SEQUENCE OF EVENTS File: mm208a.04.rsoe Source: mm208a.04.pef Generated: Thu Sep 5 23:17:15 2002
MGS (094) DKF: mm208a.04.dkf Alloc: MGS_02236_02268.SAF
Page 1 OWLT = 22:03, RTLT = 44:06

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1	MGS	02-251/00:00:00		Light Time: OWLT = 22:03, RTLT = 44:06		
2	MGS	02-251/00:00:00	45	Begin Pre-Cal		
3	MGS	02-251/00:00:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
4	MGS	02-251/00:00:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
5	MGS	02-251/00:00:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
6	MGS	02-251/00:00:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
7	MGS	02-251/00:00:00	45	Config: TGC: DEST=37		
8	MGS	02-251/00:00:00	45	Config: TGC: BAND=X, BR=4000.000000		
9	MGS	02-251/00:00:00	45	Config: FSS: CH=2, PRI_FL=10000		
10	MGS	02-251/00:00:00	45	Config: RSR		
11	MGS	02-251/00:00:00	45	Config: TXL		
12	MGS	02-251/00:00:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
13	MGS	02-251/00:00:00	45	Config: BVR		
14	MGS	02-251/00:00:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
15	MGS	02-251/00:00:00	45	Config: MDA: SMPL=0.1		
16	MGS	02-251/00:00:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
17	MGS	02-251/00:00:00	45	Config: SRA: HIGH=4, LOW=11, SERV=D		
18	MGS	02-251/00:00:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
19	MGS	02-251/00:00:00	45	Config: CMD		
20	MGS	02-251/00:18:10		NOTE: Exit Solar Eclipse 15647		02-250/23:56:06
21	MGS	02-251/00:18:40		NOTE: Exit Earth Occultation 15647		02-250/23:56:36
22	MGS	02-251/00:18:54		NOTE: Periapsis 15648 ----------		02-250/23:56:51
23	MGS	02-251/00:21:37		NOTE: Exit Planetary Atmosphere 15647		02-250/23:59:34
24	MGS	02-251/00:22:01		NOTE: Start Block (SSRMGR)		02-250/23:59:58
25	MGS	02-251/00:22:01		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, CLRALL, PART1	STSSRC	02-250/23:59:58
26	MGS	02-251/00:22:02		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-250/23:59:59
27	MGS	02-251/00:22:03		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-251/00:00:00
28	MGS	02-251/00:22:03		SSR 1A Data Enable	CSD1AE	02-251/00:00:00
29	MGS	02-251/00:22:03		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-251/00:00:00
30	MGS	02-251/00:23:16		CDU-1 Uplink Rate Select (Based on 3 bit Code): 3	TCC1BS	02-251/00:01:13
31	MGS	02-251/00:23:16		CDU-2 Uplink Rate Select (Based on 3 bit Code): 3	TCC2BS	02-251/00:01:13
32	MGS	02-251/00:23:19		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-251/00:01:16
33	MGS	02-251/00:23:19		Select Automatic HGA control mode	SAHACE	02-251/00:01:16
34	MGS	02-251/00:23:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/00:01:17
35	MGS	02-251/00:25:21		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/00:03:18
36	MGS	02-251/00:25:21		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=792000, DUR=00:03:18		02-251/00:03:18
37	MGS	02-251/00:25:21		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/00:03:18
38	MGS	02-251/00:25:21		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/00:03:18
39	MGS	02-251/00:40:03		SSR 2A Data Disable	CSD2AX	02-251/00:18:00
40	MGS	02-251/00:40:03		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=7, BITS=53492000, DUR=03:42:53		02-251/00:18:00
41	MGS	02-251/00:40:04		NOTE: End Block (SSRMGR)		02-251/00:18:01
42	MGS	02-251/00:44:17		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/00:22:14
43	MGS	02-251/00:44:17		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=5336000, DUR=00:18:56		02-251/00:22:14
44	MGS	02-251/00:44:17		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/00:22:14
45	MGS	02-251/00:44:17		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/00:22:14
46	MGS	02-251/00:44:18		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/00:22:15
47	MGS	02-251/00:44:19		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/00:22:16
48	MGS	02-251/00:44:20		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/00:22:17
49	MGS	02-251/00:46:36		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/00:24:33
50	MGS	02-251/00:54:06		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/00:32:03
51	MGS	02-251/00:59:58		Select Automatic HGA control mode	SAHACE	02-251/00:37:55
52	MGS	02-251/00:59:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/00:37:56
53	MGS	02-251/01:00:00	45	Begin Tracking		
