23203	MGS	02-009/11:00:28		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-009/10:47:30
23204	MGS	02-009/11:12:34		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/10:59:36
23205	MGS	02-009/11:15:02		NOTE: Start Block (MAP_PB_ODY)		02-009/11:02:04
23206	MGS	02-009/11:15:03		: 00:24:42, 01:33:32, FALSE, FALSE, FALSE, 00:01:15, 00:06:34, 01:19:25, 00:06:17	AEMINI	02-009/11:02:05
23207	MGS	02-009/11:15:03		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/11:02:05
23208	MGS	02-009/11:15:03		NOTE: Start EVP data return script		02-009/11:02:05
23209	MGS	02-009/11:15:04		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-009T11:44:36.000	AEMPBI	02-009/11:02:06
23210	MGS	02-009/11:17:34		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/11:04:36
23211	MGS	02-009/11:17:34		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8208000, DUR=00:17:06		02-009/11:04:36
23212	MGS	02-009/11:17:34		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-009/11:04:36
23213	MGS	02-009/11:17:34		: 00:07:57, FALSE	RDSCII	02-009/11:04:36
23214	MGS	02-009/11:17:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/11:04:36
23215	MGS	02-009/11:17:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/11:04:36
23216	MGS	02-009/11:17:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/11:04:36
23217	MGS	02-009/11:17:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/11:04:36
23218	MGS	02-009/11:17:34	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23219	MGS	02-009/11:17:34	45	NOTE: Carrier Only -- No Telemetry Modulation		
23220	MGS	02-009/11:19:43		NOTE: Enter Planetary Atmosphere 12693		02-009/11:06:45
23221	MGS	02-009/11:22:12		NOTE: Apoapsis 12693 -		02-009/11:09:14
23222	MGS	02-009/11:24:03		SSR 1B Data Disable	CSD1BX	02-009/11:11:05
23223	MGS	02-009/11:24:03		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-009/11:11:05
23224	MGS	02-009/11:24:04		NOTE: End Block (SSRMGR)		02-009/11:11:06
23225	MGS	02-009/11:24:57		NOTE: Enter Earth Occultation 12693		02-009/11:11:59
23226	MGS	02-009/11:24:57	45	NOTE: Loss Of X-Band Signal		
23227	MGS	02-009/11:25:02		NOTE: Enter Solar Eclipse 12693		02-009/11:12:05
23228	MGS	02-009/11:25:03		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/11:12:05
23229	MGS	02-009/11:25:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/11:12:33
23230	MGS	02-009/11:25:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/11:12:33
23231	MGS	02-009/11:25:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/11:12:33
23232	MGS	02-009/11:25:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/11:12:33
23233	MGS	02-009/11:25:32		NOTE: End EVP script		02-009/11:12:34
23234	MGS	02-009/11:25:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/11:12:34
23235	MGS	02-009/11:25:33		NOTE: End Block (MAP_RT)		02-009/11:12:35
23236	MGS	02-009/11:25:36		NOTE: End fixed Sub-Reflector for Radio Science		02-009/11:12:38
23237	MGS	02-009/11:40:00	65	Begin Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23238	MGS	02-009/11:42:12	45	NOTE: Below Uplink Interlock Limit		
23239	MGS	02-009/11:42:36	65	NOTE: Above Uplink Interlock Limit		
23240	MGS	02-009/11:49:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/11:36:42
23241	MGS	02-009/11:49:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/11:36:42
23242	MGS	02-009/11:49:44		Command the PSE with included data word: 3990	SWPSEL	02-009/11:36:46
23243	MGS	02-009/11:49:45		: 01:33:32	RPAONX	02-009/11:36:47
23244	MGS	02-009/11:49:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/11:36:47
23245	MGS	02-009/11:49:45		Set eclipse egress script address: 0158	SWSEES	02-009/11:36:47
23246	MGS	02-009/11:51:30		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/11:38:32
23247	MGS	02-009/11:51:37		NOTE: Exit Earth Occultation 12693		02-009/11:38:39
23248	MGS	02-009/11:51:37	45	Acquisition Of X-Band Signal		
23249	MGS	02-009/11:51:37	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23250	MGS	02-009/11:51:37	65	Acquisition Of X-Band Signal		
23251	MGS	02-009/11:51:37	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23252	MGS	02-009/11:55:00	45	End Tracking		
23253	MGS	02-009/11:57:08		NOTE: Exit Planetary Atmosphere 12693		02-009/11:44:10
23254	MGS	02-009/11:57:34		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:15:04	AEMPB	02-009/11:44:36
23255	MGS	02-009/11:57:34		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-009/11:44:36
23256	MGS	02-009/11:57:34		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-009/11:44:36
23257	MGS	02-009/11:57:35		SSR 1B Data Enable	CSD1BE	02-009/11:44:37
23258	MGS	02-009/11:57:35		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-009/11:44:37
23259	MGS	02-009/11:57:35	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23260	MGS	02-009/12:05:24		NOTE: Exit Solar Eclipse 12693		02-009/11:52:26
23261	MGS	02-009/12:10:00	45	End Post-Cal		
23262	MGS	02-009/12:12:58		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-009/12:00:00
23263	MGS	02-009/12:20:53		NOTE: Periapsis 12694 ----------		02-009/12:07:55
23264	MGS	02-009/12:30:23		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/12:17:25
23265	MGS	02-009/12:30:23		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/12:17:25
23266	MGS	02-009/12:30:24		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/12:17:26
23267	MGS	02-009/12:30:24		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/12:17:26
23268	MGS	02-009/12:52:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/12:39:26
23269	MGS	02-009/12:52:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/12:39:26
23270	MGS	02-009/13:08:13		SSR 1B Data Disable	CSD1BX	02-009/12:55:15
23271	MGS	02-009/13:08:13		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-009/12:55:15
23272	MGS	02-009/13:08:13		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-009/12:55:15
23273	MGS	02-009/13:08:13	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23274	MGS	02-009/13:12:42		NOTE: Start Block (MAP_RT)		02-009/12:59:44
23275	MGS	02-009/13:12:43		: 00:24:49, 01:33:19, FALSE, TRUE, FALSE, 00:01:15, 00:08:11, 01:15:58, 00:07:54	AEMINI	02-009/12:59:45
23276	MGS	02-009/13:12:43		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/12:59:45
23277	MGS	02-009/13:12:43		NOTE: Start EVP data return script		02-009/12:59:45
23278	MGS	02-009/13:12:44		: SE_2A, RTM, 01:15:57, MRC, 2002-009T13:44:01.000	AEMRTI	02-009/12:59:46
23279	MGS	02-009/13:17:23		NOTE: Enter Planetary Atmosphere 12694		02-009/13:04:25
23280	MGS	02-009/13:19:33		NOTE: Apoapsis 12694 -		02-009/13:06:35
23281	MGS	02-009/13:22:36		NOTE: Enter Earth Occultation 12694		02-009/13:09:38
23282	MGS	02-009/13:22:36	65	NOTE: Loss Of X-Band Signal		
23283	MGS	02-009/13:22:43		NOTE: Enter Solar Eclipse 12694		02-009/13:09:45
23284	MGS	02-009/13:22:43		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/13:09:45
23285	MGS	02-009/13:23:17		NOTE: End EVP script		02-009/13:10:19
23286	MGS	02-009/13:23:17		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/13:10:19
23287	MGS	02-009/13:23:18		NOTE: End Block (MAP_PB_ODY)		02-009/13:10:20
23288	MGS	02-009/13:43:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/13:30:49
23289	MGS	02-009/13:47:24		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/13:34:26
23290	MGS	02-009/13:47:24		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/13:34:26
23291	MGS	02-009/13:47:29		Set eclipse egress script address: 019A	SWSEES	02-009/13:34:31

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23292	MGS	02-009/13:47:32		: 01:33:19	RPAONX	02-009/13:34:34
23293	MGS	02-009/13:47:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/13:34:34
23294	MGS	02-009/13:48:47		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-009/13:35:49
23295	MGS	02-009/13:48:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/13:35:49
23296	MGS	02-009/13:48:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/13:35:49
23297	MGS	02-009/13:48:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/13:35:49
23298	MGS	02-009/13:48:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/13:35:49
23299	MGS	02-009/13:49:19		NOTE: Exit Earth Occultation 12694		02-009/13:36:21
23300	MGS	02-009/13:49:19	65	Acquisition Of X-Band Signal		
23301	MGS	02-009/13:49:19	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23302	MGS	02-009/13:49:19	65	NOTE: Carrier Only -- No Telemetry Modulation		
23303	MGS	02-009/13:54:49		NOTE: Exit Planetary Atmosphere 12694		02-009/13:41:51
23304	MGS	02-009/13:56:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/13:44:00
23305	MGS	02-009/13:56:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/13:44:00
23306	MGS	02-009/13:56:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/13:44:00
23307	MGS	02-009/13:56:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/13:44:00
23308	MGS	02-009/13:56:58	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23309	MGS	02-009/13:56:59		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-009/13:44:01
23310	MGS	02-009/13:56:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/13:44:01
23311	MGS	02-009/13:56:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/13:44:01
23312	MGS	02-009/13:56:59	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23313	MGS	02-009/13:57:03		NOTE: End fixed Sub-Reflector for Radio Science		02-009/13:44:05
23314	MGS	02-009/14:03:04		NOTE: Exit Solar Eclipse 12694		02-009/13:50:06
23315	MGS	02-009/14:18:19		NOTE: Periapsis 12695 ----------		02-009/14:05:20
23316	MGS	02-009/14:24:03		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/14:11:05
23317	MGS	02-009/14:24:03		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/14:11:05
23318	MGS	02-009/14:24:04		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/14:11:06
23319	MGS	02-009/14:24:04		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/14:11:06
23320	MGS	02-009/14:46:04		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/14:33:06
23321	MGS	02-009/14:46:04		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/14:33:06
23322	MGS	02-009/15:07:56		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/14:54:58
23323	MGS	02-009/15:10:25		NOTE: Start EVP data return script		02-009/14:57:27
23324	MGS	02-009/15:12:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/14:59:58
23325	MGS	02-009/15:12:56		: 00:07:54, FALSE	RDSCII	02-009/14:59:58
23326	MGS	02-009/15:12:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/14:59:58
23327	MGS	02-009/15:12:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/14:59:58
23328	MGS	02-009/15:12:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/14:59:58
23329	MGS	02-009/15:12:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/14:59:58
23330	MGS	02-009/15:12:56	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23331	MGS	02-009/15:12:56	65	NOTE: Carrier Only -- No Telemetry Modulation		
23332	MGS	02-009/15:15:04		NOTE: Enter Planetary Atmosphere 12695		02-009/15:02:05
23333	MGS	02-009/15:17:18		NOTE: Apoapsis 12695 -		02-009/15:04:19
23334	MGS	02-009/15:20:16		NOTE: Enter Earth Occultation 12695		02-009/15:07:18
23335	MGS	02-009/15:20:16	65	NOTE: Loss Of X-Band Signal		
23336	MGS	02-009/15:20:25		NOTE: Enter Solar Eclipse 12695		02-009/15:07:27
23337	MGS	02-009/15:20:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/15:07:27
23338	MGS	02-009/15:20:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/15:07:52
23339	MGS	02-009/15:20:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/15:07:52
23340	MGS	02-009/15:20:50		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/15:07:52
23341	MGS	02-009/15:20:50		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/15:07:52
23342	MGS	02-009/15:20:51		NOTE: End EVP script		02-009/15:07:53
23343	MGS	02-009/15:20:51		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/15:07:53
23344	MGS	02-009/15:20:55		NOTE: End fixed Sub-Reflector for Radio Science		02-009/15:07:57
23345	MGS	02-009/15:41:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/15:28:31

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23346	MGS	02-009/15:45:05		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/15:32:06
23347	MGS	02-009/15:45:05		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/15:32:06
23348	MGS	02-009/15:45:10		Set eclipse egress script address: 01DC	SWSEES	02-009/15:32:11
23349	MGS	02-009/15:45:15		: 01:33:19	RPAONX	02-009/15:32:16
23350	MGS	02-009/15:45:15		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/15:32:16
23351	MGS	02-009/15:46:30		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-009/15:33:31
23352	MGS	02-009/15:46:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/15:33:31
23353	MGS	02-009/15:46:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/15:33:31
23354	MGS	02-009/15:46:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/15:33:31
23355	MGS	02-009/15:46:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/15:33:31
23356	MGS	02-009/15:47:00		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/15:34:01
23357	MGS	02-009/15:47:02		NOTE: Exit Earth Occultation 12695		02-009/15:34:03
23358	MGS	02-009/15:47:02	65	Acquisition Of X-Band Signal		
23359	MGS	02-009/15:47:02	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23360	MGS	02-009/15:47:02	65	NOTE: Carrier Only -- No Telemetry Modulation		
23361	MGS	02-009/15:52:30		NOTE: Exit Planetary Atmosphere 12695		02-009/15:39:32
23362	MGS	02-009/15:54:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/15:41:42
23363	MGS	02-009/15:54:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/15:41:42
23364	MGS	02-009/15:54:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/15:41:42
23365	MGS	02-009/15:54:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/15:41:42
23366	MGS	02-009/15:54:41	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23367	MGS	02-009/15:54:42		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-009/15:41:43
23368	MGS	02-009/15:54:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/15:41:43
23369	MGS	02-009/15:54:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/15:41:43
23370	MGS	02-009/15:54:42	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23371	MGS	02-009/15:54:45		NOTE: End fixed Sub-Reflector for Radio Science		02-009/15:41:47
23372	MGS	02-009/16:00:46		NOTE: Exit Solar Eclipse 12695		02-009/15:47:47
23373	MGS	02-009/16:16:03		NOTE: Periapsis 12696 ----------		02-009/16:03:05
23374	MGS	02-009/16:21:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/16:08:47
23375	MGS	02-009/16:21:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/16:08:47
23376	MGS	02-009/16:21:47		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/16:08:48
23377	MGS	02-009/16:21:47		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/16:08:48
23378	MGS	02-009/16:43:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/16:30:48
23379	MGS	02-009/16:43:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/16:30:48
23380	MGS	02-009/16:53:45		NOTE: Start Block (SSRMGR)		02-009/16:40:46
23381	MGS	02-009/16:53:45		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-009/16:40:46
23382	MGS	02-009/16:53:46		SSR 1B Data Enable	CSD1BE	02-009/16:40:47
23383	MGS	02-009/16:53:46		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-009/16:40:47
23384	MGS	02-009/17:05:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/16:52:40
23385	MGS	02-009/17:08:11		NOTE: Start Block (MAP_PB_ODY)		02-009/16:55:12
23386	MGS	02-009/17:08:12		: 00:24:49, 01:33:20, FALSE, FALSE, FALSE, 00:01:15, 00:06:31, 01:19:19, 00:06:14	AEMINI	02-009/16:55:13
23387	MGS	02-009/17:08:12		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/16:55:13
23388	MGS	02-009/17:08:12		NOTE: Start EVP data return script		02-009/16:55:13
23389	MGS	02-009/17:08:13		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-009T17:37:48.000	AEMPBI	02-009/16:55:14
23390	MGS	02-009/17:10:39		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/16:57:40
23391	MGS	02-009/17:10:39		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8104000, DUR=00:16:53		02-009/16:57:40
23392	MGS	02-009/17:10:39		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-009/16:57:40
23393	MGS	02-009/17:10:39		: 00:07:54, FALSE	RDSCII	02-009/16:57:40
23394	MGS	02-009/17:10:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/16:57:40
23395	MGS	02-009/17:10:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/16:57:40
23396	MGS	02-009/17:10:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/16:57:40
23397	MGS	02-009/17:10:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/16:57:40
23398	MGS	02-009/17:10:39	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23399	MGS	02-009/17:10:39	65	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23400	MGS	02-009/17:12:51		NOTE: Enter Planetary Atmosphere 12696		02-009/16:59:52
23401	MGS	02-009/17:15:10		NOTE: Apoapsis 12696 -		02-009/17:02:11
23402	MGS	02-009/17:17:12		SSR 1A Data Disable	CSD1AX	02-009/17:04:13
23403	MGS	02-009/17:17:12		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-009/17:04:13
23404	MGS	02-009/17:17:13		NOTE: End Block (SSRMGR)		02-009/17:04:14
23405	MGS	02-009/17:18:02		NOTE: Enter Earth Occultation 12696		02-009/17:05:03
23406	MGS	02-009/17:18:02	65	NOTE: Loss Of X-Band Signal		
23407	MGS	02-009/17:18:12		NOTE: Enter Solar Eclipse 12696		02-009/17:05:13
23408	MGS	02-009/17:18:12		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/17:05:13
23409	MGS	02-009/17:18:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/17:05:34
23410	MGS	02-009/17:18:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/17:05:34
23411	MGS	02-009/17:18:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/17:05:34
23412	MGS	02-009/17:18:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/17:05:34
23413	MGS	02-009/17:18:34		NOTE: End EVP script		02-009/17:05:35
23414	MGS	02-009/17:18:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/17:05:35
23415	MGS	02-009/17:18:35		NOTE: End Block (MAP_RT)		02-009/17:05:36
23416	MGS	02-009/17:18:38		NOTE: End fixed Sub-Reflector for Radio Science		02-009/17:05:39
23417	MGS	02-009/17:42:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/17:29:48
23418	MGS	02-009/17:42:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/17:29:48
23419	MGS	02-009/17:42:51		Command the PSE with included data word: 3990	SWPSEL	02-009/17:29:52
23420	MGS	02-009/17:42:52		Set eclipse egress script address: 0158	SWSEES	02-009/17:29:53
23421	MGS	02-009/17:43:01		: 01:33:20	RPAONX	02-009/17:30:02
23422	MGS	02-009/17:43:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/17:30:02
23423	MGS	02-009/17:44:46		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/17:31:47
23424	MGS	02-009/17:44:48		NOTE: Exit Earth Occultation 12696		02-009/17:31:49
23425	MGS	02-009/17:44:48	65	Acquisition Of X-Band Signal		
23426	MGS	02-009/17:44:48	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23427	MGS	02-009/17:50:17		NOTE: Exit Planetary Atmosphere 12696		02-009/17:37:18
23428	MGS	02-009/17:50:47		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:55	AEMPB	02-009/17:37:48
23429	MGS	02-009/17:50:47		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-009/17:37:48
23430	MGS	02-009/17:50:47		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-009/17:37:48
23431	MGS	02-009/17:50:48		SSR 1A Data Enable	CSD1AE	02-009/17:37:49
23432	MGS	02-009/17:50:48		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-009/17:37:49
23433	MGS	02-009/17:50:48	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23434	MGS	02-009/17:58:33		NOTE: Exit Solar Eclipse 12696		02-009/17:45:34
23435	MGS	02-009/18:13:57		NOTE: Periapsis 12697 ----------		02-009/18:00:58
23436	MGS	02-009/18:23:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/18:10:33
23437	MGS	02-009/18:23:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/18:10:33
23438	MGS	02-009/18:23:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/18:10:34
23439	MGS	02-009/18:23:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/18:10:34
23440	MGS	02-009/18:45:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/18:32:34
23441	MGS	02-009/18:45:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/18:32:34
23442	MGS	02-009/19:01:26		SSR 1A Data Disable	CSD1AX	02-009/18:48:27
23443	MGS	02-009/19:01:26		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-009/18:48:27
23444	MGS	02-009/19:01:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-009/18:48:27
23445	MGS	02-009/19:01:26	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23446	MGS	02-009/19:05:58		NOTE: Start Block (MAP_RT)		02-009/18:52:59
23447	MGS	02-009/19:05:59		: 00:24:49, 01:33:19, FALSE, TRUE, FALSE, 00:01:15, 00:08:11, 01:15:58, 00:07:54	AEMINI	02-009/18:53:00
23448	MGS	02-009/19:05:59		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/18:53:00
23449	MGS	02-009/19:05:59		NOTE: Start EVP data return script		02-009/18:53:00
23450	MGS	02-009/19:06:00		: SE_2A, RTM, 01:15:57, MRC, 2002-009T19:37:16.000	AEMRTI	02-009/18:53:01
23451	MGS	02-009/19:10:38		NOTE: Enter Planetary Atmosphere 12697		02-009/18:57:39
23452	MGS	02-009/19:12:51		NOTE: Apoapsis 12697 -		02-009/18:59:52
23453	MGS	02-009/19:15:49		NOTE: Enter Earth Occultation 12697		02-009/19:02:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23454	MGS	02-009/19:15:49	65	NOTE: Loss Of X-Band Signal		
23455	MGS	02-009/19:15:59		NOTE: Enter Solar Eclipse 12697		02-009/19:03:00
23456	MGS	02-009/19:15:59		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/19:03:00
23457	MGS	02-009/19:16:21		NOTE: End EVP script		02-009/19:03:22
23458	MGS	02-009/19:16:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/19:03:22
23459	MGS	02-009/19:16:22		NOTE: End Block (MAP_PB_ODY)		02-009/19:03:23
23460	MGS	02-009/19:37:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/19:24:04
23461	MGS	02-009/19:40:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/19:27:34
23462	MGS	02-009/19:40:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/19:27:34
23463	MGS	02-009/19:40:38		Set eclipse egress script address: 019A	SWSEES	02-009/19:27:39
23464	MGS	02-009/19:40:48		: 01:33:19	RPAONX	02-009/19:27:49
23465	MGS	02-009/19:40:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/19:27:49
23466	MGS	02-009/19:42:03		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-009/19:29:04
23467	MGS	02-009/19:42:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/19:29:04
23468	MGS	02-009/19:42:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/19:29:04
23469	MGS	02-009/19:42:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/19:29:04
23470	MGS	02-009/19:42:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/19:29:04
23471	MGS	02-009/19:42:36		NOTE: Exit Earth Occultation 12697		02-009/19:29:37
23472	MGS	02-009/19:42:36	65	Acquisition Of X-Band Signal		
23473	MGS	02-009/19:42:36	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23474	MGS	02-009/19:42:36	65	NOTE: Carrier Only -- No Telemetry Modulation		
23475	MGS	02-009/19:48:05		NOTE: Exit Planetary Atmosphere 12697		02-009/19:35:05
23476	MGS	02-009/19:50:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/19:37:15
23477	MGS	02-009/19:50:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/19:37:15
23478	MGS	02-009/19:50:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/19:37:15
23479	MGS	02-009/19:50:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/19:37:15
23480	MGS	02-009/19:50:14	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23481	MGS	02-009/19:50:15		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-009/19:37:16
23482	MGS	02-009/19:50:15		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/19:37:16
23483	MGS	02-009/19:50:15		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/19:37:16
23484	MGS	02-009/19:50:15	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23485	MGS	02-009/19:50:19		NOTE: End fixed Sub-Reflector for Radio Science		02-009/19:37:20
23486	MGS	02-009/19:56:21		NOTE: Exit Solar Eclipse 12697		02-009/19:43:21
23487	MGS	02-009/20:10:00	15	Begin Pre-Cal		
23488	MGS	02-009/20:10:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
23489	MGS	02-009/20:10:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
23490	MGS	02-009/20:10:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
23491	MGS	02-009/20:10:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
23492	MGS	02-009/20:10:00	15	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
23493	MGS	02-009/20:10:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
23494	MGS	02-009/20:10:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
23495	MGS	02-009/20:10:00	15	Config: TGC: DEST=37		
23496	MGS	02-009/20:10:00	15	Config: TGC: BAND=X, BR=0.000000		
23497	MGS	02-009/20:10:00	15	Config: FSS: CH=2, PRI_FL=10000		
23498	MGS	02-009/20:10:00	15	Config: RSR		
23499	MGS	02-009/20:10:00	15	Config: TXL		
23500	MGS	02-009/20:10:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
23501	MGS	02-009/20:10:00	15	Config: BVR		
23502	MGS	02-009/20:10:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
23503	MGS	02-009/20:10:00	15	Config: MDA: SMPL=0.1		
23504	MGS	02-009/20:10:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
23505	MGS	02-009/20:10:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
23506	MGS	02-009/20:10:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
23507	MGS	02-009/20:11:40		NOTE: Periapsis 12698 ----------		02-009/19:58:41

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23508	MGS	02-009/20:17:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/20:04:20
23509	MGS	02-009/20:17:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/20:04:20
23510	MGS	02-009/20:17:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/20:04:21
23511	MGS	02-009/20:17:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/20:04:21
23512	MGS	02-009/20:39:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/20:26:21
23513	MGS	02-009/20:39:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/20:26:21
23514	MGS	02-009/21:01:12		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/20:48:13
23515	MGS	02-009/21:03:45		NOTE: Start EVP data return script		02-009/20:50:46
23516	MGS	02-009/21:06:12		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/20:53:13
23517	MGS	02-009/21:06:12		: 00:07:54, FALSE	RDSCII	02-009/20:53:13
23518	MGS	02-009/21:06:12		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/20:53:13
23519	MGS	02-009/21:06:12		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/20:53:13
23520	MGS	02-009/21:06:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/20:53:13
23521	MGS	02-009/21:06:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/20:53:13
23522	MGS	02-009/21:06:12	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23523	MGS	02-009/21:06:12	65	NOTE: Carrier Only -- No Telemetry Modulation		
23524	MGS	02-009/21:08:24		NOTE: Enter Planetary Atmosphere 12698		02-009/20:55:24
23525	MGS	02-009/21:10:00	15	Begin Tracking		
23526	MGS	02-009/21:10:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23527	MGS	02-009/21:10:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
23528	MGS	02-009/21:10:19		NOTE: Apoapsis 12698 -		02-009/20:57:20
23529	MGS	02-009/21:13:35		NOTE: Enter Earth Occultation 12698		02-009/21:00:35
23530	MGS	02-009/21:13:35	15	NOTE: Loss Of X-Band Signal		
23531	MGS	02-009/21:13:35	65	NOTE: Loss Of X-Band Signal		
23532	MGS	02-009/21:13:45		NOTE: Enter Solar Eclipse 12698		02-009/21:00:46
23533	MGS	02-009/21:13:45		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/21:00:46
23534	MGS	02-009/21:14:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/21:01:07
23535	MGS	02-009/21:14:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/21:01:07
23536	MGS	02-009/21:14:06		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/21:01:07
23537	MGS	02-009/21:14:06		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/21:01:07
23538	MGS	02-009/21:14:07		NOTE: End EVP script		02-009/21:01:08
23539	MGS	02-009/21:14:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/21:01:08
23540	MGS	02-009/21:14:11		NOTE: End fixed Sub-Reflector for Radio Science		02-009/21:01:12
23541	MGS	02-009/21:20:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23542	MGS	02-009/21:22:00	15	Range Modulation On: SUP=3.0dB		
23543	MGS	02-009/21:23:00	15	Begin Ranging Acquisition		
23544	MGS	02-009/21:30:00	65	End Tracking		
23545	MGS	02-009/21:34:49		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/21:21:50
23546	MGS	02-009/21:38:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/21:25:21
23547	MGS	02-009/21:38:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/21:25:21
23548	MGS	02-009/21:38:25		Set eclipse egress script address: 01DC	SWSEES	02-009/21:25:26
23549	MGS	02-009/21:38:34		: 01:33:19	RPAONX	02-009/21:25:35
23550	MGS	02-009/21:38:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/21:25:35
23551	MGS	02-009/21:39:49		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-009/21:26:50
23552	MGS	02-009/21:39:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/21:26:50
23553	MGS	02-009/21:39:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/21:26:50
23554	MGS	02-009/21:39:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/21:26:50
23555	MGS	02-009/21:39:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/21:26:50
23556	MGS	02-009/21:40:19		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/21:27:20
23557	MGS	02-009/21:40:23		NOTE: Exit Earth Occultation 12698		02-009/21:27:23
23558	MGS	02-009/21:40:23	15	Acquisition Of X-Band Signal		
23559	MGS	02-009/21:40:23	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23560	MGS	02-009/21:40:23	15	NOTE: Carrier Only -- No Telemetry Modulation		
23561	MGS	02-009/21:45:00	65	End Post-Cal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23562	MGS	02-009/21:45:51		NOTE: Exit Planetary Atmosphere 12698		02-009/21:32:52
23563	MGS	02-009/21:48:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/21:35:01
23564	MGS	02-009/21:48:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/21:35:01
23565	MGS	02-009/21:48:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/21:35:01
23566	MGS	02-009/21:48:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/21:35:01
23567	MGS	02-009/21:48:00	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23568	MGS	02-009/21:48:01		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-009/21:35:02
23569	MGS	02-009/21:48:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-009/21:35:02
23570	MGS	02-009/21:48:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-009/21:35:02
23571	MGS	02-009/21:48:01	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23572	MGS	02-009/21:48:05		NOTE: End fixed Sub-Reflector for Radio Science		02-009/21:35:06
23573	MGS	02-009/21:54:07		NOTE: Exit Solar Eclipse 12698		02-009/21:41:07
23574	MGS	02-009/22:09:26		NOTE: Periapsis 12699 ----------		02-009/21:56:26
23575	MGS	02-009/22:15:06		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-009/22:02:06
23576	MGS	02-009/22:15:06		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-009/22:02:06
23577	MGS	02-009/22:15:07		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-009/22:02:07
23578	MGS	02-009/22:15:07		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-009/22:02:07
23579	MGS	02-009/22:26:34	15	NOTE: Transmitter Off in 15 minutes		
23580	MGS	02-009/22:37:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-009/22:24:07
23581	MGS	02-009/22:37:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-009/22:24:07
23582	MGS	02-009/22:39:34	15	Range Modulation Off		
23583	MGS	02-009/22:41:34	15	Transmitter Off		
23584	MGS	02-009/22:46:54		NOTE: Start Block (SSRMGR)		02-009/22:33:54
23585	MGS	02-009/22:46:54		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-009/22:33:54
23586	MGS	02-009/22:46:55		SSR 1A Data Enable	CSD1AE	02-009/22:33:55
23587	MGS	02-009/22:46:55		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-009/22:33:55
23588	MGS	02-009/22:58:59		NOTE: Begin fixed Sub-Reflector for Radio Science		02-009/22:45:59
23589	MGS	02-009/23:01:28		NOTE: Start Block (MAP_PB_ODY)		02-009/22:48:28
23590	MGS	02-009/23:01:29		: 00:24:49, 01:33:20, FALSE, FALSE, FALSE, 00:01:15, 00:06:31, 01:19:19, 00:06:14	AEMINI	02-009/22:48:29
23591	MGS	02-009/23:01:29		Enable sending eclipse ingress script when array power disappears	SWEISE	02-009/22:48:29
23592	MGS	02-009/23:01:29		NOTE: Start EVP data return script		02-009/22:48:29
23593	MGS	02-009/23:01:30		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-009T23:31:05.000	AEMPBI	02-009/22:48:30
23594	MGS	02-009/23:03:59		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-009/22:50:59
23595	MGS	02-009/23:03:59		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8192000, DUR=00:17:04		02-009/22:50:59
23596	MGS	02-009/23:03:59		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-009/22:50:59
23597	MGS	02-009/23:03:59		: 00:07:54, FALSE	RDSCII	02-009/22:50:59
23598	MGS	02-009/23:03:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-009/22:50:59
23599	MGS	02-009/23:03:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-009/22:50:59
23600	MGS	02-009/23:03:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-009/22:50:59
23601	MGS	02-009/23:03:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-009/22:50:59
23602	MGS	02-009/23:03:59	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23603	MGS	02-009/23:03:59	15	NOTE: Carrier Only -- No Telemetry Modulation		
23604	MGS	02-009/23:06:07		NOTE: Enter Planetary Atmosphere 12699		02-009/22:53:07
23605	MGS	02-009/23:07:59		NOTE: Apoapsis 12699 -		02-009/22:54:59
23606	MGS	02-009/23:10:30		SSR 1B Data Disable	CSD1BX	02-009/22:57:30
23607	MGS	02-009/23:10:30		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-009/22:57:30
23608	MGS	02-009/23:10:31		NOTE: End Block (SSRMGR)		02-009/22:57:31
23609	MGS	02-009/23:11:18		NOTE: Enter Earth Occultation 12699		02-009/22:58:19
23610	MGS	02-009/23:11:18	15	NOTE: Loss Of X-Band Signal		
23611	MGS	02-009/23:11:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-009/22:58:29
23612	MGS	02-009/23:11:29		NOTE: Enter Solar Eclipse 12699		02-009/22:58:29
23613	MGS	02-009/23:11:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-009/22:58:53
23614	MGS	02-009/23:11:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-009/22:58:53
23615	MGS	02-009/23:11:53		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-009/22:58:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23616	MGS	02-009/23:11:53		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-009/22:58:53
23617	MGS	02-009/23:11:54		NOTE: End EVP script		02-009/22:58:54
23618	MGS	02-009/23:11:54		Turn off the MOT Exciter and RPA beam	STRPAF	02-009/22:58:54
23619	MGS	02-009/23:11:55		NOTE: End Block (MAP_RT)		02-009/22:58:55
23620	MGS	02-009/23:11:58		NOTE: End fixed Sub-Reflector for Radio Science		02-009/22:58:58
23621	MGS	02-009/23:15:54	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23622	MGS	02-009/23:17:54	15	Range Modulation On: SUP=3.0dB		
23623	MGS	02-009/23:18:54	15	Begin Ranging Acquisition		
23624	MGS	02-009/23:36:07		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-009/23:23:07
23625	MGS	02-009/23:36:07		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-009/23:23:07
23626	MGS	02-009/23:36:11		Command the PSE with included data word: 3990	SWPSEL	02-009/23:23:11
23627	MGS	02-009/23:36:12		Set eclipse egress script address: 0158	SWSEES	02-009/23:23:12
23628	MGS	02-009/23:36:18		: 01:33:20	RPAONX	02-009/23:23:18
23629	MGS	02-009/23:36:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-009/23:23:18
23630	MGS	02-009/23:38:03		Disables autonomous command to send eclipse ingress script	SWEISX	02-009/23:25:03
23631	MGS	02-009/23:38:08		NOTE: Exit Earth Occultation 12699		02-009/23:25:08
23632	MGS	02-009/23:38:08	15	Acquisition Of X-Band Signal		
23633	MGS	02-009/23:38:08	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23634	MGS	02-009/23:41:53	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23635	MGS	02-009/23:43:37		NOTE: Exit Planetary Atmosphere 12699		02-009/23:30:37
23636	MGS	02-009/23:44:04		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:55	AEMPB	02-009/23:31:04
23637	MGS	02-009/23:44:04		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-009/23:31:04
23638	MGS	02-009/23:44:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-009/23:31:04
23639	MGS	02-009/23:44:05		SSR 1B Data Enable	CSD1BE	02-009/23:31:05
23640	MGS	02-009/23:44:05		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-009/23:31:05
23641	MGS	02-009/23:44:05	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23642	MGS	02-009/23:51:50		NOTE: Exit Solar Eclipse 12699		02-009/23:38:50
23643	MGS	02-010/00:00:00		Light Time: OWLT = 12:59, RTLT = 25:59		
23644	MGS	02-010/00:07:11		NOTE: Periapsis 12700 ----------		02-009/23:54:11
23645	MGS	02-010/00:16:50		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/00:03:50
23646	MGS	02-010/00:16:50		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/00:03:50
23647	MGS	02-010/00:16:51		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/00:03:51
23648	MGS	02-010/00:16:51		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/00:03:51
23649	MGS	02-010/00:24:16	15	NOTE: Transmitter Off in 15 minutes		
23650	MGS	02-010/00:37:16	15	Range Modulation Off		
23651	MGS	02-010/00:38:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/00:25:51
23652	MGS	02-010/00:38:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/00:25:51
23653	MGS	02-010/00:39:16	15	Transmitter Off		
23654	MGS	02-010/00:54:43		SSR 1B Data Disable	CSD1BX	02-010/00:41:43
23655	MGS	02-010/00:54:43		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-010/00:41:43
23656	MGS	02-010/00:54:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-010/00:41:43
23657	MGS	02-010/00:54:43	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23658	MGS	02-010/00:59:10		NOTE: Start Block (MAP_RT)		02-010/00:46:10
23659	MGS	02-010/00:59:11		: 00:24:49, 01:33:19, FALSE, TRUE, FALSE, 00:01:15, 00:08:11, 01:15:58, 00:07:54	AEMINI	02-010/00:46:11
23660	MGS	02-010/00:59:11		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/00:46:11
23661	MGS	02-010/00:59:11		NOTE: Start EVP data return script		02-010/00:46:11
23662	MGS	02-010/00:59:12		: SE_2A, RTM, 01:15:57, MRC, 2002-010T01:30:28.000	AEMRTI	02-010/00:46:12
23663	MGS	02-010/01:03:49		NOTE: Enter Planetary Atmosphere 12700		02-010/00:50:49
23664	MGS	02-010/01:05:16	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23665	MGS	02-010/01:05:54		NOTE: Apoapsis 12700 -		02-010/00:52:54
23666	MGS	02-010/01:09:01		NOTE: Enter Earth Occultation 12700		02-010/00:56:01
23667	MGS	02-010/01:09:01	15	NOTE: Loss Of X-Band Signal		
23668	MGS	02-010/01:09:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/00:56:11
23669	MGS	02-010/01:09:11		NOTE: Enter Solar Eclipse 12700		02-010/00:56:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23670	MGS	02-010/01:09:38		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/00:56:38
23671	MGS	02-010/01:09:38		NOTE: End EVP script		02-010/00:56:38
23672	MGS	02-010/01:09:39		NOTE: End Block (MAP_PB_ODY)		02-010/00:56:39
23673	MGS	02-010/01:13:36	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23674	MGS	02-010/01:15:36	15	Range Modulation On: SUP=3.0dB		
23675	MGS	02-010/01:16:36	15	Begin Ranging Acquisition		
23676	MGS	02-010/01:30:15		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/01:17:15
23677	MGS	02-010/01:33:51		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/01:20:51
23678	MGS	02-010/01:33:51		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/01:20:51
23679	MGS	02-010/01:33:56		Set eclipse egress script address: 019A	SWSEES	02-010/01:20:56
23680	MGS	02-010/01:34:00		: 01:33:19	RPAONX	02-010/01:21:00
23681	MGS	02-010/01:34:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/01:21:00
23682	MGS	02-010/01:35:15		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-010/01:22:15
23683	MGS	02-010/01:35:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/01:22:15
23684	MGS	02-010/01:35:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/01:22:15
23685	MGS	02-010/01:35:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/01:22:15
23686	MGS	02-010/01:35:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/01:22:15
23687	MGS	02-010/01:35:51		NOTE: Exit Earth Occultation 12700		02-010/01:22:51
23688	MGS	02-010/01:35:51	15	Acquisition Of X-Band Signal		
23689	MGS	02-010/01:35:51	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23690	MGS	02-010/01:35:51	15	NOTE: Carrier Only -- No Telemetry Modulation		
23691	MGS	02-010/01:41:20		NOTE: Exit Planetary Atmosphere 12700		02-010/01:28:20
23692	MGS	02-010/01:43:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/01:30:26
23693	MGS	02-010/01:43:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/01:30:26
23694	MGS	02-010/01:43:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/01:30:26
23695	MGS	02-010/01:43:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/01:30:26
23696	MGS	02-010/01:43:26	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23697	MGS	02-010/01:43:27		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-010/01:30:27
23698	MGS	02-010/01:43:27		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/01:30:27
23699	MGS	02-010/01:43:27		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/01:30:27
23700	MGS	02-010/01:43:27	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23701	MGS	02-010/01:43:31		NOTE: End fixed Sub-Reflector for Radio Science		02-010/01:30:31
23702	MGS	02-010/01:49:32		NOTE: Exit Solar Eclipse 12700		02-010/01:36:32
23703	MGS	02-010/02:04:43		NOTE: Periapsis 12701 ----------		02-010/01:51:43
23704	MGS	02-010/02:10:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/01:57:31
23705	MGS	02-010/02:10:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/01:57:31
23706	MGS	02-010/02:10:32		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/01:57:32
23707	MGS	02-010/02:10:32		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/01:57:32
23708	MGS	02-010/02:21:58	15	NOTE: Transmitter Off in 15 minutes		
23709	MGS	02-010/02:32:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/02:19:32
23710	MGS	02-010/02:32:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/02:19:32
23711	MGS	02-010/02:34:58	15	Range Modulation Off		
23712	MGS	02-010/02:36:58	15	Transmitter Off		
23713	MGS	02-010/02:54:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/02:41:24
23714	MGS	02-010/02:56:53		NOTE: Start EVP data return script		02-010/02:43:53
23715	MGS	02-010/02:59:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/02:46:24
23716	MGS	02-010/02:59:24		: 00:07:54, FALSE	RDSCII	02-010/02:46:24
23717	MGS	02-010/02:59:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/02:46:24
23718	MGS	02-010/02:59:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/02:46:24
23719	MGS	02-010/02:59:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/02:46:24
23720	MGS	02-010/02:59:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/02:46:24
23721	MGS	02-010/02:59:24	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23722	MGS	02-010/02:59:24	15	NOTE: Carrier Only -- No Telemetry Modulation		
23723	MGS	02-010/03:01:32		NOTE: Enter Planetary Atmosphere 12701		02-010/02:48:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23724	MGS	02-010/03:03:22		NOTE: Apoapsis 12701 -		02-010/02:50:22
23725	MGS	02-010/03:06:43		NOTE: Enter Earth Occultation 12701		02-010/02:53:43
23726	MGS	02-010/03:06:43	15	NOTE: Loss Of X-Band Signal		
23727	MGS	02-010/03:06:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/02:53:53
23728	MGS	02-010/03:06:54		NOTE: Enter Solar Eclipse 12701		02-010/02:53:53
23729	MGS	02-010/03:07:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/02:54:18
23730	MGS	02-010/03:07:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/02:54:18
23731	MGS	02-010/03:07:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/02:54:18
23732	MGS	02-010/03:07:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/02:54:18
23733	MGS	02-010/03:07:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/02:54:19
23734	MGS	02-010/03:07:19		NOTE: End EVP script		02-010/02:54:19
23735	MGS	02-010/03:07:23		NOTE: End fixed Sub-Reflector for Radio Science		02-010/02:54:23
23736	MGS	02-010/03:11:18	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
23737	MGS	02-010/03:13:18	15	Range Modulation On: SUP=3.0dB		
23738	MGS	02-010/03:14:18	15	Begin Ranging Acquisition		
23739	MGS	02-010/03:25:00	45	Begin Pre-Cal		
23740	MGS	02-010/03:25:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
23741	MGS	02-010/03:25:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
23742	MGS	02-010/03:25:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
23743	MGS	02-010/03:25:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
23744	MGS	02-010/03:25:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
23745	MGS	02-010/03:25:00	45	Config: TGC: DEST=37		
23746	MGS	02-010/03:25:00	45	Config: TGC: BAND=X, BR=40000.000000		
23747	MGS	02-010/03:25:00	45	Config: FSS: CH=2, PRI_FL=10000		
23748	MGS	02-010/03:25:00	45	Config: RSR		
23749	MGS	02-010/03:25:00	45	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
23750	MGS	02-010/03:25:00	45	Config: BVR		
23751	MGS	02-010/03:25:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
23752	MGS	02-010/03:25:00	45	Config: MDA: SMPL=0.1		
23753	MGS	02-010/03:27:57		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/03:14:57
23754	MGS	02-010/03:31:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/03:18:32
23755	MGS	02-010/03:31:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/03:18:32
23756	MGS	02-010/03:31:37		Set eclipse egress script address: 01DC	SWSEES	02-010/03:18:37
23757	MGS	02-010/03:31:42		: 01:33:19	RPAONX	02-010/03:18:42
23758	MGS	02-010/03:31:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/03:18:42
23759	MGS	02-010/03:32:57		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-010/03:19:57
23760	MGS	02-010/03:32:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/03:19:57
23761	MGS	02-010/03:32:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/03:19:57
23762	MGS	02-010/03:32:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/03:19:57
23763	MGS	02-010/03:32:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/03:19:57
23764	MGS	02-010/03:33:27		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/03:20:27
23765	MGS	02-010/03:33:34		NOTE: Exit Earth Occultation 12701		02-010/03:20:33
23766	MGS	02-010/03:33:34	15	Acquisition Of X-Band Signal		
23767	MGS	02-010/03:33:34	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23768	MGS	02-010/03:33:34	15	NOTE: Carrier Only -- No Telemetry Modulation		
23769	MGS	02-010/03:39:02		NOTE: Exit Planetary Atmosphere 12701		02-010/03:26:02
23770	MGS	02-010/03:41:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/03:28:08
23771	MGS	02-010/03:41:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/03:28:08
23772	MGS	02-010/03:41:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/03:28:08
23773	MGS	02-010/03:41:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/03:28:08
23774	MGS	02-010/03:41:08	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23775	MGS	02-010/03:41:09		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-010/03:28:09
23776	MGS	02-010/03:41:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/03:28:09
23777	MGS	02-010/03:41:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/03:28:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23778	MGS	02-010/03:41:09	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23779	MGS	02-010/03:41:14		NOTE: End fixed Sub-Reflector for Radio Science		02-010/03:28:13
23780	MGS	02-010/03:47:15		NOTE: Exit Solar Eclipse 12701		02-010/03:34:14
23781	MGS	02-010/04:02:04		NOTE: Periapsis 12702 ----------		02-010/03:49:03
23782	MGS	02-010/04:08:13		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/03:55:13
23783	MGS	02-010/04:08:13		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/03:55:13
23784	MGS	02-010/04:08:14		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/03:55:14
23785	MGS	02-010/04:08:14		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/03:55:14
23786	MGS	02-010/04:19:39	15	NOTE: Transmitter Off in 15 minutes		
23787	MGS	02-010/04:30:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/04:17:14
23788	MGS	02-010/04:30:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/04:17:14
23789	MGS	02-010/04:32:40	15	Range Modulation Off		
23790	MGS	02-010/04:34:39	15	Transmitter Off		
23791	MGS	02-010/04:40:13		NOTE: Start Block (SSRMGR)		02-010/04:27:12
23792	MGS	02-010/04:40:13		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-010/04:27:12
23793	MGS	02-010/04:40:14		SSR 1B Data Enable	CSD1BE	02-010/04:27:13
23794	MGS	02-010/04:40:14		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-010/04:27:13
23795	MGS	02-010/04:52:07		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/04:39:06
23796	MGS	02-010/04:54:37		NOTE: Start Block (MAP_PB_ODY)		02-010/04:41:36
23797	MGS	02-010/04:54:38		: 00:24:49, 01:33:20, FALSE, FALSE, FALSE, 00:01:15, 00:06:31, 01:19:19, 00:06:14	AEMINI	02-010/04:41:37
23798	MGS	02-010/04:54:38		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/04:41:37
23799	MGS	02-010/04:54:38		NOTE: Start EVP data return script		02-010/04:41:37
23800	MGS	02-010/04:54:39		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-010T05:24:13.000	AEMPBI	02-010/04:41:38
23801	MGS	02-010/04:55:00	45	Begin Tracking		
23802	MGS	02-010/04:55:00	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23803	MGS	02-010/04:57:07		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/04:44:06
23804	MGS	02-010/04:57:07		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8104000, DUR=00:16:53		02-010/04:44:06
23805	MGS	02-010/04:57:07		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-010/04:44:06
23806	MGS	02-010/04:57:07		: 00:07:54, FALSE	RDSCII	02-010/04:44:06
23807	MGS	02-010/04:57:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/04:44:06
23808	MGS	02-010/04:57:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/04:44:06
23809	MGS	02-010/04:57:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/04:44:06
23810	MGS	02-010/04:57:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/04:44:06
23811	MGS	02-010/04:57:07	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23812	MGS	02-010/04:57:07	15	NOTE: Carrier Only -- No Telemetry Modulation		
23813	MGS	02-010/04:57:07	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23814	MGS	02-010/04:57:07	45	NOTE: Carrier Only -- No Telemetry Modulation		
23815	MGS	02-010/04:59:15		NOTE: Enter Planetary Atmosphere 12702		02-010/04:46:15
23816	MGS	02-010/05:00:49		NOTE: Apoapsis 12702 -		02-010/04:47:48
23817	MGS	02-010/05:03:39		SSR 1A Data Disable	CSD1AX	02-010/04:50:38
23818	MGS	02-010/05:03:39		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-010/04:50:38
23819	MGS	02-010/05:03:40		NOTE: End Block (SSRMGR)		02-010/04:50:39
23820	MGS	02-010/05:04:25		NOTE: Enter Earth Occultation 12702		02-010/04:51:25
23821	MGS	02-010/05:04:25	15	NOTE: Loss Of X-Band Signal		
23822	MGS	02-010/05:04:25	45	NOTE: Loss Of X-Band Signal		
23823	MGS	02-010/05:04:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/04:51:37
23824	MGS	02-010/05:04:38		NOTE: Enter Solar Eclipse 12702		02-010/04:51:37
23825	MGS	02-010/05:05:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/04:52:00
23826	MGS	02-010/05:05:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/04:52:00
23827	MGS	02-010/05:05:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/04:52:00
23828	MGS	02-010/05:05:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/04:52:00
23829	MGS	02-010/05:05:02		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/04:52:01
23830	MGS	02-010/05:05:02		NOTE: End EVP script		02-010/04:52:01

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23831	MGS	02-010/05:05:03		NOTE: End Block (MAP_RT)		02-010/04:52:02
23832	MGS	02-010/05:05:06		NOTE: End fixed Sub-Reflector for Radio Science		02-010/04:52:05
23833	MGS	02-010/05:07:00	15	NOTE: Below Uplink Interlock Limit		
23834	MGS	02-010/05:15:00	15	End Tracking		
23835	MGS	02-010/05:29:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/05:16:14
23836	MGS	02-010/05:29:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/05:16:14
23837	MGS	02-010/05:29:19		Command the PSE with included data word: 3990	SWPSEL	02-010/05:16:18
23838	MGS	02-010/05:29:20		Set eclipse egress script address: 0158	SWSEES	02-010/05:16:19
23839	MGS	02-010/05:29:27		: 01:33:20	RPAONX	02-010/05:16:26
23840	MGS	02-010/05:29:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/05:16:26
23841	MGS	02-010/05:30:00	15	End Post-Cal		
23842	MGS	02-010/05:31:12		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/05:18:11
23843	MGS	02-010/05:31:18		NOTE: Exit Earth Occultation 12702		02-010/05:18:17
23844	MGS	02-010/05:31:18	45	Acquisition Of X-Band Signal		
23845	MGS	02-010/05:31:18	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23846	MGS	02-010/05:36:45		NOTE: Exit Planetary Atmosphere 12702		02-010/05:23:44
23847	MGS	02-010/05:37:13		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:55	AEMPB	02-010/05:24:12
23848	MGS	02-010/05:37:13		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-010/05:24:12
23849	MGS	02-010/05:37:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-010/05:24:12
23850	MGS	02-010/05:37:14		SSR 1A Data Enable	CSD1AE	02-010/05:24:13
23851	MGS	02-010/05:37:14		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-010/05:24:13
23852	MGS	02-010/05:37:14	45	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23853	MGS	02-010/05:44:59		NOTE: Exit Solar Eclipse 12702		02-010/05:31:58
23854	MGS	02-010/06:00:02		NOTE: Periapsis 12703 ----------		02-010/05:47:01
23855	MGS	02-010/06:09:58		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/05:56:57
23856	MGS	02-010/06:09:58		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/05:56:57
23857	MGS	02-010/06:09:59		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/05:56:58
23858	MGS	02-010/06:09:59		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/05:56:58
23859	MGS	02-010/06:31:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/06:18:58
23860	MGS	02-010/06:31:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/06:18:58
23861	MGS	02-010/06:47:52		SSR 1A Data Disable	CSD1AX	02-010/06:34:51
23862	MGS	02-010/06:47:52		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-010/06:34:51
23863	MGS	02-010/06:47:52		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-010/06:34:51
23864	MGS	02-010/06:47:52	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23865	MGS	02-010/06:52:23		NOTE: Start Block (MAP_RT)		02-010/06:39:22
23866	MGS	02-010/06:52:24		: 00:24:49, 01:33:19, FALSE, TRUE, FALSE, 00:01:15, 00:08:11, 01:15:58, 00:07:54	AEMINI	02-010/06:39:23
23867	MGS	02-010/06:52:24		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/06:39:23
23868	MGS	02-010/06:52:24		NOTE: Start EVP data return script		02-010/06:39:23
23869	MGS	02-010/06:52:25		: SE_2A, RTM, 01:15:57, MRC, 2002-010T07:23:40.000	AEMRTI	02-010/06:39:24
23870	MGS	02-010/06:57:00		NOTE: Enter Planetary Atmosphere 12703		02-010/06:43:59
23871	MGS	02-010/06:58:58		NOTE: Apoapsis 12703 -		02-010/06:45:57
23872	MGS	02-010/07:02:10		NOTE: Enter Earth Occultation 12703		02-010/06:49:09
23873	MGS	02-010/07:02:10	45	NOTE: Loss Of X-Band Signal		
23874	MGS	02-010/07:02:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/06:49:23
23875	MGS	02-010/07:02:24		NOTE: Enter Solar Eclipse 12703		02-010/06:49:23
23876	MGS	02-010/07:02:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/06:49:46
23877	MGS	02-010/07:02:47		NOTE: End EVP script		02-010/06:49:46
23878	MGS	02-010/07:02:48		NOTE: End Block (MAP_PB_ODY)		02-010/06:49:47
23879	MGS	02-010/07:23:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/07:10:27
23880	MGS	02-010/07:26:59		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/07:13:58
23881	MGS	02-010/07:26:59		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/07:13:58
23882	MGS	02-010/07:27:04		Set eclipse egress script address: 019A	SWSEES	02-010/07:14:03
23883	MGS	02-010/07:27:13		: 01:33:19	RPAONX	02-010/07:14:12
23884	MGS	02-010/07:27:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/07:14:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23885	MGS	02-010/07:28:28		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-010/07:15:27
23886	MGS	02-010/07:28:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/07:15:27
23887	MGS	02-010/07:28:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/07:15:27
23888	MGS	02-010/07:28:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/07:15:27
23889	MGS	02-010/07:28:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/07:15:27
23890	MGS	02-010/07:29:05		NOTE: Exit Earth Occultation 12703		02-010/07:16:04
23891	MGS	02-010/07:29:05	45	Acquisition Of X-Band Signal		
23892	MGS	02-010/07:29:05	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23893	MGS	02-010/07:29:05	45	NOTE: Carrier Only -- No Telemetry Modulation		
23894	MGS	02-010/07:34:31		NOTE: Exit Planetary Atmosphere 12703		02-010/07:21:30
23895	MGS	02-010/07:36:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/07:23:38
23896	MGS	02-010/07:36:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/07:23:38
23897	MGS	02-010/07:36:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/07:23:38
23898	MGS	02-010/07:36:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/07:23:38
23899	MGS	02-010/07:36:39	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23900	MGS	02-010/07:36:40		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-010/07:23:39
23901	MGS	02-010/07:36:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/07:23:39
23902	MGS	02-010/07:36:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/07:23:39
23903	MGS	02-010/07:36:40	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23904	MGS	02-010/07:36:44		NOTE: End fixed Sub-Reflector for Radio Science		02-010/07:23:43
23905	MGS	02-010/07:42:46		NOTE: Exit Solar Eclipse 12703		02-010/07:29:44
23906	MGS	02-010/07:58:17		NOTE: Periapsis 12704 ----------		02-010/07:45:16
23907	MGS	02-010/08:03:45		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/07:50:44
23908	MGS	02-010/08:03:45		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/07:50:44
23909	MGS	02-010/08:03:46		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/07:50:45
23910	MGS	02-010/08:03:46		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/07:50:45
23911	MGS	02-010/08:25:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/08:12:45
23912	MGS	02-010/08:25:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/08:12:45
23913	MGS	02-010/08:47:37		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/08:34:36
23914	MGS	02-010/08:50:11		NOTE: Start EVP data return script		02-010/08:37:10
23915	MGS	02-010/08:52:37		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/08:39:36
23916	MGS	02-010/08:52:37		: 00:07:54, FALSE	RDSCII	02-010/08:39:36
23917	MGS	02-010/08:52:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/08:39:36
23918	MGS	02-010/08:52:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/08:39:36
23919	MGS	02-010/08:52:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/08:39:36
23920	MGS	02-010/08:52:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/08:39:36
23921	MGS	02-010/08:52:37	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23922	MGS	02-010/08:52:37	45	NOTE: Carrier Only -- No Telemetry Modulation		
23923	MGS	02-010/08:54:47		NOTE: Enter Planetary Atmosphere 12704		02-010/08:41:46
23924	MGS	02-010/08:57:18		NOTE: Apoapsis 12704 -		02-010/08:44:17
23925	MGS	02-010/08:59:57		NOTE: Enter Earth Occultation 12704		02-010/08:46:56
23926	MGS	02-010/08:59:57	45	NOTE: Loss Of X-Band Signal		
23927	MGS	02-010/09:00:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/08:47:10
23928	MGS	02-010/09:00:11		NOTE: Enter Solar Eclipse 12704		02-010/08:47:10
23929	MGS	02-010/09:00:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/08:47:30
23930	MGS	02-010/09:00:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/08:47:30
23931	MGS	02-010/09:00:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/08:47:30
23932	MGS	02-010/09:00:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/08:47:30
23933	MGS	02-010/09:00:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/08:47:31
23934	MGS	02-010/09:00:32		NOTE: End EVP script		02-010/08:47:31
23935	MGS	02-010/09:00:36		NOTE: End fixed Sub-Reflector for Radio Science		02-010/08:47:35
23936	MGS	02-010/09:21:15		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/09:08:14
23937	MGS	02-010/09:24:46		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/09:11:45
23938	MGS	02-010/09:24:46		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/09:11:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23939	MGS	02-010/09:24:51		Set eclipse egress script address: 01DC	SWSEES	02-010/09:11:50
23940	MGS	02-010/09:25:00		: 01:33:19	RPAONX	02-010/09:11:59
23941	MGS	02-010/09:25:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/09:11:59
23942	MGS	02-010/09:26:15		: 00:00:30, 00:08:11, FALSE	RDSCIE	02-010/09:13:14
23943	MGS	02-010/09:26:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/09:13:14
23944	MGS	02-010/09:26:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/09:13:14
23945	MGS	02-010/09:26:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/09:13:14
23946	MGS	02-010/09:26:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/09:13:14
23947	MGS	02-010/09:26:45		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/09:13:44
23948	MGS	02-010/09:26:53		NOTE: Exit Earth Occultation 12704		02-010/09:13:51
23949	MGS	02-010/09:26:53	45	Acquisition Of X-Band Signal		
23950	MGS	02-010/09:26:53	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
23951	MGS	02-010/09:26:53	45	NOTE: Carrier Only -- No Telemetry Modulation		
23952	MGS	02-010/09:32:19		NOTE: Exit Planetary Atmosphere 12704		02-010/09:19:18
23953	MGS	02-010/09:34:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/09:21:25
23954	MGS	02-010/09:34:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/09:21:25
23955	MGS	02-010/09:34:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/09:21:25
23956	MGS	02-010/09:34:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/09:21:25
23957	MGS	02-010/09:34:26	45	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23958	MGS	02-010/09:34:27		: RTM, MRC, 01:15:57, S&E_2A, FALSE, 00:07:55	AEMRT	02-010/09:21:26
23959	MGS	02-010/09:34:27		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/09:21:26
23960	MGS	02-010/09:34:27		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/09:21:26
23961	MGS	02-010/09:34:27	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
23962	MGS	02-010/09:34:31		NOTE: End fixed Sub-Reflector for Radio Science		02-010/09:21:30
23963	MGS	02-010/09:40:33		NOTE: Exit Solar Eclipse 12704		02-010/09:27:32
23964	MGS	02-010/09:56:20		NOTE: Periapsis 12705 ----------		02-010/09:43:19
23965	MGS	02-010/10:00:00	65	Begin Pre-Cal		
23966	MGS	02-010/10:00:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
23967	MGS	02-010/10:00:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
23968	MGS	02-010/10:00:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
23969	MGS	02-010/10:00:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
23970	MGS	02-010/10:00:00	65	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=HIGH, MI=80.0		
23971	MGS	02-010/10:00:00	65	Config: TGC: DEST=37		
23972	MGS	02-010/10:00:00	65	Config: TGC: BAND=X, BR=0.000000		
23973	MGS	02-010/10:00:00	65	Config: FSS: CH=2, PRI_FL=10000		
23974	MGS	02-010/10:00:00	65	Config: RSR		
23975	MGS	02-010/10:00:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
23976	MGS	02-010/10:00:00	65	Config: BVR		
23977	MGS	02-010/10:00:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
23978	MGS	02-010/10:00:00	65	Config: MDA: SMPL=0.1		
23979	MGS	02-010/10:01:32		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/09:48:31
23980	MGS	02-010/10:01:32		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/09:48:31
23981	MGS	02-010/10:01:33		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/09:48:32
23982	MGS	02-010/10:01:33		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/09:48:32
23983	MGS	02-010/10:23:33		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/10:10:32
23984	MGS	02-010/10:23:33		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/10:10:32
23985	MGS	02-010/10:33:21		NOTE: Start Block (SSRMGR)		02-010/10:20:20
23986	MGS	02-010/10:33:21		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-010/10:20:20
23987	MGS	02-010/10:33:22		SSR 1A Data Enable	CSD1AE	02-010/10:20:21
23988	MGS	02-010/10:33:22		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-010/10:20:21
23989	MGS	02-010/10:45:25		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/10:32:23
23990	MGS	02-010/10:47:56		NOTE: Start Block (MAP_PB_ODY)		02-010/10:34:55
23991	MGS	02-010/10:47:57		: 00:24:49, 01:33:20, FALSE, FALSE, FALSE, 00:01:15, 00:06:31, 01:19:19, 00:06:14	AEMINI	02-010/10:34:56
23992	MGS	02-010/10:47:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/10:34:56

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
23993	MGS	02-010/10:47:57		NOTE: Start EVP data return script		02-010/10:34:56
23994	MGS	02-010/10:47:58		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-010T11:17:31.000	AEMPBI	02-010/10:34:57
23995	MGS	02-010/10:50:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/10:37:23
23996	MGS	02-010/10:50:24		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8176000, DUR=00:17:02		02-010/10:37:23
23997	MGS	02-010/10:50:24		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-010/10:37:23
23998	MGS	02-010/10:50:24		: 00:07:54, FALSE	RDSCII	02-010/10:37:23
23999	MGS	02-010/10:50:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/10:37:23
24000	MGS	02-010/10:50:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/10:37:23
24001	MGS	02-010/10:50:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/10:37:23
24002	MGS	02-010/10:50:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/10:37:23
24003	MGS	02-010/10:50:24	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24004	MGS	02-010/10:50:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
24005	MGS	02-010/10:52:34		NOTE: Enter Planetary Atmosphere 12705		02-010/10:39:33
24006	MGS	02-010/10:55:09		NOTE: Apoapsis 12705 -		02-010/10:42:08
24007	MGS	02-010/10:56:58		SSR 1B Data Disable	CSD1BX	02-010/10:43:56
24008	MGS	02-010/10:56:58		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-010/10:43:56
24009	MGS	02-010/10:56:59		NOTE: End Block (SSRMGR)		02-010/10:43:57
24010	MGS	02-010/10:57:45		NOTE: Enter Earth Occultation 12705		02-010/10:44:43
24011	MGS	02-010/10:57:45	45	NOTE: Loss Of X-Band Signal		
24012	MGS	02-010/10:57:57		NOTE: Enter Solar Eclipse 12705		02-010/10:44:56
24013	MGS	02-010/10:57:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/10:44:56
24014	MGS	02-010/10:58:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/10:45:17
24015	MGS	02-010/10:58:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/10:45:17
24016	MGS	02-010/10:58:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/10:45:17
24017	MGS	02-010/10:58:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/10:45:17
24018	MGS	02-010/10:58:20		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/10:45:18
24019	MGS	02-010/10:58:20		NOTE: End EVP script		02-010/10:45:18
24020	MGS	02-010/10:58:21		NOTE: End Block (MAP_RT)		02-010/10:45:19
24021	MGS	02-010/10:58:24		NOTE: End fixed Sub-Reflector for Radio Science		02-010/10:45:22
24022	MGS	02-010/11:22:34		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/11:09:32
24023	MGS	02-010/11:22:34		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/11:09:32
24024	MGS	02-010/11:22:38		Command the PSE with included data word: 3990	SWPSEL	02-010/11:09:36
24025	MGS	02-010/11:22:39		Set eclipse egress script address: 0158	SWSEES	02-010/11:09:37
24026	MGS	02-010/11:22:47		: 01:33:20	RPAONX	02-010/11:09:45
24027	MGS	02-010/11:22:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/11:09:45
24028	MGS	02-010/11:24:32		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/11:11:30
24029	MGS	02-010/11:24:40		NOTE: Exit Earth Occultation 12705		02-010/11:11:38
24030	MGS	02-010/11:24:40	45	Acquisition Of X-Band Signal		
24031	MGS	02-010/11:24:40	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24032	MGS	02-010/11:30:00	65	Begin Tracking		
24033	MGS	02-010/11:30:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24034	MGS	02-010/11:30:07		NOTE: Exit Planetary Atmosphere 12705		02-010/11:17:06
24035	MGS	02-010/11:30:33		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:55	AEMPB	02-010/11:17:31
24036	MGS	02-010/11:30:33		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-010/11:17:31
24037	MGS	02-010/11:30:33		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-010/11:17:31
24038	MGS	02-010/11:30:34		SSR 1B Data Enable	CSD1BE	02-010/11:17:32
24039	MGS	02-010/11:30:34		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-010/11:17:32
24040	MGS	02-010/11:30:34	45	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24041	MGS	02-010/11:30:34	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24042	MGS	02-010/11:38:19		NOTE: Exit Solar Eclipse 12705		02-010/11:25:18
24043	MGS	02-010/11:40:03	45	NOTE: Below Uplink Interlock Limit		
24044	MGS	02-010/11:40:13	65	NOTE: Above Uplink Interlock Limit		
24045	MGS	02-010/11:50:00	45	End Tracking		
24046	MGS	02-010/11:53:55		NOTE: Periapsis 12706 ----------		02-010/11:40:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24047	MGS	02-010/12:03:19		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/11:50:17
24048	MGS	02-010/12:03:19		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/11:50:17
24049	MGS	02-010/12:03:20		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/11:50:18
24050	MGS	02-010/12:03:20		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/11:50:18
24051	MGS	02-010/12:05:00	45	End Post-Cal		
24052	MGS	02-010/12:13:02		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-010/12:00:00
24053	MGS	02-010/12:25:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/12:12:18
24054	MGS	02-010/12:25:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/12:12:18
24055	MGS	02-010/12:41:12		SSR 1B Data Disable	CSD1BX	02-010/12:28:10
24056	MGS	02-010/12:41:12		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-010/12:28:10
24057	MGS	02-010/12:41:12		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-010/12:28:10
24058	MGS	02-010/12:41:12	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24059	MGS	02-010/12:45:39		NOTE: Start Block (MAP_RT)		02-010/12:32:37
24060	MGS	02-010/12:45:40		: 00:24:58, 01:33:06, FALSE, TRUE, FALSE, 00:01:15, 00:08:07, 01:15:53, 00:07:50	AEMINI	02-010/12:32:38
24061	MGS	02-010/12:45:40		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/12:32:38
24062	MGS	02-010/12:45:40		NOTE: Start EVP data return script		02-010/12:32:38
24063	MGS	02-010/12:45:41		: SE_2A, RTM, 01:15:52, MRC, 2002-010T13:17:00.000	AEMRTI	02-010/12:32:39
24064	MGS	02-010/12:50:18		NOTE: Enter Planetary Atmosphere 12706		02-010/12:37:16
24065	MGS	02-010/12:52:31		NOTE: Apoapsis 12706 -		02-010/12:39:29
24066	MGS	02-010/12:55:28		NOTE: Enter Earth Occultation 12706		02-010/12:42:26
24067	MGS	02-010/12:55:28	65	NOTE: Loss Of X-Band Signal		
24068	MGS	02-010/12:55:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/12:42:38
24069	MGS	02-010/12:55:40		NOTE: Enter Solar Eclipse 12706		02-010/12:42:38
24070	MGS	02-010/12:56:07		NOTE: End EVP script		02-010/12:43:05
24071	MGS	02-010/12:56:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/12:43:05
24072	MGS	02-010/12:56:08		NOTE: End Block (MAP_PB_ODY)		02-010/12:43:06
24073	MGS	02-010/13:16:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/13:03:51
24074	MGS	02-010/13:20:20		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/13:07:18
24075	MGS	02-010/13:20:20		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/13:07:18
24076	MGS	02-010/13:20:25		Set eclipse egress script address: 019A	SWSEES	02-010/13:07:23
24077	MGS	02-010/13:20:38		: 01:33:06	RPAONX	02-010/13:07:36
24078	MGS	02-010/13:20:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/13:07:36
24079	MGS	02-010/13:21:53		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-010/13:08:51
24080	MGS	02-010/13:21:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/13:08:51
24081	MGS	02-010/13:21:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/13:08:51
24082	MGS	02-010/13:21:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/13:08:51
24083	MGS	02-010/13:21:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/13:08:51
24084	MGS	02-010/13:22:24		NOTE: Exit Earth Occultation 12706		02-010/13:09:22
24085	MGS	02-010/13:22:24	65	Acquisition Of X-Band Signal		
24086	MGS	02-010/13:22:24	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24087	MGS	02-010/13:22:24	65	NOTE: Carrier Only -- No Telemetry Modulation		
24088	MGS	02-010/13:27:51		NOTE: Exit Planetary Atmosphere 12706		02-010/13:14:49
24089	MGS	02-010/13:30:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/13:16:58
24090	MGS	02-010/13:30:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/13:16:58
24091	MGS	02-010/13:30:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/13:16:58
24092	MGS	02-010/13:30:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/13:16:58
24093	MGS	02-010/13:30:00	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24094	MGS	02-010/13:30:01		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-010/13:16:59
24095	MGS	02-010/13:30:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/13:16:59
24096	MGS	02-010/13:30:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/13:16:59
24097	MGS	02-010/13:30:01	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24098	MGS	02-010/13:30:05		NOTE: End fixed Sub-Reflector for Radio Science		02-010/13:17:03
24099	MGS	02-010/13:36:02		NOTE: Exit Solar Eclipse 12706		02-010/13:23:00
24100	MGS	02-010/13:51:17		NOTE: Periapsis 12707 ----------		02-010/13:38:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24101	MGS	02-010/13:57:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/13:43:59
24102	MGS	02-010/13:57:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/13:43:59
24103	MGS	02-010/13:57:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/13:44:00
24104	MGS	02-010/13:57:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/13:44:00
24105	MGS	02-010/14:19:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/14:06:00
24106	MGS	02-010/14:19:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/14:06:00
24107	MGS	02-010/14:40:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/14:27:51
24108	MGS	02-010/14:43:20		NOTE: Start EVP data return script		02-010/14:30:18
24109	MGS	02-010/14:45:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/14:32:51
24110	MGS	02-010/14:45:53		: 00:07:50, FALSE	RDSCII	02-010/14:32:51
24111	MGS	02-010/14:45:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/14:32:51
24112	MGS	02-010/14:45:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/14:32:51
24113	MGS	02-010/14:45:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/14:32:51
24114	MGS	02-010/14:45:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/14:32:51
24115	MGS	02-010/14:45:53	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24116	MGS	02-010/14:45:53	65	NOTE: Carrier Only -- No Telemetry Modulation		
24117	MGS	02-010/14:47:57		NOTE: Enter Planetary Atmosphere 12707		02-010/14:34:55
24118	MGS	02-010/14:50:07		NOTE: Apoapsis 12707 -		02-010/14:37:05
24119	MGS	02-010/14:53:07		NOTE: Enter Earth Occultation 12707		02-010/14:40:05
24120	MGS	02-010/14:53:07	65	NOTE: Loss Of X-Band Signal		
24121	MGS	02-010/14:53:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/14:40:18
24122	MGS	02-010/14:53:21		NOTE: Enter Solar Eclipse 12707		02-010/14:40:19
24123	MGS	02-010/14:53:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/14:40:41
24124	MGS	02-010/14:53:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/14:40:41
24125	MGS	02-010/14:53:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/14:40:41
24126	MGS	02-010/14:53:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/14:40:41
24127	MGS	02-010/14:53:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/14:40:42
24128	MGS	02-010/14:53:45		NOTE: End EVP script		02-010/14:40:42
24129	MGS	02-010/14:53:49		NOTE: End fixed Sub-Reflector for Radio Science		02-010/14:40:46
24130	MGS	02-010/15:14:34		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/15:01:31
24131	MGS	02-010/15:18:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/15:05:00
24132	MGS	02-010/15:18:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/15:05:00
24133	MGS	02-010/15:18:07		Set eclipse egress script address: 01DC	SWSEES	02-010/15:05:05
24134	MGS	02-010/15:18:18		: 01:33:06	RPAONX	02-010/15:05:16
24135	MGS	02-010/15:18:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/15:05:16
24136	MGS	02-010/15:19:33		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-010/15:06:31
24137	MGS	02-010/15:19:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/15:06:31
24138	MGS	02-010/15:19:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/15:06:31
24139	MGS	02-010/15:19:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/15:06:31
24140	MGS	02-010/15:19:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/15:06:31
24141	MGS	02-010/15:20:03		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/15:07:01
24142	MGS	02-010/15:20:06		NOTE: Exit Earth Occultation 12707		02-010/15:07:03
24143	MGS	02-010/15:20:06	65	Acquisition Of X-Band Signal		
24144	MGS	02-010/15:20:06	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24145	MGS	02-010/15:20:06	65	NOTE: Carrier Only -- No Telemetry Modulation		
24146	MGS	02-010/15:25:32		NOTE: Exit Planetary Atmosphere 12707		02-010/15:12:30
24147	MGS	02-010/15:27:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/15:14:38
24148	MGS	02-010/15:27:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/15:14:38
24149	MGS	02-010/15:27:40		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/15:14:38
24150	MGS	02-010/15:27:40		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/15:14:38
24151	MGS	02-010/15:27:40	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24152	MGS	02-010/15:27:41		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-010/15:14:39
24153	MGS	02-010/15:27:41		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/15:14:39
24154	MGS	02-010/15:27:41		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/15:14:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24155	MGS	02-010/15:27:41	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24156	MGS	02-010/15:27:46		NOTE: End fixed Sub-Reflector for Radio Science		02-010/15:14:43
24157	MGS	02-010/15:33:42		NOTE: Exit Solar Eclipse 12707		02-010/15:20:40
24158	MGS	02-010/15:48:53		NOTE: Periapsis 12708 ----------		02-010/15:35:50
24159	MGS	02-010/15:54:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/15:41:39
24160	MGS	02-010/15:54:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/15:41:39
24161	MGS	02-010/15:54:42		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/15:41:40
24162	MGS	02-010/15:54:42		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/15:41:40
24163	MGS	02-010/16:16:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/16:03:40
24164	MGS	02-010/16:16:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/16:03:40
24165	MGS	02-010/16:26:41		NOTE: Start Block (SSRMGR)		02-010/16:13:39
24166	MGS	02-010/16:26:41		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-010/16:13:39
24167	MGS	02-010/16:26:42		SSR 1B Data Enable	CSD1BE	02-010/16:13:40
24168	MGS	02-010/16:26:42		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-010/16:13:40
24169	MGS	02-010/16:38:34		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/16:25:31
24170	MGS	02-010/16:41:04		NOTE: Start Block (MAP_PB_ODY)		02-010/16:28:02
24171	MGS	02-010/16:41:05		: 00:24:58, 01:33:07, FALSE, FALSE, FALSE, 00:01:15, 00:06:27, 01:19:14, 00:06:10	AEMINI	02-010/16:28:03
24172	MGS	02-010/16:41:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/16:28:03
24173	MGS	02-010/16:41:05		NOTE: Start EVP data return script		02-010/16:28:03
24174	MGS	02-010/16:41:06		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-010T17:10:44.000	AEMPBI	02-010/16:28:04
24175	MGS	02-010/16:43:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/16:30:31
24176	MGS	02-010/16:43:33		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8088000, DUR=00:16:51		02-010/16:30:31
24177	MGS	02-010/16:43:33		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-010/16:30:31
24178	MGS	02-010/16:43:33		: 00:07:50, FALSE	RDSCII	02-010/16:30:31
24179	MGS	02-010/16:43:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/16:30:31
24180	MGS	02-010/16:43:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/16:30:31
24181	MGS	02-010/16:43:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/16:30:31
24182	MGS	02-010/16:43:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/16:30:31
24183	MGS	02-010/16:43:33	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24184	MGS	02-010/16:43:33	65	NOTE: Carrier Only -- No Telemetry Modulation		
24185	MGS	02-010/16:45:42		NOTE: Enter Planetary Atmosphere 12708		02-010/16:32:39
24186	MGS	02-010/16:48:03		NOTE: Apoapsis 12708 -		02-010/16:35:00
24187	MGS	02-010/16:50:06		SSR 1A Data Disable	CSD1AX	02-010/16:37:04
24188	MGS	02-010/16:50:06		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-010/16:37:04
24189	MGS	02-010/16:50:07		NOTE: End Block (SSRMGR)		02-010/16:37:05
24190	MGS	02-010/16:50:50		NOTE: Enter Earth Occultation 12708		02-010/16:37:48
24191	MGS	02-010/16:50:50	65	NOTE: Loss Of X-Band Signal		
24192	MGS	02-010/16:51:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/16:38:03
24193	MGS	02-010/16:51:06		NOTE: Enter Solar Eclipse 12708		02-010/16:38:03
24194	MGS	02-010/16:51:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/16:38:21
24195	MGS	02-010/16:51:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/16:38:21
24196	MGS	02-010/16:51:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/16:38:21
24197	MGS	02-010/16:51:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/16:38:21
24198	MGS	02-010/16:51:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/16:38:22
24199	MGS	02-010/16:51:25		NOTE: End EVP script		02-010/16:38:22
24200	MGS	02-010/16:51:26		NOTE: End Block (MAP_RT)		02-010/16:38:23
24201	MGS	02-010/16:51:29		NOTE: End fixed Sub-Reflector for Radio Science		02-010/16:38:26
24202	MGS	02-010/17:15:42		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/17:02:40
24203	MGS	02-010/17:15:42		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/17:02:40
24204	MGS	02-010/17:15:46		Command the PSE with included data word: 3990	SWPSEL	02-010/17:02:44
24205	MGS	02-010/17:15:47		Set eclipse egress script address: 0158	SWSEES	02-010/17:02:45
24206	MGS	02-010/17:16:03		: 01:33:07	RPAONX	02-010/17:03:01
24207	MGS	02-010/17:16:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/17:03:01
24208	MGS	02-010/17:17:48		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/17:04:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24209	MGS	02-010/17:17:50		NOTE: Exit Earth Occultation 12708		02-010/17:04:47
24210	MGS	02-010/17:17:50	65	Acquisition Of X-Band Signal		
24211	MGS	02-010/17:17:50	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24212	MGS	02-010/17:23:16		NOTE: Exit Planetary Atmosphere 12708		02-010/17:10:13
24213	MGS	02-010/17:23:46		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:46	AEMPB	02-010/17:10:43
24214	MGS	02-010/17:23:46		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-010/17:10:43
24215	MGS	02-010/17:23:46		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-010/17:10:43
24216	MGS	02-010/17:23:47		SSR 1A Data Enable	CSD1AE	02-010/17:10:44
24217	MGS	02-010/17:23:47		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-010/17:10:44
24218	MGS	02-010/17:23:47	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24219	MGS	02-010/17:31:27		NOTE: Exit Solar Eclipse 12708		02-010/17:18:25
24220	MGS	02-010/17:46:47		NOTE: Periapsis 12709 ----------		02-010/17:33:45
24221	MGS	02-010/17:56:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/17:43:24
24222	MGS	02-010/17:56:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/17:43:24
24223	MGS	02-010/17:56:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/17:43:25
24224	MGS	02-010/17:56:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/17:43:25
24225	MGS	02-010/18:18:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/18:05:25
24226	MGS	02-010/18:18:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/18:05:25
24227	MGS	02-010/18:34:25		SSR 1A Data Disable	CSD1AX	02-010/18:21:22
24228	MGS	02-010/18:34:25		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-010/18:21:22
24229	MGS	02-010/18:34:25		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-010/18:21:22
24230	MGS	02-010/18:34:25	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24231	MGS	02-010/18:38:52		NOTE: Start Block (MAP_RT)		02-010/18:25:49
24232	MGS	02-010/18:38:53		: 00:24:58, 01:33:06, FALSE, TRUE, FALSE, 00:01:15, 00:08:07, 01:15:53, 00:07:50	AEMINI	02-010/18:25:50
24233	MGS	02-010/18:38:53		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/18:25:50
24234	MGS	02-010/18:38:53		NOTE: Start EVP data return script		02-010/18:25:50
24235	MGS	02-010/18:38:54		: SE_2A, RTM, 01:15:52, MRC, 2002-010T19:10:12.000	AEMRTI	02-010/18:25:51
24236	MGS	02-010/18:43:29		NOTE: Enter Planetary Atmosphere 12709		02-010/18:30:27
24237	MGS	02-010/18:45:50		NOTE: Apoapsis 12709 -		02-010/18:32:47
24238	MGS	02-010/18:48:38		NOTE: Enter Earth Occultation 12709		02-010/18:35:35
24239	MGS	02-010/18:48:38	65	NOTE: Loss Of X-Band Signal		
24240	MGS	02-010/18:48:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/18:35:50
24241	MGS	02-010/18:48:53		NOTE: Enter Solar Eclipse 12709		02-010/18:35:50
24242	MGS	02-010/18:49:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/18:36:08
24243	MGS	02-010/18:49:11		NOTE: End EVP script		02-010/18:36:08
24244	MGS	02-010/18:49:12		NOTE: End Block (MAP_PB_ODY)		02-010/18:36:09
24245	MGS	02-010/19:10:06		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/18:57:03
24246	MGS	02-010/19:13:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/19:00:25
24247	MGS	02-010/19:13:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/19:00:25
24248	MGS	02-010/19:13:33		Set eclipse egress script address: 019A	SWSEES	02-010/19:00:30
24249	MGS	02-010/19:13:51		: 01:33:06	RPAONX	02-010/19:00:48
24250	MGS	02-010/19:13:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/19:00:48
24251	MGS	02-010/19:15:06		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-010/19:02:03
24252	MGS	02-010/19:15:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/19:02:03
24253	MGS	02-010/19:15:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/19:02:03
24254	MGS	02-010/19:15:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/19:02:03
24255	MGS	02-010/19:15:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/19:02:03
24256	MGS	02-010/19:15:38		NOTE: Exit Earth Occultation 12709		02-010/19:02:35
24257	MGS	02-010/19:15:38	65	Acquisition Of X-Band Signal		
24258	MGS	02-010/19:15:38	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24259	MGS	02-010/19:15:38	65	NOTE: Carrier Only -- No Telemetry Modulation		
24260	MGS	02-010/19:21:03		NOTE: Exit Planetary Atmosphere 12709		02-010/19:08:00
24261	MGS	02-010/19:23:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/19:10:10
24262	MGS	02-010/19:23:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/19:10:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24263	MGS	02-010/19:23:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/19:10:10
24264	MGS	02-010/19:23:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/19:10:10
24265	MGS	02-010/19:23:13	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24266	MGS	02-010/19:23:14		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-010/19:10:11
24267	MGS	02-010/19:23:14		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/19:10:11
24268	MGS	02-010/19:23:14		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/19:10:11
24269	MGS	02-010/19:23:14	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24270	MGS	02-010/19:23:18		NOTE: End fixed Sub-Reflector for Radio Science		02-010/19:10:15
24271	MGS	02-010/19:29:15		NOTE: Exit Solar Eclipse 12709		02-010/19:16:12
24272	MGS	02-010/19:44:37		NOTE: Periapsis 12710 ----------		02-010/19:31:34
24273	MGS	02-010/19:45:00	25	Begin Pre-Cal		
24274	MGS	02-010/19:45:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
24275	MGS	02-010/19:45:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
24276	MGS	02-010/19:45:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
24277	MGS	02-010/19:45:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
24278	MGS	02-010/19:45:00	25	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=OFF, MI=0.0		
24279	MGS	02-010/19:45:00	25	Config: TGC: DEST=37		
24280	MGS	02-010/19:45:00	25	Config: TGC: BAND=X, BR=0.000000		
24281	MGS	02-010/19:45:00	25	Config: FSS: CH=2, PRI_FL=10000		
24282	MGS	02-010/19:45:00	25	Config: RSR		
24283	MGS	02-010/19:45:00	25	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
24284	MGS	02-010/19:45:00	25	Config: BVR		
24285	MGS	02-010/19:45:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
24286	MGS	02-010/19:45:00	25	Config: MDA: SMPL=0.1		
24287	MGS	02-010/19:50:14		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/19:37:11
24288	MGS	02-010/19:50:14		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/19:37:11
24289	MGS	02-010/19:50:15		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/19:37:12
24290	MGS	02-010/19:50:15		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/19:37:12
24291	MGS	02-010/20:12:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/19:59:12
24292	MGS	02-010/20:12:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/19:59:12
24293	MGS	02-010/20:34:06		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/20:21:03
24294	MGS	02-010/20:36:40		NOTE: Start EVP data return script		02-010/20:23:37
24295	MGS	02-010/20:39:06		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/20:26:03
24296	MGS	02-010/20:39:06		: 00:07:50, FALSE	RDSCII	02-010/20:26:03
24297	MGS	02-010/20:39:06		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/20:26:03
24298	MGS	02-010/20:39:06		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/20:26:03
24299	MGS	02-010/20:39:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/20:26:03
24300	MGS	02-010/20:39:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/20:26:03
24301	MGS	02-010/20:39:06	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24302	MGS	02-010/20:39:06	65	NOTE: Carrier Only -- No Telemetry Modulation		
24303	MGS	02-010/20:41:16		NOTE: Enter Planetary Atmosphere 12710		02-010/20:28:13
24304	MGS	02-010/20:43:24		NOTE: Apoapsis 12710 -		02-010/20:30:21
24305	MGS	02-010/20:46:25		NOTE: Enter Earth Occultation 12710		02-010/20:33:21
24306	MGS	02-010/20:46:25	65	NOTE: Loss Of X-Band Signal		
24307	MGS	02-010/20:46:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/20:33:37
24308	MGS	02-010/20:46:40		NOTE: Enter Solar Eclipse 12710		02-010/20:33:37
24309	MGS	02-010/20:46:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/20:33:53
24310	MGS	02-010/20:46:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/20:33:53
24311	MGS	02-010/20:46:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/20:33:53
24312	MGS	02-010/20:46:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/20:33:53
24313	MGS	02-010/20:46:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/20:33:54
24314	MGS	02-010/20:46:58		NOTE: End EVP script		02-010/20:33:54
24315	MGS	02-010/20:47:02		NOTE: End fixed Sub-Reflector for Radio Science		02-010/20:33:58
24316	MGS	02-010/21:07:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/20:54:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24317	MGS	02-010/21:11:15		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/20:58:12
24318	MGS	02-010/21:11:15		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/20:58:12
24319	MGS	02-010/21:11:20		Set eclipse egress script address: 01DC	SWSEES	02-010/20:58:17
24320	MGS	02-010/21:11:38		: 01:33:06	RPAONX	02-010/20:58:35
24321	MGS	02-010/21:11:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/20:58:35
24322	MGS	02-010/21:12:53		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-010/20:59:50
24323	MGS	02-010/21:12:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/20:59:50
24324	MGS	02-010/21:12:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/20:59:50
24325	MGS	02-010/21:12:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/20:59:50
24326	MGS	02-010/21:12:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/20:59:50
24327	MGS	02-010/21:13:23		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/21:00:20
24328	MGS	02-010/21:13:26		NOTE: Exit Earth Occultation 12710		02-010/21:00:22
24329	MGS	02-010/21:13:26	65	Acquisition Of X-Band Signal		
24330	MGS	02-010/21:13:26	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24331	MGS	02-010/21:13:26	65	NOTE: Carrier Only -- No Telemetry Modulation		
24332	MGS	02-010/21:15:00	25	Begin Tracking		
24333	MGS	02-010/21:15:00	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24334	MGS	02-010/21:15:00	25	NOTE: Carrier Only -- No Telemetry Modulation		
24335	MGS	02-010/21:18:51		NOTE: Exit Planetary Atmosphere 12710		02-010/21:05:48
24336	MGS	02-010/21:21:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/21:07:57
24337	MGS	02-010/21:21:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/21:07:57
24338	MGS	02-010/21:21:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/21:07:57
24339	MGS	02-010/21:21:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/21:07:57
24340	MGS	02-010/21:21:00	25	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24341	MGS	02-010/21:21:00	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24342	MGS	02-010/21:21:01		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-010/21:07:58
24343	MGS	02-010/21:21:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-010/21:07:58
24344	MGS	02-010/21:21:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-010/21:07:58
24345	MGS	02-010/21:21:01	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24346	MGS	02-010/21:21:01	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24347	MGS	02-010/21:21:06		NOTE: End fixed Sub-Reflector for Radio Science		02-010/21:08:02
24348	MGS	02-010/21:27:02		NOTE: Exit Solar Eclipse 12710		02-010/21:13:59
24349	MGS	02-010/21:31:25	65	NOTE: Below Uplink Interlock Limit		
24350	MGS	02-010/21:35:00	65	End Tracking		
24351	MGS	02-010/21:42:19		NOTE: Periapsis 12711 ----------		02-010/21:29:16
24352	MGS	02-010/21:48:01		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/21:34:58
24353	MGS	02-010/21:48:01		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/21:34:58
24354	MGS	02-010/21:48:02		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/21:34:59
24355	MGS	02-010/21:48:02		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/21:34:59
24356	MGS	02-010/21:50:00	65	End Post-Cal		
24357	MGS	02-010/22:10:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/21:56:59
24358	MGS	02-010/22:10:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/21:56:59
24359	MGS	02-010/22:19:49		NOTE: Start Block (SSRMGR)		02-010/22:06:46
24360	MGS	02-010/22:19:49		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-010/22:06:46
24361	MGS	02-010/22:19:50		SSR 1A Data Enable	CSD1AE	02-010/22:06:47
24362	MGS	02-010/22:19:50		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-010/22:06:47
24363	MGS	02-010/22:31:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-010/22:18:50
24364	MGS	02-010/22:34:24		NOTE: Start Block (MAP_PB_ODY)		02-010/22:21:21
24365	MGS	02-010/22:34:25		: 00:24:58, 01:33:07, FALSE, FALSE, FALSE, 00:01:15, 00:06:27, 01:19:14, 00:06:10	AEMINI	02-010/22:21:22
24366	MGS	02-010/22:34:25		Enable sending eclipse ingress script when array power disappears	SWEISE	02-010/22:21:22
24367	MGS	02-010/22:34:25		NOTE: Start EVP data return script		02-010/22:21:22
24368	MGS	02-010/22:34:26		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-010T23:04:03.000	AEMPBI	02-010/22:21:23
24369	MGS	02-010/22:36:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-010/22:23:50
24370	MGS	02-010/22:36:53		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8184000, DUR=00:17:03		02-010/22:23:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24371	MGS	02-010/22:36:53		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-010/22:23:50
24372	MGS	02-010/22:36:53		: 00:07:50, FALSE	RDSCII	02-010/22:23:50
24373	MGS	02-010/22:36:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-010/22:23:50
24374	MGS	02-010/22:36:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-010/22:23:50
24375	MGS	02-010/22:36:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-010/22:23:50
24376	MGS	02-010/22:36:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-010/22:23:50
24377	MGS	02-010/22:36:53	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24378	MGS	02-010/22:36:53	25	NOTE: Carrier Only -- No Telemetry Modulation		
24379	MGS	02-010/22:39:01		NOTE: Enter Planetary Atmosphere 12711		02-010/22:25:58
24380	MGS	02-010/22:40:52		NOTE: Apoapsis 12711 -		02-010/22:27:49
24381	MGS	02-010/22:43:26		SSR 1B Data Disable	CSD1BX	02-010/22:30:23
24382	MGS	02-010/22:43:26		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-010/22:30:23
24383	MGS	02-010/22:43:27		NOTE: End Block (SSRMGR)		02-010/22:30:24
24384	MGS	02-010/22:44:09		NOTE: Enter Earth Occultation 12711		02-010/22:31:06
24385	MGS	02-010/22:44:09	25	NOTE: Loss Of X-Band Signal		
24386	MGS	02-010/22:44:25		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-010/22:31:22
24387	MGS	02-010/22:44:26		NOTE: Enter Solar Eclipse 12711		02-010/22:31:22
24388	MGS	02-010/22:44:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-010/22:31:40
24389	MGS	02-010/22:44:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-010/22:31:40
24390	MGS	02-010/22:44:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-010/22:31:40
24391	MGS	02-010/22:44:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-010/22:31:40
24392	MGS	02-010/22:44:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-010/22:31:41
24393	MGS	02-010/22:44:45		NOTE: End EVP script		02-010/22:31:41
24394	MGS	02-010/22:44:46		NOTE: End Block (MAP_RT)		02-010/22:31:42
24395	MGS	02-010/22:44:49		NOTE: End fixed Sub-Reflector for Radio Science		02-010/22:31:45
24396	MGS	02-010/23:09:02		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-010/22:55:59
24397	MGS	02-010/23:09:02		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-010/22:55:59
24398	MGS	02-010/23:09:06		Command the PSE with included data word: 3990	SWPSEL	02-010/22:56:03
24399	MGS	02-010/23:09:07		Set eclipse egress script address: 0158	SWSEES	02-010/22:56:04
24400	MGS	02-010/23:09:23		: 01:33:07	RPAONX	02-010/22:56:20
24401	MGS	02-010/23:09:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-010/22:56:20
24402	MGS	02-010/23:11:08		Disables autonomous command to send eclipse ingress script	SWEISX	02-010/22:58:05
24403	MGS	02-010/23:11:12		NOTE: Exit Earth Occultation 12711		02-010/22:58:09
24404	MGS	02-010/23:11:12	25	Acquisition Of X-Band Signal		
24405	MGS	02-010/23:11:12	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24406	MGS	02-010/23:16:37		NOTE: Exit Planetary Atmosphere 12711		02-010/23:03:34
24407	MGS	02-010/23:17:05		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:46	AEMPB	02-010/23:04:02
24408	MGS	02-010/23:17:05		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-010/23:04:02
24409	MGS	02-010/23:17:05		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-010/23:04:02
24410	MGS	02-010/23:17:06		SSR 1B Data Enable	CSD1BE	02-010/23:04:03
24411	MGS	02-010/23:17:06		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-010/23:04:03
24412	MGS	02-010/23:17:06	25	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24413	MGS	02-010/23:24:47		NOTE: Exit Solar Eclipse 12711		02-010/23:11:44
24414	MGS	02-010/23:40:04		NOTE: Periapsis 12712 ----------		02-010/23:27:01
24415	MGS	02-010/23:49:47		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-010/23:36:43
24416	MGS	02-010/23:49:47		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-010/23:36:43
24417	MGS	02-010/23:49:48		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-010/23:36:44
24418	MGS	02-010/23:49:48		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-010/23:36:44
24419	MGS	02-011/00:00:00		Light Time: OWLT = 13:03, RTLT = 26:07		
24420	MGS	02-011/00:00:00	15	Begin Pre-Cal		
24421	MGS	02-011/00:00:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
24422	MGS	02-011/00:00:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
24423	MGS	02-011/00:00:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
24424	MGS	02-011/00:00:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24425	MGS	02-011/00:00:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
24426	MGS	02-011/00:00:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
24427	MGS	02-011/00:00:00	15	Config: TGC: DEST=37		
24428	MGS	02-011/00:00:00	15	Config: TGC: BAND=X, BR=8000.000000		
24429	MGS	02-011/00:00:00	15	Config: FSS: CH=2, PRI_FL=10000		
24430	MGS	02-011/00:00:00	15	Config: RSR		
24431	MGS	02-011/00:00:00	15	Config: TXL		
24432	MGS	02-011/00:00:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
24433	MGS	02-011/00:00:00	15	Config: BVR		
24434	MGS	02-011/00:00:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
24435	MGS	02-011/00:00:00	15	Config: MDA: SMPL=0.1		
24436	MGS	02-011/00:00:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
24437	MGS	02-011/00:00:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
24438	MGS	02-011/00:00:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
24439	MGS	02-011/00:11:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-010/23:58:44
24440	MGS	02-011/00:11:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-010/23:58:44
24441	MGS	02-011/00:27:45		SSR 1B Data Disable	CSD1BX	02-011/00:14:41
24442	MGS	02-011/00:27:45		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-011/00:14:41
24443	MGS	02-011/00:27:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-011/00:14:41
24444	MGS	02-011/00:27:45	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24445	MGS	02-011/00:32:08		NOTE: Start Block (MAP_RT)		02-011/00:19:04
24446	MGS	02-011/00:32:09		: 00:24:58, 01:33:06, FALSE, TRUE, FALSE, 00:01:15, 00:08:07, 01:15:53, 00:07:50	AEMINI	02-011/00:19:05
24447	MGS	02-011/00:32:09		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/00:19:05
24448	MGS	02-011/00:32:09		NOTE: Start EVP data return script		02-011/00:19:05
24449	MGS	02-011/00:32:10		: SE_2A, RTM, 01:15:52, MRC, 2002-011T01:03:26.000	AEMRTI	02-011/00:19:06
24450	MGS	02-011/00:36:44		NOTE: Enter Planetary Atmosphere 12712		02-011/00:23:40
24451	MGS	02-011/00:38:44		NOTE: Apoapsis 12712 -		02-011/00:25:40
24452	MGS	02-011/00:41:52		NOTE: Enter Earth Occultation 12712		02-011/00:28:48
24453	MGS	02-011/00:41:52	25	NOTE: Loss Of X-Band Signal		
24454	MGS	02-011/00:42:09		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/00:29:05
24455	MGS	02-011/00:42:09		NOTE: Enter Solar Eclipse 12712		02-011/00:29:05
24456	MGS	02-011/00:42:31		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/00:29:27
24457	MGS	02-011/00:42:31		NOTE: End EVP script		02-011/00:29:27
24458	MGS	02-011/00:42:32		NOTE: End Block (MAP_PB_ODY)		02-011/00:29:28
24459	MGS	02-011/01:00:00	15	Begin Tracking		
24460	MGS	02-011/01:03:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/00:50:18
24461	MGS	02-011/01:06:48		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/00:53:44
24462	MGS	02-011/01:06:48		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/00:53:44
24463	MGS	02-011/01:06:53		Set eclipse egress script address: 019A	SWSEES	02-011/00:53:49
24464	MGS	02-011/01:07:07		: 01:33:06	RPAONX	02-011/00:54:03
24465	MGS	02-011/01:07:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/00:54:03
24466	MGS	02-011/01:08:22		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-011/00:55:18
24467	MGS	02-011/01:08:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/00:55:18
24468	MGS	02-011/01:08:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/00:55:18
24469	MGS	02-011/01:08:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/00:55:18
24470	MGS	02-011/01:08:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/00:55:18
24471	MGS	02-011/01:08:56		NOTE: Exit Earth Occultation 12712		02-011/00:55:52
24472	MGS	02-011/01:08:56	15	Acquisition Of X-Band Signal		
24473	MGS	02-011/01:08:56	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24474	MGS	02-011/01:08:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
24475	MGS	02-011/01:08:56	25	Acquisition Of X-Band Signal		
24476	MGS	02-011/01:08:56	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24477	MGS	02-011/01:08:56	25	NOTE: Carrier Only -- No Telemetry Modulation		
24478	MGS	02-011/01:10:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24479	MGS	02-011/01:12:00	15	Range Modulation On: SUP=3.0dB		
24480	MGS	02-011/01:13:00	15	Begin Ranging Acquisition		
24481	MGS	02-011/01:14:22		NOTE: Exit Planetary Atmosphere 12712		02-011/01:01:18
24482	MGS	02-011/01:16:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/01:03:25
24483	MGS	02-011/01:16:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/01:03:25
24484	MGS	02-011/01:16:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/01:03:25
24485	MGS	02-011/01:16:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/01:03:25
24486	MGS	02-011/01:16:29	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24487	MGS	02-011/01:16:29	25	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24488	MGS	02-011/01:16:30		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-011/01:03:26
24489	MGS	02-011/01:16:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/01:03:26
24490	MGS	02-011/01:16:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/01:03:26
24491	MGS	02-011/01:16:30	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24492	MGS	02-011/01:16:30	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24493	MGS	02-011/01:16:34		NOTE: End fixed Sub-Reflector for Radio Science		02-011/01:03:30
24494	MGS	02-011/01:22:31		NOTE: Exit Solar Eclipse 12712		02-011/01:09:27
24495	MGS	02-011/01:36:07	15	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24496	MGS	02-011/01:36:07	25	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24497	MGS	02-011/01:37:47		NOTE: Periapsis 12713 ----------		02-011/01:24:43
24498	MGS	02-011/01:43:30		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-011/01:30:26
24499	MGS	02-011/01:43:30		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-011/01:30:26
24500	MGS	02-011/01:43:31		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-011/01:30:27
24501	MGS	02-011/01:43:31		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-011/01:30:27
24502	MGS	02-011/01:54:42	15	NOTE: Transmitter Off in 15 minutes		
24503	MGS	02-011/02:05:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-011/01:52:27
24504	MGS	02-011/02:05:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-011/01:52:27
24505	MGS	02-011/02:07:42	15	Range Modulation Off		
24506	MGS	02-011/02:09:42	15	Transmitter Off		
24507	MGS	02-011/02:27:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/02:14:18
24508	MGS	02-011/02:29:51		NOTE: Start EVP data return script		02-011/02:16:47
24509	MGS	02-011/02:32:22		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/02:19:18
24510	MGS	02-011/02:32:22		: 00:07:50, FALSE	RDSCII	02-011/02:19:18
24511	MGS	02-011/02:32:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/02:19:18
24512	MGS	02-011/02:32:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/02:19:18
24513	MGS	02-011/02:32:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/02:19:18
24514	MGS	02-011/02:32:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/02:19:18
24515	MGS	02-011/02:32:22	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24516	MGS	02-011/02:32:22	15	NOTE: Carrier Only -- No Telemetry Modulation		
24517	MGS	02-011/02:32:22	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24518	MGS	02-011/02:32:22	25	NOTE: Carrier Only -- No Telemetry Modulation		
24519	MGS	02-011/02:34:26		NOTE: Enter Planetary Atmosphere 12713		02-011/02:21:22
24520	MGS	02-011/02:36:28		NOTE: Apoapsis 12713 -		02-011/02:23:24
24521	MGS	02-011/02:39:35		NOTE: Enter Earth Occultation 12713		02-011/02:26:31
24522	MGS	02-011/02:39:35	15	NOTE: Loss Of X-Band Signal		
24523	MGS	02-011/02:39:35	25	NOTE: Loss Of X-Band Signal		
24524	MGS	02-011/02:39:51		NOTE: Enter Solar Eclipse 12713		02-011/02:26:47
24525	MGS	02-011/02:39:51		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/02:26:47
24526	MGS	02-011/02:40:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/02:27:08
24527	MGS	02-011/02:40:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/02:27:08
24528	MGS	02-011/02:40:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/02:27:08
24529	MGS	02-011/02:40:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/02:27:08
24530	MGS	02-011/02:40:13		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/02:27:09
24531	MGS	02-011/02:40:13		NOTE: End EVP script		02-011/02:27:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24532	MGS	02-011/02:40:17		NOTE: End fixed Sub-Reflector for Radio Science		02-011/02:27:13
24533	MGS	02-011/02:44:16	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
24534	MGS	02-011/02:46:16	15	Range Modulation On: SUP=3.0dB		
24535	MGS	02-011/02:47:16	15	Begin Ranging Acquisition		
24536	MGS	02-011/03:01:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/02:48:00
24537	MGS	02-011/03:04:31		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/02:51:27
24538	MGS	02-011/03:04:31		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/02:51:27
24539	MGS	02-011/03:04:36		Set eclipse egress script address: 01DC	SWSEES	02-011/02:51:32
24540	MGS	02-011/03:04:49		: 01:33:06	RPAONX	02-011/02:51:45
24541	MGS	02-011/03:04:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/02:51:45
24542	MGS	02-011/03:06:04		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-011/02:53:00
24543	MGS	02-011/03:06:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/02:53:00
24544	MGS	02-011/03:06:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/02:53:00
24545	MGS	02-011/03:06:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/02:53:00
24546	MGS	02-011/03:06:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/02:53:00
24547	MGS	02-011/03:06:34		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/02:53:30
24548	MGS	02-011/03:06:39		NOTE: Exit Earth Occultation 12713		02-011/02:53:35
24549	MGS	02-011/03:06:39	15	Acquisition Of X-Band Signal		
24550	MGS	02-011/03:06:39	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24551	MGS	02-011/03:06:39	15	NOTE: Carrier Only -- No Telemetry Modulation		
24552	MGS	02-011/03:06:39	25	Acquisition Of X-Band Signal		
24553	MGS	02-011/03:06:39	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24554	MGS	02-011/03:06:39	25	NOTE: Carrier Only -- No Telemetry Modulation		
24555	MGS	02-011/03:12:04		NOTE: Exit Planetary Atmosphere 12713		02-011/02:59:00
24556	MGS	02-011/03:14:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/03:01:07
24557	MGS	02-011/03:14:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/03:01:07
24558	MGS	02-011/03:14:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/03:01:07
24559	MGS	02-011/03:14:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/03:01:07
24560	MGS	02-011/03:14:11	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24561	MGS	02-011/03:14:11	25	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24562	MGS	02-011/03:14:12		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-011/03:01:08
24563	MGS	02-011/03:14:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/03:01:08
24564	MGS	02-011/03:14:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/03:01:08
24565	MGS	02-011/03:14:12	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24566	MGS	02-011/03:14:12	25	D/L Change: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24567	MGS	02-011/03:14:16		NOTE: End fixed Sub-Reflector for Radio Science		02-011/03:01:12
24568	MGS	02-011/03:20:12		NOTE: Exit Solar Eclipse 12713		02-011/03:07:08
24569	MGS	02-011/03:35:10		NOTE: Periapsis 12714 ----------		02-011/03:22:06
24570	MGS	02-011/03:41:11		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-011/03:28:07
24571	MGS	02-011/03:41:11		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-011/03:28:07
24572	MGS	02-011/03:41:12		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-011/03:28:08
24573	MGS	02-011/03:41:12		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-011/03:28:08
24574	MGS	02-011/03:52:23	15	NOTE: Transmitter Off in 15 minutes		
24575	MGS	02-011/03:55:00	45	Begin Pre-Cal		
24576	MGS	02-011/03:55:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
24577	MGS	02-011/03:55:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
24578	MGS	02-011/03:55:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
24579	MGS	02-011/03:55:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
24580	MGS	02-011/03:55:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
24581	MGS	02-011/03:55:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
24582	MGS	02-011/03:55:00	45	Config: TGC: DEST=37		
24583	MGS	02-011/03:55:00	45	Config: TGC: BAND=X, BR=0.000000		
24584	MGS	02-011/03:55:00	45	Config: FSS: CH=2, PRI_FL=10000		
24585	MGS	02-011/03:55:00	45	Config: RSR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24586	MGS	02-011/03:55:00	45	Config: TXL		
24587	MGS	02-011/03:55:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
24588	MGS	02-011/03:55:00	45	Config: BVR		
24589	MGS	02-011/03:55:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
24590	MGS	02-011/03:55:00	45	Config: MDA: SMPL=0.1		
24591	MGS	02-011/03:55:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
24592	MGS	02-011/03:55:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
24593	MGS	02-011/03:55:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
24594	MGS	02-011/04:03:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-011/03:50:08
24595	MGS	02-011/04:03:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-011/03:50:08
24596	MGS	02-011/04:05:24	15	Range Modulation Off		
24597	MGS	02-011/04:07:23	15	Transmitter Off		
24598	MGS	02-011/04:13:09		NOTE: Start Block (SSRMGR)		02-011/04:00:05
24599	MGS	02-011/04:13:09		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-011/04:00:05
24600	MGS	02-011/04:13:10		SSR 1B Data Enable	CSD1BE	02-011/04:00:06
24601	MGS	02-011/04:13:10		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-011/04:00:06
24602	MGS	02-011/04:25:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/04:12:00
24603	MGS	02-011/04:27:33		NOTE: Start Block (MAP_PB_ODY)		02-011/04:14:29
24604	MGS	02-011/04:27:34		: 00:24:58, 01:33:07, FALSE, FALSE, FALSE, 00:01:15, 00:06:27, 01:19:14, 00:06:10	AEMINI	02-011/04:14:30
24605	MGS	02-011/04:27:34		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/04:14:30
24606	MGS	02-011/04:27:34		NOTE: Start EVP data return script		02-011/04:14:30
24607	MGS	02-011/04:27:35		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-011T04:57:10.000	AEMPBI	02-011/04:14:31
24608	MGS	02-011/04:30:04		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/04:17:00
24609	MGS	02-011/04:30:04		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8112000, DUR=00:16:54		02-011/04:17:00
24610	MGS	02-011/04:30:04		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-011/04:17:00
24611	MGS	02-011/04:30:04		: 00:07:50, FALSE	RDSCII	02-011/04:17:00
24612	MGS	02-011/04:30:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/04:17:00
24613	MGS	02-011/04:30:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/04:17:00
24614	MGS	02-011/04:30:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/04:17:00
24615	MGS	02-011/04:30:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/04:17:00
24616	MGS	02-011/04:30:04	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24617	MGS	02-011/04:30:04	15	NOTE: Carrier Only -- No Telemetry Modulation		
24618	MGS	02-011/04:30:04	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24619	MGS	02-011/04:30:04	25	NOTE: Carrier Only -- No Telemetry Modulation		
24620	MGS	02-011/04:32:10		NOTE: Enter Planetary Atmosphere 12714		02-011/04:19:05
24621	MGS	02-011/04:33:53		NOTE: Apoapsis 12714 -		02-011/04:20:49
24622	MGS	02-011/04:36:34		SSR 1A Data Disable	CSD1AX	02-011/04:23:30
24623	MGS	02-011/04:36:34		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-011/04:23:30
24624	MGS	02-011/04:36:35		NOTE: End Block (SSRMGR)		02-011/04:23:31
24625	MGS	02-011/04:37:17		NOTE: Enter Earth Occultation 12714		02-011/04:24:13
24626	MGS	02-011/04:37:17	15	NOTE: Loss Of X-Band Signal		
24627	MGS	02-011/04:37:17	25	NOTE: Loss Of X-Band Signal		
24628	MGS	02-011/04:37:34		NOTE: Enter Solar Eclipse 12714		02-011/04:24:30
24629	MGS	02-011/04:37:34		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/04:24:30
24630	MGS	02-011/04:37:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/04:24:50
24631	MGS	02-011/04:37:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/04:24:50
24632	MGS	02-011/04:37:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/04:24:50
24633	MGS	02-011/04:37:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/04:24:50
24634	MGS	02-011/04:37:55		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/04:24:51
24635	MGS	02-011/04:37:55		NOTE: End EVP script		02-011/04:24:51
24636	MGS	02-011/04:37:56		NOTE: End Block (MAP_RT)		02-011/04:24:52
24637	MGS	02-011/04:37:59		NOTE: End fixed Sub-Reflector for Radio Science		02-011/04:24:55
24638	MGS	02-011/04:40:00	15	NOTE: Transmitter Off in 15 minutes		
24639	MGS	02-011/04:41:58	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24640	MGS	02-011/04:43:59	15	Range Modulation On: SUP=3.0dB		
24641	MGS	02-011/04:44:59	15	Begin Ranging Acquisition		
24642	MGS	02-011/04:53:00	15	Range Modulation Off		
24643	MGS	02-011/04:55:00	45	Begin Tracking		
24644	MGS	02-011/04:55:00	15	Transmitter Off		
24645	MGS	02-011/05:02:12		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/04:49:08
24646	MGS	02-011/05:02:12		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/04:49:08
24647	MGS	02-011/05:02:16		Command the PSE with included data word: 3990	SWPSEL	02-011/04:49:12
24648	MGS	02-011/05:02:17		Set eclipse egress script address: 0158	SWSEES	02-011/04:49:13
24649	MGS	02-011/05:02:32		: 01:33:07	RPAONX	02-011/04:49:28
24650	MGS	02-011/05:02:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/04:49:28
24651	MGS	02-011/05:04:17		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/04:51:13
24652	MGS	02-011/05:04:22		NOTE: Exit Earth Occultation 12714		02-011/04:51:18
24653	MGS	02-011/05:04:22	15	Acquisition Of X-Band Signal		
24654	MGS	02-011/05:04:22	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24655	MGS	02-011/05:04:22	25	Acquisition Of X-Band Signal		
24656	MGS	02-011/05:04:22	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24657	MGS	02-011/05:04:22	45	Acquisition Of X-Band Signal		
24658	MGS	02-011/05:04:22	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24659	MGS	02-011/05:05:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
24660	MGS	02-011/05:06:09	25	NOTE: Below Uplink Interlock Limit		
24661	MGS	02-011/05:06:38	15	NOTE: Below Uplink Interlock Limit		
24662	MGS	02-011/05:07:00	45	Range Modulation On: SUP=3.0dB		
24663	MGS	02-011/05:08:00	45	Begin Ranging Acquisition		
24664	MGS	02-011/05:08:07	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24665	MGS	02-011/05:08:07	25	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24666	MGS	02-011/05:08:07	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24667	MGS	02-011/05:09:47		NOTE: Exit Planetary Atmosphere 12714		02-011/04:56:42
24668	MGS	02-011/05:10:14		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:46	AEMPB	02-011/04:57:10
24669	MGS	02-011/05:10:14		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-011/04:57:10
24670	MGS	02-011/05:10:14		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-011/04:57:10
24671	MGS	02-011/05:10:15		SSR 1A Data Enable	CSD1AE	02-011/04:57:11
24672	MGS	02-011/05:10:15		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-011/04:57:11
24673	MGS	02-011/05:10:15	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24674	MGS	02-011/05:10:15	25	D/L Change: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24675	MGS	02-011/05:10:15	45	D/L Change: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24676	MGS	02-011/05:15:00	25	End Tracking		
24677	MGS	02-011/05:15:00	15	End Tracking		
24678	MGS	02-011/05:17:55		NOTE: Exit Solar Eclipse 12714		02-011/05:04:51
24679	MGS	02-011/05:21:08	45	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24680	MGS	02-011/05:30:00	25	End Post-Cal		
24681	MGS	02-011/05:30:00	15	End Post-Cal		
24682	MGS	02-011/05:31:08	45	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24683	MGS	02-011/05:32:49		NOTE: Periapsis 12715 ----------		02-011/05:19:45
24684	MGS	02-011/05:42:54		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-011/05:29:50
24685	MGS	02-011/05:42:54		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-011/05:29:50
24686	MGS	02-011/05:42:55		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-011/05:29:51
24687	MGS	02-011/05:42:55		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-011/05:29:51
24688	MGS	02-011/05:50:06	45	NOTE: Transmitter Off in 15 minutes		
24689	MGS	02-011/06:03:06	45	Range Modulation Off		
24690	MGS	02-011/06:04:55		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-011/05:51:51
24691	MGS	02-011/06:04:55		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-011/05:51:51
24692	MGS	02-011/06:05:06	45	Transmitter Off		
24693	MGS	02-011/06:20:54		SSR 1A Data Disable	CSD1AX	02-011/06:07:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24694	MGS	02-011/06:20:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-011/06:07:49
24695	MGS	02-011/06:20:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-011/06:07:49
24696	MGS	02-011/06:20:54	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24697	MGS	02-011/06:25:19		NOTE: Start Block (MAP_RT)		02-011/06:12:14
24698	MGS	02-011/06:25:20		: 00:24:58, 01:33:06, FALSE, TRUE, FALSE, 00:01:15, 00:08:07, 01:15:53, 00:07:50	AEMINI	02-011/06:12:15
24699	MGS	02-011/06:25:20		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/06:12:15
24700	MGS	02-011/06:25:20		NOTE: Start EVP data return script		02-011/06:12:15
24701	MGS	02-011/06:25:21		: SE_2A, RTM, 01:15:52, MRC, 2002-011T06:56:36.000	AEMRTI	02-011/06:12:16
24702	MGS	02-011/06:29:53		NOTE: Enter Planetary Atmosphere 12715		02-011/06:16:48
24703	MGS	02-011/06:31:15	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24704	MGS	02-011/06:31:43		NOTE: Apoapsis 12715 -		02-011/06:18:38
24705	MGS	02-011/06:35:00		NOTE: Enter Earth Occultation 12715		02-011/06:21:55
24706	MGS	02-011/06:35:00	45	NOTE: Loss Of X-Band Signal		
24707	MGS	02-011/06:35:19		NOTE: Enter Solar Eclipse 12715		02-011/06:22:15
24708	MGS	02-011/06:35:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/06:22:15
24709	MGS	02-011/06:35:39		NOTE: End EVP script		02-011/06:22:35
24710	MGS	02-011/06:35:40		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/06:22:35
24711	MGS	02-011/06:35:40		NOTE: End Block (MAP_PB_ODY)		02-011/06:22:36
24712	MGS	02-011/06:39:44	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
24713	MGS	02-011/06:41:44	45	Range Modulation On: SUP=3.0dB		
24714	MGS	02-011/06:42:44	45	Begin Ranging Acquisition		
24715	MGS	02-011/06:56:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/06:43:28
24716	MGS	02-011/06:59:56		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/06:46:51
24717	MGS	02-011/06:59:56		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/06:46:51
24718	MGS	02-011/07:00:01		Set eclipse egress script address: 019A	SWSEES	02-011/06:46:56
24719	MGS	02-011/07:00:18		: 01:33:06	RPAONX	02-011/06:47:13
24720	MGS	02-011/07:00:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/06:47:13
24721	MGS	02-011/07:01:33		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-011/06:48:28
24722	MGS	02-011/07:01:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/06:48:28
24723	MGS	02-011/07:01:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/06:48:28
24724	MGS	02-011/07:01:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/06:48:28
24725	MGS	02-011/07:01:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/06:48:28
24726	MGS	02-011/07:02:08		NOTE: Exit Earth Occultation 12715		02-011/06:49:03
24727	MGS	02-011/07:02:08	45	Acquisition Of X-Band Signal		
24728	MGS	02-011/07:02:08	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24729	MGS	02-011/07:02:08	45	NOTE: Carrier Only -- No Telemetry Modulation		
24730	MGS	02-011/07:07:31		NOTE: Exit Planetary Atmosphere 12715		02-011/06:54:26
24731	MGS	02-011/07:09:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/06:56:35
24732	MGS	02-011/07:09:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/06:56:35
24733	MGS	02-011/07:09:40		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/06:56:35
24734	MGS	02-011/07:09:40		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/06:56:35
24735	MGS	02-011/07:09:40	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24736	MGS	02-011/07:09:41		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-011/06:56:36
24737	MGS	02-011/07:09:41		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/06:56:36
24738	MGS	02-011/07:09:41		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/06:56:36
24739	MGS	02-011/07:09:41	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24740	MGS	02-011/07:09:44		NOTE: End fixed Sub-Reflector for Radio Science		02-011/06:56:40
24741	MGS	02-011/07:15:41		NOTE: Exit Solar Eclipse 12715		02-011/07:02:36
24742	MGS	02-011/07:31:00		NOTE: Periapsis 12716 ----------		02-011/07:17:55
24743	MGS	02-011/07:36:40		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-011/07:23:35
24744	MGS	02-011/07:36:40		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-011/07:23:35
24745	MGS	02-011/07:36:41		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-011/07:23:36
24746	MGS	02-011/07:36:41		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-011/07:23:36
24747	MGS	02-011/07:47:51	45	NOTE: Transmitter Off in 15 minutes		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24748	MGS	02-011/07:58:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-011/07:45:36
24749	MGS	02-011/07:58:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-011/07:45:36
24750	MGS	02-011/08:00:51	45	Range Modulation Off		
24751	MGS	02-011/08:02:51	45	Transmitter Off		
24752	MGS	02-011/08:20:33		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/08:07:28
24753	MGS	02-011/08:23:07		NOTE: Start EVP data return script		02-011/08:10:02
24754	MGS	02-011/08:25:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/08:12:28
24755	MGS	02-011/08:25:33		: 00:07:50, FALSE	RDSCII	02-011/08:12:28
24756	MGS	02-011/08:25:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/08:12:28
24757	MGS	02-011/08:25:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/08:12:28
24758	MGS	02-011/08:25:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/08:12:28
24759	MGS	02-011/08:25:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/08:12:28
24760	MGS	02-011/08:25:33	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24761	MGS	02-011/08:25:33	45	NOTE: Carrier Only -- No Telemetry Modulation		
24762	MGS	02-011/08:27:39		NOTE: Enter Planetary Atmosphere 12716		02-011/08:14:34
24763	MGS	02-011/08:30:03		NOTE: Apoapsis 12716 -		02-011/08:16:58
24764	MGS	02-011/08:32:45		NOTE: Enter Earth Occultation 12716		02-011/08:19:41
24765	MGS	02-011/08:32:45	45	NOTE: Loss Of X-Band Signal		
24766	MGS	02-011/08:33:06		NOTE: Enter Solar Eclipse 12716		02-011/08:20:01
24767	MGS	02-011/08:33:07		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/08:20:02
24768	MGS	02-011/08:33:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/08:20:18
24769	MGS	02-011/08:33:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/08:20:18
24770	MGS	02-011/08:33:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/08:20:18
24771	MGS	02-011/08:33:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/08:20:18
24772	MGS	02-011/08:33:24		NOTE: End EVP script		02-011/08:20:19
24773	MGS	02-011/08:33:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/08:20:19
24774	MGS	02-011/08:33:28		NOTE: End fixed Sub-Reflector for Radio Science		02-011/08:20:23
24775	MGS	02-011/08:37:30	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
24776	MGS	02-011/08:39:31	45	Range Modulation On: SUP=3.0dB		
24777	MGS	02-011/08:40:31	45	Begin Ranging Acquisition		
24778	MGS	02-011/08:54:20		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/08:41:15
24779	MGS	02-011/08:57:41		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/08:44:36
24780	MGS	02-011/08:57:41		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/08:44:36
24781	MGS	02-011/08:57:46		Set eclipse egress script address: 01DC	SWSEES	02-011/08:44:41
24782	MGS	02-011/08:58:05		: 01:33:06	RPAONX	02-011/08:45:00
24783	MGS	02-011/08:58:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/08:45:00
24784	MGS	02-011/08:59:20		: 00:00:30, 00:08:07, FALSE	RDSCIE	02-011/08:46:15
24785	MGS	02-011/08:59:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/08:46:15
24786	MGS	02-011/08:59:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/08:46:15
24787	MGS	02-011/08:59:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/08:46:15
24788	MGS	02-011/08:59:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/08:46:15
24789	MGS	02-011/08:59:50		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/08:46:45
24790	MGS	02-011/08:59:55		NOTE: Exit Earth Occultation 12716		02-011/08:46:50
24791	MGS	02-011/08:59:55	45	Acquisition Of X-Band Signal		
24792	MGS	02-011/08:59:55	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24793	MGS	02-011/08:59:55	45	NOTE: Carrier Only -- No Telemetry Modulation		
24794	MGS	02-011/09:05:18		NOTE: Exit Planetary Atmosphere 12716		02-011/08:52:13
24795	MGS	02-011/09:07:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/08:54:22
24796	MGS	02-011/09:07:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/08:54:22
24797	MGS	02-011/09:07:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/08:54:22
24798	MGS	02-011/09:07:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/08:54:22
24799	MGS	02-011/09:07:27	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24800	MGS	02-011/09:07:28		: RTM, MRC, 01:15:52, S&E_2A, FALSE, 00:07:51	AEMRT	02-011/08:54:23
24801	MGS	02-011/09:07:28		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/08:54:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24802	MGS	02-011/09:07:28		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/08:54:23
24803	MGS	02-011/09:07:28	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24804	MGS	02-011/09:07:32		NOTE: End fixed Sub-Reflector for Radio Science		02-011/08:54:27
24805	MGS	02-011/09:13:28		NOTE: Exit Solar Eclipse 12716		02-011/09:00:23
24806	MGS	02-011/09:29:12		NOTE: Periapsis 12717 ----------		02-011/09:16:07
24807	MGS	02-011/09:34:27		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 0.5235988	SALMTA	02-011/09:21:22
24808	MGS	02-011/09:34:27		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 0.6981317	SALPTA	02-011/09:21:22
24809	MGS	02-011/09:34:28		Select manual SAM control mode (GDE is in rate mode)	SAMRCE	02-011/09:21:23
24810	MGS	02-011/09:34:28		Select manual SAP control mode (GDE is in rate mode)	SAPRCE	02-011/09:21:23
24811	MGS	02-011/09:45:38	45	NOTE: Transmitter Off in 15 minutes		
24812	MGS	02-011/09:56:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, 1.7453293	SALMTA	02-011/09:43:23
24813	MGS	02-011/09:56:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, -0.5235988	SALPTA	02-011/09:43:23
24814	MGS	02-011/09:58:39	45	Range Modulation Off		
24815	MGS	02-011/10:00:00	63	Begin Pre-Cal		
24816	MGS	02-011/10:00:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
24817	MGS	02-011/10:00:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
24818	MGS	02-011/10:00:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
24819	MGS	02-011/10:00:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
24820	MGS	02-011/10:00:00	63	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
24821	MGS	02-011/10:00:00	63	Config: TGC: DEST=37		
24822	MGS	02-011/10:00:00	63	Config: TGC: BAND=X, BR=42666.666667		
24823	MGS	02-011/10:00:00	63	Config: FSS: CH=2, PRI_FL=10000		
24824	MGS	02-011/10:00:00	63	Config: RSR		
24825	MGS	02-011/10:00:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
24826	MGS	02-011/10:00:00	63	Config: BVR		
24827	MGS	02-011/10:00:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
24828	MGS	02-011/10:00:00	63	Config: MDA: SMPL=0.1		
24829	MGS	02-011/10:00:38	45	Transmitter Off		
24830	MGS	02-011/10:06:17		NOTE: Start Block (SSRMGR)		02-011/09:53:12
24831	MGS	02-011/10:06:17		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-011/09:53:12
24832	MGS	02-011/10:06:18		SSR 1A Data Enable	CSD1AE	02-011/09:53:13
24833	MGS	02-011/10:06:18		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-011/09:53:13
24834	MGS	02-011/10:18:20		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/10:05:15
24835	MGS	02-011/10:20:52		NOTE: Start Block (MAP_PB_ODY)		02-011/10:07:47
24836	MGS	02-011/10:20:53		: 00:24:58, 01:33:07, FALSE, FALSE, FALSE, 00:01:15, 00:06:27, 01:19:14, 00:06:10	AEMINI	02-011/10:07:48
24837	MGS	02-011/10:20:53		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/10:07:48
24838	MGS	02-011/10:20:53		NOTE: Start EVP data return script		02-011/10:07:48
24839	MGS	02-011/10:20:54		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-011T10:50:29.000	AEMPBI	02-011/10:07:49
24840	MGS	02-011/10:23:20		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/10:10:15
24841	MGS	02-011/10:23:20		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8176000, DUR=00:17:02		02-011/10:10:15
24842	MGS	02-011/10:23:20		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-011/10:10:15
24843	MGS	02-011/10:23:20		: 00:07:50, FALSE	RDSCII	02-011/10:10:15
24844	MGS	02-011/10:23:20		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/10:10:15
24845	MGS	02-011/10:23:20		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/10:10:15
24846	MGS	02-011/10:23:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/10:10:15
24847	MGS	02-011/10:23:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/10:10:15
24848	MGS	02-011/10:23:20	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24849	MGS	02-011/10:23:20	45	NOTE: Carrier Only -- No Telemetry Modulation		
24850	MGS	02-011/10:25:27		NOTE: Enter Planetary Atmosphere 12717		02-011/10:12:22
24851	MGS	02-011/10:28:12		NOTE: Apoapsis 12717 -		02-011/10:15:07
24852	MGS	02-011/10:29:54		SSR 1B Data Disable	CSD1BX	02-011/10:16:49
24853	MGS	02-011/10:29:54		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-011/10:16:49
24854	MGS	02-011/10:29:55		NOTE: End Block (SSRMGR)		02-011/10:16:50
24855	MGS	02-011/10:30:34		NOTE: Enter Earth Occultation 12717		02-011/10:17:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24856	MGS	02-011/10:30:34	45	NOTE: Loss Of X-Band Signal		
24857	MGS	02-011/10:30:53		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/10:17:48
24858	MGS	02-011/10:30:54		NOTE: Enter Solar Eclipse 12717		02-011/10:17:48
24859	MGS	02-011/10:31:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/10:18:05
24860	MGS	02-011/10:31:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/10:18:05
24861	MGS	02-011/10:31:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/10:18:05
24862	MGS	02-011/10:31:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/10:18:05
24863	MGS	02-011/10:31:11		NOTE: End EVP script		02-011/10:18:06
24864	MGS	02-011/10:31:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/10:18:06
24865	MGS	02-011/10:31:12		NOTE: End Block (MAP_RT)		02-011/10:18:07
24866	MGS	02-011/10:31:15		NOTE: End fixed Sub-Reflector for Radio Science		02-011/10:18:10
24867	MGS	02-011/10:35:18	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
24868	MGS	02-011/10:37:18	45	Range Modulation On: SUP=3.0dB		
24869	MGS	02-011/10:38:18	45	Begin Ranging Acquisition		
24870	MGS	02-011/10:55:28		SAM azi/ele target angles (rad) in manual rate mode only: -0.511381, -0.6108652	SALMTA	02-011/10:42:23
24871	MGS	02-011/10:55:28		SAP azi/ele target angles (rad) in manual rate mode only: 0.5235988, 1.8325957	SALPTA	02-011/10:42:23
24872	MGS	02-011/10:55:32		Command the PSE with included data word: 3990	SWPSEL	02-011/10:42:27
24873	MGS	02-011/10:55:33		Set eclipse egress script address: 0158	SWSEES	02-011/10:42:28
24874	MGS	02-011/10:55:51		: 01:33:07	RPAONX	02-011/10:42:46
24875	MGS	02-011/10:55:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/10:42:46
24876	MGS	02-011/10:57:36		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/10:44:31
24877	MGS	02-011/10:57:43		NOTE: Exit Earth Occultation 12717		02-011/10:44:38
24878	MGS	02-011/10:57:43	45	Acquisition Of X-Band Signal		
24879	MGS	02-011/10:57:43	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24880	MGS	02-011/11:01:28	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24881	MGS	02-011/11:03:07		NOTE: Exit Planetary Atmosphere 12717		02-011/10:50:02
24882	MGS	02-011/11:03:33		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:46	AEMPB	02-011/10:50:28
24883	MGS	02-011/11:03:33		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-011/10:50:28
24884	MGS	02-011/11:03:33		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-011/10:50:28
24885	MGS	02-011/11:03:34		SSR 1B Data Enable	CSD1BE	02-011/10:50:29
24886	MGS	02-011/11:03:34		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-011/10:50:29
24887	MGS	02-011/11:03:34	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24888	MGS	02-011/11:10:00	45	NOTE: Transmitter Off in 15 minutes		
24889	MGS	02-011/11:11:16		NOTE: Exit Solar Eclipse 12717		02-011/10:58:11
24890	MGS	02-011/11:23:00	45	Range Modulation Off		
24891	MGS	02-011/11:25:00	45	Transmitter Off		
24892	MGS	02-011/11:27:04		NOTE: Periapsis 12718 ----------		02-011/11:13:59
24893	MGS	02-011/11:30:00	63	Begin Tracking		
24894	MGS	02-011/11:30:00	63	Acquire D/L: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24895	MGS	02-011/11:37:17	63	NOTE: Above Uplink Interlock Limit		
24896	MGS	02-011/11:37:54	45	NOTE: Below Uplink Interlock Limit		
24897	MGS	02-011/11:50:00	45	End Tracking		
24898	MGS	02-011/11:51:10	63	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24899	MGS	02-011/12:05:00	45	End Post-Cal		
24900	MGS	02-011/12:13:05		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-011/12:00:00
24901	MGS	02-011/12:14:12		SSR 1B Data Disable	CSD1BX	02-011/12:01:07
24902	MGS	02-011/12:14:12		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-011/12:01:07
24903	MGS	02-011/12:14:12		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-011/12:01:07
24904	MGS	02-011/12:14:12	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24905	MGS	02-011/12:18:37		NOTE: Start Block (MAP_RT)		02-011/12:05:32
24906	MGS	02-011/12:18:38		: 00:25:05, 01:32:52, FALSE, TRUE, FALSE, 00:01:15, 00:08:03, 01:15:45, 00:07:48	AEMINI	02-011/12:05:33
24907	MGS	02-011/12:18:38		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/12:05:33
24908	MGS	02-011/12:18:38		NOTE: Start EVP data return script		02-011/12:05:33