54	MGS	02-251/01:00:07	45	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
55	MGS	02-251/01:00:07	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
56	MGS	02-251/01:02:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/00:39:57
57	MGS	02-251/01:02:00		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=9588000, DUR=00:17:43		02-251/00:39:57
58	MGS	02-251/01:02:00		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/00:39:57
59	MGS	02-251/01:02:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/00:39:57
60	MGS	02-251/01:17:53		NOTE: Apoapsis 15648 -		02-251/00:55:50
61	MGS	02-251/01:25:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/01:03:40
62	MGS	02-251/01:30:39		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/01:08:36
63	MGS	02-251/01:30:39		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=16464000, DUR=00:28:39		02-251/01:08:36
64	MGS	02-251/01:30:39		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/01:08:36
65	MGS	02-251/01:30:39		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/01:08:36
66	MGS	02-251/01:30:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/01:08:40
67	MGS	02-251/01:30:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/01:08:40
68	MGS	02-251/01:30:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/01:08:41
69	MGS	02-251/01:30:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/01:08:41
70	MGS	02-251/01:30:44	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
71	MGS	02-251/01:30:44	45	NOTE: Carrier Only -- No Telemetry Modulation		
72	MGS	02-251/01:33:51		NOTE: Enter Planetary Atmosphere 15648		02-251/01:11:48
73	MGS	02-251/01:36:34		NOTE: Enter Earth Occultation 15648		02-251/01:14:31
74	MGS	02-251/01:36:34	45	NOTE: Loss Of X-Band Signal		
75	MGS	02-251/01:36:53	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
76	MGS	02-251/01:37:03		NOTE: Enter Solar Eclipse 15648		02-251/01:15:00
77	MGS	02-251/01:38:46		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/01:16:43
78	MGS	02-251/01:38:46		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/01:16:43
79	MGS	02-251/01:38:47		NOTE: End fixed Sub-Reflector for Radio Science		02-251/01:16:44
80	MGS	02-251/01:38:47		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/01:16:44
81	MGS	02-251/01:38:47		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/01:16:44
82	MGS	02-251/01:38:47		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/01:16:44
83	MGS	02-251/01:38:48		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/01:16:45
84	MGS	02-251/01:38:48		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/01:16:45
85	MGS	02-251/01:42:11		Disable A frame offset	SAAFOX	02-251/01:20:08
86	MGS	02-251/01:42:12		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/01:20:09
87	MGS	02-251/01:42:18		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/01:20:15
88	MGS	02-251/01:42:51	45	NOTE: Transmitter Off in 15 minutes		
89	MGS	02-251/01:45:11		: TRUE	mnadir	02-251/01:23:08
90	MGS	02-251/01:48:18		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/01:26:15
91	MGS	02-251/01:48:19		NOTE: End Block (MAP_RT_BETA_SUP)		02-251/01:26:16
92	MGS	02-251/01:57:40		NOTE: Start Block (SSRMGR)		02-251/01:35:37
93	MGS	02-251/01:57:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, CLRALL, PART1	STSSRC	02-251/01:35:37
94	MGS	02-251/01:57:41		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-251/01:35:38
95	MGS	02-251/01:57:42		SSR 1B Data Enable	CSD1BE	02-251/01:35:39
96	MGS	02-251/01:57:42		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-251/01:35:39
97	MGS	02-251/01:57:51	45	Transmitter Off		
98	MGS	02-251/02:07:41		Enable A frame offset	SAAFOE	02-251/01:45:38
99	MGS	02-251/02:07:42		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/01:45:39
100	MGS	02-251/02:07:43		: FALSE	mnadir	02-251/01:45:40
101	MGS	02-251/02:13:29	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
102	MGS	02-251/02:13:42		SSR 1A Data Disable	CSD1AX	02-251/01:51:39
103	MGS	02-251/02:13:42		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=26796000, DUR=01:51:39		02-251/01:51:39
104	MGS	02-251/02:13:43		NOTE: End Block (SSRMGR)		02-251/01:51:40
105	MGS	02-251/02:15:29	45	Range Modulation On: SUP=3.0dB		
106	MGS	02-251/02:15:48		NOTE: Exit Solar Eclipse 15648		02-251/01:53:44
107	MGS	02-251/02:16:18		NOTE: Exit Earth Occultation 15648		02-251/01:54:15