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24909	MGS	02-011/12:18:39		: SE_2A, RTM, 01:15:44, MRC, 2002-011T12:49:57.000	AEMRTI	02-011/12:05:34
24910	MGS	02-011/12:23:13		NOTE: Enter Planetary Atmosphere 12718		02-011/12:10:07
24911	MGS	02-011/12:25:49		NOTE: Apoapsis 12718 -		02-011/12:12:44
24912	MGS	02-011/12:28:20		NOTE: Enter Earth Occultation 12718		02-011/12:15:15
24913	MGS	02-011/12:28:20	63	NOTE: Loss Of X-Band Signal		
24914	MGS	02-011/12:28:38		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/12:15:33
24915	MGS	02-011/12:28:39		NOTE: Enter Solar Eclipse 12718		02-011/12:15:33
24916	MGS	02-011/12:28:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/12:15:53
24917	MGS	02-011/12:28:59		NOTE: End EVP script		02-011/12:15:53
24918	MGS	02-011/12:29:00		NOTE: End Block (MAP_PB_ODY)		02-011/12:15:54
24919	MGS	02-011/12:49:59		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/12:36:53
24920	MGS	02-011/12:53:44		: 01:32:52	RPAONX	02-011/12:40:38
24921	MGS	02-011/12:53:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/12:40:38
24922	MGS	02-011/12:54:59		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-011/12:41:53
24923	MGS	02-011/12:54:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/12:41:53
24924	MGS	02-011/12:54:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/12:41:53
24925	MGS	02-011/12:54:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/12:41:53
24926	MGS	02-011/12:54:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/12:41:53
24927	MGS	02-011/12:55:29		NOTE: Exit Earth Occultation 12718		02-011/12:42:24
24928	MGS	02-011/12:55:29	63	Acquisition Of X-Band Signal		
24929	MGS	02-011/12:55:29	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24930	MGS	02-011/12:55:29	63	NOTE: Carrier Only -- No Telemetry Modulation		
24931	MGS	02-011/13:00:54		NOTE: Exit Planetary Atmosphere 12718		02-011/12:47:48
24932	MGS	02-011/13:03:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/12:49:56
24933	MGS	02-011/13:03:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/12:49:56
24934	MGS	02-011/13:03:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/12:49:56
24935	MGS	02-011/13:03:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/12:49:56
24936	MGS	02-011/13:03:02	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24937	MGS	02-011/13:03:03		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-011/12:49:57
24938	MGS	02-011/13:03:03		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/12:49:57
24939	MGS	02-011/13:03:03		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/12:49:57
24940	MGS	02-011/13:03:03	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24941	MGS	02-011/13:03:07		NOTE: End fixed Sub-Reflector for Radio Science		02-011/12:50:01
24942	MGS	02-011/13:09:01		NOTE: Exit Solar Eclipse 12718		02-011/12:55:55
24943	MGS	02-011/13:24:29		NOTE: Periapsis 12719 ----------		02-011/13:11:23
24944	MGS	02-011/14:13:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/14:00:41
24945	MGS	02-011/14:16:20		NOTE: Start EVP data return script		02-011/14:03:14
24946	MGS	02-011/14:18:47		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/14:05:41
24947	MGS	02-011/14:18:47		: 00:07:48, FALSE	RDSCII	02-011/14:05:41
24948	MGS	02-011/14:18:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/14:05:41
24949	MGS	02-011/14:18:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/14:05:41
24950	MGS	02-011/14:18:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/14:05:41
24951	MGS	02-011/14:18:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/14:05:41
24952	MGS	02-011/14:18:47	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24953	MGS	02-011/14:18:47	63	NOTE: Carrier Only -- No Telemetry Modulation		
24954	MGS	02-011/14:20:54		NOTE: Enter Planetary Atmosphere 12719		02-011/14:07:48
24955	MGS	02-011/14:23:09		NOTE: Apoapsis 12719 -		02-011/14:10:03
24956	MGS	02-011/14:26:01		NOTE: Enter Earth Occultation 12719		02-011/14:12:55
24957	MGS	02-011/14:26:01	63	NOTE: Loss Of X-Band Signal		
24958	MGS	02-011/14:26:20		NOTE: Enter Solar Eclipse 12719		02-011/14:13:14
24959	MGS	02-011/14:26:20		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/14:13:14
24960	MGS	02-011/14:26:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/14:13:29
24961	MGS	02-011/14:26:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/14:13:29
24962	MGS	02-011/14:26:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/14:13:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
24963	MGS	02-011/14:26:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/14:13:29
24964	MGS	02-011/14:26:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/14:13:30
24965	MGS	02-011/14:26:36		NOTE: End EVP script		02-011/14:13:30
24966	MGS	02-011/14:26:40		NOTE: End fixed Sub-Reflector for Radio Science		02-011/14:13:34
24967	MGS	02-011/14:47:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/14:34:34
24968	MGS	02-011/14:51:25		: 01:32:52	RPAONX	02-011/14:38:19
24969	MGS	02-011/14:51:25		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/14:38:19
24970	MGS	02-011/14:52:40		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-011/14:39:34
24971	MGS	02-011/14:52:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/14:39:34
24972	MGS	02-011/14:52:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/14:39:34
24973	MGS	02-011/14:52:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/14:39:34
24974	MGS	02-011/14:52:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/14:39:34
24975	MGS	02-011/14:53:10		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/14:40:04
24976	MGS	02-011/14:53:12		NOTE: Exit Earth Occultation 12719		02-011/14:40:06
24977	MGS	02-011/14:53:12	63	Acquisition Of X-Band Signal		
24978	MGS	02-011/14:53:12	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
24979	MGS	02-011/14:53:12	63	NOTE: Carrier Only -- No Telemetry Modulation		
24980	MGS	02-011/14:58:36		NOTE: Exit Planetary Atmosphere 12719		02-011/14:45:30
24981	MGS	02-011/15:00:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/14:47:37
24982	MGS	02-011/15:00:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/14:47:37
24983	MGS	02-011/15:00:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/14:47:37
24984	MGS	02-011/15:00:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/14:47:37
24985	MGS	02-011/15:00:43	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24986	MGS	02-011/15:00:44		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-011/14:47:38
24987	MGS	02-011/15:00:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/14:47:38
24988	MGS	02-011/15:00:44		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/14:47:38
24989	MGS	02-011/15:00:44	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
24990	MGS	02-011/15:00:48		NOTE: End fixed Sub-Reflector for Radio Science		02-011/14:47:42
24991	MGS	02-011/15:06:42		NOTE: Exit Solar Eclipse 12719		02-011/14:53:36
24992	MGS	02-011/15:21:53		NOTE: Periapsis 12720 ----------		02-011/15:08:47
24993	MGS	02-011/15:59:36		NOTE: Start Block (SSRMGR)		02-011/15:46:30
24994	MGS	02-011/15:59:36		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-011/15:46:30
24995	MGS	02-011/15:59:37		SSR 1B Data Enable	CSD1BE	02-011/15:46:31
24996	MGS	02-011/15:59:37		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-011/15:46:31
24997	MGS	02-011/16:11:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/15:58:22
24998	MGS	02-011/16:14:00		NOTE: Start Block (MAP_PB_ODY)		02-011/16:00:54
24999	MGS	02-011/16:14:01		: 00:25:05, 01:32:53, FALSE, FALSE, FALSE, 00:01:15, 00:06:23, 01:19:06, 00:06:08	AEMINI	02-011/16:00:55
25000	MGS	02-011/16:14:01		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/16:00:55
25001	MGS	02-011/16:14:01		NOTE: Start EVP data return script		02-011/16:00:55
25002	MGS	02-011/16:14:02		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-011T16:43:39.000	AEMPBI	02-011/16:00:56
25003	MGS	02-011/16:16:28		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/16:03:22
25004	MGS	02-011/16:16:28		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8088000, DUR=00:16:51		02-011/16:03:22
25005	MGS	02-011/16:16:28		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-011/16:03:22
25006	MGS	02-011/16:16:28		: 00:07:48, FALSE	RDSCII	02-011/16:03:22
25007	MGS	02-011/16:16:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/16:03:22
25008	MGS	02-011/16:16:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/16:03:22
25009	MGS	02-011/16:16:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/16:03:22
25010	MGS	02-011/16:16:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/16:03:22
25011	MGS	02-011/16:16:28	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25012	MGS	02-011/16:16:28	63	NOTE: Carrier Only -- No Telemetry Modulation		
25013	MGS	02-011/16:18:34		NOTE: Enter Planetary Atmosphere 12720		02-011/16:05:28
25014	MGS	02-011/16:20:53		NOTE: Apoapsis 12720 -		02-011/16:07:47
25015	MGS	02-011/16:23:02		SSR 1A Data Disable	CSD1AX	02-011/16:09:56
25016	MGS	02-011/16:23:02		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-011/16:09:56

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25017	MGS	02-011/16:23:03		NOTE: End Block (SSRMGR)		02-011/16:09:57
25018	MGS	02-011/16:23:40		NOTE: Enter Earth Occultation 12720		02-011/16:10:34
25019	MGS	02-011/16:23:40	63	NOTE: Loss Of X-Band Signal		
25020	MGS	02-011/16:24:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/16:10:55
25021	MGS	02-011/16:24:01		NOTE: Enter Solar Eclipse 12720		02-011/16:10:55
25022	MGS	02-011/16:24:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/16:11:10
25023	MGS	02-011/16:24:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/16:11:10
25024	MGS	02-011/16:24:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/16:11:10
25025	MGS	02-011/16:24:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/16:11:10
25026	MGS	02-011/16:24:17		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/16:11:11
25027	MGS	02-011/16:24:17		NOTE: End EVP script		02-011/16:11:11
25028	MGS	02-011/16:24:18		NOTE: End Block (MAP_RT)		02-011/16:11:12
25029	MGS	02-011/16:24:21		NOTE: End fixed Sub-Reflector for Radio Science		02-011/16:11:15
25030	MGS	02-011/16:49:06		: 01:32:53	RPAONX	02-011/16:36:00
25031	MGS	02-011/16:49:06		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/16:36:00
25032	MGS	02-011/16:50:51		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/16:37:45
25033	MGS	02-011/16:50:54		NOTE: Exit Earth Occultation 12720		02-011/16:37:47
25034	MGS	02-011/16:50:54	63	Acquisition Of X-Band Signal		
25035	MGS	02-011/16:50:54	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25036	MGS	02-011/16:56:16		NOTE: Exit Planetary Atmosphere 12720		02-011/16:43:10
25037	MGS	02-011/16:56:44		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:36	AEMPB	02-011/16:43:38
25038	MGS	02-011/16:56:44		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-011/16:43:38
25039	MGS	02-011/16:56:44		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-011/16:43:38
25040	MGS	02-011/16:56:45		SSR 1A Data Enable	CSD1AE	02-011/16:43:39
25041	MGS	02-011/16:56:45		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-011/16:43:39
25042	MGS	02-011/16:56:45	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25043	MGS	02-011/17:04:23		NOTE: Exit Solar Eclipse 12720		02-011/16:51:17
25044	MGS	02-011/17:19:36		NOTE: Periapsis 12721 ----------		02-011/17:06:29
25045	MGS	02-011/17:50:00	15	Begin Pre-Cal		
25046	MGS	02-011/17:50:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
25047	MGS	02-011/17:50:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
25048	MGS	02-011/17:50:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
25049	MGS	02-011/17:50:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
25050	MGS	02-011/17:50:00	15	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=OFF, MI=0.0		
25051	MGS	02-011/17:50:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
25052	MGS	02-011/17:50:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
25053	MGS	02-011/17:50:00	15	Config: TGC: DEST=37		
25054	MGS	02-011/17:50:00	15	Config: TGC: BAND=X, BR=8000.000000		
25055	MGS	02-011/17:50:00	15	Config: FSS: CH=2, PRI_FL=10000		
25056	MGS	02-011/17:50:00	15	Config: RSR		
25057	MGS	02-011/17:50:00	15	Config: TXL		
25058	MGS	02-011/17:50:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
25059	MGS	02-011/17:50:00	15	Config: BVR		
25060	MGS	02-011/17:50:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
25061	MGS	02-011/17:50:00	15	Config: MDA: SMPL=0.1		
25062	MGS	02-011/17:50:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
25063	MGS	02-011/17:50:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
25064	MGS	02-011/17:50:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
25065	MGS	02-011/18:07:23		SSR 1A Data Disable	CSD1AX	02-011/17:54:17
25066	MGS	02-011/18:07:23		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-011/17:54:17
25067	MGS	02-011/18:07:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-011/17:54:17
25068	MGS	02-011/18:07:23	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25069	MGS	02-011/18:11:46		NOTE: Start Block (MAP_RT)		02-011/17:58:40
25070	MGS	02-011/18:11:47		: 00:25:05, 01:32:52, FALSE, TRUE, FALSE, 00:01:15, 00:08:03, 01:15:45, 00:07:48	AEMINI	02-011/17:58:41

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25071	MGS	02-011/18:11:47		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/17:58:41
25072	MGS	02-011/18:11:47		NOTE: Start EVP data return script		02-011/17:58:41
25073	MGS	02-011/18:11:48		: SE_2A, RTM, 01:15:44, MRC, 2002-011T18:43:06.000	AEMRTI	02-011/17:58:42
25074	MGS	02-011/18:16:20		NOTE: Enter Planetary Atmosphere 12721		02-011/18:03:14
25075	MGS	02-011/18:18:45		NOTE: Apoapsis 12721 -		02-011/18:05:39
25076	MGS	02-011/18:21:26		NOTE: Enter Earth Occultation 12721		02-011/18:08:20
25077	MGS	02-011/18:21:26	63	NOTE: Loss Of X-Band Signal		
25078	MGS	02-011/18:21:47		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/18:08:41
25079	MGS	02-011/18:21:48		NOTE: Enter Solar Eclipse 12721		02-011/18:08:41
25080	MGS	02-011/18:21:59		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/18:08:53
25081	MGS	02-011/18:22:00		NOTE: End EVP script		02-011/18:08:53
25082	MGS	02-011/18:22:01		NOTE: End Block (MAP_PB_ODY)		02-011/18:08:54
25083	MGS	02-011/18:43:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/18:30:01
25084	MGS	02-011/18:46:52		: 01:32:52	RPAONX	02-011/18:33:46
25085	MGS	02-011/18:46:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/18:33:46
25086	MGS	02-011/18:48:07		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-011/18:35:01
25087	MGS	02-011/18:48:07		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/18:35:01
25088	MGS	02-011/18:48:07		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/18:35:01
25089	MGS	02-011/18:48:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/18:35:01
25090	MGS	02-011/18:48:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/18:35:01
25091	MGS	02-011/18:48:40		NOTE: Exit Earth Occultation 12721		02-011/18:35:33
25092	MGS	02-011/18:48:40	63	Acquisition Of X-Band Signal		
25093	MGS	02-011/18:48:40	63	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25094	MGS	02-011/18:48:40	63	NOTE: Carrier Only -- No Telemetry Modulation		
25095	MGS	02-011/18:50:00	15	Begin Tracking		
25096	MGS	02-011/18:50:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25097	MGS	02-011/18:50:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
25098	MGS	02-011/18:54:02		NOTE: Exit Planetary Atmosphere 12721		02-011/18:40:56
25099	MGS	02-011/18:56:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/18:43:04
25100	MGS	02-011/18:56:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/18:43:04
25101	MGS	02-011/18:56:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/18:43:04
25102	MGS	02-011/18:56:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/18:43:04
25103	MGS	02-011/18:56:10	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25104	MGS	02-011/18:56:10	63	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25105	MGS	02-011/18:56:11		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-011/18:43:05
25106	MGS	02-011/18:56:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/18:43:05
25107	MGS	02-011/18:56:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/18:43:05
25108	MGS	02-011/18:56:11	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25109	MGS	02-011/18:56:11	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25110	MGS	02-011/18:56:16		NOTE: End fixed Sub-Reflector for Radio Science		02-011/18:43:09
25111	MGS	02-011/19:02:10		NOTE: Exit Solar Eclipse 12721		02-011/18:49:03
25112	MGS	02-011/19:03:01	15	NOTE: Above Uplink Interlock Limit		
25113	MGS	02-011/19:05:00	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25114	MGS	02-011/19:07:00	15	Range Modulation On: SUP=3.0dB		
25115	MGS	02-011/19:08:00	15	Begin Ranging Acquisition		
25116	MGS	02-011/19:10:00	63	End Tracking		
25117	MGS	02-011/19:17:30		NOTE: Periapsis 12722 ----------		02-011/19:04:23
25118	MGS	02-011/19:25:00	63	End Post-Cal		
25119	MGS	02-011/19:31:13	15	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25120	MGS	02-011/19:34:15	15	NOTE: Transmitter Off in 15 minutes		
25121	MGS	02-011/19:47:15	15	Range Modulation Off		
25122	MGS	02-011/19:49:15	15	Transmitter Off		
25123	MGS	02-011/20:06:56		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/19:53:49
25124	MGS	02-011/20:09:35		NOTE: Start EVP data return script		02-011/19:56:28

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25125	MGS	02-011/20:11:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/19:58:49
25126	MGS	02-011/20:11:56		: 00:07:48, FALSE	RDSCII	02-011/19:58:49
25127	MGS	02-011/20:11:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/19:58:49
25128	MGS	02-011/20:11:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/19:58:49
25129	MGS	02-011/20:11:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/19:58:49
25130	MGS	02-011/20:11:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/19:58:49
25131	MGS	02-011/20:11:56	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25132	MGS	02-011/20:11:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
25133	MGS	02-011/20:14:08		NOTE: Enter Planetary Atmosphere 12722		02-011/20:01:01
25134	MGS	02-011/20:16:28		NOTE: Apoapsis 12722 -		02-011/20:03:21
25135	MGS	02-011/20:19:13		NOTE: Enter Earth Occultation 12722		02-011/20:06:07
25136	MGS	02-011/20:19:13	15	NOTE: Loss Of X-Band Signal		
25137	MGS	02-011/20:19:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/20:06:28
25138	MGS	02-011/20:19:35		NOTE: Enter Solar Eclipse 12722		02-011/20:06:28
25139	MGS	02-011/20:19:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/20:06:37
25140	MGS	02-011/20:19:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/20:06:37
25141	MGS	02-011/20:19:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/20:06:37
25142	MGS	02-011/20:19:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/20:06:37
25143	MGS	02-011/20:19:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/20:06:38
25144	MGS	02-011/20:19:45		NOTE: End EVP script		02-011/20:06:38
25145	MGS	02-011/20:19:49		NOTE: End fixed Sub-Reflector for Radio Science		02-011/20:06:42
25146	MGS	02-011/20:23:59	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25147	MGS	02-011/20:26:00	15	Range Modulation On: SUP=3.0dB		
25148	MGS	02-011/20:27:00	15	Begin Ranging Acquisition		
25149	MGS	02-011/20:40:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/20:27:48
25150	MGS	02-011/20:44:40		: 01:32:52	RPAONX	02-011/20:31:33
25151	MGS	02-011/20:44:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/20:31:33
25152	MGS	02-011/20:45:55		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-011/20:32:48
25153	MGS	02-011/20:45:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/20:32:48
25154	MGS	02-011/20:45:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/20:32:48
25155	MGS	02-011/20:45:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/20:32:48
25156	MGS	02-011/20:45:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/20:32:48
25157	MGS	02-011/20:46:25		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/20:33:18
25158	MGS	02-011/20:46:28		NOTE: Exit Earth Occultation 12722		02-011/20:33:21
25159	MGS	02-011/20:46:28	15	Acquisition Of X-Band Signal		
25160	MGS	02-011/20:46:28	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25161	MGS	02-011/20:46:28	15	NOTE: Carrier Only -- No Telemetry Modulation		
25162	MGS	02-011/20:51:50		NOTE: Exit Planetary Atmosphere 12722		02-011/20:38:43
25163	MGS	02-011/20:53:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/20:40:51
25164	MGS	02-011/20:53:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/20:40:51
25165	MGS	02-011/20:53:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/20:40:51
25166	MGS	02-011/20:53:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/20:40:51
25167	MGS	02-011/20:53:58	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25168	MGS	02-011/20:53:59		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-011/20:40:52
25169	MGS	02-011/20:53:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-011/20:40:52
25170	MGS	02-011/20:53:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-011/20:40:52
25171	MGS	02-011/20:53:59	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25172	MGS	02-011/20:54:03		NOTE: End fixed Sub-Reflector for Radio Science		02-011/20:40:56
25173	MGS	02-011/20:59:57		NOTE: Exit Solar Eclipse 12722		02-011/20:46:51
25174	MGS	02-011/21:15:15		NOTE: Periapsis 12723 ----------		02-011/21:02:08
25175	MGS	02-011/21:32:00	15	NOTE: Transmitter Off in 15 minutes		
25176	MGS	02-011/21:45:01	15	Range Modulation Off		
25177	MGS	02-011/21:47:00	15	Transmitter Off		
25178	MGS	02-011/21:52:45		NOTE: Start Block (SSRMGR)		02-011/21:39:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25179	MGS	02-011/21:52:45		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-011/21:39:38
25180	MGS	02-011/21:52:46		SSR 1A Data Enable	CSD1AE	02-011/21:39:39
25181	MGS	02-011/21:52:46		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-011/21:39:39
25182	MGS	02-011/22:04:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-011/21:51:36
25183	MGS	02-011/22:07:20		NOTE: Start Block (MAP_PB_ODY)		02-011/21:54:13
25184	MGS	02-011/22:07:21		: 00:25:05, 01:32:53, FALSE, FALSE, FALSE, 00:01:15, 00:06:23, 01:19:06, 00:06:08	AEMINI	02-011/21:54:14
25185	MGS	02-011/22:07:21		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/21:54:14
25186	MGS	02-011/22:07:21		NOTE: Start EVP data return script		02-011/21:54:14
25187	MGS	02-011/22:07:22		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-011T22:36:58.000	AEMPBI	02-011/21:54:15
25188	MGS	02-011/22:09:43		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-011/21:56:36
25189	MGS	02-011/22:09:43		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8136000, DUR=00:16:57		02-011/21:56:36
25190	MGS	02-011/22:09:43		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-011/21:56:36
25191	MGS	02-011/22:09:43		: 00:07:48, FALSE	RDSCII	02-011/21:56:36
25192	MGS	02-011/22:09:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-011/21:56:36
25193	MGS	02-011/22:09:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-011/21:56:36
25194	MGS	02-011/22:09:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-011/21:56:36
25195	MGS	02-011/22:09:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-011/21:56:36
25196	MGS	02-011/22:09:43	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25197	MGS	02-011/22:09:43	15	NOTE: Carrier Only -- No Telemetry Modulation		
25198	MGS	02-011/22:11:54		NOTE: Enter Planetary Atmosphere 12723		02-011/21:58:47
25199	MGS	02-011/22:13:56		NOTE: Apoapsis 12723 -		02-011/22:00:49
25200	MGS	02-011/22:16:21		SSR 1B Data Disable	CSD1BX	02-011/22:03:14
25201	MGS	02-011/22:16:21		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-011/22:03:14
25202	MGS	02-011/22:16:22		NOTE: End Block (SSRMGR)		02-011/22:03:15
25203	MGS	02-011/22:16:59		NOTE: Enter Earth Occultation 12723		02-011/22:03:52
25204	MGS	02-011/22:16:59	15	NOTE: Loss Of X-Band Signal		
25205	MGS	02-011/22:17:21		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-011/22:04:14
25206	MGS	02-011/22:17:21		NOTE: Enter Solar Eclipse 12723		02-011/22:04:14
25207	MGS	02-011/22:17:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-011/22:04:24
25208	MGS	02-011/22:17:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-011/22:04:24
25209	MGS	02-011/22:17:31		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-011/22:04:24
25210	MGS	02-011/22:17:31		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-011/22:04:24
25211	MGS	02-011/22:17:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-011/22:04:25
25212	MGS	02-011/22:17:32		NOTE: End EVP script		02-011/22:04:25
25213	MGS	02-011/22:17:33		NOTE: End Block (MAP_RT)		02-011/22:04:26
25214	MGS	02-011/22:17:36		NOTE: End fixed Sub-Reflector for Radio Science		02-011/22:04:29
25215	MGS	02-011/22:21:46	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25216	MGS	02-011/22:23:46	15	Range Modulation On: SUP=3.0dB		
25217	MGS	02-011/22:24:46	15	Begin Ranging Acquisition		
25218	MGS	02-011/22:42:26		: 01:32:53	RPAONX	02-011/22:29:19
25219	MGS	02-011/22:42:26		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-011/22:29:19
25220	MGS	02-011/22:44:11		Disables autonomous command to send eclipse ingress script	SWEISX	02-011/22:31:04
25221	MGS	02-011/22:44:15		NOTE: Exit Earth Occultation 12723		02-011/22:31:08
25222	MGS	02-011/22:44:15	15	Acquisition Of X-Band Signal		
25223	MGS	02-011/22:44:15	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25224	MGS	02-011/22:48:00	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25225	MGS	02-011/22:49:37		NOTE: Exit Planetary Atmosphere 12723		02-011/22:36:30
25226	MGS	02-011/22:50:04		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:36	AEMPB	02-011/22:36:57
25227	MGS	02-011/22:50:04		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-011/22:36:57
25228	MGS	02-011/22:50:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-011/22:36:57
25229	MGS	02-011/22:50:05		SSR 1B Data Enable	CSD1BE	02-011/22:36:58
25230	MGS	02-011/22:50:05		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-011/22:36:58
25231	MGS	02-011/22:50:05	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25232	MGS	02-011/22:57:44		NOTE: Exit Solar Eclipse 12723		02-011/22:44:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25233	MGS	02-011/23:12:58		NOTE: Periapsis 12724 ----------		02-011/22:59:51
25234	MGS	02-011/23:29:43	15	NOTE: Transmitter Off in 15 minutes		
25235	MGS	02-011/23:42:44	15	Range Modulation Off		
25236	MGS	02-011/23:44:43	15	Transmitter Off		
25237	MGS	02-012/00:00:00		Light Time: OWLT = 13:07, RTLT = 26:14		
25238	MGS	02-012/00:00:00	45	Begin Pre-Cal		
25239	MGS	02-012/00:00:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
25240	MGS	02-012/00:00:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
25241	MGS	02-012/00:00:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
25242	MGS	02-012/00:00:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
25243	MGS	02-012/00:00:00	45	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
25244	MGS	02-012/00:00:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
25245	MGS	02-012/00:00:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
25246	MGS	02-012/00:00:00	45	Config: TGC: DEST=37		
25247	MGS	02-012/00:00:00	45	Config: TGC: BAND=X, BR=40000.000000		
25248	MGS	02-012/00:00:00	45	Config: FSS: CH=2, PRI_FL=10000		
25249	MGS	02-012/00:00:00	45	Config: RSR		
25250	MGS	02-012/00:00:00	45	Config: TXL		
25251	MGS	02-012/00:00:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
25252	MGS	02-012/00:00:00	45	Config: BVR		
25253	MGS	02-012/00:00:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
25254	MGS	02-012/00:00:00	45	Config: MDA: SMPL=0.1		
25255	MGS	02-012/00:00:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
25256	MGS	02-012/00:00:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
25257	MGS	02-012/00:00:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
25258	MGS	02-012/00:00:43		SSR 1B Data Disable	CSD1BX	02-011/23:47:36
25259	MGS	02-012/00:00:43		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-011/23:47:36
25260	MGS	02-012/00:00:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-011/23:47:36
25261	MGS	02-012/00:00:43	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25262	MGS	02-012/00:05:04		NOTE: Start Block (MAP_RT)		02-011/23:51:57
25263	MGS	02-012/00:05:05		: 00:25:05, 01:32:52, FALSE, TRUE, FALSE, 00:01:15, 00:08:03, 01:15:45, 00:07:48	AEMINI	02-011/23:51:58
25264	MGS	02-012/00:05:05		Enable sending eclipse ingress script when array power disappears	SWEISE	02-011/23:51:58
25265	MGS	02-012/00:05:05		NOTE: Start EVP data return script		02-011/23:51:58
25266	MGS	02-012/00:05:06		: SE_2A, RTM, 01:15:44, MRC, 2002-012T00:36:23.000	AEMRTI	02-011/23:51:59
25267	MGS	02-012/00:09:38		NOTE: Enter Planetary Atmosphere 12724		02-011/23:56:30
25268	MGS	02-012/00:10:58	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25269	MGS	02-012/00:11:31		NOTE: Apoapsis 12724 -		02-011/23:58:24
25270	MGS	02-012/00:14:43		NOTE: Enter Earth Occultation 12724		02-012/00:01:35
25271	MGS	02-012/00:14:43	15	NOTE: Loss Of X-Band Signal		
25272	MGS	02-012/00:15:05		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/00:01:58
25273	MGS	02-012/00:15:05		NOTE: Enter Solar Eclipse 12724		02-012/00:01:58
25274	MGS	02-012/00:15:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/00:02:12
25275	MGS	02-012/00:15:20		NOTE: End EVP script		02-012/00:02:12
25276	MGS	02-012/00:15:21		NOTE: End Block (MAP_PB_ODY)		02-012/00:02:13
25277	MGS	02-012/00:19:31	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25278	MGS	02-012/00:21:31	15	Range Modulation On: SUP=3.0dB		
25279	MGS	02-012/00:22:31	15	Begin Ranging Acquisition		
25280	MGS	02-012/00:36:26		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/00:23:18
25281	MGS	02-012/00:40:10		: 01:32:52	RPAONX	02-012/00:27:03
25282	MGS	02-012/00:40:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/00:27:03
25283	MGS	02-012/00:41:25		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-012/00:28:18
25284	MGS	02-012/00:41:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/00:28:18
25285	MGS	02-012/00:41:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/00:28:18
25286	MGS	02-012/00:41:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/00:28:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25287	MGS	02-012/00:41:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/00:28:18
25288	MGS	02-012/00:42:00		NOTE: Exit Earth Occultation 12724		02-012/00:28:53
25289	MGS	02-012/00:42:00	15	Acquisition Of X-Band Signal		
25290	MGS	02-012/00:42:00	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25291	MGS	02-012/00:42:00	15	NOTE: Carrier Only -- No Telemetry Modulation		
25292	MGS	02-012/00:47:23		NOTE: Exit Planetary Atmosphere 12724		02-012/00:34:15
25293	MGS	02-012/00:49:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/00:36:21
25294	MGS	02-012/00:49:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/00:36:21
25295	MGS	02-012/00:49:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/00:36:21
25296	MGS	02-012/00:49:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/00:36:21
25297	MGS	02-012/00:49:28	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25298	MGS	02-012/00:49:29		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-012/00:36:22
25299	MGS	02-012/00:49:29		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/00:36:22
25300	MGS	02-012/00:49:29		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/00:36:22
25301	MGS	02-012/00:49:29	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25302	MGS	02-012/00:49:34		NOTE: End fixed Sub-Reflector for Radio Science		02-012/00:36:26
25303	MGS	02-012/00:55:28		NOTE: Exit Solar Eclipse 12724		02-012/00:42:20
25304	MGS	02-012/01:00:00	45	Begin Tracking		
25305	MGS	02-012/01:00:00	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25306	MGS	02-012/01:05:10	45	NOTE: Above Uplink Interlock Limit		
25307	MGS	02-012/01:08:00	15	Range Modulation Off		
25308	MGS	02-012/01:10:00	45	U/L Transfer From DSS-15 to DSS-45: PWR=20.0, BR=125.0, CS=5.82dB		
25309	MGS	02-012/01:10:43		NOTE: Periapsis 12725 ----------		02-012/00:57:36
25310	MGS	02-012/01:12:00	45	Range Modulation On: SUP=3.0dB		
25311	MGS	02-012/01:13:00	45	Begin Ranging Acquisition		
25312	MGS	02-012/01:20:00	15	End Tracking		
25313	MGS	02-012/01:27:25	45	NOTE: Transmitter Off in 15 minutes		
25314	MGS	02-012/01:35:00	15	End Post-Cal		
25315	MGS	02-012/01:36:15	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25316	MGS	02-012/01:40:26	45	Range Modulation Off		
25317	MGS	02-012/01:42:25	45	Transmitter Off		
25318	MGS	02-012/02:00:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/01:47:06
25319	MGS	02-012/02:02:48		NOTE: Start EVP data return script		02-012/01:49:40
25320	MGS	02-012/02:05:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/01:52:06
25321	MGS	02-012/02:05:14		: 00:07:48, FALSE	RDSCII	02-012/01:52:06
25322	MGS	02-012/02:05:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/01:52:06
25323	MGS	02-012/02:05:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/01:52:06
25324	MGS	02-012/02:05:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/01:52:06
25325	MGS	02-012/02:05:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/01:52:06
25326	MGS	02-012/02:05:14	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25327	MGS	02-012/02:05:14	45	NOTE: Carrier Only -- No Telemetry Modulation		
25328	MGS	02-012/02:07:20		NOTE: Enter Planetary Atmosphere 12725		02-012/01:54:12
25329	MGS	02-012/02:09:28		NOTE: Apoapsis 12725 -		02-012/01:56:20
25330	MGS	02-012/02:12:25		NOTE: Enter Earth Occultation 12725		02-012/01:59:18
25331	MGS	02-012/02:12:25	45	NOTE: Loss Of X-Band Signal		
25332	MGS	02-012/02:12:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/01:59:40
25333	MGS	02-012/02:12:48		NOTE: Enter Solar Eclipse 12725		02-012/01:59:40
25334	MGS	02-012/02:13:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/01:59:54
25335	MGS	02-012/02:13:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/01:59:54
25336	MGS	02-012/02:13:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/01:59:54
25337	MGS	02-012/02:13:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/01:59:54
25338	MGS	02-012/02:13:03		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/01:59:55
25339	MGS	02-012/02:13:03		NOTE: End EVP script		02-012/01:59:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25340	MGS	02-012/02:13:07		NOTE: End fixed Sub-Reflector for Radio Science		02-012/01:59:59
25341	MGS	02-012/02:17:13	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25342	MGS	02-012/02:19:14	45	Range Modulation On: SUP=3.0dB		
25343	MGS	02-012/02:20:14	45	Begin Ranging Acquisition		
25344	MGS	02-012/02:34:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/02:21:00
25345	MGS	02-012/02:37:53		: 01:32:52	RPAONX	02-012/02:24:45
25346	MGS	02-012/02:37:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/02:24:45
25347	MGS	02-012/02:39:08		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-012/02:26:00
25348	MGS	02-012/02:39:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/02:26:00
25349	MGS	02-012/02:39:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/02:26:00
25350	MGS	02-012/02:39:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/02:26:00
25351	MGS	02-012/02:39:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/02:26:00
25352	MGS	02-012/02:39:38		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/02:26:30
25353	MGS	02-012/02:39:43		NOTE: Exit Earth Occultation 12725		02-012/02:26:36
25354	MGS	02-012/02:39:43	45	Acquisition Of X-Band Signal		
25355	MGS	02-012/02:39:43	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25356	MGS	02-012/02:39:43	45	NOTE: Carrier Only -- No Telemetry Modulation		
25357	MGS	02-012/02:45:06		NOTE: Exit Planetary Atmosphere 12725		02-012/02:31:58
25358	MGS	02-012/02:47:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/02:34:03
25359	MGS	02-012/02:47:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/02:34:03
25360	MGS	02-012/02:47:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/02:34:03
25361	MGS	02-012/02:47:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/02:34:03
25362	MGS	02-012/02:47:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25363	MGS	02-012/02:47:12		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-012/02:34:04
25364	MGS	02-012/02:47:12		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/02:34:04
25365	MGS	02-012/02:47:12		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/02:34:04
25366	MGS	02-012/02:47:12	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25367	MGS	02-012/02:47:16		NOTE: End fixed Sub-Reflector for Radio Science		02-012/02:34:08
25368	MGS	02-012/02:53:10		NOTE: Exit Solar Eclipse 12725		02-012/02:40:02
25369	MGS	02-012/03:08:18		NOTE: Periapsis 12726 ----------		02-012/02:55:10
25370	MGS	02-012/03:25:07	45	NOTE: Transmitter Off in 15 minutes		
25371	MGS	02-012/03:38:08	45	Range Modulation Off		
25372	MGS	02-012/03:40:07	45	Transmitter Off		
25373	MGS	02-012/03:46:03		NOTE: Start Block (SSRMGR)		02-012/03:32:55
25374	MGS	02-012/03:46:03		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-012/03:32:55
25375	MGS	02-012/03:46:04		SSR 1B Data Enable	CSD1BE	02-012/03:32:56
25376	MGS	02-012/03:46:04		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-012/03:32:56
25377	MGS	02-012/03:57:56		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/03:44:48
25378	MGS	02-012/04:00:29		NOTE: Start Block (MAP_PB_ODY)		02-012/03:47:21
25379	MGS	02-012/04:00:30		: 00:25:05, 01:32:53, FALSE, FALSE, FALSE, 00:01:15, 00:06:23, 01:19:06, 00:06:08	AEMINI	02-012/03:47:22
25380	MGS	02-012/04:00:30		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/03:47:22
25381	MGS	02-012/04:00:30		NOTE: Start EVP data return script		02-012/03:47:22
25382	MGS	02-012/04:00:31		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-012T04:30:05.000	AEMPBI	02-012/03:47:23
25383	MGS	02-012/04:02:56		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/03:49:48
25384	MGS	02-012/04:02:56		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8096000, DUR=00:16:52		02-012/03:49:48
25385	MGS	02-012/04:02:56		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-012/03:49:48
25386	MGS	02-012/04:02:56		: 00:07:48, FALSE	RDSCII	02-012/03:49:48
25387	MGS	02-012/04:02:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/03:49:48
25388	MGS	02-012/04:02:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/03:49:48
25389	MGS	02-012/04:02:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/03:49:48
25390	MGS	02-012/04:02:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/03:49:48
25391	MGS	02-012/04:02:56	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25392	MGS	02-012/04:02:56	45	NOTE: Carrier Only -- No Telemetry Modulation		
25393	MGS	02-012/04:05:03		NOTE: Enter Planetary Atmosphere 12726		02-012/03:51:55

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25394	MGS	02-012/04:06:58		NOTE: Apoapsis 12726 -		02-012/03:53:50
25395	MGS	02-012/04:09:30		SSR 1A Data Disable	CSD1AX	02-012/03:56:22
25396	MGS	02-012/04:09:30		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-012/03:56:22
25397	MGS	02-012/04:09:31		NOTE: End Block (SSRMGR)		02-012/03:56:23
25398	MGS	02-012/04:10:08		NOTE: Enter Earth Occultation 12726		02-012/03:57:00
25399	MGS	02-012/04:10:08	45	NOTE: Loss Of X-Band Signal		
25400	MGS	02-012/04:10:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/03:57:22
25401	MGS	02-012/04:10:30		NOTE: Enter Solar Eclipse 12726		02-012/03:57:22
25402	MGS	02-012/04:10:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/03:57:36
25403	MGS	02-012/04:10:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/03:57:36
25404	MGS	02-012/04:10:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/03:57:36
25405	MGS	02-012/04:10:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/03:57:36
25406	MGS	02-012/04:10:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/03:57:37
25407	MGS	02-012/04:10:45		NOTE: End EVP script		02-012/03:57:37
25408	MGS	02-012/04:10:46		NOTE: End Block (MAP_RT)		02-012/03:57:38
25409	MGS	02-012/04:10:49		NOTE: End fixed Sub-Reflector for Radio Science		02-012/03:57:41
25410	MGS	02-012/04:14:55	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25411	MGS	02-012/04:16:55	45	Range Modulation On: SUP=3.0dB		
25412	MGS	02-012/04:17:55	45	Begin Ranging Acquisition		
25413	MGS	02-012/04:35:35		: 01:32:53	RPAONX	02-012/04:22:27
25414	MGS	02-012/04:35:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/04:22:27
25415	MGS	02-012/04:37:20		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/04:24:12
25416	MGS	02-012/04:37:26		NOTE: Exit Earth Occultation 12726		02-012/04:24:18
25417	MGS	02-012/04:37:26	45	Acquisition Of X-Band Signal		
25418	MGS	02-012/04:37:26	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25419	MGS	02-012/04:41:11	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25420	MGS	02-012/04:42:48		NOTE: Exit Planetary Atmosphere 12726		02-012/04:29:40
25421	MGS	02-012/04:43:13		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:36	AEMPB	02-012/04:30:05
25422	MGS	02-012/04:43:13		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-012/04:30:05
25423	MGS	02-012/04:43:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-012/04:30:05
25424	MGS	02-012/04:43:14		SSR 1A Data Enable	CSD1AE	02-012/04:30:06
25425	MGS	02-012/04:43:14		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-012/04:30:06
25426	MGS	02-012/04:43:14	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25427	MGS	02-012/04:50:52		NOTE: Exit Solar Eclipse 12726		02-012/04:37:44
25428	MGS	02-012/05:05:37		NOTE: Periapsis 12727 ----------		02-012/04:52:29
25429	MGS	02-012/05:22:49	45	NOTE: Transmitter Off in 15 minutes		
25430	MGS	02-012/05:35:49	45	Range Modulation Off		
25431	MGS	02-012/05:37:49	45	Transmitter Off		
25432	MGS	02-012/05:53:52		SSR 1A Data Disable	CSD1AX	02-012/05:40:44
25433	MGS	02-012/05:53:52		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-012/05:40:44
25434	MGS	02-012/05:53:52		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-012/05:40:44
25435	MGS	02-012/05:53:52	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25436	MGS	02-012/05:58:13		NOTE: Start Block (MAP_RT)		02-012/05:45:05
25437	MGS	02-012/05:58:14		: 00:25:05, 01:32:52, FALSE, TRUE, FALSE, 00:01:15, 00:08:03, 01:15:45, 00:07:48	AEMINI	02-012/05:45:06
25438	MGS	02-012/05:58:14		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/05:45:06
25439	MGS	02-012/05:58:14		NOTE: Start EVP data return script		02-012/05:45:06
25440	MGS	02-012/05:58:15		: SE_2A, RTM, 01:15:44, MRC, 2002-012T06:29:30.000	AEMRTI	02-012/05:45:07
25441	MGS	02-012/06:02:46		NOTE: Enter Planetary Atmosphere 12727		02-012/05:49:38
25442	MGS	02-012/06:04:05	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25443	MGS	02-012/06:04:23		NOTE: Apoapsis 12727 -		02-012/05:51:15
25444	MGS	02-012/06:07:50		NOTE: Enter Earth Occultation 12727		02-012/05:54:42
25445	MGS	02-012/06:07:50	45	NOTE: Loss Of X-Band Signal		
25446	MGS	02-012/06:08:14		NOTE: Enter Solar Eclipse 12727		02-012/05:55:06
25447	MGS	02-012/06:08:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/05:55:06

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25448	MGS	02-012/06:08:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/05:55:20
25449	MGS	02-012/06:08:28		NOTE: End EVP script		02-012/05:55:20
25450	MGS	02-012/06:08:29		NOTE: End Block (MAP_PB_ODY)		02-012/05:55:21
25451	MGS	02-012/06:12:39	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25452	MGS	02-012/06:14:39	45	Range Modulation On: SUP=3.0dB		
25453	MGS	02-012/06:15:39	45	Begin Ranging Acquisition		
25454	MGS	02-012/06:29:34		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/06:16:26
25455	MGS	02-012/06:33:19		: 01:32:52	RPAONX	02-012/06:20:11
25456	MGS	02-012/06:33:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/06:20:11
25457	MGS	02-012/06:34:34		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-012/06:21:26
25458	MGS	02-012/06:34:34		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/06:21:26
25459	MGS	02-012/06:34:34		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/06:21:26
25460	MGS	02-012/06:34:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/06:21:26
25461	MGS	02-012/06:34:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/06:21:26
25462	MGS	02-012/06:35:10		NOTE: Exit Earth Occultation 12727		02-012/06:22:02
25463	MGS	02-012/06:35:10	45	Acquisition Of X-Band Signal		
25464	MGS	02-012/06:35:10	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25465	MGS	02-012/06:35:10	45	NOTE: Carrier Only -- No Telemetry Modulation		
25466	MGS	02-012/06:40:31		NOTE: Exit Planetary Atmosphere 12727		02-012/06:27:23
25467	MGS	02-012/06:42:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/06:29:29
25468	MGS	02-012/06:42:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/06:29:29
25469	MGS	02-012/06:42:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/06:29:29
25470	MGS	02-012/06:42:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/06:29:29
25471	MGS	02-012/06:42:37	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25472	MGS	02-012/06:42:38		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-012/06:29:30
25473	MGS	02-012/06:42:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/06:29:30
25474	MGS	02-012/06:42:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/06:29:30
25475	MGS	02-012/06:42:38	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25476	MGS	02-012/06:42:42		NOTE: End fixed Sub-Reflector for Radio Science		02-012/06:29:34
25477	MGS	02-012/06:48:36		NOTE: Exit Solar Eclipse 12727		02-012/06:35:27
25478	MGS	02-012/07:03:32		NOTE: Periapsis 12728 ----------		02-012/06:50:23
25479	MGS	02-012/07:20:32	45	NOTE: Transmitter Off in 15 minutes		
25480	MGS	02-012/07:33:32	45	Range Modulation Off		
25481	MGS	02-012/07:35:32	45	Transmitter Off		
25482	MGS	02-012/07:53:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/07:40:14
25483	MGS	02-012/07:56:01		NOTE: Start EVP data return script		02-012/07:42:52
25484	MGS	02-012/07:58:23		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/07:45:14
25485	MGS	02-012/07:58:23		: 00:07:48, FALSE	RDSCII	02-012/07:45:14
25486	MGS	02-012/07:58:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/07:45:14
25487	MGS	02-012/07:58:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/07:45:14
25488	MGS	02-012/07:58:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/07:45:14
25489	MGS	02-012/07:58:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/07:45:14
25490	MGS	02-012/07:58:23	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25491	MGS	02-012/07:58:23	45	NOTE: Carrier Only -- No Telemetry Modulation		
25492	MGS	02-012/08:00:30		NOTE: Enter Planetary Atmosphere 12728		02-012/07:47:21
25493	MGS	02-012/08:02:28		NOTE: Apoapsis 12728 -		02-012/07:49:20
25494	MGS	02-012/08:05:34		NOTE: Enter Earth Occultation 12728		02-012/07:52:25
25495	MGS	02-012/08:05:34	45	NOTE: Loss Of X-Band Signal		
25496	MGS	02-012/08:06:00		NOTE: Enter Solar Eclipse 12728		02-012/07:52:51
25497	MGS	02-012/08:06:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/07:52:52
25498	MGS	02-012/08:06:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/07:53:02
25499	MGS	02-012/08:06:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/07:53:02
25500	MGS	02-012/08:06:11		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/07:53:02
25501	MGS	02-012/08:06:11		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/07:53:02

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25502	MGS	02-012/08:06:11		NOTE: End EVP script		02-012/07:53:03
25503	MGS	02-012/08:06:12		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/07:53:03
25504	MGS	02-012/08:06:15		NOTE: End fixed Sub-Reflector for Radio Science		02-012/07:53:07
25505	MGS	02-012/08:10:24	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25506	MGS	02-012/08:12:25	45	Range Modulation On: SUP=3.0dB		
25507	MGS	02-012/08:13:25	45	Begin Ranging Acquisition		
25508	MGS	02-012/08:27:20		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/08:14:12
25509	MGS	02-012/08:31:06		: 01:32:52	RPAONX	02-012/08:17:57
25510	MGS	02-012/08:31:06		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/08:17:57
25511	MGS	02-012/08:32:21		: 00:00:30, 00:08:03, FALSE	RDSCIE	02-012/08:19:12
25512	MGS	02-012/08:32:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/08:19:12
25513	MGS	02-012/08:32:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/08:19:12
25514	MGS	02-012/08:32:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/08:19:12
25515	MGS	02-012/08:32:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/08:19:12
25516	MGS	02-012/08:32:51		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/08:19:42
25517	MGS	02-012/08:32:56		NOTE: Exit Earth Occultation 12728		02-012/08:19:48
25518	MGS	02-012/08:32:56	45	Acquisition Of X-Band Signal		
25519	MGS	02-012/08:32:56	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25520	MGS	02-012/08:32:56	45	NOTE: Carrier Only -- No Telemetry Modulation		
25521	MGS	02-012/08:38:17		NOTE: Exit Planetary Atmosphere 12728		02-012/08:25:08
25522	MGS	02-012/08:40:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/08:27:15
25523	MGS	02-012/08:40:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/08:27:15
25524	MGS	02-012/08:40:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/08:27:15
25525	MGS	02-012/08:40:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/08:27:15
25526	MGS	02-012/08:40:24	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25527	MGS	02-012/08:40:25		: RTM, MRC, 01:15:44, S&E_2A, FALSE, 00:07:49	AEMRT	02-012/08:27:16
25528	MGS	02-012/08:40:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/08:27:16
25529	MGS	02-012/08:40:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/08:27:16
25530	MGS	02-012/08:40:25	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25531	MGS	02-012/08:40:28		NOTE: End fixed Sub-Reflector for Radio Science		02-012/08:27:20
25532	MGS	02-012/08:46:22		NOTE: Exit Solar Eclipse 12728		02-012/08:33:13
25533	MGS	02-012/09:01:46		NOTE: Periapsis 12729 ----------		02-012/08:48:38
25534	MGS	02-012/09:18:18	45	NOTE: Transmitter Off in 15 minutes		
25535	MGS	02-012/09:31:18	45	Range Modulation Off		
25536	MGS	02-012/09:33:18	45	Transmitter Off		
25537	MGS	02-012/09:39:12		NOTE: Start Block (SSRMGR)		02-012/09:26:03
25538	MGS	02-012/09:39:12		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-012/09:26:03
25539	MGS	02-012/09:39:13		SSR 1A Data Enable	CSD1AE	02-012/09:26:04
25540	MGS	02-012/09:39:13		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-012/09:26:04
25541	MGS	02-012/09:51:09		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/09:38:00
25542	MGS	02-012/09:53:46		NOTE: Start Block (MAP_PB_ODY)		02-012/09:40:37
25543	MGS	02-012/09:53:47		: 00:25:05, 01:32:53, FALSE, FALSE, FALSE, 00:01:15, 00:06:23, 01:19:06, 00:06:08	AEMINI	02-012/09:40:38
25544	MGS	02-012/09:53:47		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/09:40:38
25545	MGS	02-012/09:53:47		NOTE: Start EVP data return script		02-012/09:40:38
25546	MGS	02-012/09:53:48		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-012T10:23:21.000	AEMPBI	02-012/09:40:39
25547	MGS	02-012/09:56:09		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/09:43:00
25548	MGS	02-012/09:56:09		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8128000, DUR=00:16:56		02-012/09:43:00
25549	MGS	02-012/09:56:09		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-012/09:43:00
25550	MGS	02-012/09:56:09		: 00:07:48, FALSE	RDSCII	02-012/09:43:00
25551	MGS	02-012/09:56:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/09:43:00
25552	MGS	02-012/09:56:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/09:43:00
25553	MGS	02-012/09:56:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/09:43:00
25554	MGS	02-012/09:56:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/09:43:00
25555	MGS	02-012/09:56:09	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25556	MGS	02-012/09:56:09	45	NOTE: Carrier Only -- No Telemetry Modulation		
25557	MGS	02-012/09:58:17		NOTE: Enter Planetary Atmosphere 12729		02-012/09:45:08
25558	MGS	02-012/10:00:50		NOTE: Apoapsis 12729 -		02-012/09:47:41
25559	MGS	02-012/10:02:48		SSR 1B Data Disable	CSD1BX	02-012/09:49:39
25560	MGS	02-012/10:02:48		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-012/09:49:39
25561	MGS	02-012/10:02:49		NOTE: End Block (SSRMGR)		02-012/09:49:40
25562	MGS	02-012/10:03:21		NOTE: Enter Earth Occultation 12729		02-012/09:50:12
25563	MGS	02-012/10:03:21	45	NOTE: Loss Of X-Band Signal		
25564	MGS	02-012/10:03:47		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/09:50:38
25565	MGS	02-012/10:03:47		NOTE: Enter Solar Eclipse 12729		02-012/09:50:38
25566	MGS	02-012/10:03:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/09:50:48
25567	MGS	02-012/10:03:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/09:50:48
25568	MGS	02-012/10:03:57		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/09:50:48
25569	MGS	02-012/10:03:57		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/09:50:48
25570	MGS	02-012/10:03:58		NOTE: End EVP script		02-012/09:50:49
25571	MGS	02-012/10:03:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/09:50:49
25572	MGS	02-012/10:03:59		NOTE: End Block (MAP_RT)		02-012/09:50:50
25573	MGS	02-012/10:04:02		NOTE: End fixed Sub-Reflector for Radio Science		02-012/09:50:53
25574	MGS	02-012/10:08:11	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25575	MGS	02-012/10:10:12	45	Range Modulation On: SUP=3.0dB		
25576	MGS	02-012/10:11:12	45	Begin Ranging Acquisition		
25577	MGS	02-012/10:28:52		: 01:32:53	RPAONX	02-012/10:15:43
25578	MGS	02-012/10:28:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/10:15:43
25579	MGS	02-012/10:30:00	65	Begin Pre-Cal		
25580	MGS	02-012/10:30:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
25581	MGS	02-012/10:30:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
25582	MGS	02-012/10:30:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
25583	MGS	02-012/10:30:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
25584	MGS	02-012/10:30:00	65	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
25585	MGS	02-012/10:30:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
25586	MGS	02-012/10:30:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
25587	MGS	02-012/10:30:00	65	Config: TGC: DEST=37		
25588	MGS	02-012/10:30:00	65	Config: TGC: BAND=X, BR=42666.666667		
25589	MGS	02-012/10:30:00	65	Config: FSS: CH=2, PRI_FL=10000		
25590	MGS	02-012/10:30:00	65	Config: RSR		
25591	MGS	02-012/10:30:00	65	Config: TXL		
25592	MGS	02-012/10:30:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
25593	MGS	02-012/10:30:00	65	Config: BVR		
25594	MGS	02-012/10:30:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
25595	MGS	02-012/10:30:00	65	Config: MDA: SMPL=0.1		
25596	MGS	02-012/10:30:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
25597	MGS	02-012/10:30:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
25598	MGS	02-012/10:30:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
25599	MGS	02-012/10:30:37		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/10:17:28
25600	MGS	02-012/10:30:44		NOTE: Exit Earth Occultation 12729		02-012/10:17:35
25601	MGS	02-012/10:30:44	45	Acquisition Of X-Band Signal		
25602	MGS	02-012/10:30:44	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25603	MGS	02-012/10:34:29	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25604	MGS	02-012/10:36:04		NOTE: Exit Planetary Atmosphere 12729		02-012/10:22:55
25605	MGS	02-012/10:36:30		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:36	AEMPB	02-012/10:23:21
25606	MGS	02-012/10:36:30		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-012/10:23:21
25607	MGS	02-012/10:36:30		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-012/10:23:21
25608	MGS	02-012/10:36:31		SSR 1B Data Enable	CSD1BE	02-012/10:23:22
25609	MGS	02-012/10:36:31		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-012/10:23:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25610	MGS	02-012/10:36:31	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25611	MGS	02-012/10:44:09		NOTE: Exit Solar Eclipse 12729		02-012/10:31:00
25612	MGS	02-012/10:59:51		NOTE: Periapsis 12730 ----------		02-012/10:46:42
25613	MGS	02-012/11:10:00	45	NOTE: Transmitter Off in 15 minutes		
25614	MGS	02-012/11:23:00	45	Range Modulation Off		
25615	MGS	02-012/11:25:00	45	Transmitter Off		
25616	MGS	02-012/11:30:00	65	Begin Tracking		
25617	MGS	02-012/11:30:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25618	MGS	02-012/11:35:27	65	NOTE: Above Uplink Interlock Limit		
25619	MGS	02-012/11:35:44	45	NOTE: Below Uplink Interlock Limit		
25620	MGS	02-012/11:47:09		SSR 1B Data Disable	CSD1BX	02-012/11:34:00
25621	MGS	02-012/11:47:09		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-012/11:34:00
25622	MGS	02-012/11:47:09		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-012/11:34:00
25623	MGS	02-012/11:47:09	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25624	MGS	02-012/11:47:09	65	D/L Change: X/16, 3-Way/45, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25625	MGS	02-012/11:50:00	45	End Tracking		
25626	MGS	02-012/11:51:18	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25627	MGS	02-012/11:51:32		NOTE: Start Block (MAP_RT)		02-012/11:38:23
25628	MGS	02-012/11:51:33		: 00:25:12, 01:32:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:01, 01:15:40, 00:07:43	AEMINI	02-012/11:38:24
25629	MGS	02-012/11:51:33		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/11:38:24
25630	MGS	02-012/11:51:33		NOTE: Start EVP data return script		02-012/11:38:24
25631	MGS	02-012/11:51:34		: SE_2A, RTM, 01:15:39, MRC, 2002-012T12:22:54.000	AEMRTI	02-012/11:38:25
25632	MGS	02-012/11:56:04		NOTE: Enter Planetary Atmosphere 12730		02-012/11:42:55
25633	MGS	02-012/11:58:44		NOTE: Apoapsis 12730 -		02-012/11:45:35
25634	MGS	02-012/12:01:09		NOTE: Enter Earth Occultation 12730		02-012/11:47:59
25635	MGS	02-012/12:01:09	65	NOTE: Loss Of X-Band Signal		
25636	MGS	02-012/12:01:33		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/11:48:24
25637	MGS	02-012/12:01:33		NOTE: Enter Solar Eclipse 12730		02-012/11:48:24
25638	MGS	02-012/12:01:45		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/11:48:36
25639	MGS	02-012/12:01:45		NOTE: End EVP script		02-012/11:48:36
25640	MGS	02-012/12:01:46		NOTE: End Block (MAP_PB_ODY)		02-012/11:48:37
25641	MGS	02-012/12:05:00	45	End Post-Cal		
25642	MGS	02-012/12:05:58	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25643	MGS	02-012/12:07:59	65	Range Modulation On: SUP=3.0dB		
25644	MGS	02-012/12:08:59	65	Begin Ranging Acquisition		
25645	MGS	02-012/12:13:09		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-012/12:00:00
25646	MGS	02-012/12:23:00		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/12:09:51
25647	MGS	02-012/12:26:45		: 01:32:40	RPAONX	02-012/12:13:36
25648	MGS	02-012/12:26:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/12:13:36
25649	MGS	02-012/12:28:00		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-012/12:14:51
25650	MGS	02-012/12:28:00		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/12:14:51
25651	MGS	02-012/12:28:00		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/12:14:51
25652	MGS	02-012/12:28:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/12:14:51
25653	MGS	02-012/12:28:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/12:14:51
25654	MGS	02-012/12:28:31		NOTE: Exit Earth Occultation 12730		02-012/12:15:22
25655	MGS	02-012/12:28:31	65	Acquisition Of X-Band Signal		
25656	MGS	02-012/12:28:31	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25657	MGS	02-012/12:28:31	65	NOTE: Carrier Only -- No Telemetry Modulation		
25658	MGS	02-012/12:33:53		NOTE: Exit Planetary Atmosphere 12730		02-012/12:20:43
25659	MGS	02-012/12:36:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/12:22:52
25660	MGS	02-012/12:36:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/12:22:52
25661	MGS	02-012/12:36:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/12:22:52
25662	MGS	02-012/12:36:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/12:22:52

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25663	MGS	02-012/12:36:01	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25664	MGS	02-012/12:36:02		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-012/12:22:53
25665	MGS	02-012/12:36:02		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/12:22:53
25666	MGS	02-012/12:36:02		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/12:22:53
25667	MGS	02-012/12:36:02	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25668	MGS	02-012/12:36:06		NOTE: End fixed Sub-Reflector for Radio Science		02-012/12:22:57
25669	MGS	02-012/12:41:56		NOTE: Exit Solar Eclipse 12730		02-012/12:28:47
25670	MGS	02-012/12:57:30		NOTE: Periapsis 12731 ----------		02-012/12:44:20
25671	MGS	02-012/13:13:49	65	NOTE: Transmitter Off in 15 minutes		
25672	MGS	02-012/13:26:49	65	Range Modulation Off		
25673	MGS	02-012/13:28:49	65	Transmitter Off		
25674	MGS	02-012/13:46:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/13:33:32
25675	MGS	02-012/13:49:16		NOTE: Start EVP data return script		02-012/13:36:07
25676	MGS	02-012/13:51:41		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/13:38:32
25677	MGS	02-012/13:51:41		: 00:07:43, FALSE	RDSCII	02-012/13:38:32
25678	MGS	02-012/13:51:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/13:38:32
25679	MGS	02-012/13:51:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/13:38:32
25680	MGS	02-012/13:51:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/13:38:32
25681	MGS	02-012/13:51:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/13:38:32
25682	MGS	02-012/13:51:41	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25683	MGS	02-012/13:51:41	65	NOTE: Carrier Only -- No Telemetry Modulation		
25684	MGS	02-012/13:53:48		NOTE: Enter Planetary Atmosphere 12731		02-012/13:40:39
25685	MGS	02-012/13:56:08		NOTE: Apoapsis 12731 -		02-012/13:42:58
25686	MGS	02-012/13:58:53		NOTE: Enter Earth Occultation 12731		02-012/13:45:43
25687	MGS	02-012/13:58:53	65	NOTE: Loss Of X-Band Signal		
25688	MGS	02-012/13:59:16		NOTE: Enter Solar Eclipse 12731		02-012/13:46:07
25689	MGS	02-012/13:59:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/13:46:07
25690	MGS	02-012/13:59:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/13:46:15
25691	MGS	02-012/13:59:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/13:46:15
25692	MGS	02-012/13:59:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/13:46:15
25693	MGS	02-012/13:59:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/13:46:15
25694	MGS	02-012/13:59:25		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/13:46:16
25695	MGS	02-012/13:59:26		NOTE: End EVP script		02-012/13:46:16
25696	MGS	02-012/13:59:30		NOTE: End fixed Sub-Reflector for Radio Science		02-012/13:46:20
25697	MGS	02-012/14:03:42	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25698	MGS	02-012/14:05:42	65	Range Modulation On: SUP=3.0dB		
25699	MGS	02-012/14:06:42	65	Begin Ranging Acquisition		
25700	MGS	02-012/14:20:44		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/14:07:34
25701	MGS	02-012/14:24:29		: 01:32:40	RPAONX	02-012/14:11:19
25702	MGS	02-012/14:24:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/14:11:19
25703	MGS	02-012/14:25:44		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-012/14:12:34
25704	MGS	02-012/14:25:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/14:12:34
25705	MGS	02-012/14:25:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/14:12:34
25706	MGS	02-012/14:25:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/14:12:34
25707	MGS	02-012/14:25:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/14:12:34
25708	MGS	02-012/14:26:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/14:13:04
25709	MGS	02-012/14:26:16		NOTE: Exit Earth Occultation 12731		02-012/14:13:06
25710	MGS	02-012/14:26:16	65	Acquisition Of X-Band Signal		
25711	MGS	02-012/14:26:16	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25712	MGS	02-012/14:26:16	65	NOTE: Carrier Only -- No Telemetry Modulation		
25713	MGS	02-012/14:31:37		NOTE: Exit Planetary Atmosphere 12731		02-012/14:18:27
25714	MGS	02-012/14:33:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/14:20:35
25715	MGS	02-012/14:33:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/14:20:35
25716	MGS	02-012/14:33:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/14:20:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25717	MGS	02-012/14:33:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/14:20:35
25718	MGS	02-012/14:33:45	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25719	MGS	02-012/14:33:46		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-012/14:20:36
25720	MGS	02-012/14:33:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/14:20:36
25721	MGS	02-012/14:33:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/14:20:36
25722	MGS	02-012/14:33:46	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25723	MGS	02-012/14:33:50		NOTE: End fixed Sub-Reflector for Radio Science		02-012/14:20:40
25724	MGS	02-012/14:39:39		NOTE: Exit Solar Eclipse 12731		02-012/14:26:29
25725	MGS	02-012/14:54:50		NOTE: Periapsis 12732 ----------		02-012/14:41:41
25726	MGS	02-012/15:11:27	65	NOTE: Transmitter Off in 15 minutes		
25727	MGS	02-012/15:24:28	65	Range Modulation Off		
25728	MGS	02-012/15:26:27	65	Transmitter Off		
25729	MGS	02-012/15:32:31		NOTE: Start Block (SSRMGR)		02-012/15:19:21
25730	MGS	02-012/15:32:31		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-012/15:19:21
25731	MGS	02-012/15:32:32		SSR 1B Data Enable	CSD1BE	02-012/15:19:22
25732	MGS	02-012/15:32:32		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-012/15:19:22
25733	MGS	02-012/15:44:25		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/15:31:15
25734	MGS	02-012/15:46:56		NOTE: Start Block (MAP_PB_ODY)		02-012/15:33:46
25735	MGS	02-012/15:46:57		: 00:25:12, 01:32:41, FALSE, FALSE, FALSE, 00:01:15, 00:06:21, 01:19:01, 00:06:03	AEMINI	02-012/15:33:47
25736	MGS	02-012/15:46:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/15:33:47
25737	MGS	02-012/15:46:57		NOTE: Start EVP data return script		02-012/15:33:47
25738	MGS	02-012/15:46:58		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-012T16:16:36.000	AEMPBI	02-012/15:33:48
25739	MGS	02-012/15:49:25		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/15:36:15
25740	MGS	02-012/15:49:25		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8104000, DUR=00:16:53		02-012/15:36:15
25741	MGS	02-012/15:49:25		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-012/15:36:15
25742	MGS	02-012/15:49:25		: 00:07:43, FALSE	RDSCII	02-012/15:36:15
25743	MGS	02-012/15:49:25		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/15:36:15
25744	MGS	02-012/15:49:25		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/15:36:15
25745	MGS	02-012/15:49:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/15:36:15
25746	MGS	02-012/15:49:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/15:36:15
25747	MGS	02-012/15:49:25	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25748	MGS	02-012/15:49:25	65	NOTE: Carrier Only -- No Telemetry Modulation		
25749	MGS	02-012/15:51:28		NOTE: Enter Planetary Atmosphere 12732		02-012/15:38:18
25750	MGS	02-012/15:53:37		NOTE: Apoapsis 12732 -		02-012/15:40:27
25751	MGS	02-012/15:55:57		SSR 1A Data Disable	CSD1AX	02-012/15:42:47
25752	MGS	02-012/15:55:57		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-012/15:42:47
25753	MGS	02-012/15:55:58		NOTE: End Block (SSRMGR)		02-012/15:42:48
25754	MGS	02-012/15:56:32		NOTE: Enter Earth Occultation 12732		02-012/15:43:22
25755	MGS	02-012/15:56:32	65	NOTE: Loss Of X-Band Signal		
25756	MGS	02-012/15:56:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/15:43:47
25757	MGS	02-012/15:56:57		NOTE: Enter Solar Eclipse 12732		02-012/15:43:47
25758	MGS	02-012/15:57:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/15:43:58
25759	MGS	02-012/15:57:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/15:43:58
25760	MGS	02-012/15:57:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/15:43:58
25761	MGS	02-012/15:57:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/15:43:58
25762	MGS	02-012/15:57:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/15:43:59
25763	MGS	02-012/15:57:09		NOTE: End EVP script		02-012/15:43:59
25764	MGS	02-012/15:57:10		NOTE: End Block (MAP_RT)		02-012/15:44:00
25765	MGS	02-012/15:57:13		NOTE: End fixed Sub-Reflector for Radio Science		02-012/15:44:03
25766	MGS	02-012/16:01:23	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25767	MGS	02-012/16:03:23	65	Range Modulation On: SUP=3.0dB		
25768	MGS	02-012/16:04:23	65	Begin Ranging Acquisition		
25769	MGS	02-012/16:22:09		: 01:32:41	RPAONX	02-012/16:08:59
25770	MGS	02-012/16:22:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/16:08:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25771	MGS	02-012/16:23:54		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/16:10:44
25772	MGS	02-012/16:23:57		NOTE: Exit Earth Occultation 12732		02-012/16:10:47
25773	MGS	02-012/16:23:57	65	Acquisition Of X-Band Signal		
25774	MGS	02-012/16:23:57	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25775	MGS	02-012/16:27:42	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25776	MGS	02-012/16:29:18		NOTE: Exit Planetary Atmosphere 12732		02-012/16:16:08
25777	MGS	02-012/16:29:45		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:26	AEMPB	02-012/16:16:35
25778	MGS	02-012/16:29:45		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-012/16:16:35
25779	MGS	02-012/16:29:45		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-012/16:16:35
25780	MGS	02-012/16:29:46		SSR 1A Data Enable	CSD1AE	02-012/16:16:36
25781	MGS	02-012/16:29:46		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-012/16:16:36
25782	MGS	02-012/16:29:46	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25783	MGS	02-012/16:37:19		NOTE: Exit Solar Eclipse 12732		02-012/16:24:09
25784	MGS	02-012/16:52:22		NOTE: Periapsis 12733 ----------		02-012/16:39:12
25785	MGS	02-012/17:09:09	65	NOTE: Transmitter Off in 15 minutes		
25786	MGS	02-012/17:22:09	65	Range Modulation Off		
25787	MGS	02-012/17:24:09	65	Transmitter Off		
25788	MGS	02-012/17:40:24		SSR 1A Data Disable	CSD1AX	02-012/17:27:14
25789	MGS	02-012/17:40:24		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-012/17:27:14
25790	MGS	02-012/17:40:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-012/17:27:14
25791	MGS	02-012/17:40:24	65	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25792	MGS	02-012/17:44:40		NOTE: Start Block (MAP_RT)		02-012/17:31:30
25793	MGS	02-012/17:44:41		: 00:25:12, 01:32:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:01, 01:15:40, 00:07:43	AEMINI	02-012/17:31:31
25794	MGS	02-012/17:44:41		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/17:31:31
25795	MGS	02-012/17:44:41		NOTE: Start EVP data return script		02-012/17:31:31
25796	MGS	02-012/17:44:42		: SE_2A, RTM, 01:15:39, MRC, 2002-012T18:16:00.000	AEMRTI	02-012/17:31:32
25797	MGS	02-012/17:49:11		NOTE: Enter Planetary Atmosphere 12733		02-012/17:36:01
25798	MGS	02-012/17:50:29	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25799	MGS	02-012/17:51:32		NOTE: Apoapsis 12733 -		02-012/17:38:22
25800	MGS	02-012/17:54:14		NOTE: Enter Earth Occultation 12733		02-012/17:41:04
25801	MGS	02-012/17:54:14	65	NOTE: Loss Of X-Band Signal		
25802	MGS	02-012/17:54:41		NOTE: Enter Solar Eclipse 12733		02-012/17:41:31
25803	MGS	02-012/17:54:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/17:41:31
25804	MGS	02-012/17:54:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/17:41:40
25805	MGS	02-012/17:54:50		NOTE: End EVP script		02-012/17:41:40
25806	MGS	02-012/17:54:51		NOTE: End Block (MAP_PB_ODY)		02-012/17:41:41
25807	MGS	02-012/17:59:06	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25808	MGS	02-012/18:01:06	65	Range Modulation On: SUP=3.0dB		
25809	MGS	02-012/18:02:06	65	Begin Ranging Acquisition		
25810	MGS	02-012/18:16:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/18:02:58
25811	MGS	02-012/18:19:53		: 01:32:40	RPAONX	02-012/18:06:43
25812	MGS	02-012/18:19:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/18:06:43
25813	MGS	02-012/18:21:08		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-012/18:07:58
25814	MGS	02-012/18:21:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/18:07:58
25815	MGS	02-012/18:21:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/18:07:58
25816	MGS	02-012/18:21:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/18:07:58
25817	MGS	02-012/18:21:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/18:07:58
25818	MGS	02-012/18:21:41		NOTE: Exit Earth Occultation 12733		02-012/18:08:31
25819	MGS	02-012/18:21:41	65	Acquisition Of X-Band Signal		
25820	MGS	02-012/18:21:41	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25821	MGS	02-012/18:21:41	65	NOTE: Carrier Only -- No Telemetry Modulation		
25822	MGS	02-012/18:27:01		NOTE: Exit Planetary Atmosphere 12733		02-012/18:13:50
25823	MGS	02-012/18:29:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/18:15:59
25824	MGS	02-012/18:29:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/18:15:59

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25825	MGS	02-012/18:29:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/18:15:59
25826	MGS	02-012/18:29:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/18:15:59
25827	MGS	02-012/18:29:09	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25828	MGS	02-012/18:29:10		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-012/18:16:00
25829	MGS	02-012/18:29:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/18:16:00
25830	MGS	02-012/18:29:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/18:16:00
25831	MGS	02-012/18:29:10	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25832	MGS	02-012/18:29:14		NOTE: End fixed Sub-Reflector for Radio Science		02-012/18:16:04
25833	MGS	02-012/18:35:03		NOTE: Exit Solar Eclipse 12733		02-012/18:21:53
25834	MGS	02-012/18:50:16		NOTE: Periapsis 12734 ----------		02-012/18:37:06
25835	MGS	02-012/19:06:55	65	NOTE: Transmitter Off in 15 minutes		
25836	MGS	02-012/19:19:56	65	Range Modulation Off		
25837	MGS	02-012/19:21:55	65	Transmitter Off		
25838	MGS	02-012/19:39:49		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/19:26:39
25839	MGS	02-012/19:42:28		NOTE: Start EVP data return script		02-012/19:29:18
25840	MGS	02-012/19:44:49		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/19:31:39
25841	MGS	02-012/19:44:49		: 00:07:43, FALSE	RDSCII	02-012/19:31:39
25842	MGS	02-012/19:44:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/19:31:39
25843	MGS	02-012/19:44:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/19:31:39
25844	MGS	02-012/19:44:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/19:31:39
25845	MGS	02-012/19:44:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/19:31:39
25846	MGS	02-012/19:44:49	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25847	MGS	02-012/19:44:49	65	NOTE: Carrier Only -- No Telemetry Modulation		
25848	MGS	02-012/19:46:59		NOTE: Enter Planetary Atmosphere 12734		02-012/19:33:48
25849	MGS	02-012/19:49:21		NOTE: Apoapsis 12734 -		02-012/19:36:10
25850	MGS	02-012/19:52:01		NOTE: Enter Earth Occultation 12734		02-012/19:38:51
25851	MGS	02-012/19:52:01	65	NOTE: Loss Of X-Band Signal		
25852	MGS	02-012/19:52:28		NOTE: Enter Solar Eclipse 12734		02-012/19:39:18
25853	MGS	02-012/19:52:28		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/19:39:18
25854	MGS	02-012/19:52:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/19:39:22
25855	MGS	02-012/19:52:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/19:39:22
25856	MGS	02-012/19:52:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/19:39:22
25857	MGS	02-012/19:52:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/19:39:22
25858	MGS	02-012/19:52:33		NOTE: End EVP script		02-012/19:39:23
25859	MGS	02-012/19:52:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/19:39:23
25860	MGS	02-012/19:52:37		NOTE: End fixed Sub-Reflector for Radio Science		02-012/19:39:27
25861	MGS	02-012/19:56:52	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25862	MGS	02-012/19:58:53	65	Range Modulation On: SUP=3.0dB		
25863	MGS	02-012/19:59:53	65	Begin Ranging Acquisition		
25864	MGS	02-012/20:10:00	15	Begin Pre-Cal		
25865	MGS	02-012/20:10:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
25866	MGS	02-012/20:10:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
25867	MGS	02-012/20:10:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
25868	MGS	02-012/20:10:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
25869	MGS	02-012/20:10:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
25870	MGS	02-012/20:10:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
25871	MGS	02-012/20:10:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
25872	MGS	02-012/20:10:00	15	Config: TGC: DEST=37		
25873	MGS	02-012/20:10:00	15	Config: TGC: BAND=X, BR=40000.000000		
25874	MGS	02-012/20:10:00	15	Config: FSS: CH=2, PRI_FL=10000		
25875	MGS	02-012/20:10:00	15	Config: RSR		
25876	MGS	02-012/20:10:00	15	Config: TXL		
25877	MGS	02-012/20:10:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
25878	MGS	02-012/20:10:00	15	Config: BVR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25879	MGS	02-012/20:10:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
25880	MGS	02-012/20:10:00	15	Config: MDA: SMPL=0.1		
25881	MGS	02-012/20:10:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
25882	MGS	02-012/20:10:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
25883	MGS	02-012/20:10:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
25884	MGS	02-012/20:13:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/20:00:45
25885	MGS	02-012/20:17:40		: 01:32:40	RPAONX	02-012/20:04:30
25886	MGS	02-012/20:17:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/20:04:30
25887	MGS	02-012/20:18:55		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-012/20:05:45
25888	MGS	02-012/20:18:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/20:05:45
25889	MGS	02-012/20:18:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/20:05:45
25890	MGS	02-012/20:18:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/20:05:45
25891	MGS	02-012/20:18:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/20:05:45
25892	MGS	02-012/20:19:25		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/20:06:15
25893	MGS	02-012/20:19:28		NOTE: Exit Earth Occultation 12734		02-012/20:06:18
25894	MGS	02-012/20:19:28	65	Acquisition Of X-Band Signal		
25895	MGS	02-012/20:19:28	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25896	MGS	02-012/20:19:28	65	NOTE: Carrier Only -- No Telemetry Modulation		
25897	MGS	02-012/20:24:48		NOTE: Exit Planetary Atmosphere 12734		02-012/20:11:37
25898	MGS	02-012/20:26:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/20:13:46
25899	MGS	02-012/20:26:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/20:13:46
25900	MGS	02-012/20:26:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/20:13:46
25901	MGS	02-012/20:26:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/20:13:46
25902	MGS	02-012/20:26:56	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25903	MGS	02-012/20:26:57		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-012/20:13:47
25904	MGS	02-012/20:26:57		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-012/20:13:47
25905	MGS	02-012/20:26:57		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-012/20:13:47
25906	MGS	02-012/20:26:57	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25907	MGS	02-012/20:27:01		NOTE: End fixed Sub-Reflector for Radio Science		02-012/20:13:51
25908	MGS	02-012/20:32:51		NOTE: Exit Solar Eclipse 12734		02-012/20:19:40
25909	MGS	02-012/20:48:07		NOTE: Periapsis 12735 ----------		02-012/20:34:56
25910	MGS	02-012/21:04:42	65	NOTE: Transmitter Off in 15 minutes		
25911	MGS	02-012/21:10:00	15	Begin Tracking		
25912	MGS	02-012/21:10:00	15	Acquire D/L: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25913	MGS	02-012/21:17:42	65	Range Modulation Off		
25914	MGS	02-012/21:19:42	65	Transmitter Off		
25915	MGS	02-012/21:25:42		NOTE: Start Block (SSRMGR)		02-012/21:12:31
25916	MGS	02-012/21:25:42		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-012/21:12:31
25917	MGS	02-012/21:25:43		SSR 1A Data Enable	CSD1AE	02-012/21:12:32
25918	MGS	02-012/21:25:43		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-012/21:12:32
25919	MGS	02-012/21:30:00	65	End Tracking		
25920	MGS	02-012/21:37:37		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/21:24:26
25921	MGS	02-012/21:40:15		NOTE: Start Block (MAP_PB_ODY)		02-012/21:27:04
25922	MGS	02-012/21:40:16		: 00:25:12, 01:32:41, FALSE, FALSE, FALSE, 00:01:15, 00:06:21, 01:19:01, 00:06:03	AEMINI	02-012/21:27:05
25923	MGS	02-012/21:40:16		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/21:27:05
25924	MGS	02-012/21:40:16		NOTE: Start EVP data return script		02-012/21:27:05
25925	MGS	02-012/21:40:17		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-012T22:09:53.000	AEMPBI	02-012/21:27:06
25926	MGS	02-012/21:42:37		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-012/21:29:26
25927	MGS	02-012/21:42:37		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8112000, DUR=00:16:54		02-012/21:29:26
25928	MGS	02-012/21:42:37		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-012/21:29:26
25929	MGS	02-012/21:42:37		: 00:07:43, FALSE	RDSCII	02-012/21:29:26
25930	MGS	02-012/21:42:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-012/21:29:26
25931	MGS	02-012/21:42:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-012/21:29:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25932	MGS	02-012/21:42:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-012/21:29:26
25933	MGS	02-012/21:42:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-012/21:29:26
25934	MGS	02-012/21:42:37	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
25935	MGS	02-012/21:42:37	15	NOTE: Carrier Only -- No Telemetry Modulation		
25936	MGS	02-012/21:44:46		NOTE: Enter Planetary Atmosphere 12735		02-012/21:31:35
25937	MGS	02-012/21:45:00	65	End Post-Cal		
25938	MGS	02-012/21:46:57		NOTE: Apoapsis 12735 -		02-012/21:33:46
25939	MGS	02-012/21:49:16		SSR 1B Data Disable	CSD1BX	02-012/21:36:05
25940	MGS	02-012/21:49:16		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-012/21:36:05
25941	MGS	02-012/21:49:17		NOTE: End Block (SSRMGR)		02-012/21:36:06
25942	MGS	02-012/21:49:48		NOTE: Enter Earth Occultation 12735		02-012/21:36:37
25943	MGS	02-012/21:49:48	15	NOTE: Loss Of X-Band Signal		
25944	MGS	02-012/21:50:15		NOTE: Enter Solar Eclipse 12735		02-012/21:37:05
25945	MGS	02-012/21:50:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/21:37:05
25946	MGS	02-012/21:50:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-012/21:37:09
25947	MGS	02-012/21:50:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-012/21:37:09
25948	MGS	02-012/21:50:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-012/21:37:09
25949	MGS	02-012/21:50:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-012/21:37:09
25950	MGS	02-012/21:50:21		NOTE: End EVP script		02-012/21:37:10
25951	MGS	02-012/21:50:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/21:37:10
25952	MGS	02-012/21:50:22		NOTE: End Block (MAP_RT)		02-012/21:37:11
25953	MGS	02-012/21:50:25		NOTE: End fixed Sub-Reflector for Radio Science		02-012/21:37:14
25954	MGS	02-012/21:54:40	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
25955	MGS	02-012/21:56:40	15	Range Modulation On: SUP=3.0dB		
25956	MGS	02-012/21:57:40	15	Begin Ranging Acquisition		
25957	MGS	02-012/22:15:28		: 01:32:41	RPAONX	02-012/22:02:17
25958	MGS	02-012/22:15:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-012/22:02:17
25959	MGS	02-012/22:17:13		Disables autonomous command to send eclipse ingress script	SWEISX	02-012/22:04:02
25960	MGS	02-012/22:17:16		NOTE: Exit Earth Occultation 12735		02-012/22:04:05
25961	MGS	02-012/22:17:16	15	Acquisition Of X-Band Signal		
25962	MGS	02-012/22:17:16	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25963	MGS	02-012/22:21:01	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25964	MGS	02-012/22:22:36		NOTE: Exit Planetary Atmosphere 12735		02-012/22:09:25
25965	MGS	02-012/22:23:04		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:26	AEMPB	02-012/22:09:53
25966	MGS	02-012/22:23:04		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-012/22:09:53
25967	MGS	02-012/22:23:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-012/22:09:53
25968	MGS	02-012/22:23:05		SSR 1B Data Enable	CSD1BE	02-012/22:09:54
25969	MGS	02-012/22:23:05		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-012/22:09:54
25970	MGS	02-012/22:23:05	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25971	MGS	02-012/22:30:38		NOTE: Exit Solar Eclipse 12735		02-012/22:17:27
25972	MGS	02-012/22:45:49		NOTE: Periapsis 12736 ----------		02-012/22:32:38
25973	MGS	02-012/23:02:26	15	NOTE: Transmitter Off in 15 minutes		
25974	MGS	02-012/23:15:27	15	Range Modulation Off		
25975	MGS	02-012/23:17:26	15	Transmitter Off		
25976	MGS	02-012/23:33:43		SSR 1B Data Disable	CSD1BX	02-012/23:20:32
25977	MGS	02-012/23:33:43		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-012/23:20:32
25978	MGS	02-012/23:33:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-012/23:20:32
25979	MGS	02-012/23:33:43	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
25980	MGS	02-012/23:38:00		NOTE: Start Block (MAP_RT)		02-012/23:24:49
25981	MGS	02-012/23:38:01		: 00:25:12, 01:32:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:01, 01:15:40, 00:07:43	AEMINI	02-012/23:24:50
25982	MGS	02-012/23:38:01		Enable sending eclipse ingress script when array power disappears	SWEISE	02-012/23:24:50
25983	MGS	02-012/23:38:01		NOTE: Start EVP data return script		02-012/23:24:50
25984	MGS	02-012/23:38:02		: SE_2A, RTM, 01:15:39, MRC, 2002-013T00:09:20.000	AEMRTI	02-012/23:24:51
25985	MGS	02-012/23:40:00	43	Begin Pre-Cal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
25986	MGS	02-012/23:40:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
25987	MGS	02-012/23:40:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
25988	MGS	02-012/23:40:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
25989	MGS	02-012/23:40:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
25990	MGS	02-012/23:40:00	43	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
25991	MGS	02-012/23:40:00	43	Config: TGC: DEST=37		
25992	MGS	02-012/23:40:00	43	Config: TGC: BAND=X, BR=40000.000000		
25993	MGS	02-012/23:40:00	43	Config: FSS: CH=2, PRI_FL=10000		
25994	MGS	02-012/23:40:00	43	Config: RSR		
25995	MGS	02-012/23:40:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
25996	MGS	02-012/23:40:00	43	Config: BVR		
25997	MGS	02-012/23:40:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
25998	MGS	02-012/23:40:00	43	Config: MDA: SMPL=0.1		
25999	MGS	02-012/23:42:31		NOTE: Enter Planetary Atmosphere 12736		02-012/23:29:20
26000	MGS	02-012/23:43:48	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26001	MGS	02-012/23:44:25		NOTE: Apoapsis 12736 -		02-012/23:31:14
26002	MGS	02-012/23:47:33		NOTE: Enter Earth Occultation 12736		02-012/23:34:22
26003	MGS	02-012/23:47:33	15	NOTE: Loss Of X-Band Signal		
26004	MGS	02-012/23:48:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-012/23:34:50
26005	MGS	02-012/23:48:01		NOTE: Enter Solar Eclipse 12736		02-012/23:34:50
26006	MGS	02-012/23:48:09		NOTE: End EVP script		02-012/23:34:58
26007	MGS	02-012/23:48:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-012/23:34:58
26008	MGS	02-012/23:48:10		NOTE: End Block (MAP_PB_ODY)		02-012/23:34:59
26009	MGS	02-012/23:52:26	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26010	MGS	02-012/23:54:26	15	Range Modulation On: SUP=3.0dB		
26011	MGS	02-012/23:55:26	15	Begin Ranging Acquisition		
26012	MGS	02-013/00:00:00		Light Time: OWLT = 13:11, RTLT = 26:22		
26013	MGS	02-013/00:09:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-012/23:56:17
26014	MGS	02-013/00:13:13		: 01:32:40	RPAONX	02-013/00:00:02
26015	MGS	02-013/00:13:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/00:00:02
26016	MGS	02-013/00:14:28		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-013/00:01:17
26017	MGS	02-013/00:14:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/00:01:17
26018	MGS	02-013/00:14:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/00:01:17
26019	MGS	02-013/00:14:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/00:01:17
26020	MGS	02-013/00:14:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/00:01:17
26021	MGS	02-013/00:15:03		NOTE: Exit Earth Occultation 12736		02-013/00:01:52
26022	MGS	02-013/00:15:03	15	Acquisition Of X-Band Signal		
26023	MGS	02-013/00:15:03	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26024	MGS	02-013/00:15:03	15	NOTE: Carrier Only -- No Telemetry Modulation		
26025	MGS	02-013/00:20:22		NOTE: Exit Planetary Atmosphere 12736		02-013/00:07:11
26026	MGS	02-013/00:22:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/00:09:18
26027	MGS	02-013/00:22:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/00:09:18
26028	MGS	02-013/00:22:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/00:09:18
26029	MGS	02-013/00:22:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/00:09:18
26030	MGS	02-013/00:22:29	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26031	MGS	02-013/00:22:30		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-013/00:09:19
26032	MGS	02-013/00:22:30		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/00:09:19
26033	MGS	02-013/00:22:30		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/00:09:19
26034	MGS	02-013/00:22:30	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26035	MGS	02-013/00:22:34		NOTE: End fixed Sub-Reflector for Radio Science		02-013/00:09:23
26036	MGS	02-013/00:28:24		NOTE: Exit Solar Eclipse 12736		02-013/00:15:13
26037	MGS	02-013/00:43:36		NOTE: Periapsis 12737 ----------		02-013/00:30:24
26038	MGS	02-013/01:00:09	15	NOTE: Transmitter Off in 15 minutes		
26039	MGS	02-013/01:10:00	43	Begin Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26040	MGS	02-013/01:10:00	43	Acquire D/L: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26041	MGS	02-013/01:13:09	15	Range Modulation Off		
26042	MGS	02-013/01:15:09	15	Transmitter Off		
26043	MGS	02-013/01:33:09		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/01:19:58
26044	MGS	02-013/01:35:44		NOTE: Start EVP data return script		02-013/01:22:33
26045	MGS	02-013/01:38:09		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/01:24:58
26046	MGS	02-013/01:38:09		: 00:07:43, FALSE	RDSCII	02-013/01:24:58
26047	MGS	02-013/01:38:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/01:24:58
26048	MGS	02-013/01:38:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/01:24:58
26049	MGS	02-013/01:38:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/01:24:58
26050	MGS	02-013/01:38:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/01:24:58
26051	MGS	02-013/01:38:09	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26052	MGS	02-013/01:38:09	15	NOTE: Carrier Only -- No Telemetry Modulation		
26053	MGS	02-013/01:38:09	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26054	MGS	02-013/01:38:09	43	NOTE: Carrier Only -- No Telemetry Modulation		
26055	MGS	02-013/01:40:14		NOTE: Enter Planetary Atmosphere 12737		02-013/01:27:02
26056	MGS	02-013/01:42:14		NOTE: Apoapsis 12737 -		02-013/01:29:03
26057	MGS	02-013/01:45:16		NOTE: Enter Earth Occultation 12737		02-013/01:32:05
26058	MGS	02-013/01:45:16	15	NOTE: Loss Of X-Band Signal		
26059	MGS	02-013/01:45:16	43	NOTE: Loss Of X-Band Signal		
26060	MGS	02-013/01:45:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/01:32:33
26061	MGS	02-013/01:45:44		NOTE: Enter Solar Eclipse 12737		02-013/01:32:33
26062	MGS	02-013/01:45:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/01:32:41
26063	MGS	02-013/01:45:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/01:32:41
26064	MGS	02-013/01:45:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/01:32:41
26065	MGS	02-013/01:45:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/01:32:41
26066	MGS	02-013/01:45:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/01:32:42
26067	MGS	02-013/01:45:53		NOTE: End EVP script		02-013/01:32:42
26068	MGS	02-013/01:45:57		NOTE: End fixed Sub-Reflector for Radio Science		02-013/01:32:46
26069	MGS	02-013/01:50:10	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26070	MGS	02-013/01:52:10	15	Range Modulation On: SUP=3.0dB		
26071	MGS	02-013/01:53:10	15	Begin Ranging Acquisition		
26072	MGS	02-013/02:07:11		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/01:54:00
26073	MGS	02-013/02:10:56		: 01:32:40	RPAONX	02-013/01:57:45
26074	MGS	02-013/02:10:56		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/01:57:45
26075	MGS	02-013/02:12:11		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-013/01:59:00
26076	MGS	02-013/02:12:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/01:59:00
26077	MGS	02-013/02:12:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/01:59:00
26078	MGS	02-013/02:12:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/01:59:00
26079	MGS	02-013/02:12:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/01:59:00
26080	MGS	02-013/02:12:41		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/01:59:30
26081	MGS	02-013/02:12:47		NOTE: Exit Earth Occultation 12737		02-013/01:59:36
26082	MGS	02-013/02:12:47	15	Acquisition Of X-Band Signal		
26083	MGS	02-013/02:12:47	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26084	MGS	02-013/02:12:47	15	NOTE: Carrier Only -- No Telemetry Modulation		
26085	MGS	02-013/02:12:47	43	Acquisition Of X-Band Signal		
26086	MGS	02-013/02:12:47	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26087	MGS	02-013/02:12:47	43	NOTE: Carrier Only -- No Telemetry Modulation		
26088	MGS	02-013/02:18:07		NOTE: Exit Planetary Atmosphere 12737		02-013/02:04:55
26089	MGS	02-013/02:20:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/02:07:01
26090	MGS	02-013/02:20:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/02:07:01
26091	MGS	02-013/02:20:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/02:07:01
26092	MGS	02-013/02:20:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/02:07:01

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26093	MGS	02-013/02:20:12	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26094	MGS	02-013/02:20:12	43	Acquire D/L: X/16, 3-Way/15, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26095	MGS	02-013/02:20:13		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-013/02:07:02
26096	MGS	02-013/02:20:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/02:07:02
26097	MGS	02-013/02:20:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/02:07:02
26098	MGS	02-013/02:20:13	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26099	MGS	02-013/02:20:13	43	D/L Change: X/16, 3-Way/15, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26100	MGS	02-013/02:20:18		NOTE: End fixed Sub-Reflector for Radio Science		02-013/02:07:06
26101	MGS	02-013/02:26:07		NOTE: Exit Solar Eclipse 12737		02-013/02:12:55
26102	MGS	02-013/02:41:19		NOTE: Periapsis 12738 ----------		02-013/02:28:07
26103	MGS	02-013/02:45:00	15	NOTE: Transmitter Off in 15 minutes		
26104	MGS	02-013/02:58:00	15	Range Modulation Off		
26105	MGS	02-013/03:00:00	15	Transmitter Off		
26106	MGS	02-013/03:05:00	15	End Tracking		
26107	MGS	02-013/03:18:57		NOTE: Start Block (SSRMGR)		02-013/03:05:45
26108	MGS	02-013/03:18:57		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-013/03:05:45
26109	MGS	02-013/03:18:58		SSR 1B Data Enable	CSD1BE	02-013/03:05:46
26110	MGS	02-013/03:18:58		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-013/03:05:46
26111	MGS	02-013/03:20:00	15	End Post-Cal		
26112	MGS	02-013/03:26:23	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26113	MGS	02-013/03:30:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/03:17:41
26114	MGS	02-013/03:33:26		NOTE: Start Block (MAP_PB_ODY)		02-013/03:20:14
26115	MGS	02-013/03:33:27		: 00:25:12, 01:32:41, FALSE, FALSE, FALSE, 00:01:15, 00:06:21, 01:19:01, 00:06:03	AEMINI	02-013/03:20:15
26116	MGS	02-013/03:33:27		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/03:20:15
26117	MGS	02-013/03:33:27		NOTE: Start EVP data return script		02-013/03:20:15
26118	MGS	02-013/03:33:28		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-013T04:03:03.000	AEMPBI	02-013/03:20:16
26119	MGS	02-013/03:35:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/03:22:41
26120	MGS	02-013/03:35:53		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8120000, DUR=00:16:55		02-013/03:22:41
26121	MGS	02-013/03:35:53		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-013/03:22:41
26122	MGS	02-013/03:35:53		: 00:07:43, FALSE	RDSCII	02-013/03:22:41
26123	MGS	02-013/03:35:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/03:22:41
26124	MGS	02-013/03:35:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/03:22:41
26125	MGS	02-013/03:35:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/03:22:41
26126	MGS	02-013/03:35:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/03:22:41
26127	MGS	02-013/03:35:53	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26128	MGS	02-013/03:35:53	43	NOTE: Carrier Only -- No Telemetry Modulation		
26129	MGS	02-013/03:37:57		NOTE: Enter Planetary Atmosphere 12738		02-013/03:24:45
26130	MGS	02-013/03:40:02		NOTE: Apoapsis 12738 -		02-013/03:26:50
26131	MGS	02-013/03:42:27		SSR 1A Data Disable	CSD1AX	02-013/03:29:15
26132	MGS	02-013/03:42:27		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-013/03:29:15
26133	MGS	02-013/03:42:28		NOTE: End Block (SSRMGR)		02-013/03:29:16
26134	MGS	02-013/03:42:59		NOTE: Enter Earth Occultation 12738		02-013/03:29:47
26135	MGS	02-013/03:42:59	43	NOTE: Loss Of X-Band Signal		
26136	MGS	02-013/03:43:27		NOTE: Enter Solar Eclipse 12738		02-013/03:30:15
26137	MGS	02-013/03:43:27		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/03:30:15
26138	MGS	02-013/03:43:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/03:30:24
26139	MGS	02-013/03:43:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/03:30:24
26140	MGS	02-013/03:43:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/03:30:24
26141	MGS	02-013/03:43:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/03:30:24
26142	MGS	02-013/03:43:37		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/03:30:25
26143	MGS	02-013/03:43:37		NOTE: End EVP script		02-013/03:30:25
26144	MGS	02-013/03:43:38		NOTE: End Block (MAP_RT)		02-013/03:30:26
26145	MGS	02-013/03:43:41		NOTE: End fixed Sub-Reflector for Radio Science		02-013/03:30:29
26146	MGS	02-013/04:08:39		: 01:32:41	RPAONX	02-013/03:55:27

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26147	MGS	02-013/04:08:39		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/03:55:27
26148	MGS	02-013/04:10:24		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/03:57:12
26149	MGS	02-013/04:10:30		NOTE: Exit Earth Occultation 12738		02-013/03:57:18
26150	MGS	02-013/04:10:30	43	Acquisition Of X-Band Signal		
26151	MGS	02-013/04:10:30	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26152	MGS	02-013/04:15:50		NOTE: Exit Planetary Atmosphere 12738		02-013/04:02:38
26153	MGS	02-013/04:16:15		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:26	AEMPB	02-013/04:03:03
26154	MGS	02-013/04:16:15		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-013/04:03:03
26155	MGS	02-013/04:16:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-013/04:03:03
26156	MGS	02-013/04:16:16		SSR 1A Data Enable	CSD1AE	02-013/04:03:04
26157	MGS	02-013/04:16:16		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-013/04:03:04
26158	MGS	02-013/04:16:16	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26159	MGS	02-013/04:23:49		NOTE: Exit Solar Eclipse 12738		02-013/04:10:37
26160	MGS	02-013/04:38:45		NOTE: Periapsis 12739 ----------		02-013/04:25:33
26161	MGS	02-013/05:26:54		SSR 1A Data Disable	CSD1AX	02-013/05:13:42
26162	MGS	02-013/05:26:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-013/05:13:42
26163	MGS	02-013/05:26:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-013/05:13:42
26164	MGS	02-013/05:26:54	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26165	MGS	02-013/05:31:09		NOTE: Start Block (MAP_RT)		02-013/05:17:57
26166	MGS	02-013/05:31:10		: 00:25:12, 01:32:40, FALSE, TRUE, FALSE, 00:01:15, 00:08:01, 01:15:40, 00:07:43	AEMINI	02-013/05:17:58
26167	MGS	02-013/05:31:10		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/05:17:58
26168	MGS	02-013/05:31:10		NOTE: Start EVP data return script		02-013/05:17:58
26169	MGS	02-013/05:31:11		: SE_2A, RTM, 01:15:39, MRC, 2002-013T06:02:27.000	AEMRTI	02-013/05:17:59
26170	MGS	02-013/05:35:40		NOTE: Enter Planetary Atmosphere 12739		02-013/05:22:28
26171	MGS	02-013/05:37:28		NOTE: Apoapsis 12739 -		02-013/05:24:16
26172	MGS	02-013/05:40:42		NOTE: Enter Earth Occultation 12739		02-013/05:27:30
26173	MGS	02-013/05:40:42	43	NOTE: Loss Of X-Band Signal		
26174	MGS	02-013/05:41:10		NOTE: Enter Solar Eclipse 12739		02-013/05:27:57
26175	MGS	02-013/05:41:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/05:27:58
26176	MGS	02-013/05:41:20		NOTE: End EVP script		02-013/05:28:08
26177	MGS	02-013/05:41:20		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/05:28:08
26178	MGS	02-013/05:41:21		NOTE: End Block (MAP_PB_ODY)		02-013/05:28:09
26179	MGS	02-013/06:02:37		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/05:49:24
26180	MGS	02-013/06:06:22		: 01:32:40	RPAONX	02-013/05:53:10
26181	MGS	02-013/06:06:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/05:53:10
26182	MGS	02-013/06:07:37		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-013/05:54:25
26183	MGS	02-013/06:07:37		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/05:54:25
26184	MGS	02-013/06:07:37		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/05:54:25
26185	MGS	02-013/06:07:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/05:54:25
26186	MGS	02-013/06:07:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/05:54:25
26187	MGS	02-013/06:08:13		NOTE: Exit Earth Occultation 12739		02-013/05:55:01
26188	MGS	02-013/06:08:13	43	Acquisition Of X-Band Signal		
26189	MGS	02-013/06:08:13	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26190	MGS	02-013/06:08:13	43	NOTE: Carrier Only -- No Telemetry Modulation		
26191	MGS	02-013/06:13:32		NOTE: Exit Planetary Atmosphere 12739		02-013/06:00:20
26192	MGS	02-013/06:15:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/06:02:26
26193	MGS	02-013/06:15:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/06:02:26
26194	MGS	02-013/06:15:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/06:02:26
26195	MGS	02-013/06:15:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/06:02:26
26196	MGS	02-013/06:15:38	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26197	MGS	02-013/06:15:39		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-013/06:02:27
26198	MGS	02-013/06:15:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/06:02:27
26199	MGS	02-013/06:15:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/06:02:27
26200	MGS	02-013/06:15:39	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26201	MGS	02-013/06:15:43		NOTE: End fixed Sub-Reflector for Radio Science		02-013/06:02:30
26202	MGS	02-013/06:21:32		NOTE: Exit Solar Eclipse 12739		02-013/06:08:20
26203	MGS	02-013/06:36:18		NOTE: Periapsis 12740 ----------		02-013/06:23:06
26204	MGS	02-013/07:26:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/07:13:05
26205	MGS	02-013/07:28:55		NOTE: Start EVP data return script		02-013/07:15:43
26206	MGS	02-013/07:31:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/07:18:06
26207	MGS	02-013/07:31:18		: 00:07:43, FALSE	RDSCII	02-013/07:18:06
26208	MGS	02-013/07:31:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/07:18:06
26209	MGS	02-013/07:31:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/07:18:06
26210	MGS	02-013/07:31:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/07:18:06
26211	MGS	02-013/07:31:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/07:18:06
26212	MGS	02-013/07:31:18	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26213	MGS	02-013/07:31:18	43	NOTE: Carrier Only -- No Telemetry Modulation		
26214	MGS	02-013/07:33:23		NOTE: Enter Planetary Atmosphere 12740		02-013/07:20:11
26215	MGS	02-013/07:35:11		NOTE: Apoapsis 12740 -		02-013/07:21:58
26216	MGS	02-013/07:38:24		NOTE: Enter Earth Occultation 12740		02-013/07:25:12
26217	MGS	02-013/07:38:24	43	NOTE: Loss Of X-Band Signal		
26218	MGS	02-013/07:38:55		NOTE: Enter Solar Eclipse 12740		02-013/07:25:42
26219	MGS	02-013/07:38:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/07:25:43
26220	MGS	02-013/07:39:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/07:25:49
26221	MGS	02-013/07:39:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/07:25:49
26222	MGS	02-013/07:39:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/07:25:49
26223	MGS	02-013/07:39:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/07:25:49
26224	MGS	02-013/07:39:02		NOTE: End EVP script		02-013/07:25:49
26225	MGS	02-013/07:39:02		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/07:25:50
26226	MGS	02-013/07:39:06		NOTE: End fixed Sub-Reflector for Radio Science		02-013/07:25:53
26227	MGS	02-013/08:00:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/07:47:09
26228	MGS	02-013/08:04:07		: 01:32:40	RPAONX	02-013/07:50:55
26229	MGS	02-013/08:04:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/07:50:55
26230	MGS	02-013/08:05:22		: 00:00:30, 00:08:01, FALSE	RDSCIE	02-013/07:52:10
26231	MGS	02-013/08:05:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/07:52:10
26232	MGS	02-013/08:05:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/07:52:10
26233	MGS	02-013/08:05:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/07:52:10
26234	MGS	02-013/08:05:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/07:52:10
26235	MGS	02-013/08:05:52		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/07:52:40
26236	MGS	02-013/08:05:58		NOTE: Exit Earth Occultation 12740		02-013/07:52:46
26237	MGS	02-013/08:05:58	43	Acquisition Of X-Band Signal		
26238	MGS	02-013/08:05:58	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26239	MGS	02-013/08:05:58	43	NOTE: Carrier Only -- No Telemetry Modulation		
26240	MGS	02-013/08:11:16		NOTE: Exit Planetary Atmosphere 12740		02-013/07:58:04
26241	MGS	02-013/08:13:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/08:00:11
26242	MGS	02-013/08:13:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/08:00:11
26243	MGS	02-013/08:13:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/08:00:11
26244	MGS	02-013/08:13:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/08:00:11
26245	MGS	02-013/08:13:23	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26246	MGS	02-013/08:13:24		: RTM, MRC, 01:15:39, S&E_2A, FALSE, 00:07:44	AEMRT	02-013/08:00:12
26247	MGS	02-013/08:13:24		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/08:00:12
26248	MGS	02-013/08:13:24		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/08:00:12
26249	MGS	02-013/08:13:24	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26250	MGS	02-013/08:13:28		NOTE: End fixed Sub-Reflector for Radio Science		02-013/08:00:15
26251	MGS	02-013/08:19:17		NOTE: Exit Solar Eclipse 12740		02-013/08:06:04
26252	MGS	02-013/08:34:25		NOTE: Periapsis 12741 ----------		02-013/08:21:13
26253	MGS	02-013/09:12:10		NOTE: Start Block (SSRMGR)		02-013/08:58:58
26254	MGS	02-013/09:12:10		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-013/08:58:58