108	MGS	02-251/02:16:26		NOTE: Periapsis 15649 ----------		02-251/01:54:23

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
109	MGS	02-251/02:16:29	45	Begin Ranging Acquisition		
110	MGS	02-251/02:19:15		NOTE: Exit Planetary Atmosphere 15648		02-251/01:57:11
111	MGS	02-251/02:20:57		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-251/01:58:54
112	MGS	02-251/02:20:57		Select Automatic HGA control mode	SAHACE	02-251/01:58:54
113	MGS	02-251/02:20:58		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/01:58:55
114	MGS	02-251/02:21:06	45	Acquisition Of X-Band Signal		
115	MGS	02-251/02:21:06	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
116	MGS	02-251/02:22:59		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:00:56
117	MGS	02-251/02:22:59		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=6068000, DUR=00:25:17		02-251/02:00:56
118	MGS	02-251/02:22:59		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/02:00:56
119	MGS	02-251/02:22:59		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/02:00:56
120	MGS	02-251/02:23:24		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:01:21
121	MGS	02-251/02:23:24		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=6168000, DUR=00:00:25		02-251/02:01:21
122	MGS	02-251/02:23:24		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-251/02:01:21
123	MGS	02-251/02:23:26		NOTE: Start Block (SSRMGR)		02-251/02:01:23
124	MGS	02-251/02:23:26		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-251/02:01:23
125	MGS	02-251/02:23:26		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-251/02:01:23
126	MGS	02-251/02:23:27		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/02:01:24
127	MGS	02-251/02:23:28		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART7	STSSRC	02-251/02:01:25
128	MGS	02-251/02:23:29		SSR 2A Data Enable	CSD2AE	02-251/02:01:26
129	MGS	02-251/02:23:29		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=7, BR=21333		02-251/02:01:26
130	MGS	02-251/02:23:29	45	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
131	MGS	02-251/02:31:25	45	NOTE: Transmitter Off in 15 minutes		
132	MGS	02-251/02:41:55		SSR 2A Data Disable	CSD2AX	02-251/02:19:52
133	MGS	02-251/02:41:55		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=7, BITS=23594666, DUR=00:18:26		02-251/02:19:52
134	MGS	02-251/02:41:55		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:19:52
135	MGS	02-251/02:41:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/02:19:52
136	MGS	02-251/02:41:55	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
137	MGS	02-251/02:41:56		NOTE: End Block (SSRMGR)		02-251/02:19:53
138	MGS	02-251/02:41:56		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:19:53
139	MGS	02-251/02:41:56		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/02:19:53
140	MGS	02-251/02:41:56		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/02:19:53
141	MGS	02-251/02:41:56	45	NOTE: Loss Of X-Band Signal		
142	MGS	02-251/02:41:57		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/02:19:54
143	MGS	02-251/02:41:58		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/02:19:55
144	MGS	02-251/02:44:14		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/02:22:11
145	MGS	02-251/02:44:26	45	Range Modulation Off		
146	MGS	02-251/02:46:25	45	Transmitter Off		
147	MGS	02-251/02:51:44		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/02:29:41
148	MGS	02-251/02:57:36		Select Automatic HGA control mode	SAHACE	02-251/02:35:33
149	MGS	02-251/02:57:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/02:35:34
150	MGS	02-251/02:57:45	45	Acquisition Of X-Band Signal		
151	MGS	02-251/02:57:45	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
152	MGS	02-251/02:59:38		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:37:35
153	MGS	02-251/02:59:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/02:37:35
154	MGS	02-251/03:00:01		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/02:37:58
155	MGS	02-251/03:00:02		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/02:37:59
156	MGS	02-251/03:00:03		SSR 2A Data Enable	CSD2AE	02-251/02:38:00
157	MGS	02-251/03:00:03		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=7, BR=21333		02-251/02:38:00
158	MGS	02-251/03:00:03	45	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