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26255	MGS	02-013/09:12:11		SSR 1A Data Enable	CSD1AE	02-013/08:58:59
26256	MGS	02-013/09:12:11		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-013/08:58:59
26257	MGS	02-013/09:24:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/09:10:50
26258	MGS	02-013/09:26:40		NOTE: Start Block (MAP_PB_ODY)		02-013/09:13:28
26259	MGS	02-013/09:26:41		: 00:25:12, 01:32:41, FALSE, FALSE, FALSE, 00:01:15, 00:06:21, 01:19:01, 00:06:03	AEMINI	02-013/09:13:29
26260	MGS	02-013/09:26:41		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/09:13:29
26261	MGS	02-013/09:26:41		NOTE: Start EVP data return script		02-013/09:13:29
26262	MGS	02-013/09:26:42		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-013T09:56:17.000	AEMPBI	02-013/09:13:30
26263	MGS	02-013/09:29:03		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/09:15:51
26264	MGS	02-013/09:29:03		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8096000, DUR=00:16:52		02-013/09:15:51
26265	MGS	02-013/09:29:03		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-013/09:15:51
26266	MGS	02-013/09:29:03		: 00:07:43, FALSE	RDSCII	02-013/09:15:51
26267	MGS	02-013/09:29:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/09:15:51
26268	MGS	02-013/09:29:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/09:15:51
26269	MGS	02-013/09:29:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/09:15:51
26270	MGS	02-013/09:29:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/09:15:51
26271	MGS	02-013/09:29:03	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26272	MGS	02-013/09:29:03	43	NOTE: Carrier Only -- No Telemetry Modulation		
26273	MGS	02-013/09:31:08		NOTE: Enter Planetary Atmosphere 12741		02-013/09:17:56
26274	MGS	02-013/09:33:28		NOTE: Apoapsis 12741 -		02-013/09:20:15
26275	MGS	02-013/09:35:42		SSR 1B Data Disable	CSD1BX	02-013/09:22:29
26276	MGS	02-013/09:35:42		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-013/09:22:29
26277	MGS	02-013/09:35:43		NOTE: End Block (SSRMGR)		02-013/09:22:30
26278	MGS	02-013/09:36:09		NOTE: Enter Earth Occultation 12741		02-013/09:22:57
26279	MGS	02-013/09:36:09	43	NOTE: Loss Of X-Band Signal		
26280	MGS	02-013/09:36:41		NOTE: Enter Solar Eclipse 12741		02-013/09:23:29
26281	MGS	02-013/09:36:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/09:23:29
26282	MGS	02-013/09:36:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/09:23:34
26283	MGS	02-013/09:36:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/09:23:34
26284	MGS	02-013/09:36:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/09:23:34
26285	MGS	02-013/09:36:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/09:23:34
26286	MGS	02-013/09:36:47		NOTE: End EVP script		02-013/09:23:34
26287	MGS	02-013/09:36:48		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/09:23:35
26288	MGS	02-013/09:36:48		NOTE: End Block (MAP_RT)		02-013/09:23:35
26289	MGS	02-013/09:36:51		NOTE: End fixed Sub-Reflector for Radio Science		02-013/09:23:38
26290	MGS	02-013/10:01:54		: 01:32:41	RPAONX	02-013/09:48:41
26291	MGS	02-013/10:01:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/09:48:41
26292	MGS	02-013/10:03:39		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/09:50:26
26293	MGS	02-013/10:03:46		NOTE: Exit Earth Occultation 12741		02-013/09:50:33
26294	MGS	02-013/10:03:46	43	Acquisition Of X-Band Signal		
26295	MGS	02-013/10:03:46	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26296	MGS	02-013/10:09:03		NOTE: Exit Planetary Atmosphere 12741		02-013/09:55:50
26297	MGS	02-013/10:09:30		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:26	AEMPB	02-013/09:56:17
26298	MGS	02-013/10:09:30		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-013/09:56:17
26299	MGS	02-013/10:09:30		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-013/09:56:17
26300	MGS	02-013/10:09:31		SSR 1B Data Enable	CSD1BE	02-013/09:56:18
26301	MGS	02-013/10:09:31		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-013/09:56:18
26302	MGS	02-013/10:09:31	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26303	MGS	02-013/10:17:04		NOTE: Exit Solar Eclipse 12741		02-013/10:03:51
26304	MGS	02-013/10:20:00	65	Begin Pre-Cal		
26305	MGS	02-013/10:20:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
26306	MGS	02-013/10:20:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
26307	MGS	02-013/10:20:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
26308	MGS	02-013/10:20:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26309	MGS	02-013/10:20:00	65	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
26310	MGS	02-013/10:20:00	65	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
26311	MGS	02-013/10:20:00	65	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
26312	MGS	02-013/10:20:00	65	Config: TGC: DEST=37		
26313	MGS	02-013/10:20:00	65	Config: TGC: BAND=X, BR=42666.666667		
26314	MGS	02-013/10:20:00	65	Config: FSS: CH=2, PRI_FL=10000		
26315	MGS	02-013/10:20:00	65	Config: RSR		
26316	MGS	02-013/10:20:00	65	Config: TXL		
26317	MGS	02-013/10:20:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
26318	MGS	02-013/10:20:00	65	Config: BVR		
26319	MGS	02-013/10:20:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
26320	MGS	02-013/10:20:00	65	Config: MDA: SMPL=0.1		
26321	MGS	02-013/10:20:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
26322	MGS	02-013/10:20:00	65	Config: SRA: HIGH=4, LOW=14, SERV=D		
26323	MGS	02-013/10:20:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
26324	MGS	02-013/10:32:39		NOTE: Periapsis 12742 ----------		02-013/10:19:26
26325	MGS	02-013/11:20:00	65	Begin Tracking		
26326	MGS	02-013/11:20:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26327	MGS	02-013/11:20:09		SSR 1B Data Disable	CSD1BX	02-013/11:06:56
26328	MGS	02-013/11:20:09		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-013/11:06:56
26329	MGS	02-013/11:20:09		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-013/11:06:56
26330	MGS	02-013/11:20:09	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26331	MGS	02-013/11:20:09	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26332	MGS	02-013/11:24:28		NOTE: Start Block (MAP_RT)		02-013/11:11:15
26333	MGS	02-013/11:24:29		: 00:25:19, 01:32:27, FALSE, TRUE, FALSE, 00:01:15, 00:07:57, 01:15:33, 00:07:41	AEMINI	02-013/11:11:16
26334	MGS	02-013/11:24:29		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/11:11:16
26335	MGS	02-013/11:24:29		NOTE: Start EVP data return script		02-013/11:11:16
26336	MGS	02-013/11:24:30		: SE_2A, RTM, 01:15:32, MRC, 2002-013T11:55:48.000	AEMRTI	02-013/11:11:17
26337	MGS	02-013/11:28:56		NOTE: Enter Planetary Atmosphere 12742		02-013/11:15:43
26338	MGS	02-013/11:31:41		NOTE: Apoapsis 12742 -		02-013/11:18:28
26339	MGS	02-013/11:33:04	65	NOTE: Above Uplink Interlock Limit		
26340	MGS	02-013/11:33:58		NOTE: Enter Earth Occultation 12742		02-013/11:20:45
26341	MGS	02-013/11:33:58	43	NOTE: Loss Of X-Band Signal		
26342	MGS	02-013/11:33:58	65	NOTE: Loss Of X-Band Signal		
26343	MGS	02-013/11:34:29		NOTE: Enter Solar Eclipse 12742		02-013/11:21:16
26344	MGS	02-013/11:34:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/11:21:16
26345	MGS	02-013/11:34:35		NOTE: End EVP script		02-013/11:21:22
26346	MGS	02-013/11:34:35		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/11:21:22
26347	MGS	02-013/11:34:36		NOTE: End Block (MAP_PB_ODY)		02-013/11:21:23
26348	MGS	02-013/11:35:03	43	NOTE: Below Uplink Interlock Limit		
26349	MGS	02-013/11:38:53	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26350	MGS	02-013/11:40:00	43	End Tracking		
26351	MGS	02-013/11:40:53	65	Range Modulation On: SUP=3.0dB		
26352	MGS	02-013/11:41:53	65	Begin Ranging Acquisition		
26353	MGS	02-013/11:55:00	43	End Post-Cal		
26354	MGS	02-013/11:56:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/11:42:50
26355	MGS	02-013/11:59:48		: 01:32:27	RPAONX	02-013/11:46:35
26356	MGS	02-013/11:59:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/11:46:35
26357	MGS	02-013/12:01:03		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-013/11:47:50
26358	MGS	02-013/12:01:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/11:47:50
26359	MGS	02-013/12:01:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/11:47:50
26360	MGS	02-013/12:01:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/11:47:50
26361	MGS	02-013/12:01:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/11:47:50
26362	MGS	02-013/12:01:34		NOTE: Exit Earth Occultation 12742		02-013/11:48:21

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26363	MGS	02-013/12:01:34	65	Acquisition Of X-Band Signal		
26364	MGS	02-013/12:01:34	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26365	MGS	02-013/12:01:34	65	NOTE: Carrier Only -- No Telemetry Modulation		
26366	MGS	02-013/12:06:51		NOTE: Exit Planetary Atmosphere 12742		02-013/11:53:38
26367	MGS	02-013/12:09:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/11:55:47
26368	MGS	02-013/12:09:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/11:55:47
26369	MGS	02-013/12:09:00		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/11:55:47
26370	MGS	02-013/12:09:00		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/11:55:47
26371	MGS	02-013/12:09:00	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26372	MGS	02-013/12:09:01		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-013/11:55:48
26373	MGS	02-013/12:09:01		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/11:55:48
26374	MGS	02-013/12:09:01		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/11:55:48
26375	MGS	02-013/12:09:01	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26376	MGS	02-013/12:09:05		NOTE: End fixed Sub-Reflector for Radio Science		02-013/11:55:52
26377	MGS	02-013/12:13:13		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-013/12:00:00
26378	MGS	02-013/12:14:52		NOTE: Exit Solar Eclipse 12742		02-013/12:01:39
26379	MGS	02-013/12:30:35		NOTE: Periapsis 12743 ----------		02-013/12:17:22
26380	MGS	02-013/12:46:33	65	NOTE: Transmitter Off in 15 minutes		
26381	MGS	02-013/12:59:33	65	Range Modulation Off		
26382	MGS	02-013/13:01:33	65	Transmitter Off		
26383	MGS	02-013/13:19:33		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/13:06:20
26384	MGS	02-013/13:22:14		NOTE: Start EVP data return script		02-013/13:09:01
26385	MGS	02-013/13:24:33		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/13:11:20
26386	MGS	02-013/13:24:33		: 00:07:41, FALSE	RDSCII	02-013/13:11:20
26387	MGS	02-013/13:24:33		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/13:11:20
26388	MGS	02-013/13:24:33		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/13:11:20
26389	MGS	02-013/13:24:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/13:11:20
26390	MGS	02-013/13:24:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/13:11:20
26391	MGS	02-013/13:24:33	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26392	MGS	02-013/13:24:33	65	NOTE: Carrier Only -- No Telemetry Modulation		
26393	MGS	02-013/13:26:43		NOTE: Enter Planetary Atmosphere 12743		02-013/13:13:30
26394	MGS	02-013/13:29:23		NOTE: Apoapsis 12743 -		02-013/13:16:10
26395	MGS	02-013/13:31:44		NOTE: Enter Earth Occultation 12743		02-013/13:18:31
26396	MGS	02-013/13:31:44	65	NOTE: Loss Of X-Band Signal		
26397	MGS	02-013/13:32:14		NOTE: Enter Solar Eclipse 12743		02-013/13:19:01
26398	MGS	02-013/13:32:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/13:19:01
26399	MGS	02-013/13:32:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/13:19:01
26400	MGS	02-013/13:32:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/13:19:01
26401	MGS	02-013/13:32:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/13:19:01
26402	MGS	02-013/13:32:14		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/13:19:01
26403	MGS	02-013/13:32:15		NOTE: End EVP script		02-013/13:19:02
26404	MGS	02-013/13:32:15		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/13:19:02
26405	MGS	02-013/13:32:19		NOTE: End fixed Sub-Reflector for Radio Science		02-013/13:19:06
26406	MGS	02-013/13:36:39	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26407	MGS	02-013/13:38:39	65	Range Modulation On: SUP=3.0dB		
26408	MGS	02-013/13:39:39	65	Begin Ranging Acquisition		
26409	MGS	02-013/13:53:48		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/13:40:35
26410	MGS	02-013/13:57:33		: 01:32:27	RPAONX	02-013/13:44:20
26411	MGS	02-013/13:57:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/13:44:20
26412	MGS	02-013/13:58:48		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-013/13:45:35
26413	MGS	02-013/13:58:48		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/13:45:35
26414	MGS	02-013/13:58:48		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/13:45:35
26415	MGS	02-013/13:58:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/13:45:35
26416	MGS	02-013/13:58:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/13:45:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26417	MGS	02-013/13:59:18		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/13:46:05
26418	MGS	02-013/13:59:20		NOTE: Exit Earth Occultation 12743		02-013/13:46:07
26419	MGS	02-013/13:59:20	65	Acquisition Of X-Band Signal		
26420	MGS	02-013/13:59:20	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26421	MGS	02-013/13:59:20	65	NOTE: Carrier Only -- No Telemetry Modulation		
26422	MGS	02-013/14:04:39		NOTE: Exit Planetary Atmosphere 12743		02-013/13:51:25
26423	MGS	02-013/14:06:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/13:53:32
26424	MGS	02-013/14:06:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/13:53:32
26425	MGS	02-013/14:06:45		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/13:53:32
26426	MGS	02-013/14:06:45		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/13:53:32
26427	MGS	02-013/14:06:45	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26428	MGS	02-013/14:06:46		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-013/13:53:33
26429	MGS	02-013/14:06:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/13:53:33
26430	MGS	02-013/14:06:46		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/13:53:33
26431	MGS	02-013/14:06:46	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26432	MGS	02-013/14:06:50		NOTE: End fixed Sub-Reflector for Radio Science		02-013/13:53:37
26433	MGS	02-013/14:12:37		NOTE: Exit Solar Eclipse 12743		02-013/13:59:24
26434	MGS	02-013/14:28:03		NOTE: Periapsis 12744 ----------		02-013/14:14:49
26435	MGS	02-013/14:44:14	65	NOTE: Transmitter Off in 15 minutes		
26436	MGS	02-013/14:57:15	65	Range Modulation Off		
26437	MGS	02-013/14:59:14	65	Transmitter Off		
26438	MGS	02-013/15:05:25		NOTE: Start Block (SSRMGR)		02-013/14:52:12
26439	MGS	02-013/15:05:25		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-013/14:52:12
26440	MGS	02-013/15:05:26		SSR 1B Data Enable	CSD1BE	02-013/14:52:13
26441	MGS	02-013/15:05:26		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-013/14:52:13
26442	MGS	02-013/15:17:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/15:04:05
26443	MGS	02-013/15:19:54		NOTE: Start Block (MAP_PB_ODY)		02-013/15:06:41
26444	MGS	02-013/15:19:55		: 00:25:19, 01:32:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:17, 01:18:54, 00:06:01	AEMINI	02-013/15:06:42
26445	MGS	02-013/15:19:55		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/15:06:42
26446	MGS	02-013/15:19:55		NOTE: Start EVP data return script		02-013/15:06:42
26447	MGS	02-013/15:19:56		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-013T15:49:34.000	AEMPBI	02-013/15:06:43
26448	MGS	02-013/15:22:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/15:09:05
26449	MGS	02-013/15:22:18		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8096000, DUR=00:16:52		02-013/15:09:05
26450	MGS	02-013/15:22:18		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-013/15:09:05
26451	MGS	02-013/15:22:18		: 00:07:41, FALSE	RDSCII	02-013/15:09:05
26452	MGS	02-013/15:22:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/15:09:05
26453	MGS	02-013/15:22:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/15:09:05
26454	MGS	02-013/15:22:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/15:09:05
26455	MGS	02-013/15:22:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/15:09:05
26456	MGS	02-013/15:22:18	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26457	MGS	02-013/15:22:18	65	NOTE: Carrier Only -- No Telemetry Modulation		
26458	MGS	02-013/15:24:25		NOTE: Enter Planetary Atmosphere 12744		02-013/15:11:11
26459	MGS	02-013/15:26:43		NOTE: Apoapsis 12744 -		02-013/15:13:29
26460	MGS	02-013/15:28:55		SSR 1A Data Disable	CSD1AX	02-013/15:15:42
26461	MGS	02-013/15:28:55		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-013/15:15:42
26462	MGS	02-013/15:28:56		NOTE: End Block (SSRMGR)		02-013/15:15:43
26463	MGS	02-013/15:29:26		NOTE: Enter Earth Occultation 12744		02-013/15:16:12
26464	MGS	02-013/15:29:26	65	NOTE: Loss Of X-Band Signal		
26465	MGS	02-013/15:29:55		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/15:16:42
26466	MGS	02-013/15:29:56		NOTE: Enter Solar Eclipse 12744		02-013/15:16:42
26467	MGS	02-013/15:29:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/15:16:46
26468	MGS	02-013/15:29:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/15:16:46
26469	MGS	02-013/15:29:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/15:16:46
26470	MGS	02-013/15:29:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/15:16:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26471	MGS	02-013/15:30:00		NOTE: End EVP script		02-013/15:16:47
26472	MGS	02-013/15:30:00		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/15:16:47
26473	MGS	02-013/15:30:01		NOTE: End Block (MAP_RT)		02-013/15:16:48
26474	MGS	02-013/15:30:04		NOTE: End fixed Sub-Reflector for Radio Science		02-013/15:16:51
26475	MGS	02-013/15:34:21	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26476	MGS	02-013/15:36:21	65	Range Modulation On: SUP=3.0dB		
26477	MGS	02-013/15:37:21	65	Begin Ranging Acquisition		
26478	MGS	02-013/15:55:14		: 01:32:28	RPAONX	02-013/15:42:01
26479	MGS	02-013/15:55:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/15:42:01
26480	MGS	02-013/15:57:00		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/15:43:46
26481	MGS	02-013/15:57:03		NOTE: Exit Earth Occultation 12744		02-013/15:43:49
26482	MGS	02-013/15:57:03	65	Acquisition Of X-Band Signal		
26483	MGS	02-013/15:57:03	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26484	MGS	02-013/16:00:48	65	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26485	MGS	02-013/16:02:21		NOTE: Exit Planetary Atmosphere 12744		02-013/15:49:08
26486	MGS	02-013/16:02:47		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:17	AEMPB	02-013/15:49:33
26487	MGS	02-013/16:02:47		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-013/15:49:33
26488	MGS	02-013/16:02:47		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-013/15:49:33
26489	MGS	02-013/16:02:48		SSR 1A Data Enable	CSD1AE	02-013/15:49:34
26490	MGS	02-013/16:02:48		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-013/15:49:34
26491	MGS	02-013/16:02:48	65	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26492	MGS	02-013/16:10:18		NOTE: Exit Solar Eclipse 12744		02-013/15:57:05
26493	MGS	02-013/16:25:26		NOTE: Periapsis 12745 ----------		02-013/16:12:12
26494	MGS	02-013/16:41:53	65	NOTE: Transmitter Off in 15 minutes		
26495	MGS	02-013/16:54:53	65	Range Modulation Off		
26496	MGS	02-013/16:56:53	65	Transmitter Off		
26497	MGS	02-013/17:13:26		SSR 1A Data Disable	CSD1AX	02-013/17:00:12
26498	MGS	02-013/17:13:26		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-013/17:00:12
26499	MGS	02-013/17:13:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-013/17:00:12
26500	MGS	02-013/17:13:26	65	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26501	MGS	02-013/17:17:36		NOTE: Start Block (MAP_RT)		02-013/17:04:22
26502	MGS	02-013/17:17:37		: 00:25:19, 01:32:27, FALSE, TRUE, FALSE, 00:01:15, 00:07:57, 01:15:33, 00:07:41	AEMINI	02-013/17:04:23
26503	MGS	02-013/17:17:37		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/17:04:23
26504	MGS	02-013/17:17:37		NOTE: Start EVP data return script		02-013/17:04:23
26505	MGS	02-013/17:17:38		: SE_2A, RTM, 01:15:32, MRC, 2002-013T17:48:56.000	AEMRTI	02-013/17:04:24
26506	MGS	02-013/17:22:05		NOTE: Enter Planetary Atmosphere 12745		02-013/17:08:51
26507	MGS	02-013/17:23:20	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26508	MGS	02-013/17:24:29		NOTE: Apoapsis 12745 -		02-013/17:11:15
26509	MGS	02-013/17:27:05		NOTE: Enter Earth Occultation 12745		02-013/17:13:51
26510	MGS	02-013/17:27:05	65	NOTE: Loss Of X-Band Signal		
26511	MGS	02-013/17:27:37		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/17:14:23
26512	MGS	02-013/17:27:37		NOTE: Enter Solar Eclipse 12745		02-013/17:14:23
26513	MGS	02-013/17:27:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/17:14:29
26514	MGS	02-013/17:27:43		NOTE: End EVP script		02-013/17:14:29
26515	MGS	02-013/17:27:44		NOTE: End Block (MAP_PB_ODY)		02-013/17:14:30
26516	MGS	02-013/17:32:02	65	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26517	MGS	02-013/17:34:02	65	Range Modulation On: SUP=3.0dB		
26518	MGS	02-013/17:35:02	65	Begin Ranging Acquisition		
26519	MGS	02-013/17:49:11		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/17:35:57
26520	MGS	02-013/17:52:56		: 01:32:27	RPAONX	02-013/17:39:42
26521	MGS	02-013/17:52:56		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/17:39:42
26522	MGS	02-013/17:54:11		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-013/17:40:57
26523	MGS	02-013/17:54:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/17:40:57
26524	MGS	02-013/17:54:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/17:40:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26525	MGS	02-013/17:54:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/17:40:57
26526	MGS	02-013/17:54:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/17:40:57
26527	MGS	02-013/17:54:45		NOTE: Exit Earth Occultation 12745		02-013/17:41:31
26528	MGS	02-013/17:54:45	65	Acquisition Of X-Band Signal		
26529	MGS	02-013/17:54:45	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26530	MGS	02-013/17:54:45	65	NOTE: Carrier Only -- No Telemetry Modulation		
26531	MGS	02-013/18:00:02		NOTE: Exit Planetary Atmosphere 12745		02-013/17:46:48
26532	MGS	02-013/18:02:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/17:48:54
26533	MGS	02-013/18:02:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/17:48:54
26534	MGS	02-013/18:02:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/17:48:54
26535	MGS	02-013/18:02:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/17:48:54
26536	MGS	02-013/18:02:08	65	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26537	MGS	02-013/18:02:09		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-013/17:48:55
26538	MGS	02-013/18:02:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/17:48:55
26539	MGS	02-013/18:02:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/17:48:55
26540	MGS	02-013/18:02:09	65	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26541	MGS	02-013/18:02:13		NOTE: End fixed Sub-Reflector for Radio Science		02-013/17:48:59
26542	MGS	02-013/18:05:00	15	Begin Pre-Cal		
26543	MGS	02-013/18:05:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
26544	MGS	02-013/18:05:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
26545	MGS	02-013/18:05:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
26546	MGS	02-013/18:05:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
26547	MGS	02-013/18:05:00	15	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
26548	MGS	02-013/18:05:00	15	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
26549	MGS	02-013/18:05:00	15	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
26550	MGS	02-013/18:05:00	15	Config: TGC: DEST=37		
26551	MGS	02-013/18:05:00	15	Config: TGC: BAND=X, BR=40000.000000		
26552	MGS	02-013/18:05:00	15	Config: FSS: CH=2, PRI_FL=10000		
26553	MGS	02-013/18:05:00	15	Config: RSR		
26554	MGS	02-013/18:05:00	15	Config: TXL		
26555	MGS	02-013/18:05:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
26556	MGS	02-013/18:05:00	15	Config: BVR		
26557	MGS	02-013/18:05:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
26558	MGS	02-013/18:05:00	15	Config: MDA: SMPL=0.1		
26559	MGS	02-013/18:05:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
26560	MGS	02-013/18:05:00	15	Config: SRA: HIGH=4, LOW=14, SERV=D		
26561	MGS	02-013/18:05:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
26562	MGS	02-013/18:07:59		NOTE: Exit Solar Eclipse 12745		02-013/17:54:46
26563	MGS	02-013/18:23:09		NOTE: Periapsis 12746 ----------		02-013/18:09:55
26564	MGS	02-013/18:39:37	65	NOTE: Transmitter Off in 15 minutes		
26565	MGS	02-013/18:52:38	65	Range Modulation Off		
26566	MGS	02-013/18:54:37	65	Transmitter Off		
26567	MGS	02-013/19:05:00	15	Begin Tracking		
26568	MGS	02-013/19:05:00	15	Acquire D/L: X/16, 3-Way/65, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26569	MGS	02-013/19:12:41		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/18:59:27
26570	MGS	02-013/19:15:23		NOTE: Start EVP data return script		02-013/19:02:09
26571	MGS	02-013/19:17:41		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/19:04:27
26572	MGS	02-013/19:17:41		: 00:07:41, FALSE	RDSCII	02-013/19:04:27
26573	MGS	02-013/19:17:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/19:04:27
26574	MGS	02-013/19:17:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/19:04:27
26575	MGS	02-013/19:17:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/19:04:27
26576	MGS	02-013/19:17:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/19:04:27
26577	MGS	02-013/19:17:41	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26578	MGS	02-013/19:17:41	15	NOTE: Carrier Only -- No Telemetry Modulation		
26579	MGS	02-013/19:17:41	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26580	MGS	02-013/19:17:41	65	NOTE: Carrier Only -- No Telemetry Modulation		
26581	MGS	02-013/19:19:50		NOTE: Enter Planetary Atmosphere 12746		02-013/19:06:36
26582	MGS	02-013/19:22:21		NOTE: Apoapsis 12746 -		02-013/19:09:07
26583	MGS	02-013/19:24:51		NOTE: Enter Earth Occultation 12746		02-013/19:11:36
26584	MGS	02-013/19:24:51	15	NOTE: Loss Of X-Band Signal		
26585	MGS	02-013/19:24:51	65	NOTE: Loss Of X-Band Signal		
26586	MGS	02-013/19:25:00	65	End Tracking		
26587	MGS	02-013/19:25:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/19:12:08
26588	MGS	02-013/19:25:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/19:12:08
26589	MGS	02-013/19:25:22		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/19:12:08
26590	MGS	02-013/19:25:22		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/19:12:08
26591	MGS	02-013/19:25:23		NOTE: Enter Solar Eclipse 12746		02-013/19:12:09
26592	MGS	02-013/19:25:23		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/19:12:09
26593	MGS	02-013/19:25:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/19:12:09
26594	MGS	02-013/19:25:23		NOTE: End EVP script		02-013/19:12:09
26595	MGS	02-013/19:25:27		NOTE: End fixed Sub-Reflector for Radio Science		02-013/19:12:13
26596	MGS	02-013/19:29:47	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26597	MGS	02-013/19:31:47	15	Range Modulation On: SUP=3.0dB		
26598	MGS	02-013/19:32:47	15	Begin Ranging Acquisition		
26599	MGS	02-013/19:40:00	65	End Post-Cal		
26600	MGS	02-013/19:46:57		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/19:33:43
26601	MGS	02-013/19:50:42		: 01:32:27	RPAONX	02-013/19:37:28
26602	MGS	02-013/19:50:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/19:37:28
26603	MGS	02-013/19:51:57		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-013/19:38:43
26604	MGS	02-013/19:51:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/19:38:43
26605	MGS	02-013/19:51:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/19:38:43
26606	MGS	02-013/19:51:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/19:38:43
26607	MGS	02-013/19:51:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/19:38:43
26608	MGS	02-013/19:52:27		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/19:39:13
26609	MGS	02-013/19:52:30		NOTE: Exit Earth Occultation 12746		02-013/19:39:16
26610	MGS	02-013/19:52:30	15	Acquisition Of X-Band Signal		
26611	MGS	02-013/19:52:30	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26612	MGS	02-013/19:52:30	15	NOTE: Carrier Only -- No Telemetry Modulation		
26613	MGS	02-013/19:57:47		NOTE: Exit Planetary Atmosphere 12746		02-013/19:44:33
26614	MGS	02-013/19:59:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/19:46:40
26615	MGS	02-013/19:59:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/19:46:40
26616	MGS	02-013/19:59:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/19:46:40
26617	MGS	02-013/19:59:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/19:46:40
26618	MGS	02-013/19:59:54	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26619	MGS	02-013/19:59:55		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-013/19:46:41
26620	MGS	02-013/19:59:55		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/19:46:41
26621	MGS	02-013/19:59:55		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/19:46:41
26622	MGS	02-013/19:59:55	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26623	MGS	02-013/19:59:59		NOTE: End fixed Sub-Reflector for Radio Science		02-013/19:46:45
26624	MGS	02-013/20:05:46		NOTE: Exit Solar Eclipse 12746		02-013/19:52:31
26625	MGS	02-013/20:21:03		NOTE: Periapsis 12747 ----------		02-013/20:07:49
26626	MGS	02-013/20:37:24	15	NOTE: Transmitter Off in 15 minutes		
26627	MGS	02-013/20:50:25	15	Range Modulation Off		
26628	MGS	02-013/20:52:24	15	Transmitter Off		
26629	MGS	02-013/20:58:38		NOTE: Start Block (SSRMGR)		02-013/20:45:24
26630	MGS	02-013/20:58:38		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-013/20:45:24
26631	MGS	02-013/20:58:39		SSR 1A Data Enable	CSD1AE	02-013/20:45:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26632	MGS	02-013/20:58:39		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-013/20:45:25
26633	MGS	02-013/21:10:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/20:57:13
26634	MGS	02-013/21:13:09		NOTE: Start Block (MAP_PB_ODY)		02-013/20:59:55
26635	MGS	02-013/21:13:10		: 00:25:19, 01:32:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:17, 01:18:54, 00:06:01	AEMINI	02-013/20:59:56
26636	MGS	02-013/21:13:10		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/20:59:56
26637	MGS	02-013/21:13:10		NOTE: Start EVP data return script		02-013/20:59:56
26638	MGS	02-013/21:13:11		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-013T21:42:47.000	AEMPBI	02-013/20:59:57
26639	MGS	02-013/21:15:27		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-013/21:02:13
26640	MGS	02-013/21:15:27		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8064000, DUR=00:16:48		02-013/21:02:13
26641	MGS	02-013/21:15:27		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-013/21:02:13
26642	MGS	02-013/21:15:27		: 00:07:41, FALSE	RDSCII	02-013/21:02:13
26643	MGS	02-013/21:15:27		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/21:02:13
26644	MGS	02-013/21:15:27		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/21:02:13
26645	MGS	02-013/21:15:27		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/21:02:13
26646	MGS	02-013/21:15:27		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/21:02:13
26647	MGS	02-013/21:15:27	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26648	MGS	02-013/21:15:27	15	NOTE: Carrier Only -- No Telemetry Modulation		
26649	MGS	02-013/21:17:38		NOTE: Enter Planetary Atmosphere 12747		02-013/21:04:24
26650	MGS	02-013/21:20:04		NOTE: Apoapsis 12747 -		02-013/21:06:50
26651	MGS	02-013/21:22:10		SSR 1B Data Disable	CSD1BX	02-013/21:08:56
26652	MGS	02-013/21:22:10		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-013/21:08:56
26653	MGS	02-013/21:22:11		NOTE: End Block (SSRMGR)		02-013/21:08:57
26654	MGS	02-013/21:22:38		NOTE: Enter Earth Occultation 12747		02-013/21:09:23
26655	MGS	02-013/21:22:38	15	NOTE: Loss Of X-Band Signal		
26656	MGS	02-013/21:23:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/21:09:54
26657	MGS	02-013/21:23:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/21:09:54
26658	MGS	02-013/21:23:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/21:09:54
26659	MGS	02-013/21:23:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/21:09:54
26660	MGS	02-013/21:23:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/21:09:55
26661	MGS	02-013/21:23:10		NOTE: End EVP script		02-013/21:09:55
26662	MGS	02-013/21:23:10		NOTE: Enter Solar Eclipse 12747		02-013/21:09:56
26663	MGS	02-013/21:23:10		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/21:09:56
26664	MGS	02-013/21:23:11		NOTE: End Block (MAP_RT)		02-013/21:09:56
26665	MGS	02-013/21:23:14		NOTE: End fixed Sub-Reflector for Radio Science		02-013/21:09:59
26666	MGS	02-013/21:27:34	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26667	MGS	02-013/21:29:35	15	Range Modulation On: SUP=3.0dB		
26668	MGS	02-013/21:30:35	15	Begin Ranging Acquisition		
26669	MGS	02-013/21:48:29		: 01:32:28	RPAONX	02-013/21:35:15
26670	MGS	02-013/21:48:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/21:35:15
26671	MGS	02-013/21:50:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-013/21:37:00
26672	MGS	02-013/21:50:18		NOTE: Exit Earth Occultation 12747		02-013/21:37:03
26673	MGS	02-013/21:50:18	15	Acquisition Of X-Band Signal		
26674	MGS	02-013/21:50:18	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26675	MGS	02-013/21:54:03	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26676	MGS	02-013/21:55:35		NOTE: Exit Planetary Atmosphere 12747		02-013/21:42:20
26677	MGS	02-013/21:56:01		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:17	AEMPB	02-013/21:42:47
26678	MGS	02-013/21:56:01		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-013/21:42:47
26679	MGS	02-013/21:56:01		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-013/21:42:47
26680	MGS	02-013/21:56:02		SSR 1B Data Enable	CSD1BE	02-013/21:42:48
26681	MGS	02-013/21:56:02		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-013/21:42:48
26682	MGS	02-013/21:56:02	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26683	MGS	02-013/22:03:33		NOTE: Exit Solar Eclipse 12747		02-013/21:50:19
26684	MGS	02-013/22:18:49		NOTE: Periapsis 12748 ----------		02-013/22:05:34
26685	MGS	02-013/22:35:10	15	NOTE: Transmitter Off in 15 minutes		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26686	MGS	02-013/22:48:10	15	Range Modulation Off		
26687	MGS	02-013/22:50:10	15	Transmitter Off		
26688	MGS	02-013/23:06:41		SSR 1B Data Disable	CSD1BX	02-013/22:53:26
26689	MGS	02-013/23:06:41		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-013/22:53:26
26690	MGS	02-013/23:06:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-013/22:53:26
26691	MGS	02-013/23:06:41	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26692	MGS	02-013/23:10:56		NOTE: Start Block (MAP_RT)		02-013/22:57:41
26693	MGS	02-013/23:10:57		: 00:25:19, 01:32:27, FALSE, TRUE, FALSE, 00:01:15, 00:07:57, 01:15:33, 00:07:41	AEMINI	02-013/22:57:42
26694	MGS	02-013/23:10:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-013/22:57:42
26695	MGS	02-013/23:10:57		NOTE: Start EVP data return script		02-013/22:57:42
26696	MGS	02-013/23:10:58		: SE_2A, RTM, 01:15:32, MRC, 2002-013T23:42:14.000	AEMRTI	02-013/22:57:43
26697	MGS	02-013/23:15:25		NOTE: Enter Planetary Atmosphere 12748		02-013/23:02:10
26698	MGS	02-013/23:16:39	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26699	MGS	02-013/23:17:34		NOTE: Apoapsis 12748 -		02-013/23:04:19
26700	MGS	02-013/23:20:24		NOTE: Enter Earth Occultation 12748		02-013/23:07:09
26701	MGS	02-013/23:20:24	15	NOTE: Loss Of X-Band Signal		
26702	MGS	02-013/23:20:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-013/23:07:42
26703	MGS	02-013/23:20:57		NOTE: Enter Solar Eclipse 12748		02-013/23:07:42
26704	MGS	02-013/23:20:58		NOTE: End EVP script		02-013/23:07:43
26705	MGS	02-013/23:20:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-013/23:07:43
26706	MGS	02-013/23:20:59		NOTE: End Block (MAP_PB_ODY)		02-013/23:07:44
26707	MGS	02-013/23:25:21	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26708	MGS	02-013/23:27:21	15	Range Modulation On: SUP=3.0dB		
26709	MGS	02-013/23:28:21	15	Begin Ranging Acquisition		
26710	MGS	02-013/23:42:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-013/23:29:16
26711	MGS	02-013/23:46:16		: 01:32:27	RPAONX	02-013/23:33:01
26712	MGS	02-013/23:46:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-013/23:33:01
26713	MGS	02-013/23:47:31		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-013/23:34:16
26714	MGS	02-013/23:47:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-013/23:34:16
26715	MGS	02-013/23:47:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-013/23:34:16
26716	MGS	02-013/23:47:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-013/23:34:16
26717	MGS	02-013/23:47:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-013/23:34:16
26718	MGS	02-013/23:48:05		NOTE: Exit Earth Occultation 12748		02-013/23:34:51
26719	MGS	02-013/23:48:05	15	Acquisition Of X-Band Signal		
26720	MGS	02-013/23:48:05	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26721	MGS	02-013/23:48:05	15	NOTE: Carrier Only -- No Telemetry Modulation		
26722	MGS	02-013/23:53:22		NOTE: Exit Planetary Atmosphere 12748		02-013/23:40:07
26723	MGS	02-013/23:55:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-013/23:42:13
26724	MGS	02-013/23:55:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-013/23:42:13
26725	MGS	02-013/23:55:28		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-013/23:42:13
26726	MGS	02-013/23:55:28		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-013/23:42:13
26727	MGS	02-013/23:55:28	15	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26728	MGS	02-013/23:55:29		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-013/23:42:14
26729	MGS	02-013/23:55:29		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-013/23:42:14
26730	MGS	02-013/23:55:29		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-013/23:42:14
26731	MGS	02-013/23:55:29	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26732	MGS	02-013/23:55:33		NOTE: End fixed Sub-Reflector for Radio Science		02-013/23:42:18
26733	MGS	02-014/00:00:00		Light Time: OWLT = 13:14, RTLT = 26:29		
26734	MGS	02-014/00:01:20		NOTE: Exit Solar Eclipse 12748		02-013/23:48:05
26735	MGS	02-014/00:16:31		NOTE: Periapsis 12749 ----------		02-014/00:03:16
26736	MGS	02-014/00:32:53	15	NOTE: Transmitter Off in 15 minutes		
26737	MGS	02-014/00:45:53	15	Range Modulation Off		
26738	MGS	02-014/00:47:53	15	Transmitter Off		
26739	MGS	02-014/01:06:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/00:52:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26740	MGS	02-014/01:08:41		NOTE: Start EVP data return script		02-014/00:55:26
26741	MGS	02-014/01:11:01		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/00:57:46
26742	MGS	02-014/01:11:01		: 00:07:41, FALSE	RDSCII	02-014/00:57:46
26743	MGS	02-014/01:11:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/00:57:46
26744	MGS	02-014/01:11:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/00:57:46
26745	MGS	02-014/01:11:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/00:57:46
26746	MGS	02-014/01:11:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/00:57:46
26747	MGS	02-014/01:11:01	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26748	MGS	02-014/01:11:01	15	NOTE: Carrier Only -- No Telemetry Modulation		
26749	MGS	02-014/01:13:08		NOTE: Enter Planetary Atmosphere 12749		02-014/00:59:53
26750	MGS	02-014/01:15:06		NOTE: Apoapsis 12749 -		02-014/01:01:51
26751	MGS	02-014/01:18:08		NOTE: Enter Earth Occultation 12749		02-014/01:04:53
26752	MGS	02-014/01:18:08	15	NOTE: Loss Of X-Band Signal		
26753	MGS	02-014/01:18:41		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/01:05:26
26754	MGS	02-014/01:18:41		NOTE: Enter Solar Eclipse 12749		02-014/01:05:26
26755	MGS	02-014/01:18:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/01:05:27
26756	MGS	02-014/01:18:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/01:05:27
26757	MGS	02-014/01:18:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/01:05:27
26758	MGS	02-014/01:18:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/01:05:27
26759	MGS	02-014/01:18:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/01:05:28
26760	MGS	02-014/01:18:43		NOTE: End EVP script		02-014/01:05:28
26761	MGS	02-014/01:18:47		NOTE: End fixed Sub-Reflector for Radio Science		02-014/01:05:32
26762	MGS	02-014/01:23:06	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26763	MGS	02-014/01:25:07	15	Range Modulation On: SUP=3.0dB		
26764	MGS	02-014/01:26:07	15	Begin Ranging Acquisition		
26765	MGS	02-014/01:40:15		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/01:27:00
26766	MGS	02-014/01:44:00		: 01:32:27	RPAONX	02-014/01:30:45
26767	MGS	02-014/01:44:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/01:30:45
26768	MGS	02-014/01:45:15		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-014/01:32:00
26769	MGS	02-014/01:45:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/01:32:00
26770	MGS	02-014/01:45:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/01:32:00
26771	MGS	02-014/01:45:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/01:32:00
26772	MGS	02-014/01:45:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/01:32:00
26773	MGS	02-014/01:45:45		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/01:32:30
26774	MGS	02-014/01:45:51		NOTE: Exit Earth Occultation 12749		02-014/01:32:36
26775	MGS	02-014/01:45:51	15	Acquisition Of X-Band Signal		
26776	MGS	02-014/01:45:51	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26777	MGS	02-014/01:45:51	15	NOTE: Carrier Only -- No Telemetry Modulation		
26778	MGS	02-014/01:51:08		NOTE: Exit Planetary Atmosphere 12749		02-014/01:37:53
26779	MGS	02-014/01:53:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/01:39:57
26780	MGS	02-014/01:53:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/01:39:57
26781	MGS	02-014/01:53:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/01:39:57
26782	MGS	02-014/01:53:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/01:39:57
26783	MGS	02-014/01:53:12	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26784	MGS	02-014/01:53:13		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-014/01:39:58
26785	MGS	02-014/01:53:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/01:39:58
26786	MGS	02-014/01:53:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/01:39:58
26787	MGS	02-014/01:53:13	15	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26788	MGS	02-014/01:53:17		NOTE: End fixed Sub-Reflector for Radio Science		02-014/01:40:02
26789	MGS	02-014/01:59:04		NOTE: Exit Solar Eclipse 12749		02-014/01:45:49
26790	MGS	02-014/02:14:16		NOTE: Periapsis 12750 ----------		02-014/02:01:01
26791	MGS	02-014/02:30:35	15	NOTE: Transmitter Off in 15 minutes		
26792	MGS	02-014/02:43:35	15	Range Modulation Off		
26793	MGS	02-014/02:45:35	15	Transmitter Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26794	MGS	02-014/02:51:50		NOTE: Start Block (SSRMGR)		02-014/02:38:35
26795	MGS	02-014/02:51:50		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-014/02:38:35
26796	MGS	02-014/02:51:51		SSR 1B Data Enable	CSD1BE	02-014/02:38:36
26797	MGS	02-014/02:51:51		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-014/02:38:36
26798	MGS	02-014/03:03:45		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/02:50:30
26799	MGS	02-014/03:06:22		NOTE: Start Block (MAP_PB_ODY)		02-014/02:53:07
26800	MGS	02-014/03:06:23		: 00:25:19, 01:32:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:17, 01:18:54, 00:06:01	AEMINI	02-014/02:53:08
26801	MGS	02-014/03:06:23		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/02:53:08
26802	MGS	02-014/03:06:23		NOTE: Start EVP data return script		02-014/02:53:08
26803	MGS	02-014/03:06:24		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-014T03:36:00.000	AEMPBI	02-014/02:53:09
26804	MGS	02-014/03:08:45		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/02:55:30
26805	MGS	02-014/03:08:45		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8112000, DUR=00:16:54		02-014/02:55:30
26806	MGS	02-014/03:08:45		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-014/02:55:30
26807	MGS	02-014/03:08:45		: 00:07:41, FALSE	RDSCII	02-014/02:55:30
26808	MGS	02-014/03:08:45		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/02:55:30
26809	MGS	02-014/03:08:45		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/02:55:30
26810	MGS	02-014/03:08:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/02:55:30
26811	MGS	02-014/03:08:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/02:55:30
26812	MGS	02-014/03:08:45	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26813	MGS	02-014/03:08:45	15	NOTE: Carrier Only -- No Telemetry Modulation		
26814	MGS	02-014/03:10:51		NOTE: Enter Planetary Atmosphere 12750		02-014/02:57:35
26815	MGS	02-014/03:13:01		NOTE: Apoapsis 12750 -		02-014/02:59:46
26816	MGS	02-014/03:15:23		SSR 1A Data Disable	CSD1AX	02-014/03:02:08
26817	MGS	02-014/03:15:23		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-014/03:02:08
26818	MGS	02-014/03:15:24		NOTE: End Block (SSRMGR)		02-014/03:02:09
26819	MGS	02-014/03:15:50		NOTE: Enter Earth Occultation 12750		02-014/03:02:35
26820	MGS	02-014/03:15:50	15	NOTE: Loss Of X-Band Signal		
26821	MGS	02-014/03:16:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/03:03:08
26822	MGS	02-014/03:16:24		NOTE: Enter Solar Eclipse 12750		02-014/03:03:08
26823	MGS	02-014/03:16:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/03:03:11
26824	MGS	02-014/03:16:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/03:03:11
26825	MGS	02-014/03:16:26		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/03:03:11
26826	MGS	02-014/03:16:26		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/03:03:11
26827	MGS	02-014/03:16:27		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/03:03:12
26828	MGS	02-014/03:16:27		NOTE: End EVP script		02-014/03:03:12
26829	MGS	02-014/03:16:28		NOTE: End Block (MAP_RT)		02-014/03:03:13
26830	MGS	02-014/03:16:31		NOTE: End fixed Sub-Reflector for Radio Science		02-014/03:03:16
26831	MGS	02-014/03:20:49	15	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26832	MGS	02-014/03:22:49	15	Range Modulation On: SUP=3.0dB		
26833	MGS	02-014/03:23:49	15	Begin Ranging Acquisition		
26834	MGS	02-014/03:41:42		: 01:32:28	RPAONX	02-014/03:28:27
26835	MGS	02-014/03:41:42		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/03:28:27
26836	MGS	02-014/03:43:27		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/03:30:12
26837	MGS	02-014/03:43:35		NOTE: Exit Earth Occultation 12750		02-014/03:30:19
26838	MGS	02-014/03:43:35	15	Acquisition Of X-Band Signal		
26839	MGS	02-014/03:43:35	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26840	MGS	02-014/03:47:20	15	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26841	MGS	02-014/03:48:51		NOTE: Exit Planetary Atmosphere 12750		02-014/03:35:36
26842	MGS	02-014/03:49:14		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:17	AEMPB	02-014/03:35:59
26843	MGS	02-014/03:49:14		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-014/03:35:59
26844	MGS	02-014/03:49:14		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-014/03:35:59
26845	MGS	02-014/03:49:15		SSR 1A Data Enable	CSD1AE	02-014/03:36:00
26846	MGS	02-014/03:49:15		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-014/03:36:00
26847	MGS	02-014/03:49:15	15	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26848	MGS	02-014/03:50:00	45	Begin Pre-Cal		
26849	MGS	02-014/03:50:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
26850	MGS	02-014/03:50:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
26851	MGS	02-014/03:50:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
26852	MGS	02-014/03:50:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
26853	MGS	02-014/03:50:00	45	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
26854	MGS	02-014/03:50:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
26855	MGS	02-014/03:50:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
26856	MGS	02-014/03:50:00	45	Config: TGC: DEST=37		
26857	MGS	02-014/03:50:00	45	Config: TGC: BAND=X, BR=42666.666667		
26858	MGS	02-014/03:50:00	45	Config: FSS: CH=2, PRI_FL=10000		
26859	MGS	02-014/03:50:00	45	Config: RSR		
26860	MGS	02-014/03:50:00	45	Config: TXL		
26861	MGS	02-014/03:50:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
26862	MGS	02-014/03:50:00	45	Config: BVR		
26863	MGS	02-014/03:50:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
26864	MGS	02-014/03:50:00	45	Config: MDA: SMPL=0.1		
26865	MGS	02-014/03:50:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
26866	MGS	02-014/03:50:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
26867	MGS	02-014/03:50:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
26868	MGS	02-014/03:56:47		NOTE: Exit Solar Eclipse 12750		02-014/03:43:31
26869	MGS	02-014/04:11:54		NOTE: Periapsis 12751 ----------		02-014/03:58:38
26870	MGS	02-014/04:28:17	15	NOTE: Transmitter Off in 15 minutes		
26871	MGS	02-014/04:41:17	15	Range Modulation Off		
26872	MGS	02-014/04:43:17	15	Transmitter Off		
26873	MGS	02-014/04:50:00	45	Begin Tracking		
26874	MGS	02-014/04:50:00	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26875	MGS	02-014/04:59:54		SSR 1A Data Disable	CSD1AX	02-014/04:46:38
26876	MGS	02-014/04:59:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-014/04:46:38
26877	MGS	02-014/04:59:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-014/04:46:38
26878	MGS	02-014/04:59:54	15	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26879	MGS	02-014/04:59:54	45	D/L Change: X/16, 3-Way/15, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26880	MGS	02-014/05:04:05		NOTE: Start Block (MAP_RT)		02-014/04:50:49
26881	MGS	02-014/05:04:06		: 00:25:19, 01:32:27, FALSE, TRUE, FALSE, 00:01:15, 00:07:57, 01:15:33, 00:07:41	AEMINI	02-014/04:50:50
26882	MGS	02-014/05:04:06		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/04:50:50
26883	MGS	02-014/05:04:06		NOTE: Start EVP data return script		02-014/04:50:50
26884	MGS	02-014/05:04:07		: SE_2A, RTM, 01:15:32, MRC, 2002-014T05:35:23.000	AEMRTI	02-014/04:50:51
26885	MGS	02-014/05:05:30	15	NOTE: Below Uplink Interlock Limit		
26886	MGS	02-014/05:08:33		NOTE: Enter Planetary Atmosphere 12751		02-014/04:55:18
26887	MGS	02-014/05:09:48	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26888	MGS	02-014/05:09:48	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26889	MGS	02-014/05:10:00	15	End Tracking		
26890	MGS	02-014/05:10:36		NOTE: Apoapsis 12751 -		02-014/04:57:20
26891	MGS	02-014/05:13:33		NOTE: Enter Earth Occultation 12751		02-014/05:00:17
26892	MGS	02-014/05:13:33	45	NOTE: Loss Of X-Band Signal		
26893	MGS	02-014/05:14:06		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/05:00:50
26894	MGS	02-014/05:14:06		NOTE: Enter Solar Eclipse 12751		02-014/05:00:50
26895	MGS	02-014/05:14:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/05:00:55
26896	MGS	02-014/05:14:11		NOTE: End EVP script		02-014/05:00:55
26897	MGS	02-014/05:14:12		NOTE: End Block (MAP_PB_ODY)		02-014/05:00:56
26898	MGS	02-014/05:18:30	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26899	MGS	02-014/05:20:31	45	Range Modulation On: SUP=3.0dB		
26900	MGS	02-014/05:21:31	45	Begin Ranging Acquisition		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26901	MGS	02-014/05:25:00	15	End Post-Cal		
26902	MGS	02-014/05:35:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/05:22:24
26903	MGS	02-014/05:39:25		: 01:32:27	RPAONX	02-014/05:26:09
26904	MGS	02-014/05:39:25		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/05:26:09
26905	MGS	02-014/05:40:40		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-014/05:27:24
26906	MGS	02-014/05:40:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/05:27:24
26907	MGS	02-014/05:40:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/05:27:24
26908	MGS	02-014/05:40:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/05:27:24
26909	MGS	02-014/05:40:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/05:27:24
26910	MGS	02-014/05:41:17		NOTE: Exit Earth Occultation 12751		02-014/05:28:01
26911	MGS	02-014/05:41:17	45	Acquisition Of X-Band Signal		
26912	MGS	02-014/05:41:17	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26913	MGS	02-014/05:41:17	45	NOTE: Carrier Only -- No Telemetry Modulation		
26914	MGS	02-014/05:46:34		NOTE: Exit Planetary Atmosphere 12751		02-014/05:33:18
26915	MGS	02-014/05:48:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/05:35:21
26916	MGS	02-014/05:48:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/05:35:21
26917	MGS	02-014/05:48:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/05:35:21
26918	MGS	02-014/05:48:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/05:35:21
26919	MGS	02-014/05:48:37	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26920	MGS	02-014/05:48:38		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-014/05:35:22
26921	MGS	02-014/05:48:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/05:35:22
26922	MGS	02-014/05:48:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/05:35:22
26923	MGS	02-014/05:48:38	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26924	MGS	02-014/05:48:42		NOTE: End fixed Sub-Reflector for Radio Science		02-014/05:35:26
26925	MGS	02-014/05:54:28		NOTE: Exit Solar Eclipse 12751		02-014/05:41:13
26926	MGS	02-014/06:09:14		NOTE: Periapsis 12752 ----------		02-014/05:55:58
26927	MGS	02-014/06:25:58	45	NOTE: Transmitter Off in 15 minutes		
26928	MGS	02-014/06:38:59	45	Range Modulation Off		
26929	MGS	02-014/06:40:58	45	Transmitter Off		
26930	MGS	02-014/06:59:10		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/06:45:54
26931	MGS	02-014/07:01:49		NOTE: Start EVP data return script		02-014/06:48:33
26932	MGS	02-014/07:04:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/06:50:54
26933	MGS	02-014/07:04:10		: 00:07:41, FALSE	RDSCII	02-014/06:50:54
26934	MGS	02-014/07:04:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/06:50:54
26935	MGS	02-014/07:04:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/06:50:54
26936	MGS	02-014/07:04:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/06:50:54
26937	MGS	02-014/07:04:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/06:50:54
26938	MGS	02-014/07:04:10	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26939	MGS	02-014/07:04:10	45	NOTE: Carrier Only -- No Telemetry Modulation		
26940	MGS	02-014/07:06:16		NOTE: Enter Planetary Atmosphere 12752		02-014/06:53:00
26941	MGS	02-014/07:08:02		NOTE: Apoapsis 12752 -		02-014/06:54:46
26942	MGS	02-014/07:11:15		NOTE: Enter Earth Occultation 12752		02-014/06:57:59
26943	MGS	02-014/07:11:15	45	NOTE: Loss Of X-Band Signal		
26944	MGS	02-014/07:11:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/06:58:33
26945	MGS	02-014/07:11:49		NOTE: Enter Solar Eclipse 12752		02-014/06:58:33
26946	MGS	02-014/07:11:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/06:58:35
26947	MGS	02-014/07:11:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/06:58:35
26948	MGS	02-014/07:11:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/06:58:35
26949	MGS	02-014/07:11:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/06:58:35
26950	MGS	02-014/07:11:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/06:58:36
26951	MGS	02-014/07:11:52		NOTE: End EVP script		02-014/06:58:36
26952	MGS	02-014/07:11:56		NOTE: End fixed Sub-Reflector for Radio Science		02-014/06:58:40
26953	MGS	02-014/07:16:14	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
26954	MGS	02-014/07:18:14	45	Range Modulation On: SUP=3.0dB		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
26955	MGS	02-014/07:19:14	45	Begin Ranging Acquisition		
26956	MGS	02-014/07:33:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/07:20:07
26957	MGS	02-014/07:37:08		: 01:32:27	RPAONX	02-014/07:23:52
26958	MGS	02-014/07:37:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/07:23:52
26959	MGS	02-014/07:38:23		: 00:00:30, 00:07:57, FALSE	RDSCIE	02-014/07:25:07
26960	MGS	02-014/07:38:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/07:25:07
26961	MGS	02-014/07:38:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/07:25:07
26962	MGS	02-014/07:38:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/07:25:07
26963	MGS	02-014/07:38:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/07:25:07
26964	MGS	02-014/07:38:53		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/07:25:37
26965	MGS	02-014/07:39:01		NOTE: Exit Earth Occultation 12752		02-014/07:25:44
26966	MGS	02-014/07:39:01	45	Acquisition Of X-Band Signal		
26967	MGS	02-014/07:39:01	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
26968	MGS	02-014/07:39:01	45	NOTE: Carrier Only -- No Telemetry Modulation		
26969	MGS	02-014/07:44:16		NOTE: Exit Planetary Atmosphere 12752		02-014/07:31:00
26970	MGS	02-014/07:46:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/07:33:04
26971	MGS	02-014/07:46:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/07:33:04
26972	MGS	02-014/07:46:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/07:33:04
26973	MGS	02-014/07:46:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/07:33:04
26974	MGS	02-014/07:46:20	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26975	MGS	02-014/07:46:21		: RTM, MRC, 01:15:32, S&E_2A, FALSE, 00:07:42	AEMRT	02-014/07:33:05
26976	MGS	02-014/07:46:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/07:33:05
26977	MGS	02-014/07:46:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/07:33:05
26978	MGS	02-014/07:46:21	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
26979	MGS	02-014/07:46:25		NOTE: End fixed Sub-Reflector for Radio Science		02-014/07:33:09
26980	MGS	02-014/07:52:12		NOTE: Exit Solar Eclipse 12752		02-014/07:38:56
26981	MGS	02-014/08:07:05		NOTE: Periapsis 12753 ----------		02-014/07:53:49
26982	MGS	02-014/08:23:41	45	NOTE: Transmitter Off in 15 minutes		
26983	MGS	02-014/08:36:41	45	Range Modulation Off		
26984	MGS	02-014/08:38:41	45	Transmitter Off		
26985	MGS	02-014/08:45:07		NOTE: Start Block (SSRMGR)		02-014/08:31:51
26986	MGS	02-014/08:45:07		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-014/08:31:51
26987	MGS	02-014/08:45:08		SSR 1A Data Enable	CSD1AE	02-014/08:31:52
26988	MGS	02-014/08:45:08		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-014/08:31:52
26989	MGS	02-014/08:56:53		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/08:43:37
26990	MGS	02-014/08:59:34		NOTE: Start Block (MAP_PB_ODY)		02-014/08:46:18
26991	MGS	02-014/08:59:35		: 00:25:19, 01:32:28, FALSE, FALSE, FALSE, 00:01:15, 00:06:17, 01:18:54, 00:06:01	AEMINI	02-014/08:46:19
26992	MGS	02-014/08:59:35		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/08:46:19
26993	MGS	02-014/08:59:35		NOTE: Start EVP data return script		02-014/08:46:19
26994	MGS	02-014/08:59:36		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-014T09:29:10.000	AEMPBI	02-014/08:46:20
26995	MGS	02-014/09:01:53		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/08:48:37
26996	MGS	02-014/09:01:53		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8040000, DUR=00:16:45		02-014/08:48:37
26997	MGS	02-014/09:01:53		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-014/08:48:37
26998	MGS	02-014/09:01:53		: 00:07:41, FALSE	RDSCII	02-014/08:48:37
26999	MGS	02-014/09:01:53		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/08:48:37
27000	MGS	02-014/09:01:53		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/08:48:37
27001	MGS	02-014/09:01:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/08:48:37
27002	MGS	02-014/09:01:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/08:48:37
27003	MGS	02-014/09:01:53	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27004	MGS	02-014/09:01:53	45	NOTE: Carrier Only -- No Telemetry Modulation		
27005	MGS	02-014/09:04:00		NOTE: Enter Planetary Atmosphere 12753		02-014/08:50:44
27006	MGS	02-014/09:06:03		NOTE: Apoapsis 12753 -		02-014/08:52:47
27007	MGS	02-014/09:08:35		SSR 1B Data Disable	CSD1BX	02-014/08:55:19
27008	MGS	02-014/09:08:35		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-014/08:55:19