159	MGS	02-251/03:15:44		NOTE: Apoapsis 15649 -		02-251/02:53:41
160	MGS	02-251/03:23:21		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/03:01:18
161	MGS	02-251/03:23:25		SSR 2A Data Disable	CSD2AX	02-251/03:01:22
162	MGS	02-251/03:23:25		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=7, BITS=29909333, DUR=00:23:22		02-251/03:01:22

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
163	MGS	02-251/03:23:26		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/03:01:23
164	MGS	02-251/03:23:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/03:01:23
165	MGS	02-251/03:23:26	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
166	MGS	02-251/03:28:17		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/03:06:14
167	MGS	02-251/03:28:17		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/03:06:14
168	MGS	02-251/03:28:21		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/03:06:18
169	MGS	02-251/03:28:21		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/03:06:18
170	MGS	02-251/03:28:21	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
171	MGS	02-251/03:28:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/03:06:19
172	MGS	02-251/03:28:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/03:06:19
173	MGS	02-251/03:28:22	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
174	MGS	02-251/03:28:22	45	NOTE: Carrier Only -- No Telemetry Modulation		
175	MGS	02-251/03:31:34		NOTE: Enter Planetary Atmosphere 15649		02-251/03:09:31
176	MGS	02-251/03:34:17		NOTE: Enter Earth Occultation 15649		02-251/03:12:14
177	MGS	02-251/03:34:17	45	NOTE: Loss Of X-Band Signal		
178	MGS	02-251/03:34:46		NOTE: Enter Solar Eclipse 15649		02-251/03:12:43
179	MGS	02-251/03:36:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/03:14:21
180	MGS	02-251/03:36:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/03:14:21
181	MGS	02-251/03:36:25		NOTE: End fixed Sub-Reflector for Radio Science		02-251/03:14:22
182	MGS	02-251/03:36:25		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/03:14:22
183	MGS	02-251/03:36:25		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/03:14:22
184	MGS	02-251/03:36:25		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/03:14:22
185	MGS	02-251/03:36:26		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/03:14:23
186	MGS	02-251/03:36:26		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/03:14:23
187	MGS	02-251/03:39:54		Disable A frame offset	SAAFOX	02-251/03:17:51
188	MGS	02-251/03:39:55		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/03:17:52
189	MGS	02-251/03:39:56		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/03:17:53
190	MGS	02-251/03:42:54		: TRUE	mnadir	02-251/03:20:51
191	MGS	02-251/03:45:56		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/03:23:53
192	MGS	02-251/03:45:57		NOTE: End Block (MAP_RT_BETA_SUP)		02-251/03:23:54
193	MGS	02-251/03:55:45		NOTE: Start Block (SSRMGR)		02-251/03:33:42
194	MGS	02-251/03:55:45		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-251/03:33:42
195	MGS	02-251/03:55:46		SSR 1A Data Enable	CSD1AE	02-251/03:33:43
196	MGS	02-251/03:55:46		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-251/03:33:43
197	MGS	02-251/04:05:24		Enable A frame offset	SAAFOE	02-251/03:43:21
198	MGS	02-251/04:05:25		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/03:43:22
199	MGS	02-251/04:05:26		: FALSE	mnadir	02-251/03:43:23
200	MGS	02-251/04:11:46		SSR 1B Data Disable	CSD1BX	02-251/03:49:43
201	MGS	02-251/04:11:46		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=32176000, DUR=02:14:04		02-251/03:49:43
202	MGS	02-251/04:11:47		NOTE: End Block (SSRMGR)		02-251/03:49:44
203	MGS	02-251/04:13:30		NOTE: Exit Solar Eclipse 15649		02-251/03:51:27
204	MGS	02-251/04:14:00		NOTE: Exit Earth Occultation 15649		02-251/03:51:57
205	MGS	02-251/04:14:17		NOTE: Periapsis 15650 ----------		02-251/03:52:14
206	MGS	02-251/04:16:57		NOTE: Exit Planetary Atmosphere 15649		02-251/03:54:54
207	MGS	02-251/04:18:39		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-251/03:56:36
208	MGS	02-251/04:18:39		Select Automatic HGA control mode	SAHACE	02-251/03:56:36
209	MGS	02-251/04:18:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/03:56:37
210	MGS	02-251/04:18:48	45	Acquisition Of X-Band Signal		
211	MGS	02-251/04:18:48	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
212	MGS	02-251/04:20:41		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-251/03:58:38
213	MGS	02-251/04:20:41		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=5980000, DUR=00:24:55		02-251/03:58:38
214	MGS	02-251/04:20:41		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-251/03:58:38
215	MGS	02-251/04:20:41		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-251/03:58:38
216	MGS	02-251/04:20:41	45	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
217	MGS	02-251/04:39:37		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/04:17:34
218	MGS	02-251/04:39:37		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=10524000, DUR=00:18:56		02-251/04:17:34
219	MGS	02-251/04:39:37		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-251/04:17:34
220	MGS	02-251/04:39:37		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/04:17:34
221	MGS	02-251/04:39:37	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
222	MGS	02-251/04:39:38		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/04:17:35
223	MGS	02-251/04:39:38	45	NOTE: Loss Of X-Band Signal		
224	MGS	02-251/04:39:39		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/04:17:36
225	MGS	02-251/04:39:40		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/04:17:37
226	MGS	02-251/04:41:56		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/04:19:53
227	MGS	02-251/04:49:26		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/04:27:23
228	MGS	02-251/04:55:00	65	Begin Pre-Cal		
229	MGS	02-251/04:55:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
230	MGS	02-251/04:55:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
231	MGS	02-251/04:55:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
232	MGS	02-251/04:55:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
233	MGS	02-251/04:55:00	65	Config: TGC: DEST=37		
234	MGS	02-251/04:55:00	65	Config: TGC: BAND=X, BR=4000.000000		
235	MGS	02-251/04:55:00	65	Config: FSS: CH=2, PRI_FL=10000		
236	MGS	02-251/04:55:00	65	Config: RSR		
237	MGS	02-251/04:55:00	65	Config: TXL		
238	MGS	02-251/04:55:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
239	MGS	02-251/04:55:00	65	Config: BVR		
240	MGS	02-251/04:55:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
241	MGS	02-251/04:55:00	65	Config: MDA: SMPL=0.1		
242	MGS	02-251/04:55:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
243	MGS	02-251/04:55:00	65	Config: SRA: HIGH=4, LOW=11, SERV=D		
244	MGS	02-251/04:55:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
245	MGS	02-251/04:55:00	65	Config: CMD		
246	MGS	02-251/04:55:18		Select Automatic HGA control mode	SAHACE	02-251/04:33:15
247	MGS	02-251/04:55:19		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/04:33:16
248	MGS	02-251/04:55:27	45	Acquisition Of X-Band Signal		
249	MGS	02-251/04:55:27	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
250	MGS	02-251/04:57:20		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-251/04:35:17
251	MGS	02-251/04:57:20		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=14776000, DUR=00:17:43		02-251/04:35:17
252	MGS	02-251/04:57:20		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-251/04:35:17
253	MGS	02-251/04:57:20		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-251/04:35:17
254	MGS	02-251/04:57:20	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
255	MGS	02-251/05:13:28		NOTE: Apoapsis 15650 -		02-251/04:51:25
256	MGS	02-251/05:21:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/04:59:00
257	MGS	02-251/05:25:59		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/05:03:56
258	MGS	02-251/05:25:59		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=21652000, DUR=00:28:39		02-251/05:03:56
259	MGS	02-251/05:25:59		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-251/05:03:56
260	MGS	02-251/05:25:59		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/05:03:56
261	MGS	02-251/05:25:59	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
262	MGS	02-251/05:26:03		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/05:04:00
263	MGS	02-251/05:26:03		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/05:04:00
264	MGS	02-251/05:26:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/05:04:01
265	MGS	02-251/05:26:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/05:04:01
266	MGS	02-251/05:26:04	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