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27009	MGS	02-014/09:08:36		NOTE: End Block (SSRMGR)		02-014/08:55:20
27010	MGS	02-014/09:08:58		NOTE: Enter Earth Occultation 12753		02-014/08:55:42
27011	MGS	02-014/09:08:58	45	NOTE: Loss Of X-Band Signal		
27012	MGS	02-014/09:09:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/08:56:18
27013	MGS	02-014/09:09:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/08:56:18
27014	MGS	02-014/09:09:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/08:56:18
27015	MGS	02-014/09:09:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/08:56:18
27016	MGS	02-014/09:09:35		NOTE: Enter Solar Eclipse 12753		02-014/08:56:19
27017	MGS	02-014/09:09:35		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/08:56:19
27018	MGS	02-014/09:09:35		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/08:56:19
27019	MGS	02-014/09:09:35		NOTE: End EVP script		02-014/08:56:19
27020	MGS	02-014/09:09:36		NOTE: End Block (MAP_RT)		02-014/08:56:20
27021	MGS	02-014/09:09:39		NOTE: End fixed Sub-Reflector for Radio Science		02-014/08:56:23
27022	MGS	02-014/09:13:59	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
27023	MGS	02-014/09:15:59	45	Range Modulation On: SUP=3.0dB		
27024	MGS	02-014/09:16:59	45	Begin Ranging Acquisition		
27025	MGS	02-014/09:34:54		: 01:32:28	RPAONX	02-014/09:21:38
27026	MGS	02-014/09:34:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/09:21:38
27027	MGS	02-014/09:36:39		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/09:23:23
27028	MGS	02-014/09:36:47		NOTE: Exit Earth Occultation 12753		02-014/09:23:30
27029	MGS	02-014/09:36:47	45	Acquisition Of X-Band Signal		
27030	MGS	02-014/09:36:47	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27031	MGS	02-014/09:40:32	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27032	MGS	02-014/09:42:01		NOTE: Exit Planetary Atmosphere 12753		02-014/09:28:45
27033	MGS	02-014/09:42:26		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:17	AEMPB	02-014/09:29:10
27034	MGS	02-014/09:42:26		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-014/09:29:10
27035	MGS	02-014/09:42:26		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-014/09:29:10
27036	MGS	02-014/09:42:27		SSR 1B Data Enable	CSD1BE	02-014/09:29:11
27037	MGS	02-014/09:42:27		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-014/09:29:11
27038	MGS	02-014/09:42:27	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27039	MGS	02-014/09:49:58		NOTE: Exit Solar Eclipse 12753		02-014/09:36:41
27040	MGS	02-014/09:50:00	65	Begin Pre-Cal		
27041	MGS	02-014/09:50:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27042	MGS	02-014/09:50:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27043	MGS	02-014/09:50:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
27044	MGS	02-014/09:50:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
27045	MGS	02-014/09:50:00	65	Config: TGC: DEST=37		
27046	MGS	02-014/09:50:00	65	Config: TGC: BAND=X, BR=8000.000000		
27047	MGS	02-014/09:50:00	65	Config: FSS: CH=2, PRI_FL=10000		
27048	MGS	02-014/09:50:00	65	Config: RSR		
27049	MGS	02-014/09:50:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
27050	MGS	02-014/09:50:00	65	Config: BVR		
27051	MGS	02-014/09:50:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
27052	MGS	02-014/09:50:00	65	Config: MDA: SMPL=0.1		
27053	MGS	02-014/10:05:18		NOTE: Periapsis 12754 ----------		02-014/09:52:02
27054	MGS	02-014/10:21:27	45	NOTE: Transmitter Off in 15 minutes		
27055	MGS	02-014/10:34:27	45	Range Modulation Off		
27056	MGS	02-014/10:36:27	45	Transmitter Off		
27057	MGS	02-014/10:53:05		SSR 1B Data Disable	CSD1BX	02-014/10:39:49
27058	MGS	02-014/10:53:05		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-014/10:39:49
27059	MGS	02-014/10:53:05		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-014/10:39:49
27060	MGS	02-014/10:53:05	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27061	MGS	02-014/10:57:20		NOTE: Start Block (MAP_RT)		02-014/10:44:04
27062	MGS	02-014/10:57:21		: 00:25:27, 01:32:14, FALSE, TRUE, FALSE, 00:01:15, 00:07:54, 01:15:26, 00:07:38	AEMINI	02-014/10:44:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27063	MGS	02-014/10:57:21		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/10:44:05
27064	MGS	02-014/10:57:21		NOTE: Start EVP data return script		02-014/10:44:05
27065	MGS	02-014/10:57:22		: SE_2A, RTM, 01:15:25, MRC, 2002-014T11:28:43.000	AEMRTI	02-014/10:44:06
27066	MGS	02-014/11:01:46		NOTE: Enter Planetary Atmosphere 12754		02-014/10:48:30
27067	MGS	02-014/11:03:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27068	MGS	02-014/11:04:25		NOTE: Apoapsis 12754 -		02-014/10:51:08
27069	MGS	02-014/11:06:45		NOTE: Enter Earth Occultation 12754		02-014/10:53:28
27070	MGS	02-014/11:06:45	45	NOTE: Loss Of X-Band Signal		
27071	MGS	02-014/11:07:21		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/10:54:05
27072	MGS	02-014/11:07:22		NOTE: Enter Solar Eclipse 12754		02-014/10:54:05
27073	MGS	02-014/11:07:22		NOTE: End EVP script		02-014/10:54:06
27074	MGS	02-014/11:07:22		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/10:54:06
27075	MGS	02-014/11:07:23		NOTE: End Block (MAP_PB_ODY)		02-014/10:54:07
27076	MGS	02-014/11:20:00	65	Begin Tracking		
27077	MGS	02-014/11:29:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/11:15:47
27078	MGS	02-014/11:30:42	65	NOTE: Above Uplink Interlock Limit		
27079	MGS	02-014/11:31:24	45	NOTE: Below Uplink Interlock Limit		
27080	MGS	02-014/11:32:49		: 01:32:14	RPAONX	02-014/11:19:32
27081	MGS	02-014/11:32:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/11:19:32
27082	MGS	02-014/11:34:04		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-014/11:20:47
27083	MGS	02-014/11:34:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/11:20:47
27084	MGS	02-014/11:34:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/11:20:47
27085	MGS	02-014/11:34:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/11:20:47
27086	MGS	02-014/11:34:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/11:20:47
27087	MGS	02-014/11:34:34		NOTE: Exit Earth Occultation 12754		02-014/11:21:17
27088	MGS	02-014/11:34:34	45	Acquisition Of X-Band Signal		
27089	MGS	02-014/11:34:34	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27090	MGS	02-014/11:34:34	45	NOTE: Carrier Only -- No Telemetry Modulation		
27091	MGS	02-014/11:34:34	65	Acquisition Of X-Band Signal		
27092	MGS	02-014/11:34:34	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27093	MGS	02-014/11:34:34	65	NOTE: Carrier Only -- No Telemetry Modulation		
27094	MGS	02-014/11:39:49		NOTE: Exit Planetary Atmosphere 12754		02-014/11:26:32
27095	MGS	02-014/11:40:00	45	End Tracking		
27096	MGS	02-014/11:41:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/11:28:41
27097	MGS	02-014/11:41:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/11:28:41
27098	MGS	02-014/11:41:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/11:28:41
27099	MGS	02-014/11:41:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/11:28:41
27100	MGS	02-014/11:41:58	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27101	MGS	02-014/11:41:59		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-014/11:28:42
27102	MGS	02-014/11:41:59		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/11:28:42
27103	MGS	02-014/11:41:59		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/11:28:42
27104	MGS	02-014/11:41:59	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27105	MGS	02-014/11:42:03		NOTE: End fixed Sub-Reflector for Radio Science		02-014/11:28:46
27106	MGS	02-014/11:47:45		NOTE: Exit Solar Eclipse 12754		02-014/11:34:28
27107	MGS	02-014/11:55:00	45	End Post-Cal		
27108	MGS	02-014/12:03:25		NOTE: Periapsis 12755 ----------		02-014/11:50:08
27109	MGS	02-014/12:13:17		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-014/12:00:00
27110	MGS	02-014/12:52:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/12:39:07
27111	MGS	02-014/12:55:08		NOTE: Start EVP data return script		02-014/12:41:51
27112	MGS	02-014/12:57:24		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/12:44:07
27113	MGS	02-014/12:57:24		: 00:07:38, FALSE	RDSCII	02-014/12:44:07
27114	MGS	02-014/12:57:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/12:44:07
27115	MGS	02-014/12:57:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/12:44:07
27116	MGS	02-014/12:57:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/12:44:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27117	MGS	02-014/12:57:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/12:44:07
27118	MGS	02-014/12:57:24	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27119	MGS	02-014/12:57:24	65	NOTE: Carrier Only -- No Telemetry Modulation		
27120	MGS	02-014/12:59:34		NOTE: Enter Planetary Atmosphere 12755		02-014/12:46:17
27121	MGS	02-014/13:02:23		NOTE: Apoapsis 12755 -		02-014/12:49:06
27122	MGS	02-014/13:04:33		NOTE: Enter Earth Occultation 12755		02-014/12:51:16
27123	MGS	02-014/13:04:33	65	NOTE: Loss Of X-Band Signal		
27124	MGS	02-014/13:05:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/12:51:45
27125	MGS	02-014/13:05:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/12:51:45
27126	MGS	02-014/13:05:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/12:51:45
27127	MGS	02-014/13:05:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/12:51:45
27128	MGS	02-014/13:05:03		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/12:51:46
27129	MGS	02-014/13:05:03		NOTE: End EVP script		02-014/12:51:46
27130	MGS	02-014/13:05:07		NOTE: End fixed Sub-Reflector for Radio Science		02-014/12:51:50
27131	MGS	02-014/13:05:08		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/12:51:51
27132	MGS	02-014/13:05:08		NOTE: Enter Solar Eclipse 12755		02-014/12:51:52
27133	MGS	02-014/13:26:50		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/13:13:33
27134	MGS	02-014/13:30:35		: 01:32:14	RPAONX	02-014/13:17:18
27135	MGS	02-014/13:30:35		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/13:17:18
27136	MGS	02-014/13:31:50		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-014/13:18:33
27137	MGS	02-014/13:31:50		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/13:18:33
27138	MGS	02-014/13:31:50		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/13:18:33
27139	MGS	02-014/13:31:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/13:18:33
27140	MGS	02-014/13:31:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/13:18:33
27141	MGS	02-014/13:32:20		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/13:19:03
27142	MGS	02-014/13:32:22		NOTE: Exit Earth Occultation 12755		02-014/13:19:05
27143	MGS	02-014/13:32:22	65	Acquisition Of X-Band Signal		
27144	MGS	02-014/13:32:22	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27145	MGS	02-014/13:32:22	65	NOTE: Carrier Only -- No Telemetry Modulation		
27146	MGS	02-014/13:37:37		NOTE: Exit Planetary Atmosphere 12755		02-014/13:24:20
27147	MGS	02-014/13:39:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/13:26:27
27148	MGS	02-014/13:39:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/13:26:27
27149	MGS	02-014/13:39:44		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/13:26:27
27150	MGS	02-014/13:39:44		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/13:26:27
27151	MGS	02-014/13:39:44	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27152	MGS	02-014/13:39:45		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-014/13:26:28
27153	MGS	02-014/13:39:45		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/13:26:28
27154	MGS	02-014/13:39:45		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/13:26:28
27155	MGS	02-014/13:39:45	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27156	MGS	02-014/13:39:49		NOTE: End fixed Sub-Reflector for Radio Science		02-014/13:26:32
27157	MGS	02-014/13:45:32		NOTE: Exit Solar Eclipse 12755		02-014/13:32:15
27158	MGS	02-014/14:01:07		NOTE: Periapsis 12756 ----------		02-014/13:47:50
27159	MGS	02-014/14:38:18		NOTE: Start Block (SSRMGR)		02-014/14:25:01
27160	MGS	02-014/14:38:18		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-014/14:25:01
27161	MGS	02-014/14:38:19		SSR 1B Data Enable	CSD1BE	02-014/14:25:02
27162	MGS	02-014/14:38:19		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-014/14:25:02
27163	MGS	02-014/14:50:10		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/14:36:53
27164	MGS	02-014/14:52:51		NOTE: Start Block (MAP_PB_ODY)		02-014/14:39:34
27165	MGS	02-014/14:52:52		: 00:25:27, 01:32:15, FALSE, FALSE, FALSE, 00:01:15, 00:06:14, 01:18:47, 00:05:58	AEMINI	02-014/14:39:35
27166	MGS	02-014/14:52:52		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/14:39:35
27167	MGS	02-014/14:52:52		NOTE: Start EVP data return script		02-014/14:39:35
27168	MGS	02-014/14:52:53		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-014T15:22:31.000	AEMPBI	02-014/14:39:36
27169	MGS	02-014/14:55:10		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/14:41:53
27170	MGS	02-014/14:55:10		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8088000, DUR=00:16:51		02-014/14:41:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27171	MGS	02-014/14:55:10		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-014/14:41:53
27172	MGS	02-014/14:55:10		: 00:07:38, FALSE	RDSCII	02-014/14:41:53
27173	MGS	02-014/14:55:10		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/14:41:53
27174	MGS	02-014/14:55:10		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/14:41:53
27175	MGS	02-014/14:55:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/14:41:53
27176	MGS	02-014/14:55:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/14:41:53
27177	MGS	02-014/14:55:10	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27178	MGS	02-014/14:55:10	65	NOTE: Carrier Only -- No Telemetry Modulation		
27179	MGS	02-014/14:57:19		NOTE: Enter Planetary Atmosphere 12756		02-014/14:44:02
27180	MGS	02-014/14:59:49		NOTE: Apoapsis 12756 -		02-014/14:46:32
27181	MGS	02-014/15:01:52		SSR 1A Data Disable	CSD1AX	02-014/14:48:35
27182	MGS	02-014/15:01:52		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-014/14:48:35
27183	MGS	02-014/15:01:53		NOTE: End Block (SSRMGR)		02-014/14:48:36
27184	MGS	02-014/15:02:18		NOTE: Enter Earth Occultation 12756		02-014/14:49:00
27185	MGS	02-014/15:02:18	65	NOTE: Loss Of X-Band Signal		
27186	MGS	02-014/15:02:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/14:49:31
27187	MGS	02-014/15:02:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/14:49:31
27188	MGS	02-014/15:02:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/14:49:31
27189	MGS	02-014/15:02:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/14:49:31
27190	MGS	02-014/15:02:49		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/14:49:32
27191	MGS	02-014/15:02:49		NOTE: End EVP script		02-014/14:49:32
27192	MGS	02-014/15:02:50		NOTE: End Block (MAP_RT)		02-014/14:49:33
27193	MGS	02-014/15:02:52		NOTE: Enter Solar Eclipse 12756		02-014/14:49:35
27194	MGS	02-014/15:02:52		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/14:49:35
27195	MGS	02-014/15:02:53		NOTE: End fixed Sub-Reflector for Radio Science		02-014/14:49:36
27196	MGS	02-014/15:28:19		: 01:32:15	RPAONX	02-014/15:15:02
27197	MGS	02-014/15:28:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/15:15:02
27198	MGS	02-014/15:30:04		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/15:16:47
27199	MGS	02-014/15:30:06		NOTE: Exit Earth Occultation 12756		02-014/15:16:49
27200	MGS	02-014/15:30:06	65	Acquisition Of X-Band Signal		
27201	MGS	02-014/15:30:06	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27202	MGS	02-014/15:35:22		NOTE: Exit Planetary Atmosphere 12756		02-014/15:22:05
27203	MGS	02-014/15:35:48		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:14:07	AEMPB	02-014/15:22:31
27204	MGS	02-014/15:35:48		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-014/15:22:31
27205	MGS	02-014/15:35:48		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-014/15:22:31
27206	MGS	02-014/15:35:49		SSR 1A Data Enable	CSD1AE	02-014/15:22:32
27207	MGS	02-014/15:35:49		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-014/15:22:32
27208	MGS	02-014/15:35:49	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27209	MGS	02-014/15:43:15		NOTE: Exit Solar Eclipse 12756		02-014/15:29:58
27210	MGS	02-014/15:58:28		NOTE: Periapsis 12757 ----------		02-014/15:45:10
27211	MGS	02-014/16:46:27		SSR 1A Data Disable	CSD1AX	02-014/16:33:10
27212	MGS	02-014/16:46:27		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-014/16:33:10
27213	MGS	02-014/16:46:27		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-014/16:33:10
27214	MGS	02-014/16:46:27	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27215	MGS	02-014/16:50:31		NOTE: Start Block (MAP_RT)		02-014/16:37:14
27216	MGS	02-014/16:50:32		: 00:25:27, 01:32:14, FALSE, TRUE, FALSE, 00:01:15, 00:07:54, 01:15:26, 00:07:38	AEMINI	02-014/16:37:15
27217	MGS	02-014/16:50:32		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/16:37:15
27218	MGS	02-014/16:50:32		NOTE: Start EVP data return script		02-014/16:37:15
27219	MGS	02-014/16:50:33		: SE_2A, RTM, 01:15:25, MRC, 2002-014T17:21:52.000	AEMRTI	02-014/16:37:16
27220	MGS	02-014/16:54:58		NOTE: Enter Planetary Atmosphere 12757		02-014/16:41:41
27221	MGS	02-014/16:57:15		NOTE: Apoapsis 12757 -		02-014/16:43:57
27222	MGS	02-014/16:59:57		NOTE: Enter Earth Occultation 12757		02-014/16:46:39
27223	MGS	02-014/16:59:57	65	NOTE: Loss Of X-Band Signal		
27224	MGS	02-014/17:00:32		NOTE: Enter Solar Eclipse 12757		02-014/16:47:15

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27225	MGS	02-014/17:00:32		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/16:47:15
27226	MGS	02-014/17:00:34		NOTE: End EVP script		02-014/16:47:17
27227	MGS	02-014/17:00:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/16:47:17
27228	MGS	02-014/17:00:35		NOTE: End Block (MAP_PB_ODY)		02-014/16:47:18
27229	MGS	02-014/17:22:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/17:08:57
27230	MGS	02-014/17:25:59		: 01:32:14	RPAONX	02-014/17:12:42
27231	MGS	02-014/17:25:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/17:12:42
27232	MGS	02-014/17:27:14		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-014/17:13:57
27233	MGS	02-014/17:27:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/17:13:57
27234	MGS	02-014/17:27:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/17:13:57
27235	MGS	02-014/17:27:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/17:13:57
27236	MGS	02-014/17:27:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/17:13:57
27237	MGS	02-014/17:27:47		NOTE: Exit Earth Occultation 12757		02-014/17:14:30
27238	MGS	02-014/17:27:47	65	Acquisition Of X-Band Signal		
27239	MGS	02-014/17:27:47	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27240	MGS	02-014/17:27:47	65	NOTE: Carrier Only -- No Telemetry Modulation		
27241	MGS	02-014/17:33:02		NOTE: Exit Planetary Atmosphere 12757		02-014/17:19:45
27242	MGS	02-014/17:35:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/17:21:51
27243	MGS	02-014/17:35:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/17:21:51
27244	MGS	02-014/17:35:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/17:21:51
27245	MGS	02-014/17:35:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/17:21:51
27246	MGS	02-014/17:35:09	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27247	MGS	02-014/17:35:10		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-014/17:21:52
27248	MGS	02-014/17:35:10		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/17:21:52
27249	MGS	02-014/17:35:10		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/17:21:52
27250	MGS	02-014/17:35:10	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27251	MGS	02-014/17:35:13		NOTE: End fixed Sub-Reflector for Radio Science		02-014/17:21:56
27252	MGS	02-014/17:40:55		NOTE: Exit Solar Eclipse 12757		02-014/17:27:38
27253	MGS	02-014/17:55:57		NOTE: Periapsis 12758 ----------		02-014/17:42:39
27254	MGS	02-014/18:45:35		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/18:32:17
27255	MGS	02-014/18:48:16		NOTE: Start EVP data return script		02-014/18:34:58
27256	MGS	02-014/18:50:35		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/18:37:17
27257	MGS	02-014/18:50:35		: 00:07:38, FALSE	RDSCII	02-014/18:37:17
27258	MGS	02-014/18:50:35		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/18:37:17
27259	MGS	02-014/18:50:35		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/18:37:17
27260	MGS	02-014/18:50:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/18:37:17
27261	MGS	02-014/18:50:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/18:37:17
27262	MGS	02-014/18:50:35	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27263	MGS	02-014/18:50:35	65	NOTE: Carrier Only -- No Telemetry Modulation		
27264	MGS	02-014/18:52:40		NOTE: Enter Planetary Atmosphere 12758		02-014/18:39:22
27265	MGS	02-014/18:55:06		NOTE: Apoapsis 12758 -		02-014/18:41:48
27266	MGS	02-014/18:57:38		NOTE: Enter Earth Occultation 12758		02-014/18:44:20
27267	MGS	02-014/18:57:38	65	NOTE: Loss Of X-Band Signal		
27268	MGS	02-014/18:58:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/18:44:55
27269	MGS	02-014/18:58:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/18:44:55
27270	MGS	02-014/18:58:13		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/18:44:55
27271	MGS	02-014/18:58:13		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/18:44:55
27272	MGS	02-014/18:58:14		NOTE: End EVP script		02-014/18:44:56
27273	MGS	02-014/18:58:14		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/18:44:56
27274	MGS	02-014/18:58:15		NOTE: Enter Solar Eclipse 12758		02-014/18:44:57
27275	MGS	02-014/18:58:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/18:44:58
27276	MGS	02-014/18:58:18		NOTE: End fixed Sub-Reflector for Radio Science		02-014/18:45:00
27277	MGS	02-014/19:19:58		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/19:06:40
27278	MGS	02-014/19:23:43		: 01:32:14	RPAONX	02-014/19:10:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27279	MGS	02-014/19:23:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/19:10:25
27280	MGS	02-014/19:24:58		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-014/19:11:40
27281	MGS	02-014/19:24:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/19:11:40
27282	MGS	02-014/19:24:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/19:11:40
27283	MGS	02-014/19:24:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/19:11:40
27284	MGS	02-014/19:24:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/19:11:40
27285	MGS	02-014/19:25:28		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/19:12:10
27286	MGS	02-014/19:25:30		NOTE: Exit Earth Occultation 12758		02-014/19:12:13
27287	MGS	02-014/19:25:30	65	Acquisition Of X-Band Signal		
27288	MGS	02-014/19:25:30	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27289	MGS	02-014/19:25:30	65	NOTE: Carrier Only -- No Telemetry Modulation		
27290	MGS	02-014/19:30:45		NOTE: Exit Planetary Atmosphere 12758		02-014/19:17:27
27291	MGS	02-014/19:32:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/19:19:34
27292	MGS	02-014/19:32:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/19:19:34
27293	MGS	02-014/19:32:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/19:19:34
27294	MGS	02-014/19:32:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/19:19:34
27295	MGS	02-014/19:32:52	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27296	MGS	02-014/19:32:53		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-014/19:19:35
27297	MGS	02-014/19:32:53		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/19:19:35
27298	MGS	02-014/19:32:53		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/19:19:35
27299	MGS	02-014/19:32:53	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27300	MGS	02-014/19:32:57		NOTE: End fixed Sub-Reflector for Radio Science		02-014/19:19:39
27301	MGS	02-014/19:38:38		NOTE: Exit Solar Eclipse 12758		02-014/19:25:20
27302	MGS	02-014/19:53:47		NOTE: Periapsis 12759 ----------		02-014/19:40:29
27303	MGS	02-014/20:15:00	25	Begin Pre-Cal		
27304	MGS	02-014/20:15:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27305	MGS	02-014/20:15:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27306	MGS	02-014/20:15:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
27307	MGS	02-014/20:15:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
27308	MGS	02-014/20:15:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
27309	MGS	02-014/20:15:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
27310	MGS	02-014/20:15:00	25	Config: TGC: DEST=37		
27311	MGS	02-014/20:15:00	25	Config: TGC: BAND=X, BR=0.000000		
27312	MGS	02-014/20:15:00	25	Config: FSS: CH=2, PRI_FL=10000		
27313	MGS	02-014/20:15:00	25	Config: RSR		
27314	MGS	02-014/20:15:00	25	Config: TXL		
27315	MGS	02-014/20:15:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
27316	MGS	02-014/20:15:00	25	Config: BVR		
27317	MGS	02-014/20:15:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
27318	MGS	02-014/20:15:00	25	Config: MDA: SMPL=0.1		
27319	MGS	02-014/20:15:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
27320	MGS	02-014/20:15:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
27321	MGS	02-014/20:15:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
27322	MGS	02-014/20:31:35		NOTE: Start Block (SSRMGR)		02-014/20:18:17
27323	MGS	02-014/20:31:35		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-014/20:18:17
27324	MGS	02-014/20:31:36		SSR 1A Data Enable	CSD1AE	02-014/20:18:18
27325	MGS	02-014/20:31:36		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-014/20:18:18
27326	MGS	02-014/20:43:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/20:30:00
27327	MGS	02-014/20:46:01		NOTE: Start Block (MAP_PB_ODY)		02-014/20:32:43
27328	MGS	02-014/20:46:02		: 00:25:27, 01:32:15, FALSE, FALSE, FALSE, 00:01:15, 00:06:14, 01:18:47, 00:05:58	AEMINI	02-014/20:32:44
27329	MGS	02-014/20:46:02		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/20:32:44
27330	MGS	02-014/20:46:02		NOTE: Start EVP data return script		02-014/20:32:44
27331	MGS	02-014/20:46:03		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-014T21:15:41.000	AEMPBI	02-014/20:32:45
27332	MGS	02-014/20:48:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-014/20:35:00

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27333	MGS	02-014/20:48:18		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8016000, DUR=00:16:42		02-014/20:35:00
27334	MGS	02-014/20:48:18		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-014/20:35:00
27335	MGS	02-014/20:48:18		: 00:07:38, FALSE	RDSCII	02-014/20:35:00
27336	MGS	02-014/20:48:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/20:35:00
27337	MGS	02-014/20:48:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/20:35:00
27338	MGS	02-014/20:48:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/20:35:00
27339	MGS	02-014/20:48:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/20:35:00
27340	MGS	02-014/20:48:18	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27341	MGS	02-014/20:48:18	65	NOTE: Carrier Only -- No Telemetry Modulation		
27342	MGS	02-014/20:50:28		NOTE: Enter Planetary Atmosphere 12759		02-014/20:37:09
27343	MGS	02-014/20:52:55		NOTE: Apoapsis 12759 -		02-014/20:39:37
27344	MGS	02-014/20:55:03		SSR 1B Data Disable	CSD1BX	02-014/20:41:45
27345	MGS	02-014/20:55:03		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-014/20:41:45
27346	MGS	02-014/20:55:04		NOTE: End Block (SSRMGR)		02-014/20:41:46
27347	MGS	02-014/20:55:25		NOTE: Enter Earth Occultation 12759		02-014/20:42:07
27348	MGS	02-014/20:55:25	65	NOTE: Loss Of X-Band Signal		
27349	MGS	02-014/20:55:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/20:42:38
27350	MGS	02-014/20:55:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/20:42:38
27351	MGS	02-014/20:55:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/20:42:38
27352	MGS	02-014/20:55:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/20:42:38
27353	MGS	02-014/20:55:57		NOTE: End EVP script		02-014/20:42:39
27354	MGS	02-014/20:55:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/20:42:39
27355	MGS	02-014/20:55:58		NOTE: End Block (MAP_RT)		02-014/20:42:40
27356	MGS	02-014/20:56:01		NOTE: End fixed Sub-Reflector for Radio Science		02-014/20:42:43
27357	MGS	02-014/20:56:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/20:42:44
27358	MGS	02-014/20:56:02		NOTE: Enter Solar Eclipse 12759		02-014/20:42:44
27359	MGS	02-014/21:15:00	25	Begin Tracking		
27360	MGS	02-014/21:21:29		: 01:32:15	RPAONX	02-014/21:08:11
27361	MGS	02-014/21:21:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/21:08:11
27362	MGS	02-014/21:23:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-014/21:09:56
27363	MGS	02-014/21:23:17		NOTE: Exit Earth Occultation 12759		02-014/21:09:59
27364	MGS	02-014/21:23:17	25	Acquisition Of X-Band Signal		
27365	MGS	02-014/21:23:17	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27366	MGS	02-014/21:23:17	65	Acquisition Of X-Band Signal		
27367	MGS	02-014/21:23:17	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27368	MGS	02-014/21:25:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27369	MGS	02-014/21:27:00	25	Range Modulation On: SUP=3.0dB		
27370	MGS	02-014/21:28:00	25	Begin Ranging Acquisition		
27371	MGS	02-014/21:28:31		NOTE: Exit Planetary Atmosphere 12759		02-014/21:15:13
27372	MGS	02-014/21:28:58		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:14:07	AEMPB	02-014/21:15:40
27373	MGS	02-014/21:28:58		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-014/21:15:40
27374	MGS	02-014/21:28:58		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-014/21:15:40
27375	MGS	02-014/21:28:59		SSR 1B Data Enable	CSD1BE	02-014/21:15:41
27376	MGS	02-014/21:28:59		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-014/21:15:41
27377	MGS	02-014/21:28:59	25	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27378	MGS	02-014/21:28:59	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27379	MGS	02-014/21:30:39	65	NOTE: Below Uplink Interlock Limit		
27380	MGS	02-014/21:35:00	65	End Tracking		
27381	MGS	02-014/21:36:26		NOTE: Exit Solar Eclipse 12759		02-014/21:23:07
27382	MGS	02-014/21:50:00	65	End Post-Cal		
27383	MGS	02-014/21:51:36	25	Acquire D/L: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27384	MGS	02-014/21:51:40		NOTE: Periapsis 12760 ----------		02-014/21:38:21
27385	MGS	02-014/22:07:50	25	NOTE: Transmitter Off in 15 minutes		
27386	MGS	02-014/22:20:51	25	Range Modulation Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27387	MGS	02-014/22:22:50	25	Transmitter Off		
27388	MGS	02-014/22:39:37		SSR 1B Data Disable	CSD1BX	02-014/22:26:19
27389	MGS	02-014/22:39:37		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-014/22:26:19
27390	MGS	02-014/22:39:37		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-014/22:26:19
27391	MGS	02-014/22:39:37	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27392	MGS	02-014/22:43:48		NOTE: Start Block (MAP_RT)		02-014/22:30:30
27393	MGS	02-014/22:43:49		: 00:25:27, 01:32:14, FALSE, TRUE, FALSE, 00:01:15, 00:07:54, 01:15:26, 00:07:38	AEMINI	02-014/22:30:31
27394	MGS	02-014/22:43:49		Enable sending eclipse ingress script when array power disappears	SWEISE	02-014/22:30:31
27395	MGS	02-014/22:43:49		NOTE: Start EVP data return script		02-014/22:30:31
27396	MGS	02-014/22:43:50		: SE_2A, RTM, 01:15:25, MRC, 2002-014T23:15:09.000	AEMRTI	02-014/22:30:32
27397	MGS	02-014/22:48:15		NOTE: Enter Planetary Atmosphere 12760		02-014/22:34:57
27398	MGS	02-014/22:49:27	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27399	MGS	02-014/22:50:34		NOTE: Apoapsis 12760 -		02-014/22:37:16
27400	MGS	02-014/22:53:12		NOTE: Enter Earth Occultation 12760		02-014/22:39:53
27401	MGS	02-014/22:53:12	25	NOTE: Loss Of X-Band Signal		
27402	MGS	02-014/22:53:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-014/22:40:26
27403	MGS	02-014/22:53:45		NOTE: End EVP script		02-014/22:40:26
27404	MGS	02-014/22:53:46		NOTE: End Block (MAP_PB_ODY)		02-014/22:40:27
27405	MGS	02-014/22:53:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-014/22:40:31
27406	MGS	02-014/22:53:50		NOTE: Enter Solar Eclipse 12760		02-014/22:40:31
27407	MGS	02-014/22:58:13	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27408	MGS	02-014/23:00:14	25	Range Modulation On: SUP=3.0dB		
27409	MGS	02-014/23:01:14	25	Begin Ranging Acquisition		
27410	MGS	02-014/23:15:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-014/23:02:13
27411	MGS	02-014/23:19:16		: 01:32:14	RPAONX	02-014/23:05:58
27412	MGS	02-014/23:19:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-014/23:05:58
27413	MGS	02-014/23:20:31		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-014/23:07:13
27414	MGS	02-014/23:20:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-014/23:07:13
27415	MGS	02-014/23:20:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-014/23:07:13
27416	MGS	02-014/23:20:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-014/23:07:13
27417	MGS	02-014/23:20:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-014/23:07:13
27418	MGS	02-014/23:21:05		NOTE: Exit Earth Occultation 12760		02-014/23:07:47
27419	MGS	02-014/23:21:05	25	Acquisition Of X-Band Signal		
27420	MGS	02-014/23:21:05	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27421	MGS	02-014/23:21:05	25	NOTE: Carrier Only -- No Telemetry Modulation		
27422	MGS	02-014/23:26:19		NOTE: Exit Planetary Atmosphere 12760		02-014/23:13:01
27423	MGS	02-014/23:28:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-014/23:15:07
27424	MGS	02-014/23:28:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-014/23:15:07
27425	MGS	02-014/23:28:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-014/23:15:07
27426	MGS	02-014/23:28:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-014/23:15:07
27427	MGS	02-014/23:28:25	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27428	MGS	02-014/23:28:26		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-014/23:15:08
27429	MGS	02-014/23:28:26		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-014/23:15:08
27430	MGS	02-014/23:28:26		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-014/23:15:08
27431	MGS	02-014/23:28:26	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27432	MGS	02-014/23:28:31		NOTE: End fixed Sub-Reflector for Radio Science		02-014/23:15:12
27433	MGS	02-014/23:34:13		NOTE: Exit Solar Eclipse 12760		02-014/23:20:55
27434	MGS	02-014/23:49:22		NOTE: Periapsis 12761 ----------		02-014/23:36:03
27435	MGS	02-015/00:00:00		Light Time: OWLT = 13:18, RTLT = 26:37		
27436	MGS	02-015/00:05:35	25	NOTE: Transmitter Off in 15 minutes		
27437	MGS	02-015/00:18:35	25	Range Modulation Off		
27438	MGS	02-015/00:20:35	25	Transmitter Off		
27439	MGS	02-015/00:38:52		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/00:25:33
27440	MGS	02-015/00:41:36		NOTE: Start EVP data return script		02-015/00:28:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27441	MGS	02-015/00:43:52		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/00:30:33
27442	MGS	02-015/00:43:52		: 00:07:38, FALSE	RDSCII	02-015/00:30:33
27443	MGS	02-015/00:43:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/00:30:33
27444	MGS	02-015/00:43:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/00:30:33
27445	MGS	02-015/00:43:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/00:30:33
27446	MGS	02-015/00:43:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/00:30:33
27447	MGS	02-015/00:43:52	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27448	MGS	02-015/00:43:52	25	NOTE: Carrier Only -- No Telemetry Modulation		
27449	MGS	02-015/00:46:00		NOTE: Enter Planetary Atmosphere 12761		02-015/00:32:42
27450	MGS	02-015/00:48:03		NOTE: Apoapsis 12761 -		02-015/00:34:44
27451	MGS	02-015/00:50:57		NOTE: Enter Earth Occultation 12761		02-015/00:37:38
27452	MGS	02-015/00:50:57	25	NOTE: Loss Of X-Band Signal		
27453	MGS	02-015/00:51:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/00:38:11
27454	MGS	02-015/00:51:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/00:38:11
27455	MGS	02-015/00:51:30		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/00:38:11
27456	MGS	02-015/00:51:30		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/00:38:11
27457	MGS	02-015/00:51:31		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/00:38:12
27458	MGS	02-015/00:51:31		NOTE: End EVP script		02-015/00:38:12
27459	MGS	02-015/00:51:35		NOTE: End fixed Sub-Reflector for Radio Science		02-015/00:38:16
27460	MGS	02-015/00:51:35		NOTE: Enter Solar Eclipse 12761		02-015/00:38:17
27461	MGS	02-015/00:51:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/00:38:17
27462	MGS	02-015/00:56:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27463	MGS	02-015/00:58:00	25	Range Modulation On: SUP=3.0dB		
27464	MGS	02-015/00:59:00	25	Begin Ranging Acquisition		
27465	MGS	02-015/01:13:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/00:59:59
27466	MGS	02-015/01:17:03		: 01:32:14	RPAONX	02-015/01:03:44
27467	MGS	02-015/01:17:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/01:03:44
27468	MGS	02-015/01:18:18		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-015/01:04:59
27469	MGS	02-015/01:18:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/01:04:59
27470	MGS	02-015/01:18:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/01:04:59
27471	MGS	02-015/01:18:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/01:04:59
27472	MGS	02-015/01:18:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/01:04:59
27473	MGS	02-015/01:18:48		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/01:05:29
27474	MGS	02-015/01:18:52		NOTE: Exit Earth Occultation 12761		02-015/01:05:33
27475	MGS	02-015/01:18:52	25	Acquisition Of X-Band Signal		
27476	MGS	02-015/01:18:52	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27477	MGS	02-015/01:18:52	25	NOTE: Carrier Only -- No Telemetry Modulation		
27478	MGS	02-015/01:24:06		NOTE: Exit Planetary Atmosphere 12761		02-015/01:10:47
27479	MGS	02-015/01:26:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/01:12:53
27480	MGS	02-015/01:26:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/01:12:53
27481	MGS	02-015/01:26:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/01:12:53
27482	MGS	02-015/01:26:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/01:12:53
27483	MGS	02-015/01:26:12	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27484	MGS	02-015/01:26:13		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-015/01:12:54
27485	MGS	02-015/01:26:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/01:12:54
27486	MGS	02-015/01:26:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/01:12:54
27487	MGS	02-015/01:26:13	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27488	MGS	02-015/01:26:17		NOTE: End fixed Sub-Reflector for Radio Science		02-015/01:12:58
27489	MGS	02-015/01:31:59		NOTE: Exit Solar Eclipse 12761		02-015/01:18:40
27490	MGS	02-015/01:47:09		NOTE: Periapsis 12762 ----------		02-015/01:33:50
27491	MGS	02-015/02:03:18	25	NOTE: Transmitter Off in 15 minutes		
27492	MGS	02-015/02:16:18	25	Range Modulation Off		
27493	MGS	02-015/02:18:18	25	Transmitter Off		
27494	MGS	02-015/02:24:44		NOTE: Start Block (SSRMGR)		02-015/02:11:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27495	MGS	02-015/02:24:44		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-015/02:11:25
27496	MGS	02-015/02:24:45		SSR 1B Data Enable	CSD1BE	02-015/02:11:26
27497	MGS	02-015/02:24:45		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-015/02:11:26
27498	MGS	02-015/02:36:38		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/02:23:19
27499	MGS	02-015/02:39:18		NOTE: Start Block (MAP_PB_ODY)		02-015/02:25:59
27500	MGS	02-015/02:39:19		: 00:25:27, 01:32:15, FALSE, FALSE, FALSE, 00:01:15, 00:06:14, 01:18:47, 00:05:58	AEMINI	02-015/02:26:00
27501	MGS	02-015/02:39:19		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/02:26:00
27502	MGS	02-015/02:39:19		NOTE: Start EVP data return script		02-015/02:26:00
27503	MGS	02-015/02:39:20		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-015T03:08:56.000	AEMPBI	02-015/02:26:01
27504	MGS	02-015/02:41:38		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/02:28:19
27505	MGS	02-015/02:41:38		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8104000, DUR=00:16:53		02-015/02:28:19
27506	MGS	02-015/02:41:38		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-015/02:28:19
27507	MGS	02-015/02:41:38		: 00:07:38, FALSE	RDSCII	02-015/02:28:19
27508	MGS	02-015/02:41:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/02:28:19
27509	MGS	02-015/02:41:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/02:28:19
27510	MGS	02-015/02:41:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/02:28:19
27511	MGS	02-015/02:41:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/02:28:19
27512	MGS	02-015/02:41:38	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27513	MGS	02-015/02:41:38	25	NOTE: Carrier Only -- No Telemetry Modulation		
27514	MGS	02-015/02:43:43		NOTE: Enter Planetary Atmosphere 12762		02-015/02:30:24
27515	MGS	02-015/02:45:48		NOTE: Apoapsis 12762 -		02-015/02:32:29
27516	MGS	02-015/02:48:20		SSR 1A Data Disable	CSD1AX	02-015/02:35:01
27517	MGS	02-015/02:48:20		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-015/02:35:01
27518	MGS	02-015/02:48:21		NOTE: End Block (SSRMGR)		02-015/02:35:02
27519	MGS	02-015/02:48:41		NOTE: Enter Earth Occultation 12762		02-015/02:35:21
27520	MGS	02-015/02:48:41	25	NOTE: Loss Of X-Band Signal		
27521	MGS	02-015/02:49:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/02:35:57
27522	MGS	02-015/02:49:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/02:35:57
27523	MGS	02-015/02:49:16		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/02:35:57
27524	MGS	02-015/02:49:16		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/02:35:57
27525	MGS	02-015/02:49:17		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/02:35:58
27526	MGS	02-015/02:49:17		NOTE: End EVP script		02-015/02:35:58
27527	MGS	02-015/02:49:18		NOTE: End Block (MAP_RT)		02-015/02:35:59
27528	MGS	02-015/02:49:19		NOTE: Enter Solar Eclipse 12762		02-015/02:36:00
27529	MGS	02-015/02:49:19		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/02:36:00
27530	MGS	02-015/02:49:21		NOTE: End fixed Sub-Reflector for Radio Science		02-015/02:36:02
27531	MGS	02-015/02:53:44	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27532	MGS	02-015/02:55:44	25	Range Modulation On: SUP=3.0dB		
27533	MGS	02-015/02:56:44	25	Begin Ranging Acquisition		
27534	MGS	02-015/03:14:46		: 01:32:15	RPAONX	02-015/03:01:27
27535	MGS	02-015/03:14:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/03:01:27
27536	MGS	02-015/03:16:31		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/03:03:12
27537	MGS	02-015/03:16:37		NOTE: Exit Earth Occultation 12762		02-015/03:03:18
27538	MGS	02-015/03:16:37	25	Acquisition Of X-Band Signal		
27539	MGS	02-015/03:16:37	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27540	MGS	02-015/03:20:22	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27541	MGS	02-015/03:21:51		NOTE: Exit Planetary Atmosphere 12762		02-015/03:08:32
27542	MGS	02-015/03:22:15		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:14:07	AEMPB	02-015/03:08:56
27543	MGS	02-015/03:22:15		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-015/03:08:56
27544	MGS	02-015/03:22:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-015/03:08:56
27545	MGS	02-015/03:22:16		SSR 1A Data Enable	CSD1AE	02-015/03:08:57
27546	MGS	02-015/03:22:16		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-015/03:08:57
27547	MGS	02-015/03:22:16	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27548	MGS	02-015/03:29:42		NOTE: Exit Solar Eclipse 12762		02-015/03:16:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27549	MGS	02-015/03:44:52		NOTE: Periapsis 12763 ----------		02-015/03:31:33
27550	MGS	02-015/03:50:00	34	Begin Pre-Cal		
27551	MGS	02-015/03:50:00	34	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27552	MGS	02-015/03:50:00	34	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27553	MGS	02-015/03:50:00	34	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
27554	MGS	02-015/03:50:00	34	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
27555	MGS	02-015/03:50:00	34	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
27556	MGS	02-015/03:50:00	34	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
27557	MGS	02-015/03:50:00	34	Config: TGC: DEST=37		
27558	MGS	02-015/03:50:00	34	Config: TGC: BAND=X, BR=8000.000000		
27559	MGS	02-015/03:50:00	34	Config: FSS: CH=2, PRI_FL=10000		
27560	MGS	02-015/03:50:00	34	Config: RSR		
27561	MGS	02-015/03:50:00	34	Config: TXL		
27562	MGS	02-015/03:50:00	34	Config: UWV: AMP=XHEMT, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
27563	MGS	02-015/03:50:00	34	Config: BVR		
27564	MGS	02-015/03:50:00	34	Config: Doppler Extractor: BIAS=+1MHZ		
27565	MGS	02-015/03:50:00	34	Config: MDA: SMPL=0.1		
27566	MGS	02-015/03:50:00	34	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
27567	MGS	02-015/03:50:00	34	Config: SRA: HIGH=4, LOW=14, SERV=D		
27568	MGS	02-015/03:50:00	34	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
27569	MGS	02-015/04:01:00	25	NOTE: Transmitter Off in 15 minutes		
27570	MGS	02-015/04:14:00	25	Range Modulation Off		
27571	MGS	02-015/04:16:00	25	Transmitter Off		
27572	MGS	02-015/04:32:54		SSR 1A Data Disable	CSD1AX	02-015/04:19:35
27573	MGS	02-015/04:32:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-015/04:19:35
27574	MGS	02-015/04:32:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-015/04:19:35
27575	MGS	02-015/04:32:54	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27576	MGS	02-015/04:37:00		NOTE: Start Block (MAP_RT)		02-015/04:23:41
27577	MGS	02-015/04:37:01		: 00:25:27, 01:32:14, FALSE, TRUE, FALSE, 00:01:15, 00:07:54, 01:15:26, 00:07:38	AEMINI	02-015/04:23:42
27578	MGS	02-015/04:37:01		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/04:23:42
27579	MGS	02-015/04:37:01		NOTE: Start EVP data return script		02-015/04:23:42
27580	MGS	02-015/04:37:02		: SE_2A, RTM, 01:15:25, MRC, 2002-015T05:08:19.000	AEMRTI	02-015/04:23:43
27581	MGS	02-015/04:41:26		NOTE: Enter Planetary Atmosphere 12763		02-015/04:28:07
27582	MGS	02-015/04:42:38	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27583	MGS	02-015/04:43:40		NOTE: Apoapsis 12763 -		02-015/04:30:20
27584	MGS	02-015/04:46:23		NOTE: Enter Earth Occultation 12763		02-015/04:33:04
27585	MGS	02-015/04:46:23	25	NOTE: Loss Of X-Band Signal		
27586	MGS	02-015/04:47:01		NOTE: Enter Solar Eclipse 12763		02-015/04:33:42
27587	MGS	02-015/04:47:01		NOTE: End EVP script		02-015/04:33:42
27588	MGS	02-015/04:47:01		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/04:33:42
27589	MGS	02-015/04:47:01		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/04:33:42
27590	MGS	02-015/04:47:02		NOTE: End Block (MAP_PB_ODY)		02-015/04:33:43
27591	MGS	02-015/04:50:00	34	Begin Tracking		
27592	MGS	02-015/05:00:00	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27593	MGS	02-015/05:02:00	34	Range Modulation On: SUP=3.0dB		
27594	MGS	02-015/05:03:00	34	Begin Ranging Acquisition		
27595	MGS	02-015/05:04:38	25	NOTE: Below Uplink Interlock Limit		
27596	MGS	02-015/05:08:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/04:55:24
27597	MGS	02-015/05:10:00	25	End Tracking		
27598	MGS	02-015/05:12:28		: 01:32:14	RPAONX	02-015/04:59:09
27599	MGS	02-015/05:12:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/04:59:09
27600	MGS	02-015/05:13:43		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-015/05:00:24
27601	MGS	02-015/05:13:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/05:00:24
27602	MGS	02-015/05:13:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/05:00:24

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27603	MGS	02-015/05:13:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/05:00:24
27604	MGS	02-015/05:13:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/05:00:24
27605	MGS	02-015/05:14:19		NOTE: Exit Earth Occultation 12763		02-015/05:01:00
27606	MGS	02-015/05:14:19	34	Acquisition Of X-Band Signal		
27607	MGS	02-015/05:14:19	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27608	MGS	02-015/05:14:19	34	NOTE: Carrier Only -- No Telemetry Modulation		
27609	MGS	02-015/05:19:34		NOTE: Exit Planetary Atmosphere 12763		02-015/05:06:14
27610	MGS	02-015/05:21:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/05:08:18
27611	MGS	02-015/05:21:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/05:08:18
27612	MGS	02-015/05:21:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/05:08:18
27613	MGS	02-015/05:21:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/05:08:18
27614	MGS	02-015/05:21:37	34	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27615	MGS	02-015/05:21:38		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-015/05:08:19
27616	MGS	02-015/05:21:38		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/05:08:19
27617	MGS	02-015/05:21:38		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/05:08:19
27618	MGS	02-015/05:21:38	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27619	MGS	02-015/05:21:42		NOTE: End fixed Sub-Reflector for Radio Science		02-015/05:08:23
27620	MGS	02-015/05:25:00	25	End Post-Cal		
27621	MGS	02-015/05:26:38	34	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27622	MGS	02-015/05:27:24		NOTE: Exit Solar Eclipse 12763		02-015/05:14:05
27623	MGS	02-015/05:42:22		NOTE: Periapsis 12764 ----------		02-015/05:29:02
27624	MGS	02-015/05:58:41	34	NOTE: Transmitter Off in 15 minutes		
27625	MGS	02-015/06:11:42	34	Range Modulation Off		
27626	MGS	02-015/06:13:41	34	Transmitter Off		
27627	MGS	02-015/06:32:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/06:18:44
27628	MGS	02-015/06:34:44		NOTE: Start EVP data return script		02-015/06:21:24
27629	MGS	02-015/06:37:04		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/06:23:44
27630	MGS	02-015/06:37:04		: 00:07:38, FALSE	RDSCII	02-015/06:23:44
27631	MGS	02-015/06:37:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/06:23:44
27632	MGS	02-015/06:37:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/06:23:44
27633	MGS	02-015/06:37:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/06:23:44
27634	MGS	02-015/06:37:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/06:23:44
27635	MGS	02-015/06:37:04	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27636	MGS	02-015/06:37:04	34	NOTE: Carrier Only -- No Telemetry Modulation		
27637	MGS	02-015/06:39:09		NOTE: Enter Planetary Atmosphere 12764		02-015/06:25:49
27638	MGS	02-015/06:41:06		NOTE: Apoapsis 12764 -		02-015/06:27:47
27639	MGS	02-015/06:44:06		NOTE: Enter Earth Occultation 12764		02-015/06:30:46
27640	MGS	02-015/06:44:06	34	NOTE: Loss Of X-Band Signal		
27641	MGS	02-015/06:44:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/06:31:22
27642	MGS	02-015/06:44:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/06:31:22
27643	MGS	02-015/06:44:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/06:31:22
27644	MGS	02-015/06:44:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/06:31:22
27645	MGS	02-015/06:44:42		NOTE: End EVP script		02-015/06:31:23
27646	MGS	02-015/06:44:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/06:31:23
27647	MGS	02-015/06:44:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/06:31:24
27648	MGS	02-015/06:44:44		NOTE: Enter Solar Eclipse 12764		02-015/06:31:24
27649	MGS	02-015/06:44:46		NOTE: End fixed Sub-Reflector for Radio Science		02-015/06:31:27
27650	MGS	02-015/06:49:08	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27651	MGS	02-015/06:51:08	34	Range Modulation On: SUP=3.0dB		
27652	MGS	02-015/06:52:08	34	Begin Ranging Acquisition		
27653	MGS	02-015/07:06:25		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/06:53:06
27654	MGS	02-015/07:10:11		: 01:32:14	RPAONX	02-015/06:56:51
27655	MGS	02-015/07:10:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/06:56:51
27656	MGS	02-015/07:11:26		: 00:00:30, 00:07:54, FALSE	RDSCIE	02-015/06:58:06

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27657	MGS	02-015/07:11:26		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/06:58:06
27658	MGS	02-015/07:11:26		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/06:58:06
27659	MGS	02-015/07:11:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/06:58:06
27660	MGS	02-015/07:11:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/06:58:06
27661	MGS	02-015/07:11:56		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/06:58:36
27662	MGS	02-015/07:12:02		NOTE: Exit Earth Occultation 12764		02-015/06:58:42
27663	MGS	02-015/07:12:02	34	Acquisition Of X-Band Signal		
27664	MGS	02-015/07:12:02	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27665	MGS	02-015/07:12:02	34	NOTE: Carrier Only -- No Telemetry Modulation		
27666	MGS	02-015/07:17:16		NOTE: Exit Planetary Atmosphere 12764		02-015/07:03:56
27667	MGS	02-015/07:19:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/07:06:00
27668	MGS	02-015/07:19:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/07:06:00
27669	MGS	02-015/07:19:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/07:06:00
27670	MGS	02-015/07:19:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/07:06:00
27671	MGS	02-015/07:19:20	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27672	MGS	02-015/07:19:21		: RTM, MRC, 01:15:25, S&E_2A, FALSE, 00:07:39	AEMRT	02-015/07:06:01
27673	MGS	02-015/07:19:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/07:06:01
27674	MGS	02-015/07:19:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/07:06:01
27675	MGS	02-015/07:19:21	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27676	MGS	02-015/07:19:25		NOTE: End fixed Sub-Reflector for Radio Science		02-015/07:06:05
27677	MGS	02-015/07:25:07		NOTE: Exit Solar Eclipse 12764		02-015/07:11:47
27678	MGS	02-015/07:39:48		NOTE: Periapsis 12765 ----------		02-015/07:26:29
27679	MGS	02-015/07:56:23	34	NOTE: Transmitter Off in 15 minutes		
27680	MGS	02-015/08:09:24	34	Range Modulation Off		
27681	MGS	02-015/08:11:23	34	Transmitter Off		
27682	MGS	02-015/08:18:04		NOTE: Start Block (SSRMGR)		02-015/08:04:44
27683	MGS	02-015/08:18:04		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-015/08:04:44
27684	MGS	02-015/08:18:05		SSR 1A Data Enable	CSD1AE	02-015/08:04:45
27685	MGS	02-015/08:18:05		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-015/08:04:45
27686	MGS	02-015/08:29:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/08:16:26
27687	MGS	02-015/08:32:28		NOTE: Start Block (MAP_PB_ODY)		02-015/08:19:08
27688	MGS	02-015/08:32:29		: 00:25:27, 01:32:15, FALSE, FALSE, FALSE, 00:01:15, 00:06:14, 01:18:47, 00:05:58	AEMINI	02-015/08:19:09
27689	MGS	02-015/08:32:29		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/08:19:09
27690	MGS	02-015/08:32:29		NOTE: Start EVP data return script		02-015/08:19:09
27691	MGS	02-015/08:32:30		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-015T09:02:05.000	AEMPBI	02-015/08:19:10
27692	MGS	02-015/08:34:46		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/08:21:26
27693	MGS	02-015/08:34:46		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8008000, DUR=00:16:41		02-015/08:21:26
27694	MGS	02-015/08:34:46		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-015/08:21:26
27695	MGS	02-015/08:34:46		: 00:07:38, FALSE	RDSCII	02-015/08:21:26
27696	MGS	02-015/08:34:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/08:21:26
27697	MGS	02-015/08:34:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/08:21:26
27698	MGS	02-015/08:34:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/08:21:26
27699	MGS	02-015/08:34:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/08:21:26
27700	MGS	02-015/08:34:46	34	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27701	MGS	02-015/08:34:46	34	NOTE: Carrier Only -- No Telemetry Modulation		
27702	MGS	02-015/08:36:52		NOTE: Enter Planetary Atmosphere 12765		02-015/08:23:32
27703	MGS	02-015/08:38:41		NOTE: Apoapsis 12765 -		02-015/08:25:21
27704	MGS	02-015/08:41:29		SSR 1B Data Disable	CSD1BX	02-015/08:28:09
27705	MGS	02-015/08:41:29		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-015/08:28:09
27706	MGS	02-015/08:41:30		NOTE: End Block (SSRMGR)		02-015/08:28:10
27707	MGS	02-015/08:41:48		NOTE: Enter Earth Occultation 12765		02-015/08:28:28
27708	MGS	02-015/08:41:48	34	NOTE: Loss Of X-Band Signal		
27709	MGS	02-015/08:42:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/08:29:04
27710	MGS	02-015/08:42:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/08:29:04

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27711	MGS	02-015/08:42:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/08:29:04
27712	MGS	02-015/08:42:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/08:29:04
27713	MGS	02-015/08:42:25		NOTE: End EVP script		02-015/08:29:05
27714	MGS	02-015/08:42:25		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/08:29:05
27715	MGS	02-015/08:42:26		NOTE: End Block (MAP_RT)		02-015/08:29:06
27716	MGS	02-015/08:42:28		NOTE: Enter Solar Eclipse 12765		02-015/08:29:08
27717	MGS	02-015/08:42:29		NOTE: End fixed Sub-Reflector for Radio Science		02-015/08:29:09
27718	MGS	02-015/08:42:29		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/08:29:09
27719	MGS	02-015/08:46:52	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27720	MGS	02-015/08:48:53	34	Range Modulation On: SUP=3.0dB		
27721	MGS	02-015/08:49:53	34	Begin Ranging Acquisition		
27722	MGS	02-015/09:07:56		: 01:32:15	RPAONX	02-015/08:54:36
27723	MGS	02-015/09:07:56		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/08:54:36
27724	MGS	02-015/09:09:41		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/08:56:21
27725	MGS	02-015/09:09:47		NOTE: Exit Earth Occultation 12765		02-015/08:56:27
27726	MGS	02-015/09:09:47	34	Acquisition Of X-Band Signal		
27727	MGS	02-015/09:09:47	34	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27728	MGS	02-015/09:13:32	34	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27729	MGS	02-015/09:14:59		NOTE: Exit Planetary Atmosphere 12765		02-015/09:01:39
27730	MGS	02-015/09:15:25		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:14:07	AEMPB	02-015/09:02:05
27731	MGS	02-015/09:15:25		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-015/09:02:05
27732	MGS	02-015/09:15:25		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-015/09:02:05
27733	MGS	02-015/09:15:26		SSR 1B Data Enable	CSD1BE	02-015/09:02:06
27734	MGS	02-015/09:15:26		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-015/09:02:06
27735	MGS	02-015/09:15:26	34	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27736	MGS	02-015/09:22:51		NOTE: Exit Solar Eclipse 12765		02-015/09:09:31
27737	MGS	02-015/09:37:52		NOTE: Periapsis 12766 ----------		02-015/09:24:32
27738	MGS	02-015/09:50:00	63	Begin Pre-Cal		
27739	MGS	02-015/09:50:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27740	MGS	02-015/09:50:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27741	MGS	02-015/09:50:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
27742	MGS	02-015/09:50:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
27743	MGS	02-015/09:50:00	63	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
27744	MGS	02-015/09:50:00	63	Config: TGC: DEST=37		
27745	MGS	02-015/09:50:00	63	Config: TGC: BAND=X, BR=40000.000000		
27746	MGS	02-015/09:50:00	63	Config: FSS: CH=2, PRI_FL=10000		
27747	MGS	02-015/09:50:00	63	Config: RSR		
27748	MGS	02-015/09:50:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
27749	MGS	02-015/09:50:00	63	Config: BVR		
27750	MGS	02-015/09:50:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
27751	MGS	02-015/09:50:00	63	Config: MDA: SMPL=0.1		
27752	MGS	02-015/09:54:08	34	NOTE: Transmitter Off in 15 minutes		
27753	MGS	02-015/10:07:08	34	Range Modulation Off		
27754	MGS	02-015/10:09:08	34	Transmitter Off		
27755	MGS	02-015/10:26:04		SSR 1B Data Disable	CSD1BX	02-015/10:12:44
27756	MGS	02-015/10:26:04		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-015/10:12:44
27757	MGS	02-015/10:26:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-015/10:12:44
27758	MGS	02-015/10:26:04	34	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27759	MGS	02-015/10:30:14		NOTE: Start Block (MAP_RT)		02-015/10:16:54
27760	MGS	02-015/10:30:15		: 00:25:33, 01:32:02, FALSE, TRUE, FALSE, 00:01:15, 00:07:52, 01:15:19, 00:07:35	AEMINI	02-015/10:16:55
27761	MGS	02-015/10:30:15		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/10:16:55
27762	MGS	02-015/10:30:15		NOTE: Start EVP data return script		02-015/10:16:55
27763	MGS	02-015/10:30:16		: SE_2A, RTM, 01:15:18, MRC, 2002-015T11:01:36.000	AEMRTI	02-015/10:16:56
27764	MGS	02-015/10:34:37		NOTE: Enter Planetary Atmosphere 12766		02-015/10:21:17

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27765	MGS	02-015/10:35:48	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27766	MGS	02-015/10:36:55		NOTE: Apoapsis 12766 -		02-015/10:23:35
27767	MGS	02-015/10:39:33		NOTE: Enter Earth Occultation 12766		02-015/10:26:13
27768	MGS	02-015/10:39:33	34	NOTE: Loss Of X-Band Signal		
27769	MGS	02-015/10:40:11		NOTE: End EVP script		02-015/10:26:50
27770	MGS	02-015/10:40:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/10:26:51
27771	MGS	02-015/10:40:12		NOTE: End Block (MAP_PB_ODY)		02-015/10:26:51
27772	MGS	02-015/10:40:15		NOTE: Enter Solar Eclipse 12766		02-015/10:26:55
27773	MGS	02-015/10:40:15		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/10:26:55
27774	MGS	02-015/10:44:38	34	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
27775	MGS	02-015/10:46:39	34	Range Modulation On: SUP=3.0dB		
27776	MGS	02-015/10:47:39	34	Begin Ranging Acquisition		
27777	MGS	02-015/11:00:00	34	NOTE: Transmitter Off in 15 minutes		
27778	MGS	02-015/11:02:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/10:48:43
27779	MGS	02-015/11:05:48		: 01:32:02	RPAONX	02-015/10:52:28
27780	MGS	02-015/11:05:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/10:52:28
27781	MGS	02-015/11:07:03		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-015/10:53:43
27782	MGS	02-015/11:07:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/10:53:43
27783	MGS	02-015/11:07:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/10:53:43
27784	MGS	02-015/11:07:03		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/10:53:43
27785	MGS	02-015/11:07:03		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/10:53:43
27786	MGS	02-015/11:07:34		NOTE: Exit Earth Occultation 12766		02-015/10:54:14
27787	MGS	02-015/11:07:34	34	Acquisition Of X-Band Signal		
27788	MGS	02-015/11:07:34	34	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27789	MGS	02-015/11:07:34	34	NOTE: Carrier Only -- No Telemetry Modulation		
27790	MGS	02-015/11:12:46		NOTE: Exit Planetary Atmosphere 12766		02-015/10:59:25
27791	MGS	02-015/11:13:00	34	Range Modulation Off		
27792	MGS	02-015/11:14:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/11:01:35
27793	MGS	02-015/11:14:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/11:01:35
27794	MGS	02-015/11:14:55		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/11:01:35
27795	MGS	02-015/11:14:55		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/11:01:35
27796	MGS	02-015/11:14:55	34	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27797	MGS	02-015/11:14:56		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-015/11:01:36
27798	MGS	02-015/11:14:56		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/11:01:36
27799	MGS	02-015/11:14:56		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/11:01:36
27800	MGS	02-015/11:14:56	34	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27801	MGS	02-015/11:15:00	34	Transmitter Off		
27802	MGS	02-015/11:15:00		NOTE: End fixed Sub-Reflector for Radio Science		02-015/11:01:40
27803	MGS	02-015/11:20:00	63	Begin Tracking		
27804	MGS	02-015/11:20:00	63	Acquire D/L: X/16, 3-Way/34, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27805	MGS	02-015/11:20:38		NOTE: Exit Solar Eclipse 12766		02-015/11:07:18
27806	MGS	02-015/11:27:46	63	NOTE: Above Uplink Interlock Limit		
27807	MGS	02-015/11:29:13	34	NOTE: Below Uplink Interlock Limit		
27808	MGS	02-015/11:36:06		NOTE: Periapsis 12767 ----------		02-015/11:22:46
27809	MGS	02-015/11:40:00	34	End Tracking		
27810	MGS	02-015/11:41:40	63	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27811	MGS	02-015/11:55:00	34	End Post-Cal		
27812	MGS	02-015/12:13:20		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-015/12:00:00
27813	MGS	02-015/12:25:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/12:11:54
27814	MGS	02-015/12:28:02		NOTE: Start EVP data return script		02-015/12:14:42
27815	MGS	02-015/12:30:14		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/12:16:54
27816	MGS	02-015/12:30:14		: 00:07:35, FALSE	RDSCII	02-015/12:16:54
27817	MGS	02-015/12:30:14		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/12:16:54