267	MGS	02-251/05:26:04	45	NOTE: Carrier Only -- No Telemetry Modulation		
268	MGS	02-251/05:29:20		NOTE: Enter Planetary Atmosphere 15650		02-251/05:07:17
269	MGS	02-251/05:31:24		NOTE: Start Block (SSRMGR)		02-251/05:09:21
270	MGS	02-251/05:31:24		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-251/05:09:21

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
271	MGS	02-251/05:31:25		SSR 1B Data Enable	CSD1BE	02-251/05:09:22
272	MGS	02-251/05:31:25		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-251/05:09:22
273	MGS	02-251/05:32:02		NOTE: Enter Earth Occultation 15650		02-251/05:09:59
274	MGS	02-251/05:32:02	45	NOTE: Loss Of X-Band Signal		
275	MGS	02-251/05:32:32		NOTE: Enter Solar Eclipse 15650		02-251/05:10:29
276	MGS	02-251/05:34:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/05:12:03
277	MGS	02-251/05:34:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/05:12:03
278	MGS	02-251/05:34:07		NOTE: End fixed Sub-Reflector for Radio Science		02-251/05:12:04
279	MGS	02-251/05:34:07		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/05:12:04
280	MGS	02-251/05:34:07		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/05:12:04
281	MGS	02-251/05:34:07		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/05:12:04
282	MGS	02-251/05:34:08		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/05:12:05
283	MGS	02-251/05:34:08		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/05:12:05
284	MGS	02-251/05:37:38		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/05:15:35
285	MGS	02-251/05:43:38		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/05:21:35
286	MGS	02-251/05:43:39		NOTE: End Block (MAP_RT_BETA_SUP)		02-251/05:21:36
287	MGS	02-251/05:47:25		SSR 1A Data Disable	CSD1AX	02-251/05:25:22
288	MGS	02-251/05:47:25		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=26796000, DUR=01:51:39		02-251/05:25:22
289	MGS	02-251/05:47:26		NOTE: End Block (SSRMGR)		02-251/05:25:23
290	MGS	02-251/05:55:00	65	Begin Tracking		
291	MGS	02-251/06:00:40	65	NOTE: Above Uplink Interlock Limit		
292	MGS	02-251/06:05:44	45	NOTE: Below Uplink Interlock Limit		
293	MGS	02-251/06:08:57	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
294	MGS	02-251/06:10:57	65	Range Modulation On: SUP=3.0dB		
295	MGS	02-251/06:11:15		NOTE: Exit Solar Eclipse 15650		02-251/05:49:12
296	MGS	02-251/06:11:45		NOTE: Exit Earth Occultation 15650		02-251/05:49:42
297	MGS	02-251/06:11:57	65	Begin Ranging Acquisition		
298	MGS	02-251/06:12:05		NOTE: Periapsis 15651 ----------		02-251/05:50:02
299	MGS	02-251/06:14:43		NOTE: Exit Planetary Atmosphere 15650		02-251/05:52:40
300	MGS	02-251/06:15:00	45	End Tracking		
301	MGS	02-251/06:16:23		NOTE: Start Block (MAP_PB_BETA_SUP)		02-251/05:54:20
302	MGS	02-251/06:16:23		Select Automatic HGA control mode	SAHACE	02-251/05:54:20
303	MGS	02-251/06:16:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/05:54:21
304	MGS	02-251/06:16:25		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/05:54:22
305	MGS	02-251/06:16:26		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART1	STSSRC	02-251/05:54:23
306	MGS	02-251/06:16:27		SSR 2A Data Enable	CSD2AE	02-251/05:54:24
307	MGS	02-251/06:16:27		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=1, BR=21333		02-251/05:54:24
308	MGS	02-251/06:16:32	65	Acquisition Of X-Band Signal		
309	MGS	02-251/06:16:32	65	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
310	MGS	02-251/06:26:56	65	NOTE: Transmitter Off in 15 minutes		
311	MGS	02-251/06:30:00	45	End Post-Cal		
312	MGS	02-251/06:37:23		SSR 2A Data Disable	CSD2AX	02-251/06:15:20
313	MGS	02-251/06:37:23		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=1, BITS=26794666, DUR=00:20:56		02-251/06:15:20
314	MGS	02-251/06:37:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/06:15:21
315	MGS	02-251/06:37:24	65	NOTE: Loss Of X-Band Signal		
316	MGS	02-251/06:37:25		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/06:15:22
317	MGS	02-251/06:37:26		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/06:15:23
318	MGS	02-251/06:39:42		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/06:17:39
319	MGS	02-251/06:39:57	65	Range Modulation Off		
320	MGS	02-251/06:41:56	65	Transmitter Off		
321	MGS	02-251/06:47:12		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/06:25:09