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27818	MGS	02-015/12:30:14		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/12:16:54
27819	MGS	02-015/12:30:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/12:16:54
27820	MGS	02-015/12:30:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/12:16:54
27821	MGS	02-015/12:30:14	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27822	MGS	02-015/12:30:14	63	NOTE: Carrier Only -- No Telemetry Modulation		
27823	MGS	02-015/12:32:25		NOTE: Enter Planetary Atmosphere 12767		02-015/12:19:04
27824	MGS	02-015/12:35:12		NOTE: Apoapsis 12767 -		02-015/12:21:51
27825	MGS	02-015/12:37:21		NOTE: Enter Earth Occultation 12767		02-015/12:24:00
27826	MGS	02-015/12:37:21	63	NOTE: Loss Of X-Band Signal		
27827	MGS	02-015/12:37:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/12:24:29
27828	MGS	02-015/12:37:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/12:24:29
27829	MGS	02-015/12:37:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/12:24:29
27830	MGS	02-015/12:37:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/12:24:29
27831	MGS	02-015/12:37:50		NOTE: End EVP script		02-015/12:24:30
27832	MGS	02-015/12:37:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/12:24:30
27833	MGS	02-015/12:37:54		NOTE: End fixed Sub-Reflector for Radio Science		02-015/12:24:34
27834	MGS	02-015/12:38:02		NOTE: Enter Solar Eclipse 12767		02-015/12:24:42
27835	MGS	02-015/12:38:02		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/12:24:42
27836	MGS	02-015/12:59:50		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/12:46:30
27837	MGS	02-015/13:03:36		: 01:32:02	RPAONX	02-015/12:50:15
27838	MGS	02-015/13:03:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/12:50:15
27839	MGS	02-015/13:04:51		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-015/12:51:30
27840	MGS	02-015/13:04:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/12:51:30
27841	MGS	02-015/13:04:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/12:51:30
27842	MGS	02-015/13:04:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/12:51:30
27843	MGS	02-015/13:04:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/12:51:30
27844	MGS	02-015/13:05:21		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/12:52:00
27845	MGS	02-015/13:05:22		NOTE: Exit Earth Occultation 12767		02-015/12:52:01
27846	MGS	02-015/13:05:22	63	Acquisition Of X-Band Signal		
27847	MGS	02-015/13:05:22	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27848	MGS	02-015/13:05:22	63	NOTE: Carrier Only -- No Telemetry Modulation		
27849	MGS	02-015/13:10:34		NOTE: Exit Planetary Atmosphere 12767		02-015/12:57:13
27850	MGS	02-015/13:12:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/12:59:22
27851	MGS	02-015/13:12:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/12:59:22
27852	MGS	02-015/13:12:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/12:59:22
27853	MGS	02-015/13:12:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/12:59:22
27854	MGS	02-015/13:12:43	63	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27855	MGS	02-015/13:12:44		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-015/12:59:23
27856	MGS	02-015/13:12:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/12:59:23
27857	MGS	02-015/13:12:44		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/12:59:23
27858	MGS	02-015/13:12:44	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27859	MGS	02-015/13:12:47		NOTE: End fixed Sub-Reflector for Radio Science		02-015/12:59:27
27860	MGS	02-015/13:18:26		NOTE: Exit Solar Eclipse 12767		02-015/13:05:05
27861	MGS	02-015/13:34:07		NOTE: Periapsis 12768 ----------		02-015/13:20:46
27862	MGS	02-015/13:35:00	65	Begin Pre-Cal		
27863	MGS	02-015/13:35:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27864	MGS	02-015/13:35:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27865	MGS	02-015/13:35:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
27866	MGS	02-015/13:35:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
27867	MGS	02-015/13:35:00	65	At BOT: S/C Tlm Mode: BR=0.0, FL=10000, SC=HIGH, MI=80.0		
27868	MGS	02-015/13:35:00	65	Config: TGC: DEST=37		
27869	MGS	02-015/13:35:00	65	Config: TGC: BAND=X, BR=0.000000		
27870	MGS	02-015/13:35:00	65	Config: FSS: CH=2, PRI_FL=10000		
27871	MGS	02-015/13:35:00	65	Config: RSR		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27872	MGS	02-015/13:35:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
27873	MGS	02-015/13:35:00	65	Config: BVR		
27874	MGS	02-015/13:35:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
27875	MGS	02-015/13:35:00	65	Config: MDA: SMPL=0.1		
27876	MGS	02-015/14:11:12		NOTE: Start Block (SSRMGR)		02-015/13:57:51
27877	MGS	02-015/14:11:12		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-015/13:57:51
27878	MGS	02-015/14:11:13		SSR 1B Data Enable	CSD1BE	02-015/13:57:52
27879	MGS	02-015/14:11:13		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-015/13:57:52
27880	MGS	02-015/14:23:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/14:09:41
27881	MGS	02-015/14:25:47		NOTE: Start Block (MAP_PB_ODY)		02-015/14:12:26
27882	MGS	02-015/14:25:48		: 00:25:33, 01:32:03, FALSE, FALSE, FALSE, 00:01:15, 00:06:12, 01:18:40, 00:05:55	AEMINI	02-015/14:12:27
27883	MGS	02-015/14:25:48		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/14:12:27
27884	MGS	02-015/14:25:48		NOTE: Start EVP data return script		02-015/14:12:27
27885	MGS	02-015/14:25:49		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-015T14:55:28.000	AEMPBI	02-015/14:12:28
27886	MGS	02-015/14:28:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/14:14:41
27887	MGS	02-015/14:28:02		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8072000, DUR=00:16:49		02-015/14:14:41
27888	MGS	02-015/14:28:02		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-015/14:14:41
27889	MGS	02-015/14:28:02		: 00:07:35, FALSE	RDSCII	02-015/14:14:41
27890	MGS	02-015/14:28:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/14:14:41
27891	MGS	02-015/14:28:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/14:14:41
27892	MGS	02-015/14:28:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/14:14:41
27893	MGS	02-015/14:28:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/14:14:41
27894	MGS	02-015/14:28:02	63	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27895	MGS	02-015/14:28:02	63	NOTE: Carrier Only -- No Telemetry Modulation		
27896	MGS	02-015/14:30:12		NOTE: Enter Planetary Atmosphere 12768		02-015/14:16:51
27897	MGS	02-015/14:32:58		NOTE: Apoapsis 12768 -		02-015/14:19:37
27898	MGS	02-015/14:34:49		SSR 1A Data Disable	CSD1AX	02-015/14:21:28
27899	MGS	02-015/14:34:49		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-015/14:21:28
27900	MGS	02-015/14:34:50		NOTE: End Block (SSRMGR)		02-015/14:21:29
27901	MGS	02-015/14:35:08		NOTE: Enter Earth Occultation 12768		02-015/14:21:47
27902	MGS	02-015/14:35:08	63	NOTE: Loss Of X-Band Signal		
27903	MGS	02-015/14:35:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/14:22:16
27904	MGS	02-015/14:35:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/14:22:16
27905	MGS	02-015/14:35:37		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/14:22:16
27906	MGS	02-015/14:35:37		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/14:22:16
27907	MGS	02-015/14:35:38		NOTE: End EVP script		02-015/14:22:17
27908	MGS	02-015/14:35:38		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/14:22:17
27909	MGS	02-015/14:35:39		NOTE: End Block (MAP_RT)		02-015/14:22:18
27910	MGS	02-015/14:35:42		NOTE: End fixed Sub-Reflector for Radio Science		02-015/14:22:21
27911	MGS	02-015/14:35:48		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/14:22:27
27912	MGS	02-015/14:35:48		NOTE: Enter Solar Eclipse 12768		02-015/14:22:27
27913	MGS	02-015/15:01:21		: 01:32:03	RPAONX	02-015/14:48:00
27914	MGS	02-015/15:01:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/14:48:00
27915	MGS	02-015/15:03:06		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/14:49:45
27916	MGS	02-015/15:03:09		NOTE: Exit Earth Occultation 12768		02-015/14:49:48
27917	MGS	02-015/15:03:09	63	Acquisition Of X-Band Signal		
27918	MGS	02-015/15:03:09	63	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27919	MGS	02-015/15:05:00	65	Begin Tracking		
27920	MGS	02-015/15:05:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27921	MGS	02-015/15:08:22		NOTE: Exit Planetary Atmosphere 12768		02-015/14:55:01
27922	MGS	02-015/15:08:48		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:13:57	AEMPB	02-015/14:55:27
27923	MGS	02-015/15:08:48		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-015/14:55:27
27924	MGS	02-015/15:08:48		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-015/14:55:27
27925	MGS	02-015/15:08:49		SSR 1A Data Enable	CSD1AE	02-015/14:55:28

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27926	MGS	02-015/15:08:49		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-015/14:55:28
27927	MGS	02-015/15:08:49	63	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27928	MGS	02-015/15:08:49	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27929	MGS	02-015/15:16:12		NOTE: Exit Solar Eclipse 12768		02-015/15:02:51
27930	MGS	02-015/15:25:00	63	End Tracking		
27931	MGS	02-015/15:31:37		NOTE: Periapsis 12769 ----------		02-015/15:18:16
27932	MGS	02-015/15:40:00	63	End Post-Cal		
27933	MGS	02-015/16:19:27		SSR 1A Data Disable	CSD1AX	02-015/16:06:06
27934	MGS	02-015/16:19:27		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-015/16:06:06
27935	MGS	02-015/16:19:27		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-015/16:06:06
27936	MGS	02-015/16:19:27	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27937	MGS	02-015/16:23:29		NOTE: Start Block (MAP_RT)		02-015/16:10:08
27938	MGS	02-015/16:23:30		: 00:25:33, 01:32:02, FALSE, TRUE, FALSE, 00:01:15, 00:07:52, 01:15:19, 00:07:35	AEMINI	02-015/16:10:09
27939	MGS	02-015/16:23:30		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/16:10:09
27940	MGS	02-015/16:23:30		NOTE: Start EVP data return script		02-015/16:10:09
27941	MGS	02-015/16:23:31		: SE_2A, RTM, 01:15:18, MRC, 2002-015T16:54:50.000	AEMRTI	02-015/16:10:10
27942	MGS	02-015/16:27:54		NOTE: Enter Planetary Atmosphere 12769		02-015/16:14:33
27943	MGS	02-015/16:30:18		NOTE: Apoapsis 12769 -		02-015/16:16:57
27944	MGS	02-015/16:32:50		NOTE: Enter Earth Occultation 12769		02-015/16:19:29
27945	MGS	02-015/16:32:50	65	NOTE: Loss Of X-Band Signal		
27946	MGS	02-015/16:33:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/16:20:03
27947	MGS	02-015/16:33:24		NOTE: End EVP script		02-015/16:20:03
27948	MGS	02-015/16:33:25		NOTE: End Block (MAP_PB_ODY)		02-015/16:20:04
27949	MGS	02-015/16:33:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/16:20:09
27950	MGS	02-015/16:33:30		NOTE: Enter Solar Eclipse 12769		02-015/16:20:09
27951	MGS	02-015/16:55:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/16:41:57
27952	MGS	02-015/16:59:03		: 01:32:02	RPAONX	02-015/16:45:42
27953	MGS	02-015/16:59:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/16:45:42
27954	MGS	02-015/17:00:18		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-015/16:46:57
27955	MGS	02-015/17:00:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/16:46:57
27956	MGS	02-015/17:00:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/16:46:57
27957	MGS	02-015/17:00:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/16:46:57
27958	MGS	02-015/17:00:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/16:46:57
27959	MGS	02-015/17:00:52		NOTE: Exit Earth Occultation 12769		02-015/16:47:31
27960	MGS	02-015/17:00:52	65	Acquisition Of X-Band Signal		
27961	MGS	02-015/17:00:52	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
27962	MGS	02-015/17:00:52	65	NOTE: Carrier Only -- No Telemetry Modulation		
27963	MGS	02-015/17:06:05		NOTE: Exit Planetary Atmosphere 12769		02-015/16:52:44
27964	MGS	02-015/17:08:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/16:54:49
27965	MGS	02-015/17:08:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/16:54:49
27966	MGS	02-015/17:08:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/16:54:49
27967	MGS	02-015/17:08:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/16:54:49
27968	MGS	02-015/17:08:10	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27969	MGS	02-015/17:08:11		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-015/16:54:50
27970	MGS	02-015/17:08:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/16:54:50
27971	MGS	02-015/17:08:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/16:54:50
27972	MGS	02-015/17:08:11	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
27973	MGS	02-015/17:08:15		NOTE: End fixed Sub-Reflector for Radio Science		02-015/16:54:54
27974	MGS	02-015/17:13:54		NOTE: Exit Solar Eclipse 12769		02-015/17:00:32
27975	MGS	02-015/17:28:59		NOTE: Periapsis 12770 ----------		02-015/17:15:38
27976	MGS	02-015/17:45:00	25	Begin Pre-Cal		
27977	MGS	02-015/17:45:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
27978	MGS	02-015/17:45:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
27979	MGS	02-015/17:45:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
27980	MGS	02-015/17:45:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
27981	MGS	02-015/17:45:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
27982	MGS	02-015/17:45:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
27983	MGS	02-015/17:45:00	25	Config: TGC: DEST=37		
27984	MGS	02-015/17:45:00	25	Config: TGC: BAND=X, BR=0.000000		
27985	MGS	02-015/17:45:00	25	Config: FSS: CH=2, PRI_FL=10000		
27986	MGS	02-015/17:45:00	25	Config: RSR		
27987	MGS	02-015/17:45:00	25	Config: TXL		
27988	MGS	02-015/17:45:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
27989	MGS	02-015/17:45:00	25	Config: BVR		
27990	MGS	02-015/17:45:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
27991	MGS	02-015/17:45:00	25	Config: MDA: SMPL=0.1		
27992	MGS	02-015/17:45:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
27993	MGS	02-015/17:45:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
27994	MGS	02-015/17:45:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
27995	MGS	02-015/18:18:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/18:05:08
27996	MGS	02-015/18:21:11		NOTE: Start EVP data return script		02-015/18:07:50
27997	MGS	02-015/18:23:29		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/18:10:08
27998	MGS	02-015/18:23:29		: 00:07:35, FALSE	RDSCII	02-015/18:10:08
27999	MGS	02-015/18:23:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/18:10:08
28000	MGS	02-015/18:23:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/18:10:08
28001	MGS	02-015/18:23:29		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/18:10:08
28002	MGS	02-015/18:23:29		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/18:10:08
28003	MGS	02-015/18:23:29	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28004	MGS	02-015/18:23:29	65	NOTE: Carrier Only -- No Telemetry Modulation		
28005	MGS	02-015/18:25:34		NOTE: Enter Planetary Atmosphere 12770		02-015/18:12:12
28006	MGS	02-015/18:28:02		NOTE: Apoapsis 12770 -		02-015/18:14:41
28007	MGS	02-015/18:30:30		NOTE: Enter Earth Occultation 12770		02-015/18:17:08
28008	MGS	02-015/18:30:30	65	NOTE: Loss Of X-Band Signal		
28009	MGS	02-015/18:31:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/18:17:43
28010	MGS	02-015/18:31:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/18:17:43
28011	MGS	02-015/18:31:04		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/18:17:43
28012	MGS	02-015/18:31:04		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/18:17:43
28013	MGS	02-015/18:31:05		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/18:17:44
28014	MGS	02-015/18:31:05		NOTE: End EVP script		02-015/18:17:44
28015	MGS	02-015/18:31:09		NOTE: End fixed Sub-Reflector for Radio Science		02-015/18:17:48
28016	MGS	02-015/18:31:11		NOTE: Enter Solar Eclipse 12770		02-015/18:17:50
28017	MGS	02-015/18:31:11		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/18:17:50
28018	MGS	02-015/18:45:00	25	Begin Tracking		
28019	MGS	02-015/18:53:00		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/18:39:38
28020	MGS	02-015/18:54:37	25	NOTE: Above Uplink Interlock Limit		
28021	MGS	02-015/18:55:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28022	MGS	02-015/18:56:44		: 01:32:02	RPAONX	02-015/18:43:23
28023	MGS	02-015/18:56:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/18:43:23
28024	MGS	02-015/18:57:00	25	Range Modulation On: SUP=3.0dB		
28025	MGS	02-015/18:57:59		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-015/18:44:38
28026	MGS	02-015/18:57:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/18:44:38
28027	MGS	02-015/18:57:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/18:44:38
28028	MGS	02-015/18:57:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/18:44:38
28029	MGS	02-015/18:57:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/18:44:38
28030	MGS	02-015/18:58:00	25	Begin Ranging Acquisition		
28031	MGS	02-015/18:58:29		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/18:45:08
28032	MGS	02-015/18:58:33		NOTE: Exit Earth Occultation 12770		02-015/18:45:12
28033	MGS	02-015/18:58:33	25	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28034	MGS	02-015/18:58:33	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28035	MGS	02-015/18:58:33	25	NOTE: Carrier Only -- No Telemetry Modulation		
28036	MGS	02-015/18:58:33	65	Acquisition Of X-Band Signal		
28037	MGS	02-015/18:58:33	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28038	MGS	02-015/18:58:33	65	NOTE: Carrier Only -- No Telemetry Modulation		
28039	MGS	02-015/19:03:45		NOTE: Exit Planetary Atmosphere 12770		02-015/18:50:24
28040	MGS	02-015/19:05:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/18:52:30
28041	MGS	02-015/19:05:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/18:52:30
28042	MGS	02-015/19:05:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/18:52:30
28043	MGS	02-015/19:05:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/18:52:30
28044	MGS	02-015/19:05:51	25	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28045	MGS	02-015/19:05:51	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28046	MGS	02-015/19:05:52		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-015/18:52:31
28047	MGS	02-015/19:05:52		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/18:52:31
28048	MGS	02-015/19:05:52		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/18:52:31
28049	MGS	02-015/19:05:52	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28050	MGS	02-015/19:05:52	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28051	MGS	02-015/19:05:57		NOTE: End fixed Sub-Reflector for Radio Science		02-015/18:52:35
28052	MGS	02-015/19:11:34		NOTE: Exit Solar Eclipse 12770		02-015/18:58:13
28053	MGS	02-015/19:21:43	25	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28054	MGS	02-015/19:21:43	65	Acquire D/L: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28055	MGS	02-015/19:26:40		NOTE: Periapsis 12771 ----------		02-015/19:13:19
28056	MGS	02-015/19:42:46	25	NOTE: Transmitter Off in 15 minutes		
28057	MGS	02-015/19:45:00	15	Begin Pre-Cal		
28058	MGS	02-015/19:45:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
28059	MGS	02-015/19:45:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
28060	MGS	02-015/19:45:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
28061	MGS	02-015/19:45:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
28062	MGS	02-015/19:45:00	15	At BOT: S/C Tlm Mode: BR=42666.7, FL=10000, SC=HIGH, MI=80.0		
28063	MGS	02-015/19:45:00	15	Config: TGC: DEST=37		
28064	MGS	02-015/19:45:00	15	Config: TGC: BAND=X, BR=42666.666667		
28065	MGS	02-015/19:45:00	15	Config: FSS: CH=2, PRI_FL=10000		
28066	MGS	02-015/19:45:00	15	Config: RSR		
28067	MGS	02-015/19:45:00	15	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
28068	MGS	02-015/19:45:00	15	Config: BVR		
28069	MGS	02-015/19:45:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
28070	MGS	02-015/19:45:00	15	Config: MDA: SMPL=0.1		
28071	MGS	02-015/19:55:46	25	Range Modulation Off		
28072	MGS	02-015/19:57:46	25	Transmitter Off		
28073	MGS	02-015/20:04:31		NOTE: Start Block (SSRMGR)		02-015/19:51:09
28074	MGS	02-015/20:04:31		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-015/19:51:09
28075	MGS	02-015/20:04:32		SSR 1A Data Enable	CSD1AE	02-015/19:51:10
28076	MGS	02-015/20:04:32		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-015/19:51:10
28077	MGS	02-015/20:16:11		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/20:02:49
28078	MGS	02-015/20:18:56		NOTE: Start Block (MAP_PB_ODY)		02-015/20:05:34
28079	MGS	02-015/20:18:57		: 00:25:33, 01:32:03, FALSE, FALSE, FALSE, 00:01:15, 00:06:12, 01:18:40, 00:05:55	AEMINI	02-015/20:05:35
28080	MGS	02-015/20:18:57		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/20:05:35
28081	MGS	02-015/20:18:57		NOTE: Start EVP data return script		02-015/20:05:35
28082	MGS	02-015/20:18:58		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-015T20:48:35.000	AEMPBI	02-015/20:05:36
28083	MGS	02-015/20:21:11		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-015/20:07:49
28084	MGS	02-015/20:21:11		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=7992000, DUR=00:16:39		02-015/20:07:49
28085	MGS	02-015/20:21:11		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-015/20:07:49
28086	MGS	02-015/20:21:11		: 00:07:35, FALSE	RDSCII	02-015/20:07:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28087	MGS	02-015/20:21:11		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/20:07:49
28088	MGS	02-015/20:21:11		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/20:07:49
28089	MGS	02-015/20:21:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/20:07:49
28090	MGS	02-015/20:21:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/20:07:49
28091	MGS	02-015/20:21:11	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28092	MGS	02-015/20:21:11	25	NOTE: Carrier Only -- No Telemetry Modulation		
28093	MGS	02-015/20:21:11	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28094	MGS	02-015/20:21:11	65	NOTE: Carrier Only -- No Telemetry Modulation		
28095	MGS	02-015/20:23:19		NOTE: Enter Planetary Atmosphere 12771		02-015/20:09:57
28096	MGS	02-015/20:25:56		NOTE: Apoapsis 12771 -		02-015/20:12:34
28097	MGS	02-015/20:27:57		SSR 1B Data Disable	CSD1BX	02-015/20:14:35
28098	MGS	02-015/20:27:57		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-015/20:14:35
28099	MGS	02-015/20:27:58		NOTE: End Block (SSRMGR)		02-015/20:14:36
28100	MGS	02-015/20:28:14		NOTE: Enter Earth Occultation 12771		02-015/20:14:52
28101	MGS	02-015/20:28:14	25	NOTE: Loss Of X-Band Signal		
28102	MGS	02-015/20:28:14	65	NOTE: Loss Of X-Band Signal		
28103	MGS	02-015/20:28:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/20:15:24
28104	MGS	02-015/20:28:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/20:15:24
28105	MGS	02-015/20:28:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/20:15:24
28106	MGS	02-015/20:28:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/20:15:24
28107	MGS	02-015/20:28:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/20:15:25
28108	MGS	02-015/20:28:47		NOTE: End EVP script		02-015/20:15:25
28109	MGS	02-015/20:28:48		NOTE: End Block (MAP_RT)		02-015/20:15:26
28110	MGS	02-015/20:28:51		NOTE: End fixed Sub-Reflector for Radio Science		02-015/20:15:29
28111	MGS	02-015/20:28:56		NOTE: Enter Solar Eclipse 12771		02-015/20:15:35
28112	MGS	02-015/20:28:57		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/20:15:35
28113	MGS	02-015/20:33:20	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28114	MGS	02-015/20:35:20	25	Range Modulation On: SUP=3.0dB		
28115	MGS	02-015/20:36:20	25	Begin Ranging Acquisition		
28116	MGS	02-015/20:54:30		: 01:32:03	RPAONX	02-015/20:41:08
28117	MGS	02-015/20:54:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/20:41:08
28118	MGS	02-015/20:56:15		Disables autonomous command to send eclipse ingress script	SWEISX	02-015/20:42:53
28119	MGS	02-015/20:56:19		NOTE: Exit Earth Occultation 12771		02-015/20:42:57
28120	MGS	02-015/20:56:19	25	Acquisition Of X-Band Signal		
28121	MGS	02-015/20:56:19	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28122	MGS	02-015/20:56:19	65	Acquisition Of X-Band Signal		
28123	MGS	02-015/20:56:19	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28124	MGS	02-015/21:00:04	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28125	MGS	02-015/21:00:04	65	Acquire D/L: X/16, 3-Way/25, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28126	MGS	02-015/21:01:30		NOTE: Exit Planetary Atmosphere 12771		02-015/20:48:08
28127	MGS	02-015/21:01:57		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:13:57	AEMPB	02-015/20:48:35
28128	MGS	02-015/21:01:57		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-015/20:48:35
28129	MGS	02-015/21:01:57		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-015/20:48:35
28130	MGS	02-015/21:01:58		SSR 1B Data Enable	CSD1BE	02-015/20:48:36
28131	MGS	02-015/21:01:58		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-015/20:48:36
28132	MGS	02-015/21:01:58	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28133	MGS	02-015/21:01:58	65	D/L Change: X/16, 3-Way/25, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28134	MGS	02-015/21:09:20		NOTE: Exit Solar Eclipse 12771		02-015/20:55:58
28135	MGS	02-015/21:15:00	15	Begin Tracking		
28136	MGS	02-015/21:15:00	15	Acquire D/L: X/16, 3-Way/25, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28137	MGS	02-015/21:24:35		NOTE: Periapsis 12772 ----------		02-015/21:11:13
28138	MGS	02-015/21:30:27	65	NOTE: Below Uplink Interlock Limit		
28139	MGS	02-015/21:35:00	65	End Tracking		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28140	MGS	02-015/21:40:32	25	NOTE: Transmitter Off in 15 minutes		
28141	MGS	02-015/21:50:00	65	End Post-Cal		
28142	MGS	02-015/21:53:33	25	Range Modulation Off		
28143	MGS	02-015/21:55:32	25	Transmitter Off		
28144	MGS	02-015/22:12:36		SSR 1B Data Disable	CSD1BX	02-015/21:59:14
28145	MGS	02-015/22:12:36		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-015/21:59:14
28146	MGS	02-015/22:12:36		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-015/21:59:14
28147	MGS	02-015/22:12:36	15	D/L Change: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28148	MGS	02-015/22:12:36	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28149	MGS	02-015/22:16:43		NOTE: Start Block (MAP_RT)		02-015/22:03:21
28150	MGS	02-015/22:16:44		: 00:25:33, 01:32:02, FALSE, TRUE, FALSE, 00:01:15, 00:07:52, 01:15:19, 00:07:35	AEMINI	02-015/22:03:22
28151	MGS	02-015/22:16:44		Enable sending eclipse ingress script when array power disappears	SWEISE	02-015/22:03:22
28152	MGS	02-015/22:16:44		NOTE: Start EVP data return script		02-015/22:03:22
28153	MGS	02-015/22:16:45		: SE_2A, RTM, 01:15:18, MRC, 2002-015T22:48:03.000	AEMRTI	02-015/22:03:23
28154	MGS	02-015/22:21:07		NOTE: Enter Planetary Atmosphere 12772		02-015/22:07:45
28155	MGS	02-015/22:22:16	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28156	MGS	02-015/22:22:16	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28157	MGS	02-015/22:23:40		NOTE: Apoapsis 12772 -		02-015/22:10:18
28158	MGS	02-015/22:26:01		NOTE: Enter Earth Occultation 12772		02-015/22:12:39
28159	MGS	02-015/22:26:01	15	NOTE: Loss Of X-Band Signal		
28160	MGS	02-015/22:26:01	25	NOTE: Loss Of X-Band Signal		
28161	MGS	02-015/22:26:33		NOTE: End EVP script		02-015/22:13:11
28162	MGS	02-015/22:26:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-015/22:13:11
28163	MGS	02-015/22:26:34		NOTE: End Block (MAP_PB_ODY)		02-015/22:13:12
28164	MGS	02-015/22:26:44		NOTE: Enter Solar Eclipse 12772		02-015/22:13:22
28165	MGS	02-015/22:26:44		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-015/22:13:22
28166	MGS	02-015/22:31:07	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28167	MGS	02-015/22:33:08	25	Range Modulation On: SUP=3.0dB		
28168	MGS	02-015/22:34:08	25	Begin Ranging Acquisition		
28169	MGS	02-015/22:48:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/22:35:10
28170	MGS	02-015/22:52:17		: 01:32:02	RPAONX	02-015/22:38:55
28171	MGS	02-015/22:52:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-015/22:38:55
28172	MGS	02-015/22:53:32		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-015/22:40:10
28173	MGS	02-015/22:53:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-015/22:40:10
28174	MGS	02-015/22:53:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-015/22:40:10
28175	MGS	02-015/22:53:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-015/22:40:10
28176	MGS	02-015/22:53:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-015/22:40:10
28177	MGS	02-015/22:54:06		NOTE: Exit Earth Occultation 12772		02-015/22:40:44
28178	MGS	02-015/22:54:06	15	Acquisition Of X-Band Signal		
28179	MGS	02-015/22:54:06	15	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28180	MGS	02-015/22:54:06	15	NOTE: Carrier Only -- No Telemetry Modulation		
28181	MGS	02-015/22:54:06	25	Acquisition Of X-Band Signal		
28182	MGS	02-015/22:54:06	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28183	MGS	02-015/22:54:06	25	NOTE: Carrier Only -- No Telemetry Modulation		
28184	MGS	02-015/22:59:18		NOTE: Exit Planetary Atmosphere 12772		02-015/22:45:56
28185	MGS	02-015/23:01:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-015/22:48:02
28186	MGS	02-015/23:01:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-015/22:48:02
28187	MGS	02-015/23:01:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-015/22:48:02
28188	MGS	02-015/23:01:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-015/22:48:02
28189	MGS	02-015/23:01:24	15	Acquire D/L: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28190	MGS	02-015/23:01:24	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28191	MGS	02-015/23:01:25		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-015/22:48:03
28192	MGS	02-015/23:01:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-015/22:48:03
28193	MGS	02-015/23:01:25		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-015/22:48:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28194	MGS	02-015/23:01:25	15	D/L Change: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28195	MGS	02-015/23:01:25	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28196	MGS	02-015/23:01:29		NOTE: End fixed Sub-Reflector for Radio Science		02-015/22:48:07
28197	MGS	02-015/23:07:08		NOTE: Exit Solar Eclipse 12772		02-015/22:53:46
28198	MGS	02-015/23:22:22		NOTE: Periapsis 12773 ----------		02-015/23:09:00
28199	MGS	02-015/23:38:18	25	NOTE: Transmitter Off in 15 minutes		
28200	MGS	02-015/23:51:19	25	Range Modulation Off		
28201	MGS	02-015/23:53:18	25	Transmitter Off		
28202	MGS	02-016/00:00:00		Light Time: OWLT = 13:22, RTLT = 26:44		
28203	MGS	02-016/00:11:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-015/23:58:21
28204	MGS	02-016/00:14:30		NOTE: Start EVP data return script		02-016/00:01:08
28205	MGS	02-016/00:16:43		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/00:03:21
28206	MGS	02-016/00:16:43		: 00:07:35, FALSE	RDSCII	02-016/00:03:21
28207	MGS	02-016/00:16:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/00:03:21
28208	MGS	02-016/00:16:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/00:03:21
28209	MGS	02-016/00:16:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/00:03:21
28210	MGS	02-016/00:16:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/00:03:21
28211	MGS	02-016/00:16:43	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28212	MGS	02-016/00:16:43	15	NOTE: Carrier Only -- No Telemetry Modulation		
28213	MGS	02-016/00:16:43	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28214	MGS	02-016/00:16:43	25	NOTE: Carrier Only -- No Telemetry Modulation		
28215	MGS	02-016/00:18:54		NOTE: Enter Planetary Atmosphere 12773		02-016/00:05:31
28216	MGS	02-016/00:21:11		NOTE: Apoapsis 12773 -		02-016/00:07:49
28217	MGS	02-016/00:23:48		NOTE: Enter Earth Occultation 12773		02-016/00:10:25
28218	MGS	02-016/00:23:48	15	NOTE: Loss Of X-Band Signal		
28219	MGS	02-016/00:23:48	25	NOTE: Loss Of X-Band Signal		
28220	MGS	02-016/00:24:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/00:10:56
28221	MGS	02-016/00:24:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/00:10:56
28222	MGS	02-016/00:24:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/00:10:56
28223	MGS	02-016/00:24:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/00:10:56
28224	MGS	02-016/00:24:19		NOTE: End EVP script		02-016/00:10:57
28225	MGS	02-016/00:24:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/00:10:57
28226	MGS	02-016/00:24:23		NOTE: End fixed Sub-Reflector for Radio Science		02-016/00:11:01
28227	MGS	02-016/00:24:30		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/00:11:08
28228	MGS	02-016/00:24:31		NOTE: Enter Solar Eclipse 12773		02-016/00:11:08
28229	MGS	02-016/00:30:00	25	End Tracking		
28230	MGS	02-016/00:45:00	25	End Post-Cal		
28231	MGS	02-016/00:46:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/00:32:56
28232	MGS	02-016/00:50:03		: 01:32:02	RPAONX	02-016/00:36:41
28233	MGS	02-016/00:50:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/00:36:41
28234	MGS	02-016/00:51:18		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-016/00:37:56
28235	MGS	02-016/00:51:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/00:37:56
28236	MGS	02-016/00:51:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/00:37:56
28237	MGS	02-016/00:51:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/00:37:56
28238	MGS	02-016/00:51:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/00:37:56
28239	MGS	02-016/00:51:48		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/00:38:26
28240	MGS	02-016/00:51:54		NOTE: Exit Earth Occultation 12773		02-016/00:38:31
28241	MGS	02-016/00:51:54	15	Acquisition Of X-Band Signal		
28242	MGS	02-016/00:51:54	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28243	MGS	02-016/00:51:54	15	NOTE: Carrier Only -- No Telemetry Modulation		
28244	MGS	02-016/00:57:05		NOTE: Exit Planetary Atmosphere 12773		02-016/00:43:43
28245	MGS	02-016/00:59:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/00:45:48
28246	MGS	02-016/00:59:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/00:45:48
28247	MGS	02-016/00:59:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/00:45:48

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28248	MGS	02-016/00:59:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/00:45:48
28249	MGS	02-016/00:59:10	15	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28250	MGS	02-016/00:59:11		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-016/00:45:49
28251	MGS	02-016/00:59:11		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/00:45:49
28252	MGS	02-016/00:59:11		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/00:45:49
28253	MGS	02-016/00:59:11	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28254	MGS	02-016/00:59:15		NOTE: End fixed Sub-Reflector for Radio Science		02-016/00:45:53
28255	MGS	02-016/01:04:55		NOTE: Exit Solar Eclipse 12773		02-016/00:51:32
28256	MGS	02-016/01:20:04		NOTE: Periapsis 12774 ----------		02-016/01:06:41
28257	MGS	02-016/01:57:40		NOTE: Start Block (SSRMGR)		02-016/01:44:17
28258	MGS	02-016/01:57:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-016/01:44:17
28259	MGS	02-016/01:57:41		SSR 1B Data Enable	CSD1BE	02-016/01:44:18
28260	MGS	02-016/01:57:41		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-016/01:44:18
28261	MGS	02-016/02:09:30		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/01:56:07
28262	MGS	02-016/02:12:15		NOTE: Start Block (MAP_PB_ODY)		02-016/01:58:52
28263	MGS	02-016/02:12:16		: 00:25:33, 01:32:03, FALSE, FALSE, FALSE, 00:01:15, 00:06:12, 01:18:40, 00:05:55	AEMINI	02-016/01:58:53
28264	MGS	02-016/02:12:16		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/01:58:53
28265	MGS	02-016/02:12:16		NOTE: Start EVP data return script		02-016/01:58:53
28266	MGS	02-016/02:12:17		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-016T02:41:53.000	AEMPBI	02-016/01:58:54
28267	MGS	02-016/02:14:30		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/02:01:07
28268	MGS	02-016/02:14:30		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8072000, DUR=00:16:49		02-016/02:01:07
28269	MGS	02-016/02:14:30		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-016/02:01:07
28270	MGS	02-016/02:14:30		: 00:07:35, FALSE	RDSCII	02-016/02:01:07
28271	MGS	02-016/02:14:30		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/02:01:07
28272	MGS	02-016/02:14:30		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/02:01:07
28273	MGS	02-016/02:14:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/02:01:07
28274	MGS	02-016/02:14:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/02:01:07
28275	MGS	02-016/02:14:30	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28276	MGS	02-016/02:14:30	15	NOTE: Carrier Only -- No Telemetry Modulation		
28277	MGS	02-016/02:16:38		NOTE: Enter Planetary Atmosphere 12774		02-016/02:03:15
28278	MGS	02-016/02:18:42		NOTE: Apoapsis 12774 -		02-016/02:05:19
28279	MGS	02-016/02:21:16		SSR 1A Data Disable	CSD1AX	02-016/02:07:53
28280	MGS	02-016/02:21:16		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-016/02:07:53
28281	MGS	02-016/02:21:17		NOTE: End Block (SSRMGR)		02-016/02:07:54
28282	MGS	02-016/02:21:32		NOTE: Enter Earth Occultation 12774		02-016/02:08:09
28283	MGS	02-016/02:21:32	15	NOTE: Loss Of X-Band Signal		
28284	MGS	02-016/02:22:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/02:08:42
28285	MGS	02-016/02:22:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/02:08:42
28286	MGS	02-016/02:22:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/02:08:42
28287	MGS	02-016/02:22:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/02:08:42
28288	MGS	02-016/02:22:06		NOTE: End EVP script		02-016/02:08:43
28289	MGS	02-016/02:22:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/02:08:43
28290	MGS	02-016/02:22:07		NOTE: End Block (MAP_RT)		02-016/02:08:44
28291	MGS	02-016/02:22:10		NOTE: End fixed Sub-Reflector for Radio Science		02-016/02:08:47
28292	MGS	02-016/02:22:15		NOTE: Enter Solar Eclipse 12774		02-016/02:08:53
28293	MGS	02-016/02:22:16		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/02:08:53
28294	MGS	02-016/02:47:49		: 01:32:03	RPAONX	02-016/02:34:26
28295	MGS	02-016/02:47:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/02:34:26
28296	MGS	02-016/02:49:34		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/02:36:11
28297	MGS	02-016/02:49:40		NOTE: Exit Earth Occultation 12774		02-016/02:36:17
28298	MGS	02-016/02:49:40	15	Acquisition Of X-Band Signal		
28299	MGS	02-016/02:49:40	15	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28300	MGS	02-016/02:54:51		NOTE: Exit Planetary Atmosphere 12774		02-016/02:41:28
28301	MGS	02-016/02:55:16		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:13:57	AEMPB	02-016/02:41:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28302	MGS	02-016/02:55:16		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-016/02:41:53
28303	MGS	02-016/02:55:16		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-016/02:41:53
28304	MGS	02-016/02:55:17		SSR 1A Data Enable	CSD1AE	02-016/02:41:54
28305	MGS	02-016/02:55:17		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-016/02:41:54
28306	MGS	02-016/02:55:17	15	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28307	MGS	02-016/03:02:39		NOTE: Exit Solar Eclipse 12774		02-016/02:49:16
28308	MGS	02-016/03:17:49		NOTE: Periapsis 12775 ----------		02-016/03:04:26
28309	MGS	02-016/03:20:00	45	Begin Pre-Cal		
28310	MGS	02-016/03:20:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
28311	MGS	02-016/03:20:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
28312	MGS	02-016/03:20:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
28313	MGS	02-016/03:20:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
28314	MGS	02-016/03:20:00	45	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
28315	MGS	02-016/03:20:00	45	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
28316	MGS	02-016/03:20:00	45	Config: TGC: DEST=37		
28317	MGS	02-016/03:20:00	45	Config: TGC: BAND=X, BR=8000.000000		
28318	MGS	02-016/03:20:00	45	Config: FSS: CH=2, PRI_FL=10000		
28319	MGS	02-016/03:20:00	45	Config: RSR		
28320	MGS	02-016/03:20:00	45	Config: TXL		
28321	MGS	02-016/03:20:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
28322	MGS	02-016/03:20:00	45	Config: BVR		
28323	MGS	02-016/03:20:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
28324	MGS	02-016/03:20:00	45	Config: MDA: SMPL=0.1		
28325	MGS	02-016/03:20:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
28326	MGS	02-016/03:20:00	45	Config: SRA: HIGH=4, LOW=14, SERV=D		
28327	MGS	02-016/03:20:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
28328	MGS	02-016/04:05:55		SSR 1A Data Disable	CSD1AX	02-016/03:52:32
28329	MGS	02-016/04:05:55		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-016/03:52:32
28330	MGS	02-016/04:05:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-016/03:52:32
28331	MGS	02-016/04:05:55	15	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28332	MGS	02-016/04:09:57		NOTE: Start Block (MAP_RT)		02-016/03:56:34
28333	MGS	02-016/04:09:58		: 00:25:33, 01:32:02, FALSE, TRUE, FALSE, 00:01:15, 00:07:52, 01:15:19, 00:07:35	AEMINI	02-016/03:56:35
28334	MGS	02-016/04:09:58		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/03:56:35
28335	MGS	02-016/04:09:58		NOTE: Start EVP data return script		02-016/03:56:35
28336	MGS	02-016/04:09:59		: SE_2A, RTM, 01:15:18, MRC, 2002-016T04:41:17.000	AEMRTI	02-016/03:56:36
28337	MGS	02-016/04:14:20		NOTE: Enter Planetary Atmosphere 12775		02-016/04:00:57
28338	MGS	02-016/04:16:36		NOTE: Apoapsis 12775 -		02-016/04:03:13
28339	MGS	02-016/04:19:15		NOTE: Enter Earth Occultation 12775		02-016/04:05:52
28340	MGS	02-016/04:19:15	15	NOTE: Loss Of X-Band Signal		
28341	MGS	02-016/04:19:52		NOTE: End EVP script		02-016/04:06:29
28342	MGS	02-016/04:19:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/04:06:29
28343	MGS	02-016/04:19:53		NOTE: End Block (MAP_PB_ODY)		02-016/04:06:30
28344	MGS	02-016/04:19:58		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/04:06:35
28345	MGS	02-016/04:19:58		NOTE: Enter Solar Eclipse 12775		02-016/04:06:35
28346	MGS	02-016/04:20:00	45	Begin Tracking		
28347	MGS	02-016/04:30:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
28348	MGS	02-016/04:32:00	45	Range Modulation On: SUP=3.0dB		
28349	MGS	02-016/04:33:00	45	Begin Ranging Acquisition		
28350	MGS	02-016/04:40:00	15	End Tracking		
28351	MGS	02-016/04:41:46		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/04:28:23
28352	MGS	02-016/04:45:31		: 01:32:02	RPAONX	02-016/04:32:08
28353	MGS	02-016/04:45:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/04:32:08
28354	MGS	02-016/04:46:46		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-016/04:33:23
28355	MGS	02-016/04:46:46		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/04:33:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28356	MGS	02-016/04:46:46		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/04:33:23
28357	MGS	02-016/04:46:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/04:33:23
28358	MGS	02-016/04:46:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/04:33:23
28359	MGS	02-016/04:47:23		NOTE: Exit Earth Occultation 12775		02-016/04:34:00
28360	MGS	02-016/04:47:23	45	Acquisition Of X-Band Signal		
28361	MGS	02-016/04:47:23	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28362	MGS	02-016/04:47:23	45	NOTE: Carrier Only -- No Telemetry Modulation		
28363	MGS	02-016/04:52:35		NOTE: Exit Planetary Atmosphere 12775		02-016/04:39:12
28364	MGS	02-016/04:54:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/04:41:15
28365	MGS	02-016/04:54:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/04:41:15
28366	MGS	02-016/04:54:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/04:41:15
28367	MGS	02-016/04:54:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/04:41:15
28368	MGS	02-016/04:54:38	45	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28369	MGS	02-016/04:54:39		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-016/04:41:16
28370	MGS	02-016/04:54:39		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/04:41:16
28371	MGS	02-016/04:54:39		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/04:41:16
28372	MGS	02-016/04:54:39	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28373	MGS	02-016/04:54:43		NOTE: End fixed Sub-Reflector for Radio Science		02-016/04:41:20
28374	MGS	02-016/04:55:00	15	End Post-Cal		
28375	MGS	02-016/04:56:46	45	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28376	MGS	02-016/05:00:22		NOTE: Exit Solar Eclipse 12775		02-016/04:46:59
28377	MGS	02-016/05:15:29		NOTE: Periapsis 12776 ----------		02-016/05:02:06
28378	MGS	02-016/05:31:26	45	NOTE: Transmitter Off in 15 minutes		
28379	MGS	02-016/05:44:26	45	Range Modulation Off		
28380	MGS	02-016/05:46:26	45	Transmitter Off		
28381	MGS	02-016/06:04:57		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/05:51:34
28382	MGS	02-016/06:07:40		NOTE: Start EVP data return script		02-016/05:54:17
28383	MGS	02-016/06:09:57		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/05:56:34
28384	MGS	02-016/06:09:57		: 00:07:35, FALSE	RDSCII	02-016/05:56:34
28385	MGS	02-016/06:09:57		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/05:56:34
28386	MGS	02-016/06:09:57		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/05:56:34
28387	MGS	02-016/06:09:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/05:56:34
28388	MGS	02-016/06:09:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/05:56:34
28389	MGS	02-016/06:09:57	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28390	MGS	02-016/06:09:57	45	NOTE: Carrier Only -- No Telemetry Modulation		
28391	MGS	02-016/06:12:03		NOTE: Enter Planetary Atmosphere 12776		02-016/05:58:40
28392	MGS	02-016/06:14:15		NOTE: Apoapsis 12776 -		02-016/06:00:51
28393	MGS	02-016/06:16:58		NOTE: Enter Earth Occultation 12776		02-016/06:03:34
28394	MGS	02-016/06:16:58	45	NOTE: Loss Of X-Band Signal		
28395	MGS	02-016/06:17:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/06:04:09
28396	MGS	02-016/06:17:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/06:04:09
28397	MGS	02-016/06:17:32		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/06:04:09
28398	MGS	02-016/06:17:32		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/06:04:09
28399	MGS	02-016/06:17:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/06:04:10
28400	MGS	02-016/06:17:33		NOTE: End EVP script		02-016/06:04:10
28401	MGS	02-016/06:17:37		NOTE: End fixed Sub-Reflector for Radio Science		02-016/06:04:14
28402	MGS	02-016/06:17:40		NOTE: Enter Solar Eclipse 12776		02-016/06:04:17
28403	MGS	02-016/06:17:40		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/06:04:17
28404	MGS	02-016/06:22:04	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
28405	MGS	02-016/06:24:04	45	Range Modulation On: SUP=3.0dB		
28406	MGS	02-016/06:25:04	45	Begin Ranging Acquisition		
28407	MGS	02-016/06:39:28		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/06:26:05
28408	MGS	02-016/06:43:13		: 01:32:02	RPAONX	02-016/06:29:50
28409	MGS	02-016/06:43:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/06:29:50

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28410	MGS	02-016/06:44:28		: 00:00:30, 00:07:52, FALSE	RDSCIE	02-016/06:31:05
28411	MGS	02-016/06:44:28		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/06:31:05
28412	MGS	02-016/06:44:28		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/06:31:05
28413	MGS	02-016/06:44:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/06:31:05
28414	MGS	02-016/06:44:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/06:31:05
28415	MGS	02-016/06:44:58		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/06:31:35
28416	MGS	02-016/06:45:06		NOTE: Exit Earth Occultation 12776		02-016/06:31:42
28417	MGS	02-016/06:45:06	45	Acquisition Of X-Band Signal		
28418	MGS	02-016/06:45:06	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28419	MGS	02-016/06:45:06	45	NOTE: Carrier Only -- No Telemetry Modulation		
28420	MGS	02-016/06:50:17		NOTE: Exit Planetary Atmosphere 12776		02-016/06:36:54
28421	MGS	02-016/06:52:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/06:38:57
28422	MGS	02-016/06:52:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/06:38:57
28423	MGS	02-016/06:52:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/06:38:57
28424	MGS	02-016/06:52:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/06:38:57
28425	MGS	02-016/06:52:20	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28426	MGS	02-016/06:52:21		: RTM, MRC, 01:15:18, S&E_2A, FALSE, 00:07:36	AEMRT	02-016/06:38:58
28427	MGS	02-016/06:52:21		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/06:38:58
28428	MGS	02-016/06:52:21		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/06:38:58
28429	MGS	02-016/06:52:21	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28430	MGS	02-016/06:52:26		NOTE: End fixed Sub-Reflector for Radio Science		02-016/06:39:02
28431	MGS	02-016/06:58:03		NOTE: Exit Solar Eclipse 12776		02-016/06:44:40
28432	MGS	02-016/07:12:51		NOTE: Periapsis 12777 ----------		02-016/06:59:27
28433	MGS	02-016/07:29:07	45	NOTE: Transmitter Off in 15 minutes		
28434	MGS	02-016/07:42:08	45	Range Modulation Off		
28435	MGS	02-016/07:44:07	45	Transmitter Off		
28436	MGS	02-016/07:50:58		NOTE: Start Block (SSRMGR)		02-016/07:37:35
28437	MGS	02-016/07:50:58		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-016/07:37:35
28438	MGS	02-016/07:50:59		SSR 1A Data Enable	CSD1AE	02-016/07:37:36
28439	MGS	02-016/07:50:59		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-016/07:37:36
28440	MGS	02-016/08:02:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/07:49:16
28441	MGS	02-016/08:05:23		NOTE: Start Block (MAP_PB_ODY)		02-016/07:51:59
28442	MGS	02-016/08:05:24		: 00:25:33, 01:32:03, FALSE, FALSE, FALSE, 00:01:15, 00:06:12, 01:18:40, 00:05:55	AEMINI	02-016/07:52:00
28443	MGS	02-016/08:05:24		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/07:52:00
28444	MGS	02-016/08:05:24		NOTE: Start EVP data return script		02-016/07:52:00
28445	MGS	02-016/08:05:25		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-016T08:35:00.000	AEMPBI	02-016/07:52:01
28446	MGS	02-016/08:07:40		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/07:54:16
28447	MGS	02-016/08:07:40		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=8000000, DUR=00:16:40		02-016/07:54:16
28448	MGS	02-016/08:07:40		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-016/07:54:16
28449	MGS	02-016/08:07:40		: 00:07:35, FALSE	RDSCII	02-016/07:54:16
28450	MGS	02-016/08:07:40		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/07:54:16
28451	MGS	02-016/08:07:40		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/07:54:16
28452	MGS	02-016/08:07:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/07:54:16
28453	MGS	02-016/08:07:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/07:54:16
28454	MGS	02-016/08:07:40	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28455	MGS	02-016/08:07:40	45	NOTE: Carrier Only -- No Telemetry Modulation		
28456	MGS	02-016/08:09:46		NOTE: Enter Planetary Atmosphere 12777		02-016/07:56:22
28457	MGS	02-016/08:11:40		NOTE: Apoapsis 12777 -		02-016/07:58:16
28458	MGS	02-016/08:14:25		SSR 1B Data Disable	CSD1BX	02-016/08:01:01
28459	MGS	02-016/08:14:25		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-016/08:01:01
28460	MGS	02-016/08:14:26		NOTE: End Block (SSRMGR)		02-016/08:01:02
28461	MGS	02-016/08:14:40		NOTE: Enter Earth Occultation 12777		02-016/08:01:16
28462	MGS	02-016/08:14:40	45	NOTE: Loss Of X-Band Signal		
28463	MGS	02-016/08:15:15		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/08:01:51

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28464	MGS	02-016/08:15:15		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/08:01:51
28465	MGS	02-016/08:15:15		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/08:01:51
28466	MGS	02-016/08:15:15		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/08:01:51
28467	MGS	02-016/08:15:16		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/08:01:52
28468	MGS	02-016/08:15:16		NOTE: End EVP script		02-016/08:01:52
28469	MGS	02-016/08:15:17		NOTE: End Block (MAP_RT)		02-016/08:01:53
28470	MGS	02-016/08:15:20		NOTE: End fixed Sub-Reflector for Radio Science		02-016/08:01:56
28471	MGS	02-016/08:15:24		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/08:02:00
28472	MGS	02-016/08:15:24		NOTE: Enter Solar Eclipse 12777		02-016/08:02:00
28473	MGS	02-016/08:19:47	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
28474	MGS	02-016/08:21:47	45	Range Modulation On: SUP=3.0dB		
28475	MGS	02-016/08:22:47	45	Begin Ranging Acquisition		
28476	MGS	02-016/08:40:57		: 01:32:03	RPAONX	02-016/08:27:33
28477	MGS	02-016/08:40:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/08:27:33
28478	MGS	02-016/08:42:42		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/08:29:18
28479	MGS	02-016/08:42:49		NOTE: Exit Earth Occultation 12777		02-016/08:29:25
28480	MGS	02-016/08:42:49	45	Acquisition Of X-Band Signal		
28481	MGS	02-016/08:42:49	45	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28482	MGS	02-016/08:46:34	45	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28483	MGS	02-016/08:47:59		NOTE: Exit Planetary Atmosphere 12777		02-016/08:34:36
28484	MGS	02-016/08:48:24		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:13:57	AEMPB	02-016/08:35:00
28485	MGS	02-016/08:48:24		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-016/08:35:00
28486	MGS	02-016/08:48:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-016/08:35:00
28487	MGS	02-016/08:48:25		SSR 1B Data Enable	CSD1BE	02-016/08:35:01
28488	MGS	02-016/08:48:25		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-016/08:35:01
28489	MGS	02-016/08:48:25	45	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28490	MGS	02-016/08:55:47		NOTE: Exit Solar Eclipse 12777		02-016/08:42:23
28491	MGS	02-016/09:10:36		NOTE: Periapsis 12778 ----------		02-016/08:57:13
28492	MGS	02-016/09:26:50	45	NOTE: Transmitter Off in 15 minutes		
28493	MGS	02-016/09:39:50	45	Range Modulation Off		
28494	MGS	02-016/09:41:50	45	Transmitter Off		
28495	MGS	02-016/09:50:00	65	Begin Pre-Cal		
28496	MGS	02-016/09:50:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
28497	MGS	02-016/09:50:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
28498	MGS	02-016/09:50:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
28499	MGS	02-016/09:50:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
28500	MGS	02-016/09:50:00	65	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
28501	MGS	02-016/09:50:00	65	Config: TGC: DEST=37		
28502	MGS	02-016/09:50:00	65	Config: TGC: BAND=X, BR=40000.000000		
28503	MGS	02-016/09:50:00	65	Config: FSS: CH=2, PRI_FL=10000		
28504	MGS	02-016/09:50:00	65	Config: RSR		
28505	MGS	02-016/09:50:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
28506	MGS	02-016/09:50:00	65	Config: BVR		
28507	MGS	02-016/09:50:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
28508	MGS	02-016/09:50:00	65	Config: MDA: SMPL=0.1		
28509	MGS	02-016/09:59:03		SSR 1B Data Disable	CSD1BX	02-016/09:45:39
28510	MGS	02-016/09:59:03		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-016/09:45:39
28511	MGS	02-016/09:59:03		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-016/09:45:39
28512	MGS	02-016/09:59:03	45	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28513	MGS	02-016/10:03:08		NOTE: Start Block (MAP_RT)		02-016/09:49:44
28514	MGS	02-016/10:03:09		: 00:25:40, 01:31:50, FALSE, TRUE, FALSE, 00:01:15, 00:07:50, 01:15:10, 00:07:34	AEMINI	02-016/09:49:45
28515	MGS	02-016/10:03:09		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/09:49:45
28516	MGS	02-016/10:03:09		NOTE: Start EVP data return script		02-016/09:49:45
28517	MGS	02-016/10:03:10		: SE_2A, RTM, 01:15:09, MRC, 2002-016T10:34:31.000	AEMRTI	02-016/09:49:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28518	MGS	02-016/10:07:30		NOTE: Enter Planetary Atmosphere 12778		02-016/09:54:06
28519	MGS	02-016/10:08:38	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28520	MGS	02-016/10:09:37		NOTE: Apoapsis 12778 -		02-016/09:56:13
28521	MGS	02-016/10:12:23		NOTE: Enter Earth Occultation 12778		02-016/09:58:59
28522	MGS	02-016/10:12:23	45	NOTE: Loss Of X-Band Signal		
28523	MGS	02-016/10:13:00		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/09:59:36
28524	MGS	02-016/10:13:00		NOTE: End EVP script		02-016/09:59:36
28525	MGS	02-016/10:13:01		NOTE: End Block (MAP_PB_ODY)		02-016/09:59:37
28526	MGS	02-016/10:13:09		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/09:59:45
28527	MGS	02-016/10:13:09		NOTE: Enter Solar Eclipse 12778		02-016/09:59:45
28528	MGS	02-016/10:17:32	45	Acquire U/L: X/16, PWR=20.0, BR=125.0, CS=5.82dB		
28529	MGS	02-016/10:19:32	45	Range Modulation On: SUP=3.0dB		
28530	MGS	02-016/10:20:32	45	Begin Ranging Acquisition		
28531	MGS	02-016/10:35:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/10:21:40
28532	MGS	02-016/10:38:49		: 01:31:50	RPAONX	02-016/10:25:25
28533	MGS	02-016/10:38:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/10:25:25
28534	MGS	02-016/10:40:04		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-016/10:26:40
28535	MGS	02-016/10:40:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/10:26:40
28536	MGS	02-016/10:40:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/10:26:40
28537	MGS	02-016/10:40:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/10:26:40
28538	MGS	02-016/10:40:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/10:26:40
28539	MGS	02-016/10:40:35		NOTE: Exit Earth Occultation 12778		02-016/10:27:11
28540	MGS	02-016/10:40:35	45	Acquisition Of X-Band Signal		
28541	MGS	02-016/10:40:35	45	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28542	MGS	02-016/10:40:35	45	NOTE: Carrier Only -- No Telemetry Modulation		
28543	MGS	02-016/10:45:44		NOTE: Exit Planetary Atmosphere 12778		02-016/10:32:20
28544	MGS	02-016/10:47:54		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/10:34:30
28545	MGS	02-016/10:47:54		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/10:34:30
28546	MGS	02-016/10:47:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/10:34:30
28547	MGS	02-016/10:47:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/10:34:30
28548	MGS	02-016/10:47:54	45	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28549	MGS	02-016/10:47:55		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-016/10:34:31
28550	MGS	02-016/10:47:55		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/10:34:31
28551	MGS	02-016/10:47:55		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/10:34:31
28552	MGS	02-016/10:47:55	45	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28553	MGS	02-016/10:47:59		NOTE: End fixed Sub-Reflector for Radio Science		02-016/10:34:35
28554	MGS	02-016/10:53:32		NOTE: Exit Solar Eclipse 12778		02-016/10:40:08
28555	MGS	02-016/11:00:00	45	NOTE: Transmitter Off in 15 minutes		
28556	MGS	02-016/11:08:49		NOTE: Periapsis 12779 ----------		02-016/10:55:25
28557	MGS	02-016/11:13:00	45	Range Modulation Off		
28558	MGS	02-016/11:15:00	45	Transmitter Off		
28559	MGS	02-016/11:20:00	65	Begin Tracking		
28560	MGS	02-016/11:20:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28561	MGS	02-016/11:25:56	65	NOTE: Above Uplink Interlock Limit		
28562	MGS	02-016/11:27:03	45	NOTE: Below Uplink Interlock Limit		
28563	MGS	02-016/11:40:00	45	End Tracking		
28564	MGS	02-016/11:41:48	65	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28565	MGS	02-016/11:55:00	45	End Post-Cal		
28566	MGS	02-016/11:58:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/11:44:40
28567	MGS	02-016/12:00:56		NOTE: Start EVP data return script		02-016/11:47:32
28568	MGS	02-016/12:03:04		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/11:49:40
28569	MGS	02-016/12:03:04		: 00:07:34, FALSE	RDSCII	02-016/11:49:40
28570	MGS	02-016/12:03:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/11:49:40

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28571	MGS	02-016/12:03:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/11:49:40
28572	MGS	02-016/12:03:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/11:49:40
28573	MGS	02-016/12:03:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/11:49:40
28574	MGS	02-016/12:03:04	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28575	MGS	02-016/12:03:04	65	NOTE: Carrier Only -- No Telemetry Modulation		
28576	MGS	02-016/12:05:16		NOTE: Enter Planetary Atmosphere 12779		02-016/11:51:51
28577	MGS	02-016/12:07:59		NOTE: Apoapsis 12779 -		02-016/11:54:35
28578	MGS	02-016/12:10:09		NOTE: Enter Earth Occultation 12779		02-016/11:56:45
28579	MGS	02-016/12:10:09	65	NOTE: Loss Of X-Band Signal		
28580	MGS	02-016/12:10:38		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/11:57:14
28581	MGS	02-016/12:10:38		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/11:57:14
28582	MGS	02-016/12:10:38		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/11:57:14
28583	MGS	02-016/12:10:38		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/11:57:14
28584	MGS	02-016/12:10:39		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/11:57:15
28585	MGS	02-016/12:10:39		NOTE: End EVP script		02-016/11:57:15
28586	MGS	02-016/12:10:43		NOTE: End fixed Sub-Reflector for Radio Science		02-016/11:57:19
28587	MGS	02-016/12:10:56		NOTE: Enter Solar Eclipse 12779		02-016/11:57:31
28588	MGS	02-016/12:10:56		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/11:57:32
28589	MGS	02-016/12:13:24		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-016/12:00:00
28590	MGS	02-016/12:32:51		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/12:19:27
28591	MGS	02-016/12:36:36		: 01:31:50	RPAONX	02-016/12:23:12
28592	MGS	02-016/12:36:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/12:23:12
28593	MGS	02-016/12:37:51		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-016/12:24:27
28594	MGS	02-016/12:37:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/12:24:27
28595	MGS	02-016/12:37:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/12:24:27
28596	MGS	02-016/12:37:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/12:24:27
28597	MGS	02-016/12:37:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/12:24:27
28598	MGS	02-016/12:38:21		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/12:24:57
28599	MGS	02-016/12:38:22		NOTE: Exit Earth Occultation 12779		02-016/12:24:58
28600	MGS	02-016/12:38:22	65	Acquisition Of X-Band Signal		
28601	MGS	02-016/12:38:22	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28602	MGS	02-016/12:38:22	65	NOTE: Carrier Only -- No Telemetry Modulation		
28603	MGS	02-016/12:43:31		NOTE: Exit Planetary Atmosphere 12779		02-016/12:30:07
28604	MGS	02-016/12:45:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/12:32:17
28605	MGS	02-016/12:45:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/12:32:17
28606	MGS	02-016/12:45:41		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/12:32:17
28607	MGS	02-016/12:45:41		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/12:32:17
28608	MGS	02-016/12:45:41	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28609	MGS	02-016/12:45:42		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-016/12:32:18
28610	MGS	02-016/12:45:42		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/12:32:18
28611	MGS	02-016/12:45:42		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/12:32:18
28612	MGS	02-016/12:45:42	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28613	MGS	02-016/12:45:46		NOTE: End fixed Sub-Reflector for Radio Science		02-016/12:32:22
28614	MGS	02-016/12:51:20		NOTE: Exit Solar Eclipse 12779		02-016/12:37:55
28615	MGS	02-016/13:06:59		NOTE: Periapsis 12780 ----------		02-016/12:53:34
28616	MGS	02-016/13:44:04		NOTE: Start Block (SSRMGR)		02-016/13:30:40
28617	MGS	02-016/13:44:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-016/13:30:40
28618	MGS	02-016/13:44:05		SSR 1B Data Enable	CSD1BE	02-016/13:30:41
28619	MGS	02-016/13:44:05		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=8000, SRC=SE_1A		02-016/13:30:41
28620	MGS	02-016/13:55:52		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/13:42:27
28621	MGS	02-016/13:58:41		NOTE: Start Block (MAP_PB_ODY)		02-016/13:45:17
28622	MGS	02-016/13:58:42		: 00:25:40, 01:31:51, FALSE, FALSE, FALSE, 00:01:15, 00:06:10, 01:18:31, 00:05:54	AEMINI	02-016/13:45:18
28623	MGS	02-016/13:58:42		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/13:45:18
28624	MGS	02-016/13:58:42		NOTE: Start EVP data return script		02-016/13:45:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28625	MGS	02-016/13:58:43		: SSR_1A, F42KHZ, PART1, SE_1A, 2002-016T14:28:24.000	AEMPBI	02-016/13:45:19
28626	MGS	02-016/14:00:51		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/13:47:27
28627	MGS	02-016/14:00:51		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8048000, DUR=00:16:46		02-016/13:47:27
28628	MGS	02-016/14:00:51		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=8000, SRC=SE_1A		02-016/13:47:27
28629	MGS	02-016/14:00:51		: 00:07:34, FALSE	RDSCII	02-016/13:47:27
28630	MGS	02-016/14:00:51		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/13:47:27
28631	MGS	02-016/14:00:51		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/13:47:27
28632	MGS	02-016/14:00:51		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/13:47:27
28633	MGS	02-016/14:00:51		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/13:47:27
28634	MGS	02-016/14:00:51	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28635	MGS	02-016/14:00:51	65	NOTE: Carrier Only -- No Telemetry Modulation		
28636	MGS	02-016/14:03:04		NOTE: Enter Planetary Atmosphere 12780		02-016/13:49:39
28637	MGS	02-016/14:06:03		NOTE: Apoapsis 12780 -		02-016/13:52:38
28638	MGS	02-016/14:07:43		SSR 1A Data Disable	CSD1AX	02-016/13:54:19
28639	MGS	02-016/14:07:43		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-016/13:54:19
28640	MGS	02-016/14:07:44		NOTE: End Block (SSRMGR)		02-016/13:54:20
28641	MGS	02-016/14:07:57		NOTE: Enter Earth Occultation 12780		02-016/13:54:33
28642	MGS	02-016/14:07:57	65	NOTE: Loss Of X-Band Signal		
28643	MGS	02-016/14:08:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/13:55:01
28644	MGS	02-016/14:08:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/13:55:01
28645	MGS	02-016/14:08:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/13:55:01
28646	MGS	02-016/14:08:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/13:55:01
28647	MGS	02-016/14:08:26		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/13:55:02
28648	MGS	02-016/14:08:27		NOTE: End EVP script		02-016/13:55:02
28649	MGS	02-016/14:08:28		NOTE: End Block (MAP_RT)		02-016/13:55:03
28650	MGS	02-016/14:08:31		NOTE: End fixed Sub-Reflector for Radio Science		02-016/13:55:06
28651	MGS	02-016/14:08:42		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/13:55:18
28652	MGS	02-016/14:08:43		NOTE: Enter Solar Eclipse 12780		02-016/13:55:18
28653	MGS	02-016/14:34:23		: 01:31:51	RPAONX	02-016/14:20:58
28654	MGS	02-016/14:34:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/14:20:58
28655	MGS	02-016/14:36:08		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/14:22:43
28656	MGS	02-016/14:36:10		NOTE: Exit Earth Occultation 12780		02-016/14:22:45
28657	MGS	02-016/14:36:10	65	Acquisition Of X-Band Signal		
28658	MGS	02-016/14:36:10	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28659	MGS	02-016/14:41:20		NOTE: Exit Planetary Atmosphere 12780		02-016/14:27:55
28660	MGS	02-016/14:41:48		: REC_1A, F42KHZ, PART1, SE_1A, FALSE, 00:13:47	AEMPB	02-016/14:28:23
28661	MGS	02-016/14:41:48		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-016/14:28:23
28662	MGS	02-016/14:41:48		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART1	STSSRC	02-016/14:28:23
28663	MGS	02-016/14:41:49		SSR 1A Data Enable	CSD1AE	02-016/14:28:24
28664	MGS	02-016/14:41:49		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=42666		02-016/14:28:24
28665	MGS	02-016/14:41:49	65	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28666	MGS	02-016/14:49:07		NOTE: Exit Solar Eclipse 12780		02-016/14:35:42
28667	MGS	02-016/15:04:45		NOTE: Periapsis 12781 ----------		02-016/14:51:20
28668	MGS	02-016/15:52:27		SSR 1A Data Disable	CSD1AX	02-016/15:39:02
28669	MGS	02-016/15:52:27		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-016/15:39:02
28670	MGS	02-016/15:52:27		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-016/15:39:02
28671	MGS	02-016/15:52:27	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28672	MGS	02-016/15:56:26		NOTE: Start Block (MAP_RT)		02-016/15:43:01
28673	MGS	02-016/15:56:27		: 00:25:40, 01:31:50, FALSE, TRUE, FALSE, 00:01:15, 00:07:50, 01:15:10, 00:07:34	AEMINI	02-016/15:43:02
28674	MGS	02-016/15:56:27		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/15:43:02
28675	MGS	02-016/15:56:27		NOTE: Start EVP data return script		02-016/15:43:02
28676	MGS	02-016/15:56:28		: SE_2A, RTM, 01:15:09, MRC, 2002-016T16:27:49.000	AEMRTI	02-016/15:43:03
28677	MGS	02-016/16:00:49		NOTE: Enter Planetary Atmosphere 12781		02-016/15:47:24
28678	MGS	02-016/16:03:32		NOTE: Apoapsis 12781 -		02-016/15:50:07

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28679	MGS	02-016/16:05:43		NOTE: Enter Earth Occultation 12781		02-016/15:52:18
28680	MGS	02-016/16:05:43	65	NOTE: Loss Of X-Band Signal		
28681	MGS	02-016/16:06:14		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/15:52:49
28682	MGS	02-016/16:06:14		NOTE: End EVP script		02-016/15:52:49
28683	MGS	02-016/16:06:15		NOTE: End Block (MAP_PB_ODY)		02-016/15:52:50
28684	MGS	02-016/16:06:27		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/15:53:02
28685	MGS	02-016/16:06:27		NOTE: Enter Solar Eclipse 12781		02-016/15:53:02
28686	MGS	02-016/16:28:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/16:14:57
28687	MGS	02-016/16:32:07		: 01:31:50	RPAONX	02-016/16:18:42
28688	MGS	02-016/16:32:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/16:18:42
28689	MGS	02-016/16:33:22		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-016/16:19:57
28690	MGS	02-016/16:33:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/16:19:57
28691	MGS	02-016/16:33:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/16:19:57
28692	MGS	02-016/16:33:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/16:19:57
28693	MGS	02-016/16:33:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/16:19:57
28694	MGS	02-016/16:33:55		NOTE: Exit Earth Occultation 12781		02-016/16:20:30
28695	MGS	02-016/16:33:55	65	Acquisition Of X-Band Signal		
28696	MGS	02-016/16:33:55	65	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28697	MGS	02-016/16:33:55	65	NOTE: Carrier Only -- No Telemetry Modulation		
28698	MGS	02-016/16:39:06		NOTE: Exit Planetary Atmosphere 12781		02-016/16:25:41
28699	MGS	02-016/16:41:12		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/16:27:47
28700	MGS	02-016/16:41:12		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/16:27:47
28701	MGS	02-016/16:41:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/16:27:47
28702	MGS	02-016/16:41:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/16:27:47
28703	MGS	02-016/16:41:12	65	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28704	MGS	02-016/16:41:13		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-016/16:27:48
28705	MGS	02-016/16:41:13		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/16:27:48
28706	MGS	02-016/16:41:13		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/16:27:48
28707	MGS	02-016/16:41:13	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28708	MGS	02-016/16:41:17		NOTE: End fixed Sub-Reflector for Radio Science		02-016/16:27:52
28709	MGS	02-016/16:46:51		NOTE: Exit Solar Eclipse 12781		02-016/16:33:26
28710	MGS	02-016/17:02:07		NOTE: Periapsis 12782 ----------		02-016/16:48:41
28711	MGS	02-016/17:40:00	25	Begin Pre-Cal		
28712	MGS	02-016/17:40:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
28713	MGS	02-016/17:40:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
28714	MGS	02-016/17:40:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
28715	MGS	02-016/17:40:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
28716	MGS	02-016/17:40:00	25	At BOT: S/C Tlm Mode: BR=40000.0, FL=10000, SC=HIGH, MI=80.0		
28717	MGS	02-016/17:40:00	25	Config: CPA SRC=SFOC, BUF=1, BR=125.000000		
28718	MGS	02-016/17:40:00	25	Config: CPA Buffers: B0=5.82dB, B1=1.95dB		
28719	MGS	02-016/17:40:00	25	Config: TGC: DEST=37		
28720	MGS	02-016/17:40:00	25	Config: TGC: BAND=X, BR=40000.000000		
28721	MGS	02-016/17:40:00	25	Config: FSS: CH=2, PRI_FL=10000		
28722	MGS	02-016/17:40:00	25	Config: RSR		
28723	MGS	02-016/17:40:00	25	Config: TXL		
28724	MGS	02-016/17:40:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
28725	MGS	02-016/17:40:00	25	Config: BVR		
28726	MGS	02-016/17:40:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
28727	MGS	02-016/17:40:00	25	Config: MDA: SMPL=0.1		
28728	MGS	02-016/17:40:00	25	Config: SRA: SUP= 3.0dB, T1=62, T2=3, T3=0		
28729	MGS	02-016/17:40:00	25	Config: SRA: HIGH=4, LOW=14, SERV=D		
28730	MGS	02-016/17:40:00	25	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
28731	MGS	02-016/17:51:22		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/17:37:57
28732	MGS	02-016/17:54:07		NOTE: Start EVP data return script		02-016/17:40:42

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28733	MGS	02-016/17:56:22		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/17:42:57
28734	MGS	02-016/17:56:22		: 00:07:34, FALSE	RDSCII	02-016/17:42:57
28735	MGS	02-016/17:56:22		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/17:42:57
28736	MGS	02-016/17:56:22		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/17:42:57
28737	MGS	02-016/17:56:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/17:42:57
28738	MGS	02-016/17:56:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/17:42:57
28739	MGS	02-016/17:56:22	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28740	MGS	02-016/17:56:22	65	NOTE: Carrier Only -- No Telemetry Modulation		
28741	MGS	02-016/17:58:29		NOTE: Enter Planetary Atmosphere 12782		02-016/17:45:04
28742	MGS	02-016/18:00:54		NOTE: Apoapsis 12782 -		02-016/17:47:29
28743	MGS	02-016/18:03:22		NOTE: Enter Earth Occultation 12782		02-016/17:49:57
28744	MGS	02-016/18:03:22	65	NOTE: Loss Of X-Band Signal		
28745	MGS	02-016/18:03:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/17:50:31
28746	MGS	02-016/18:03:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/17:50:31
28747	MGS	02-016/18:03:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/17:50:31
28748	MGS	02-016/18:03:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/17:50:31
28749	MGS	02-016/18:03:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/17:50:32
28750	MGS	02-016/18:03:57		NOTE: End EVP script		02-016/17:50:32
28751	MGS	02-016/18:04:01		NOTE: End fixed Sub-Reflector for Radio Science		02-016/17:50:36
28752	MGS	02-016/18:04:07		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/17:50:42
28753	MGS	02-016/18:04:07		NOTE: Enter Solar Eclipse 12782		02-016/17:50:42
28754	MGS	02-016/18:26:02		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/18:12:37
28755	MGS	02-016/18:29:47		: 01:31:50	RPAONX	02-016/18:16:22
28756	MGS	02-016/18:29:47		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/18:16:22
28757	MGS	02-016/18:31:02		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-016/18:17:37
28758	MGS	02-016/18:31:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/18:17:37
28759	MGS	02-016/18:31:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/18:17:37
28760	MGS	02-016/18:31:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/18:17:37
28761	MGS	02-016/18:31:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/18:17:37
28762	MGS	02-016/18:31:32		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/18:18:07
28763	MGS	02-016/18:31:37		NOTE: Exit Earth Occultation 12782		02-016/18:18:12
28764	MGS	02-016/18:31:37	65	Acquisition Of X-Band Signal		
28765	MGS	02-016/18:31:37	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28766	MGS	02-016/18:31:37	65	NOTE: Carrier Only -- No Telemetry Modulation		
28767	MGS	02-016/18:36:47		NOTE: Exit Planetary Atmosphere 12782		02-016/18:23:21
28768	MGS	02-016/18:38:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/18:25:27
28769	MGS	02-016/18:38:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/18:25:27
28770	MGS	02-016/18:38:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/18:25:27
28771	MGS	02-016/18:38:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/18:25:27
28772	MGS	02-016/18:38:52	65	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28773	MGS	02-016/18:38:53		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-016/18:25:28
28774	MGS	02-016/18:38:53		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/18:25:28
28775	MGS	02-016/18:38:53		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/18:25:28
28776	MGS	02-016/18:38:53	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28777	MGS	02-016/18:38:57		NOTE: End fixed Sub-Reflector for Radio Science		02-016/18:25:32
28778	MGS	02-016/18:40:00	25	Begin Tracking		
28779	MGS	02-016/18:40:00	25	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28780	MGS	02-016/18:44:31		NOTE: Exit Solar Eclipse 12782		02-016/18:31:06
28781	MGS	02-016/18:52:26	25	NOTE: Above Uplink Interlock Limit		
28782	MGS	02-016/18:55:00	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28783	MGS	02-016/18:57:00	25	Range Modulation On: SUP=3.0dB		
28784	MGS	02-016/18:58:00	25	Begin Ranging Acquisition		
28785	MGS	02-016/18:59:33		NOTE: Periapsis 12783 ----------		02-016/18:46:08
28786	MGS	02-016/19:15:27	25	NOTE: Transmitter Off in 15 minutes		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28787	MGS	02-016/19:21:50	25	Acquire D/L: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28788	MGS	02-016/19:21:50	65	Acquire D/L: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28789	MGS	02-016/19:28:27	25	Range Modulation Off		
28790	MGS	02-016/19:30:27	25	Transmitter Off		
28791	MGS	02-016/19:37:24		NOTE: Start Block (SSRMGR)		02-016/19:23:59
28792	MGS	02-016/19:37:24		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-016/19:23:59
28793	MGS	02-016/19:37:25		SSR 1A Data Enable	CSD1AE	02-016/19:24:00
28794	MGS	02-016/19:37:25		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-016/19:24:00
28795	MGS	02-016/19:49:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/19:35:37
28796	MGS	02-016/19:51:48		NOTE: Start Block (MAP_PB_ODY)		02-016/19:38:23
28797	MGS	02-016/19:51:49		: 00:25:40, 01:31:51, FALSE, FALSE, FALSE, 00:01:15, 00:06:10, 01:18:31, 00:05:54	AEMINI	02-016/19:38:24
28798	MGS	02-016/19:51:49		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/19:38:24
28799	MGS	02-016/19:51:49		NOTE: Start EVP data return script		02-016/19:38:24
28800	MGS	02-016/19:51:50		: SSR_1B, F42KHZ, PART1, SE_1A, 2002-016T20:21:29.000	AEMPBI	02-016/19:38:25
28801	MGS	02-016/19:54:02		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/19:40:37
28802	MGS	02-016/19:54:02		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=7976000, DUR=00:16:37		02-016/19:40:37
28803	MGS	02-016/19:54:02		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-016/19:40:37
28804	MGS	02-016/19:54:02		: 00:07:34, FALSE	RDSCII	02-016/19:40:37
28805	MGS	02-016/19:54:02		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/19:40:37
28806	MGS	02-016/19:54:02		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/19:40:37
28807	MGS	02-016/19:54:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/19:40:37
28808	MGS	02-016/19:54:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/19:40:37
28809	MGS	02-016/19:54:02	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28810	MGS	02-016/19:54:02	25	NOTE: Carrier Only -- No Telemetry Modulation		
28811	MGS	02-016/19:54:02	65	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28812	MGS	02-016/19:54:02	65	NOTE: Carrier Only -- No Telemetry Modulation		
28813	MGS	02-016/19:56:10		NOTE: Enter Planetary Atmosphere 12783		02-016/19:42:44
28814	MGS	02-016/19:58:41		NOTE: Apoapsis 12783 -		02-016/19:45:15
28815	MGS	02-016/20:00:49		SSR 1B Data Disable	CSD1BX	02-016/19:47:24
28816	MGS	02-016/20:00:49		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=180824000, DUR=06:16:43		02-016/19:47:24
28817	MGS	02-016/20:00:50		NOTE: End Block (SSRMGR)		02-016/19:47:25
28818	MGS	02-016/20:01:03		NOTE: Enter Earth Occultation 12783		02-016/19:47:37
28819	MGS	02-016/20:01:03	25	NOTE: Loss Of X-Band Signal		
28820	MGS	02-016/20:01:03	65	NOTE: Loss Of X-Band Signal		
28821	MGS	02-016/20:01:36		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/19:48:11
28822	MGS	02-016/20:01:36		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/19:48:11
28823	MGS	02-016/20:01:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/19:48:11
28824	MGS	02-016/20:01:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/19:48:11
28825	MGS	02-016/20:01:37		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/19:48:12
28826	MGS	02-016/20:01:38		NOTE: End EVP script		02-016/19:48:12
28827	MGS	02-016/20:01:39		NOTE: End Block (MAP_RT)		02-016/19:48:13
28828	MGS	02-016/20:01:42		NOTE: End fixed Sub-Reflector for Radio Science		02-016/19:48:16
28829	MGS	02-016/20:01:49		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/19:48:24
28830	MGS	02-016/20:01:50		NOTE: Enter Solar Eclipse 12783		02-016/19:48:24
28831	MGS	02-016/20:06:13	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28832	MGS	02-016/20:08:14	25	Range Modulation On: SUP=3.0dB		
28833	MGS	02-016/20:09:14	25	Begin Ranging Acquisition		
28834	MGS	02-016/20:27:29		: 01:31:51	RPAONX	02-016/20:14:04
28835	MGS	02-016/20:27:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/20:14:04
28836	MGS	02-016/20:29:14		Disables autonomous command to send eclipse ingress script	SWEISX	02-016/20:15:49
28837	MGS	02-016/20:29:19		NOTE: Exit Earth Occultation 12783		02-016/20:15:53
28838	MGS	02-016/20:29:19	25	Acquisition Of X-Band Signal		
28839	MGS	02-016/20:29:19	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28840	MGS	02-016/20:29:19	65	Acquisition Of X-Band Signal		
28841	MGS	02-016/20:29:19	65	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28842	MGS	02-016/20:33:04	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28843	MGS	02-016/20:33:04	65	Acquire D/L: X/16, 3-Way/25, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28844	MGS	02-016/20:34:28		NOTE: Exit Planetary Atmosphere 12783		02-016/20:21:02
28845	MGS	02-016/20:34:54		: REC_1B, F42KHZ, PART1, SE_1A, FALSE, 00:13:47	AEMPB	02-016/20:21:29
28846	MGS	02-016/20:34:54		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-016/20:21:29
28847	MGS	02-016/20:34:54		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART1	STSSRC	02-016/20:21:29
28848	MGS	02-016/20:34:55		SSR 1B Data Enable	CSD1BE	02-016/20:21:30
28849	MGS	02-016/20:34:55		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=42666		02-016/20:21:30
28850	MGS	02-016/20:34:55	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28851	MGS	02-016/20:34:55	65	D/L Change: X/16, 3-Way/25, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28852	MGS	02-016/20:42:13		NOTE: Exit Solar Eclipse 12783		02-016/20:28:47
28853	MGS	02-016/20:57:19		NOTE: Periapsis 12784 ----------		02-016/20:43:53
28854	MGS	02-016/21:13:12	25	NOTE: Transmitter Off in 15 minutes		
28855	MGS	02-016/21:26:13	25	Range Modulation Off		
28856	MGS	02-016/21:28:12	25	Transmitter Off		
28857	MGS	02-016/21:30:14	65	NOTE: Below Uplink Interlock Limit		
28858	MGS	02-016/21:35:00	65	End Tracking		
28859	MGS	02-016/21:45:34		SSR 1B Data Disable	CSD1BX	02-016/21:32:08
28860	MGS	02-016/21:45:34		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=180821333, DUR=01:10:38		02-016/21:32:08
28861	MGS	02-016/21:45:34		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-016/21:32:08
28862	MGS	02-016/21:45:34	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28863	MGS	02-016/21:49:35		NOTE: Start Block (MAP_RT)		02-016/21:36:09
28864	MGS	02-016/21:49:36		: 00:25:40, 01:31:50, FALSE, TRUE, FALSE, 00:01:15, 00:07:50, 01:15:10, 00:07:34	AEMINI	02-016/21:36:10
28865	MGS	02-016/21:49:36		Enable sending eclipse ingress script when array power disappears	SWEISE	02-016/21:36:10
28866	MGS	02-016/21:49:36		NOTE: Start EVP data return script		02-016/21:36:10
28867	MGS	02-016/21:49:37		: SE_2A, RTM, 01:15:09, MRC, 2002-016T22:20:57.000	AEMRTI	02-016/21:36:11
28868	MGS	02-016/21:50:00	65	End Post-Cal		
28869	MGS	02-016/21:53:57		NOTE: Enter Planetary Atmosphere 12784		02-016/21:40:31
28870	MGS	02-016/21:55:04	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28871	MGS	02-016/21:56:31		NOTE: Apoapsis 12784 -		02-016/21:43:05
28872	MGS	02-016/21:58:49		NOTE: Enter Earth Occultation 12784		02-016/21:45:23
28873	MGS	02-016/21:58:49	25	NOTE: Loss Of X-Band Signal		
28874	MGS	02-016/21:59:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/21:45:55
28875	MGS	02-016/21:59:21		NOTE: End EVP script		02-016/21:45:55
28876	MGS	02-016/21:59:22		NOTE: End Block (MAP_PB_ODY)		02-016/21:45:56
28877	MGS	02-016/21:59:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/21:46:10
28878	MGS	02-016/21:59:36		NOTE: Enter Solar Eclipse 12784		02-016/21:46:10
28879	MGS	02-016/22:03:59	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28880	MGS	02-016/22:05:59	25	Range Modulation On: SUP=3.0dB		
28881	MGS	02-016/22:06:59	25	Begin Ranging Acquisition		
28882	MGS	02-016/22:21:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/22:08:05
28883	MGS	02-016/22:25:16		: 01:31:50	RPAONX	02-016/22:11:50
28884	MGS	02-016/22:25:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-016/22:11:50
28885	MGS	02-016/22:26:31		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-016/22:13:05
28886	MGS	02-016/22:26:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/22:13:05
28887	MGS	02-016/22:26:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/22:13:05
28888	MGS	02-016/22:26:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/22:13:05
28889	MGS	02-016/22:26:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/22:13:05
28890	MGS	02-016/22:27:06		NOTE: Exit Earth Occultation 12784		02-016/22:13:40
28891	MGS	02-016/22:27:06	25	Acquisition Of X-Band Signal		
28892	MGS	02-016/22:27:06	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28893	MGS	02-016/22:27:06	25	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28894	MGS	02-016/22:32:14		NOTE: Exit Planetary Atmosphere 12784		02-016/22:18:48
28895	MGS	02-016/22:34:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/22:20:55
28896	MGS	02-016/22:34:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/22:20:55
28897	MGS	02-016/22:34:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/22:20:55
28898	MGS	02-016/22:34:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/22:20:55
28899	MGS	02-016/22:34:21	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28900	MGS	02-016/22:34:22		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-016/22:20:56
28901	MGS	02-016/22:34:22		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-016/22:20:56
28902	MGS	02-016/22:34:22		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-016/22:20:56
28903	MGS	02-016/22:34:22	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28904	MGS	02-016/22:34:26		NOTE: End fixed Sub-Reflector for Radio Science		02-016/22:21:00
28905	MGS	02-016/22:40:00		NOTE: Exit Solar Eclipse 12784		02-016/22:26:34
28906	MGS	02-016/22:55:12		NOTE: Periapsis 12785 ----------		02-016/22:41:46
28907	MGS	02-016/23:10:59	25	NOTE: Transmitter Off in 15 minutes		
28908	MGS	02-016/23:23:59	25	Range Modulation Off		
28909	MGS	02-016/23:25:59	25	Transmitter Off		
28910	MGS	02-016/23:44:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-016/23:31:05
28911	MGS	02-016/23:47:23		NOTE: Start EVP data return script		02-016/23:33:57
28912	MGS	02-016/23:49:31		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-016/23:36:05
28913	MGS	02-016/23:49:31		: 00:07:34, FALSE	RDSCII	02-016/23:36:05
28914	MGS	02-016/23:49:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-016/23:36:05
28915	MGS	02-016/23:49:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-016/23:36:05
28916	MGS	02-016/23:49:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-016/23:36:05
28917	MGS	02-016/23:49:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-016/23:36:05
28918	MGS	02-016/23:49:31	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28919	MGS	02-016/23:49:31	25	NOTE: Carrier Only -- No Telemetry Modulation		
28920	MGS	02-016/23:51:44		NOTE: Enter Planetary Atmosphere 12785		02-016/23:38:18
28921	MGS	02-016/23:54:11		NOTE: Apoapsis 12785 -		02-016/23:40:45
28922	MGS	02-016/23:56:36		NOTE: Enter Earth Occultation 12785		02-016/23:43:10
28923	MGS	02-016/23:56:36	25	NOTE: Loss Of X-Band Signal		
28924	MGS	02-016/23:57:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-016/23:43:39
28925	MGS	02-016/23:57:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-016/23:43:39
28926	MGS	02-016/23:57:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-016/23:43:39
28927	MGS	02-016/23:57:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-016/23:43:39
28928	MGS	02-016/23:57:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-016/23:43:40
28929	MGS	02-016/23:57:06		NOTE: End EVP script		02-016/23:43:40
28930	MGS	02-016/23:57:10		NOTE: End fixed Sub-Reflector for Radio Science		02-016/23:43:44
28931	MGS	02-016/23:57:23		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-016/23:43:57
28932	MGS	02-016/23:57:24		NOTE: Enter Solar Eclipse 12785		02-016/23:43:57
28933	MGS	02-017/00:00:00		Light Time: OWLT = 13:26, RTLT = 26:52		
28934	MGS	02-017/00:01:46	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
28935	MGS	02-017/00:03:47	25	Range Modulation On: SUP=3.0dB		
28936	MGS	02-017/00:04:47	25	Begin Ranging Acquisition		
28937	MGS	02-017/00:19:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/00:05:52
28938	MGS	02-017/00:23:03		: 01:31:50	RPAONX	02-017/00:09:37
28939	MGS	02-017/00:23:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-017/00:09:37
28940	MGS	02-017/00:24:18		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-017/00:10:52
28941	MGS	02-017/00:24:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/00:10:52
28942	MGS	02-017/00:24:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/00:10:52
28943	MGS	02-017/00:24:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/00:10:52
28944	MGS	02-017/00:24:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/00:10:52
28945	MGS	02-017/00:24:48		Disables autonomous command to send eclipse ingress script	SWEISX	02-017/00:11:22
28946	MGS	02-017/00:24:53		NOTE: Exit Earth Occultation 12785		02-017/00:11:27
28947	MGS	02-017/00:24:53	25	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
28948	MGS	02-017/00:24:53	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28949	MGS	02-017/00:24:53	25	NOTE: Carrier Only -- No Telemetry Modulation		
28950	MGS	02-017/00:30:02		NOTE: Exit Planetary Atmosphere 12785		02-017/00:16:36
28951	MGS	02-017/00:32:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/00:18:42
28952	MGS	02-017/00:32:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/00:18:42
28953	MGS	02-017/00:32:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/00:18:42
28954	MGS	02-017/00:32:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/00:18:42
28955	MGS	02-017/00:32:08	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28956	MGS	02-017/00:32:09		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-017/00:18:43
28957	MGS	02-017/00:32:09		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-017/00:18:43
28958	MGS	02-017/00:32:09		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-017/00:18:43
28959	MGS	02-017/00:32:09	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
28960	MGS	02-017/00:32:14		NOTE: End fixed Sub-Reflector for Radio Science		02-017/00:18:47
28961	MGS	02-017/00:37:48		NOTE: Exit Solar Eclipse 12785		02-017/00:24:21
28962	MGS	02-017/00:52:55		NOTE: Periapsis 12786 ----------		02-017/00:39:29
28963	MGS	02-017/01:08:44	25	NOTE: Transmitter Off in 15 minutes		
28964	MGS	02-017/01:21:44	25	Range Modulation Off		
28965	MGS	02-017/01:23:44	25	Transmitter Off		
28966	MGS	02-017/01:30:33		NOTE: Start Block (SSRMGR)		02-017/01:17:07
28967	MGS	02-017/01:30:33		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-017/01:17:07
28968	MGS	02-017/01:30:34		SSR 1B Data Enable	CSD1BE	02-017/01:17:08
28969	MGS	02-017/01:30:34		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=8000, SRC=SE_1A		02-017/01:17:08
28970	MGS	02-017/01:42:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/01:28:52
28971	MGS	02-017/01:45:08		NOTE: Start Block (MAP_PB_ODY)		02-017/01:31:42
28972	MGS	02-017/01:45:09		: 00:25:40, 01:31:51, FALSE, FALSE, FALSE, 00:01:15, 00:06:10, 01:18:31, 00:05:54	AEMINI	02-017/01:31:43
28973	MGS	02-017/01:45:09		Enable sending eclipse ingress script when array power disappears	SWEISE	02-017/01:31:43
28974	MGS	02-017/01:45:09		NOTE: Start EVP data return script		02-017/01:31:43
28975	MGS	02-017/01:45:10		: SSR_1A, F42KHZ, PART2, SE_1A, 2002-017T02:14:49.000	AEMPBI	02-017/01:31:44
28976	MGS	02-017/01:47:18		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-017/01:33:52
28977	MGS	02-017/01:47:18		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=8032000, DUR=00:16:44		02-017/01:33:52
28978	MGS	02-017/01:47:18		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=8000, SRC=SE_1A		02-017/01:33:52
28979	MGS	02-017/01:47:18		: 00:07:34, FALSE	RDSCII	02-017/01:33:52
28980	MGS	02-017/01:47:18		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/01:33:52
28981	MGS	02-017/01:47:18		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/01:33:52
28982	MGS	02-017/01:47:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/01:33:52
28983	MGS	02-017/01:47:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/01:33:52
28984	MGS	02-017/01:47:18	25	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
28985	MGS	02-017/01:47:18	25	NOTE: Carrier Only -- No Telemetry Modulation		
28986	MGS	02-017/01:49:30		NOTE: Enter Planetary Atmosphere 12786		02-017/01:36:03
28987	MGS	02-017/01:51:40		NOTE: Apoapsis 12786 -		02-017/01:38:14
28988	MGS	02-017/01:54:09		SSR 1A Data Disable	CSD1AX	02-017/01:40:43
28989	MGS	02-017/01:54:09		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-017/01:40:43
28990	MGS	02-017/01:54:10		NOTE: End Block (SSRMGR)		02-017/01:40:44
28991	MGS	02-017/01:54:22		NOTE: Enter Earth Occultation 12786		02-017/01:40:55
28992	MGS	02-017/01:54:22	25	NOTE: Loss Of X-Band Signal		
28993	MGS	02-017/01:54:52		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/01:41:26
28994	MGS	02-017/01:54:52		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/01:41:26
28995	MGS	02-017/01:54:52		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/01:41:26
28996	MGS	02-017/01:54:52		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/01:41:26
28997	MGS	02-017/01:54:53		Turn off the MOT Exciter and RPA beam	STRPAF	02-017/01:41:27
28998	MGS	02-017/01:54:54		NOTE: End EVP script		02-017/01:41:27
28999	MGS	02-017/01:54:55		NOTE: End Block (MAP_RT)		02-017/01:41:28
29000	MGS	02-017/01:54:58		NOTE: End fixed Sub-Reflector for Radio Science		02-017/01:41:31
29001	MGS	02-017/01:55:09		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-017/01:41:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29002	MGS	02-017/01:55:10		NOTE: Enter Solar Eclipse 12786		02-017/01:41:43
29003	MGS	02-017/01:59:33	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
29004	MGS	02-017/02:01:33	25	Range Modulation On: SUP=3.0dB		
29005	MGS	02-017/02:02:33	25	Begin Ranging Acquisition		
29006	MGS	02-017/02:15:00	43	Begin Pre-Cal		
29007	MGS	02-017/02:15:00	43	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
29008	MGS	02-017/02:15:00	43	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
29009	MGS	02-017/02:15:00	43	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
29010	MGS	02-017/02:15:00	43	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
29011	MGS	02-017/02:15:00	43	At BOT: S/C Tlm Mode: BR=8000.0, FL=10000, SC=HIGH, MI=80.0		
29012	MGS	02-017/02:15:00	43	Config: TGC: DEST=37		
29013	MGS	02-017/02:15:00	43	Config: TGC: BAND=X, BR=8000.000000		
29014	MGS	02-017/02:15:00	43	Config: FSS: CH=2, PRI_FL=10000		
29015	MGS	02-017/02:15:00	43	Config: RSR		
29016	MGS	02-017/02:15:00	43	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
29017	MGS	02-017/02:15:00	43	Config: BVR		
29018	MGS	02-017/02:15:00	43	Config: Doppler Extractor: BIAS=+1MHZ		
29019	MGS	02-017/02:15:00	43	Config: MDA: SMPL=0.1		
29020	MGS	02-017/02:20:49		: 01:31:51	RPAONX	02-017/02:07:23
29021	MGS	02-017/02:20:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-017/02:07:23
29022	MGS	02-017/02:22:34		Disables autonomous command to send eclipse ingress script	SWEISX	02-017/02:09:08
29023	MGS	02-017/02:22:40		NOTE: Exit Earth Occultation 12786		02-017/02:09:14
29024	MGS	02-017/02:22:40	25	Acquisition Of X-Band Signal		
29025	MGS	02-017/02:22:40	25	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29026	MGS	02-017/02:26:25	25	Acquire D/L: X/16, 2-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29027	MGS	02-017/02:27:49		NOTE: Exit Planetary Atmosphere 12786		02-017/02:14:22
29028	MGS	02-017/02:28:14		: REC_1A, F42KHZ, PART2, SE_1A, FALSE, 00:13:47	AEMPB	02-017/02:14:48
29029	MGS	02-017/02:28:14		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-017/02:14:48
29030	MGS	02-017/02:28:14		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F42KHZ, PLYBCK, PART2	STSSRC	02-017/02:14:48
29031	MGS	02-017/02:28:15		SSR 1A Data Enable	CSD1AE	02-017/02:14:49
29032	MGS	02-017/02:28:15		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=42666		02-017/02:14:49
29033	MGS	02-017/02:28:15	25	D/L Change: X/16, 2-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29034	MGS	02-017/02:35:34		NOTE: Exit Solar Eclipse 12786		02-017/02:22:07
29035	MGS	02-017/02:50:41		NOTE: Periapsis 12787 ----------		02-017/02:37:15
29036	MGS	02-017/03:06:27	25	NOTE: Transmitter Off in 15 minutes		
29037	MGS	02-017/03:19:27	25	Range Modulation Off		
29038	MGS	02-017/03:21:27	25	Transmitter Off		
29039	MGS	02-017/03:38:54		SSR 1A Data Disable	CSD1AX	02-017/03:25:27
29040	MGS	02-017/03:38:54		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-017/03:25:27
29041	MGS	02-017/03:38:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-017/03:25:27
29042	MGS	02-017/03:38:54	25	D/L Change: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29043	MGS	02-017/03:42:53		NOTE: Start Block (MAP_RT)		02-017/03:29:26
29044	MGS	02-017/03:42:54		: 00:25:40, 01:31:50, FALSE, TRUE, FALSE, 00:01:15, 00:07:50, 01:15:10, 00:07:34	AEMINI	02-017/03:29:27
29045	MGS	02-017/03:42:54		Enable sending eclipse ingress script when array power disappears	SWEISE	02-017/03:29:27
29046	MGS	02-017/03:42:54		NOTE: Start EVP data return script		02-017/03:29:27
29047	MGS	02-017/03:42:55		: SE_2A, RTM, 01:15:09, MRC, 2002-017T04:14:13.000	AEMRTI	02-017/03:29:28
29048	MGS	02-017/03:45:00	43	Begin Tracking		
29049	MGS	02-017/03:45:00	43	Acquire D/L: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29050	MGS	02-017/03:47:13		NOTE: Enter Planetary Atmosphere 12787		02-017/03:33:46
29051	MGS	02-017/03:48:20	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29052	MGS	02-017/03:48:20	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29053	MGS	02-017/03:49:22		NOTE: Apoapsis 12787 -		02-017/03:35:55
29054	MGS	02-017/03:52:05		NOTE: Enter Earth Occultation 12787		02-017/03:38:38
29055	MGS	02-017/03:52:05	25	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29056	MGS	02-017/03:52:05	43	NOTE: Loss Of X-Band Signal		
29057	MGS	02-017/03:52:41		Turn off the MOT Exciter and RPA beam	STRPAF	02-017/03:39:14
29058	MGS	02-017/03:52:41		NOTE: End EVP script		02-017/03:39:14
29059	MGS	02-017/03:52:42		NOTE: End Block (MAP_PB_ODY)		02-017/03:39:15
29060	MGS	02-017/03:52:53		NOTE: Enter Solar Eclipse 12787		02-017/03:39:27
29061	MGS	02-017/03:52:54		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-017/03:39:27
29062	MGS	02-017/03:57:17	25	Acquire U/L: X/16, PWR=4.0, BR=125.0, CS=5.82dB		
29063	MGS	02-017/03:59:17	25	Range Modulation On: SUP=3.0dB		
29064	MGS	02-017/04:00:17	25	Begin Ranging Acquisition		
29065	MGS	02-017/04:14:48		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/04:01:22
29066	MGS	02-017/04:18:34		: 01:31:50	RPAONX	02-017/04:05:07
29067	MGS	02-017/04:18:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-017/04:05:07
29068	MGS	02-017/04:19:49		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-017/04:06:22
29069	MGS	02-017/04:19:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/04:06:22
29070	MGS	02-017/04:19:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/04:06:22
29071	MGS	02-017/04:19:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/04:06:22
29072	MGS	02-017/04:19:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/04:06:22
29073	MGS	02-017/04:20:25		NOTE: Exit Earth Occultation 12787		02-017/04:06:58
29074	MGS	02-017/04:20:25	25	Acquisition Of X-Band Signal		
29075	MGS	02-017/04:20:25	25	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
29076	MGS	02-017/04:20:25	25	NOTE: Carrier Only -- No Telemetry Modulation		
29077	MGS	02-017/04:20:25	43	Acquisition Of X-Band Signal		
29078	MGS	02-017/04:20:25	43	Acquire D/L: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
29079	MGS	02-017/04:20:25	43	NOTE: Carrier Only -- No Telemetry Modulation		
29080	MGS	02-017/04:25:34		NOTE: Exit Planetary Atmosphere 12787		02-017/04:12:07
29081	MGS	02-017/04:27:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/04:14:12
29082	MGS	02-017/04:27:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/04:14:12
29083	MGS	02-017/04:27:39		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/04:14:12
29084	MGS	02-017/04:27:39		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/04:14:12
29085	MGS	02-017/04:27:39	25	Acquire D/L: X/16, 2-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29086	MGS	02-017/04:27:39	43	Acquire D/L: X/16, 3-Way/25, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29087	MGS	02-017/04:27:40		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-017/04:14:13
29088	MGS	02-017/04:27:40		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-017/04:14:13
29089	MGS	02-017/04:27:40		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-017/04:14:13
29090	MGS	02-017/04:27:40	25	D/L Change: X/16, 2-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29091	MGS	02-017/04:27:40	43	D/L Change: X/16, 3-Way/25, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29092	MGS	02-017/04:27:43		NOTE: End fixed Sub-Reflector for Radio Science		02-017/04:14:17
29093	MGS	02-017/04:33:17		NOTE: Exit Solar Eclipse 12787		02-017/04:19:50
29094	MGS	02-017/04:35:00	25	NOTE: Transmitter Off in 15 minutes		
29095	MGS	02-017/04:48:00	25	Range Modulation Off		
29096	MGS	02-017/04:48:26		NOTE: Periapsis 12788 ----------		02-017/04:34:59
29097	MGS	02-017/04:50:00	25	Transmitter Off		
29098	MGS	02-017/05:03:52	25	NOTE: Below Uplink Interlock Limit		
29099	MGS	02-017/05:15:00	25	End Tracking		
29100	MGS	02-017/05:16:53	43	Acquire D/L: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29101	MGS	02-017/05:30:00	25	End Post-Cal		
29102	MGS	02-017/05:37:49		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/05:24:22
29103	MGS	02-017/05:40:36		NOTE: Start EVP data return script		02-017/05:27:09
29104	MGS	02-017/05:42:49		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-017/05:29:22
29105	MGS	02-017/05:42:49		: 00:07:34, FALSE	RDSCII	02-017/05:29:22
29106	MGS	02-017/05:42:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/05:29:22
29107	MGS	02-017/05:42:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/05:29:22
29108	MGS	02-017/05:42:49		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/05:29:22
29109	MGS	02-017/05:42:49		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/05:29:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29110	MGS	02-017/05:42:49	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
29111	MGS	02-017/05:42:49	43	NOTE: Carrier Only -- No Telemetry Modulation		
29112	MGS	02-017/05:44:56		NOTE: Enter Planetary Atmosphere 12788		02-017/05:31:28
29113	MGS	02-017/05:47:17		NOTE: Apoapsis 12788 -		02-017/05:33:50
29114	MGS	02-017/05:49:48		NOTE: Enter Earth Occultation 12788		02-017/05:36:21
29115	MGS	02-017/05:49:48	43	NOTE: Loss Of X-Band Signal		
29116	MGS	02-017/05:50:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/05:36:56
29117	MGS	02-017/05:50:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/05:36:56
29118	MGS	02-017/05:50:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/05:36:56
29119	MGS	02-017/05:50:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/05:36:56
29120	MGS	02-017/05:50:24		NOTE: End EVP script		02-017/05:36:57
29121	MGS	02-017/05:50:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-017/05:36:57
29122	MGS	02-017/05:50:28		NOTE: End fixed Sub-Reflector for Radio Science		02-017/05:37:01
29123	MGS	02-017/05:50:35		NOTE: Enter Solar Eclipse 12788		02-017/05:37:08
29124	MGS	02-017/05:50:36		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-017/05:37:09
29125	MGS	02-017/06:12:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/05:59:04
29126	MGS	02-017/06:16:16		: 01:31:50	RPAONX	02-017/06:02:49
29127	MGS	02-017/06:16:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-017/06:02:49
29128	MGS	02-017/06:17:31		: 00:00:30, 00:07:50, FALSE	RDSCIE	02-017/06:04:04
29129	MGS	02-017/06:17:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/06:04:04
29130	MGS	02-017/06:17:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/06:04:04
29131	MGS	02-017/06:17:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/06:04:04
29132	MGS	02-017/06:17:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/06:04:04
29133	MGS	02-017/06:18:01		Disables autonomous command to send eclipse ingress script	SWEISX	02-017/06:04:34
29134	MGS	02-017/06:18:08		NOTE: Exit Earth Occultation 12788		02-017/06:04:41
29135	MGS	02-017/06:18:08	43	Acquisition Of X-Band Signal		
29136	MGS	02-017/06:18:08	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
29137	MGS	02-017/06:18:08	43	NOTE: Carrier Only -- No Telemetry Modulation		
29138	MGS	02-017/06:23:17		NOTE: Exit Planetary Atmosphere 12788		02-017/06:09:50
29139	MGS	02-017/06:25:21		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/06:11:54
29140	MGS	02-017/06:25:21		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/06:11:54
29141	MGS	02-017/06:25:21		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/06:11:54
29142	MGS	02-017/06:25:21		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/06:11:54
29143	MGS	02-017/06:25:21	43	D/L Change: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29144	MGS	02-017/06:25:22		: RTM, MRC, 01:15:09, S&E_2A, FALSE, 00:07:35	AEMRT	02-017/06:11:55
29145	MGS	02-017/06:25:22		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-017/06:11:55
29146	MGS	02-017/06:25:22		Sends a block of payload commands to the PDS: PDS, [3986]	SCPDSC	02-017/06:11:55
29147	MGS	02-017/06:25:22	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29148	MGS	02-017/06:25:26		NOTE: End fixed Sub-Reflector for Radio Science		02-017/06:11:59
29149	MGS	02-017/06:30:59		NOTE: Exit Solar Eclipse 12788		02-017/06:17:32
29150	MGS	02-017/06:45:58		NOTE: Periapsis 12789 ----------		02-017/06:32:31
29151	MGS	02-017/07:35:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-017/07:22:04
29152	MGS	02-017/07:38:17		NOTE: Start Block (MAP_PB_ODY)		02-017/07:24:50
29153	MGS	02-017/07:38:18		: 00:25:40, 01:31:51, FALSE, FALSE, FALSE, 00:01:15, 00:06:10, 01:18:31, 00:05:54	AEMINI	02-017/07:24:51
29154	MGS	02-017/07:38:18		Enable sending eclipse ingress script when array power disappears	SWEISE	02-017/07:24:51
29155	MGS	02-017/07:38:18		NOTE: Start EVP data return script		02-017/07:24:51
29156	MGS	02-017/07:38:19		: SSR_1B, F42KHZ, PART2, SE_1A, 2002-017T08:07:56.000	AEMPBI	02-017/07:24:52
29157	MGS	02-017/07:40:31		Sends a block of payload commands to the PDS: PDS, [3983]	SCPDSC	02-017/07:27:04
29158	MGS	02-017/07:40:31		: 00:07:34, FALSE	RDSCII	02-017/07:27:04
29159	MGS	02-017/07:40:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-017/07:27:04
29160	MGS	02-017/07:40:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-017/07:27:04
29161	MGS	02-017/07:40:31		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-017/07:27:04
29162	MGS	02-017/07:40:31		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-017/07:27:04
29163	MGS	02-017/07:40:31	43	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29164	MGS	02-017/07:40:31	43	NOTE: Carrier Only -- No Telemetry Modulation		
29165	MGS	02-017/07:42:39		NOTE: Enter Planetary Atmosphere 12789		02-017/07:29:11
29166	MGS	02-017/07:44:44		NOTE: Apoapsis 12789 -		02-017/07:31:16
29167	MGS	02-017/07:47:18		SSR 1B Data Disable	CSD1BX	02-017/07:33:51
29168	MGS	02-017/07:47:18		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=180824000, DUR=06:16:43		02-017/07:33:51
29169	MGS	02-017/07:47:19		NOTE: End Block (SSRMGR)		02-017/07:33:52
29170	MGS	02-017/07:47:30		NOTE: Enter Earth Occultation 12789		02-017/07:34:03
29171	MGS	02-017/07:47:30	43	NOTE: Loss Of X-Band Signal		
29172	MGS	02-017/07:48:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-017/07:34:38
29173	MGS	02-017/07:48:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-017/07:34:38
29174	MGS	02-017/07:48:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-017/07:34:38
29175	MGS	02-017/07:48:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-017/07:34:38
29176	MGS	02-017/07:48:06		NOTE: End EVP script		02-017/07:34:39
29177	MGS	02-017/07:48:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-017/07:34:39
29178	MGS	02-017/07:48:07		NOTE: End Block (MAP_RT)		02-017/07:34:40
29179	MGS	02-017/07:48:10		NOTE: End fixed Sub-Reflector for Radio Science		02-017/07:34:43
29180	MGS	02-017/07:48:18		NOTE: Enter Solar Eclipse 12789		02-017/07:34:51
29181	MGS	02-017/07:48:18		Starts a Script for immediate execution: 1, YES, NO, NO, NO, BUS, 00B1, , , , , , , , ,	SCSSCR	02-017/07:34:51
29182	MGS	02-017/08:13:58		: 01:31:51	RPAONX	02-017/08:00:31
29183	MGS	02-017/08:13:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-017/08:00:31
29184	MGS	02-017/08:15:43		Disables autonomous command to send eclipse ingress script	SWEISX	02-017/08:02:16
29185	MGS	02-017/08:15:51		NOTE: Exit Earth Occultation 12789		02-017/08:02:23
29186	MGS	02-017/08:15:51	43	Acquisition Of X-Band Signal		
29187	MGS	02-017/08:15:51	43	Acquire D/L: X/20, 1-Way, BW=10, BR=0.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29188	MGS	02-017/08:20:59		NOTE: Exit Planetary Atmosphere 12789		02-017/08:07:32
29189	MGS	02-017/08:21:23		: REC_1B, F42KHZ, PART2, SE_1A, FALSE, 00:13:47	AEMPB	02-017/08:07:56
29190	MGS	02-017/08:21:23		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-017/08:07:56
29191	MGS	02-017/08:21:23		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F42KHZ, PLYBCK, PART2	STSSRC	02-017/08:07:56
29192	MGS	02-017/08:21:24		SSR 1B Data Enable	CSD1BE	02-017/08:07:57
29193	MGS	02-017/08:21:24		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=42666		02-017/08:07:57
29194	MGS	02-017/08:21:24	43	D/L Change: X/20, 1-Way, BW=10, BR=42666.7, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29195	MGS	02-017/08:28:41		NOTE: Exit Solar Eclipse 12789		02-017/08:15:14
29196	MGS	02-017/08:43:19		NOTE: Periapsis 12790 ----------		02-017/08:29:51
29197	MGS	02-017/09:32:02		SSR 1B Data Disable	CSD1BX	02-017/09:18:35
29198	MGS	02-017/09:32:02		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=180821333, DUR=01:10:38		02-017/09:18:35
29199	MGS	02-017/09:32:02		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-017/09:18:35
29200	MGS	02-017/09:32:02	43	D/L Change: X/20, 1-Way, BW=10, BR=8000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
29201	MGS	02-017/09:40:00	65	Begin Pre-Cal		
29202	MGS	02-017/09:40:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
29203	MGS	02-017/09:40:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
29204	MGS	02-017/09:40:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
29205	MGS	02-017/09:40:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
29206	MGS	02-017/09:40:00	65	Config: TGC: DEST=37		
29207	MGS	02-017/09:40:00	65	Config: TGC: BAND=X, BR=8000.000000		
29208	MGS	02-017/09:40:00	65	Config: FSS: CH=2, PRI_FL=10000		
29209	MGS	02-017/09:40:00	65	Config: RSR		
29210	MGS	02-017/09:40:00	65	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
29211	MGS	02-017/09:40:00	65	Config: BVR		
29212	MGS	02-017/09:40:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
29213	MGS	02-017/09:40:00	65	Config: MDA: SMPL=0.1		
29214	MGS	02-017/09:40:22		NOTE: Enter Planetary Atmosphere 12790		02-017/09:26:54
29215	MGS	02-017/09:42:11		NOTE: Apoapsis 12790 -		02-017/09:28:44
29216	MGS	02-017/09:45:13		NOTE: Enter Earth Occultation 12790		02-017/09:31:45
29217	MGS	02-017/09:45:13	43	NOTE: Loss Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29218	MGS	02-017/09:45:49		NOTE: End EVP script		02-017/09:32:22
29219	MGS	02-017/09:45:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-017/09:32:22
29220	MGS	02-017/09:45:50		NOTE: End Block (MAP_PB_ODY)		02-017/09:32:23
29221	MGS	02-017/09:46:02		NOTE: Enter Solar Eclipse 12790		02-017/09:32:35
29222	MGS	02-017/10:13:35		NOTE: Exit Earth Occultation 12790		02-017/10:00:07
29223	MGS	02-017/10:18:42		NOTE: Exit Planetary Atmosphere 12790		02-017/10:05:15
29224	MGS	02-017/10:26:26		NOTE: Exit Solar Eclipse 12790		02-017/10:12:58
29225	MGS	02-017/10:41:19		NOTE: Periapsis 12791 ----------		02-017/10:27:51
29226	MGS	02-017/11:10:00	65	Begin Tracking		
29227	MGS	02-017/11:23:34	65	NOTE: Above Uplink Interlock Limit		
29228	MGS	02-017/11:26:21	43	NOTE: Below Uplink Interlock Limit		
29229	MGS	02-017/11:30:00	43	End Tracking		
29230	MGS	02-017/11:38:07		NOTE: Enter Planetary Atmosphere 12791		02-017/11:24:39
29231	MGS	02-017/11:40:22		NOTE: Apoapsis 12791 -		02-017/11:26:54
29232	MGS	02-017/11:42:57		NOTE: Enter Earth Occultation 12791		02-017/11:29:29
29233	MGS	02-017/11:43:49		NOTE: Enter Solar Eclipse 12791		02-017/11:30:20
29234	MGS	02-017/11:45:00	43	End Post-Cal		
29235	MGS	02-017/12:11:22		NOTE: Exit Earth Occultation 12791		02-017/11:57:54
29236	MGS	02-017/12:13:28		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-017/12:00:00
29237	MGS	02-017/12:16:28		NOTE: Exit Planetary Atmosphere 12791		02-017/12:03:00
29238	MGS	02-017/12:24:12		NOTE: Exit Solar Eclipse 12791		02-017/12:10:44
29239	MGS	02-017/12:39:34		NOTE: Periapsis 12792 ----------		02-017/12:26:06
29240	MGS	02-017/13:35:54		NOTE: Enter Planetary Atmosphere 12792		02-017/13:22:26
29241	MGS	02-017/13:38:42		NOTE: Apoapsis 12792 -		02-017/13:25:13
29242	MGS	02-017/13:40:45		NOTE: Enter Earth Occultation 12792		02-017/13:27:16
29243	MGS	02-017/13:41:36		NOTE: Enter Solar Eclipse 12792		02-017/13:28:07
29244	MGS	02-017/14:09:10		NOTE: Exit Earth Occultation 12792		02-017/13:55:41
29245	MGS	02-017/14:14:17		NOTE: Exit Planetary Atmosphere 12792		02-017/14:00:48
29246	MGS	02-017/14:22:00		NOTE: Exit Solar Eclipse 12792		02-017/14:08:32
29247	MGS	02-017/14:37:36		NOTE: Periapsis 12793 ----------		02-017/14:24:08
29248	MGS	02-017/15:33:41		NOTE: Enter Planetary Atmosphere 12793		02-017/15:20:13
29249	MGS	02-017/15:36:31		NOTE: Apoapsis 12793 -		02-017/15:23:03
29250	MGS	02-017/15:38:32		NOTE: Enter Earth Occultation 12793		02-017/15:25:04
29251	MGS	02-017/15:39:22		NOTE: Enter Solar Eclipse 12793		02-017/15:25:53
29252	MGS	02-017/16:06:57		NOTE: Exit Earth Occultation 12793		02-017/15:53:28
29253	MGS	02-017/16:12:04		NOTE: Exit Planetary Atmosphere 12793		02-017/15:58:36
29254	MGS	02-017/16:19:46		NOTE: Exit Solar Eclipse 12793		02-017/16:06:18
29255	MGS	02-017/16:35:10		NOTE: Periapsis 12794 ----------		02-017/16:21:41
29256	MGS	02-017/17:10:00	25	Begin Pre-Cal		
29257	MGS	02-017/17:10:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
29258	MGS	02-017/17:10:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
29259	MGS	02-017/17:10:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
29260	MGS	02-017/17:10:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
29261	MGS	02-017/17:10:00	25	Config: TGC: DEST=37		
29262	MGS	02-017/17:10:00	25	Config: TGC: BAND=X, BR=8000.000000		
29263	MGS	02-017/17:10:00	25	Config: FSS: CH=2, PRI_FL=10000		
29264	MGS	02-017/17:10:00	25	Config: RSR		
29265	MGS	02-017/17:10:00	25	Config: UWV: AMP=XTWM1, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
29266	MGS	02-017/17:10:00	25	Config: BVR		
29267	MGS	02-017/17:10:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
29268	MGS	02-017/17:10:00	25	Config: MDA: SMPL=0.1		
29269	MGS	02-017/17:31:24		NOTE: Enter Planetary Atmosphere 12794		02-017/17:17:56
29270	MGS	02-017/17:33:53		NOTE: Apoapsis 12794 -		02-017/17:20:24
29271	MGS	02-017/17:36:15		NOTE: Enter Earth Occultation 12794		02-017/17:22:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
29272	MGS	02-017/17:37:05		NOTE: Enter Solar Eclipse 12794		02-017/17:23:36
29273	MGS	02-017/18:04:40		NOTE: Exit Earth Occultation 12794		02-017/17:51:11
29274	MGS	02-017/18:09:48		NOTE: Exit Planetary Atmosphere 12794		02-017/17:56:19
29275	MGS	02-017/18:17:29		NOTE: Exit Solar Eclipse 12794		02-017/18:04:00
29276	MGS	02-017/18:32:32		NOTE: Periapsis 12795 ----------		02-017/18:19:03
29277	MGS	02-017/18:40:00	25	Begin Tracking		
29278	MGS	02-017/18:50:15	25	NOTE: Above Uplink Interlock Limit		
29279	MGS	02-017/19:00:00	65	End Tracking		
29280	MGS	02-017/19:15:00	65	End Post-Cal		
29281	MGS	02-017/19:29:04		NOTE: Enter Planetary Atmosphere 12795		02-017/19:15:35
29282	MGS	02-017/19:31:31		NOTE: Apoapsis 12795 -		02-017/19:18:02
29283	MGS	02-017/19:33:55		NOTE: Enter Earth Occultation 12795		02-017/19:20:25
29284	MGS	02-017/19:34:45		NOTE: Enter Solar Eclipse 12795		02-017/19:21:16
29285	MGS	02-017/20:02:22		NOTE: Exit Earth Occultation 12795		02-017/19:48:53
29286	MGS	02-017/20:07:29		NOTE: Exit Planetary Atmosphere 12795		02-017/19:53:59
29287	MGS	02-017/20:15:09		NOTE: Exit Solar Eclipse 12795		02-017/20:01:40
29288	MGS	02-017/20:30:09		NOTE: Periapsis 12796 ----------		02-017/20:16:39
29289	MGS	02-017/21:26:49		NOTE: Enter Planetary Atmosphere 12796		02-017/21:13:19
29290	MGS	02-017/21:29:26		NOTE: Apoapsis 12796 -		02-017/21:15:56
29291	MGS	02-017/21:31:38		NOTE: Enter Earth Occultation 12796		02-017/21:18:09
29292	MGS	02-017/21:32:30		NOTE: Enter Solar Eclipse 12796		02-017/21:19:01
29293	MGS	02-017/22:00:06		NOTE: Exit Earth Occultation 12796		02-017/21:46:37
29294	MGS	02-017/22:05:13		NOTE: Exit Planetary Atmosphere 12796		02-017/21:51:43
29295	MGS	02-017/22:12:54		NOTE: Exit Solar Eclipse 12796		02-017/21:59:25
29296	MGS	02-017/22:28:03		NOTE: Periapsis 12797 ----------		02-017/22:14:34
29297	MGS	02-017/23:24:36		NOTE: Enter Planetary Atmosphere 12797		02-017/23:11:07
29298	MGS	02-017/23:27:11		NOTE: Apoapsis 12797 -		02-017/23:13:41
29299	MGS	02-017/23:29:26		NOTE: Enter Earth Occultation 12797		02-017/23:15:56
29300	MGS	02-017/23:30:18		NOTE: Enter Solar Eclipse 12797		02-017/23:16:48
29301	MGS	02-017/23:57:54		NOTE: Exit Earth Occultation 12797		02-017/23:44:24
29302	MGS	02-018/00:00:00		Light Time: OWLT = 13:29, RTLT = 26:59		
29303	MGS	02-018/00:03:01		NOTE: Exit Planetary Atmosphere 12797		02-017/23:49:31
29304	MGS	02-018/00:10:42		NOTE: Exit Solar Eclipse 12797		02-017/23:57:12