322	MGS	02-251/06:53:04		Select Automatic HGA control mode	SAHACE	02-251/06:31:01
323	MGS	02-251/06:53:05		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/06:31:02
324	MGS	02-251/06:53:06		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/06:31:03

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
325	MGS	02-251/06:53:07		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART1	STSSRC	02-251/06:31:04
326	MGS	02-251/06:53:08		SSR 2B Data Enable	CSD2BE	02-251/06:31:05
327	MGS	02-251/06:53:08		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=1, BR=21333		02-251/06:31:05
328	MGS	02-251/06:53:13	65	Acquisition Of X-Band Signal		
329	MGS	02-251/06:53:13	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
330	MGS	02-251/07:11:01		NOTE: Apoapsis 15651 -		02-251/06:48:58
331	MGS	02-251/07:18:21		SSR 2B Data Disable	CSD2BX	02-251/06:56:18
332	MGS	02-251/07:18:21		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=1, BITS=32277333, DUR=00:25:13		02-251/06:56:18
333	MGS	02-251/07:18:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/06:56:19
334	MGS	02-251/07:18:22	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
335	MGS	02-251/07:18:55		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/06:56:53
336	MGS	02-251/07:23:56		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/07:01:53
337	MGS	02-251/07:23:56		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/07:01:53
338	MGS	02-251/07:23:56	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
339	MGS	02-251/07:23:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/07:01:54
340	MGS	02-251/07:23:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/07:01:54
341	MGS	02-251/07:23:57	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
342	MGS	02-251/07:23:57	65	NOTE: Carrier Only -- No Telemetry Modulation		
343	MGS	02-251/07:27:05		NOTE: Enter Planetary Atmosphere 15651		02-251/07:05:02
344	MGS	02-251/07:29:28		NOTE: Start Block (SSRMGR)		02-251/07:07:25
345	MGS	02-251/07:29:28		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART3	STSSRC	02-251/07:07:25
346	MGS	02-251/07:29:29		SSR 1A Data Enable	CSD1AE	02-251/07:07:26
347	MGS	02-251/07:29:29		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-251/07:07:26
348	MGS	02-251/07:29:47		NOTE: Enter Earth Occultation 15651		02-251/07:07:44
349	MGS	02-251/07:29:47	65	NOTE: Loss Of X-Band Signal		
350	MGS	02-251/07:30:06	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
351	MGS	02-251/07:30:17		NOTE: Enter Solar Eclipse 15651		02-251/07:08:14
352	MGS	02-251/07:32:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/07:09:57
353	MGS	02-251/07:32:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/07:09:57
354	MGS	02-251/07:32:00		NOTE: End fixed Sub-Reflector for Radio Science		02-251/07:09:58
355	MGS	02-251/07:32:01		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/07:09:58
356	MGS	02-251/07:32:01		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/07:09:58
357	MGS	02-251/07:32:02		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/07:09:59
358	MGS	02-251/07:32:04		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/07:10:01
359	MGS	02-251/07:32:05		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/07:10:02
360	MGS	02-251/07:35:24		Disable A frame offset	SAAFOX	02-251/07:13:21
361	MGS	02-251/07:35:25		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/07:13:22
362	MGS	02-251/07:35:35		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/07:13:32
363	MGS	02-251/07:36:04	65	NOTE: Transmitter Off in 15 minutes		
364	MGS	02-251/07:38:24		: TRUE	mnadir	02-251/07:16:21
365	MGS	02-251/07:41:35		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/07:19:32
366	MGS	02-251/07:41:36		NOTE: End Block (MAP_PB_BETA_SUP)		02-251/07:19:33
367	MGS	02-251/07:45:29		SSR 1B Data Disable	CSD1BX	02-251/07:23:26
368	MGS	02-251/07:45:29		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=32176000, DUR=02:14:04		02-251/07:23:26
369	MGS	02-251/07:45:30		NOTE: End Block (SSRMGR)		02-251/07:23:27
370	MGS	02-251/07:51:04	65	Transmitter Off		
371	MGS	02-251/08:00:54		Enable A frame offset	SAAFOE	02-251/07:38:51
372	MGS	02-251/08:00:55		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/07:38:52
373	MGS	02-251/08:00:56		: FALSE	mnadir	02-251/07:38:53
374	MGS	02-251/08:06:42	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
375	MGS	02-251/08:08:42	65	Range Modulation On: SUP=3.0dB		
376	MGS	02-251/08:09:00		NOTE: Exit Solar Eclipse 15651		02-251/07:46:57
377	MGS	02-251/08:09:31		NOTE: Exit Earth Occultation 15651		02-251/07:47:28
378	MGS	02-251/08:09:42	65	Begin Ranging Acquisition		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
379	MGS	02-251/08:09:45		NOTE: Periapsis 15652 ----------		02-251/07:47:42
380	MGS	02-251/08:12:27		NOTE: Exit Planetary Atmosphere 15651		02-251/07:50:25
381	MGS	02-251/08:14:08		NOTE: Start Block (MAP_PB_BETA_SUP)		02-251/07:52:05
382	MGS	02-251/08:14:08		Select Automatic HGA control mode	SAHACE	02-251/07:52:05
383	MGS	02-251/08:14:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/07:52:06
384	MGS	02-251/08:14:10		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/07:52:07
385	MGS	02-251/08:14:11		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART2	STSSRC	02-251/07:52:08
386	MGS	02-251/08:14:12		SSR 2A Data Enable	CSD2AE	02-251/07:52:09
387	MGS	02-251/08:14:12		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=2, BR=21333		02-251/07:52:09
388	MGS	02-251/08:14:17	65	Acquisition Of X-Band Signal		
389	MGS	02-251/08:14:17	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
390	MGS	02-251/08:24:39	65	NOTE: Transmitter Off in 15 minutes		
391	MGS	02-251/08:35:08		SSR 2A Data Disable	CSD2AX	02-251/08:13:05
392	MGS	02-251/08:35:08		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=2, BITS=26794666, DUR=00:20:56		02-251/08:13:05
393	MGS	02-251/08:35:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/08:13:06
394	MGS	02-251/08:35:09	65	NOTE: Loss Of X-Band Signal		
395	MGS	02-251/08:35:10		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/08:13:07
396	MGS	02-251/08:35:11		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/08:13:08
397	MGS	02-251/08:37:27		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/08:15:24
398	MGS	02-251/08:37:39	65	Range Modulation Off		
399	MGS	02-251/08:39:39	65	Transmitter Off		
400	MGS	02-251/08:44:57		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/08:22:54
401	MGS	02-251/08:50:49		Select Automatic HGA control mode	SAHACE	02-251/08:28:46
402	MGS	02-251/08:50:50		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/08:28:47
403	MGS	02-251/08:50:51		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/08:28:48
404	MGS	02-251/08:50:52		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART2	STSSRC	02-251/08:28:49
405	MGS	02-251/08:50:53		SSR 2B Data Enable	CSD2BE	02-251/08:28:50
406	MGS	02-251/08:50:53		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=2, BR=21333		02-251/08:28:50
407	MGS	02-251/08:50:58	65	Acquisition Of X-Band Signal		
408	MGS	02-251/08:50:58	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
409	MGS	02-251/09:05:06		NOTE: Start Block (SSRMGR)		02-251/08:43:03
410	MGS	02-251/09:05:06		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART3	STSSRC	02-251/08:43:03
411	MGS	02-251/09:05:07		SSR 1B Data Enable	CSD1BE	02-251/08:43:04
412	MGS	02-251/09:05:07		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-251/08:43:04
413	MGS	02-251/09:08:29		NOTE: Apoapsis 15652 -		02-251/08:46:26
414	MGS	02-251/09:16:06		SSR 2B Data Disable	CSD2BX	02-251/08:54:03
415	MGS	02-251/09:16:06		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=2, BITS=32277333, DUR=00:25:13		02-251/08:54:03
416	MGS	02-251/09:16:07		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/08:54:04
417	MGS	02-251/09:16:07	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
418	MGS	02-251/09:16:40		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/08:54:38
419	MGS	02-251/09:21:08		SSR 1A Data Disable	CSD1AX	02-251/08:59:05
420	MGS	02-251/09:21:08		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=3, BITS=26796000, DUR=01:51:39		02-251/08:59:05
421	MGS	02-251/09:21:09		NOTE: End Block (SSRMGR)		02-251/08:59:06
422	MGS	02-251/09:21:41		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/08:59:38
423	MGS	02-251/09:21:41		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/08:59:38
424	MGS	02-251/09:21:41	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
425	MGS	02-251/09:21:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/08:59:39
426	MGS	02-251/09:21:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/08:59:39
427	MGS	02-251/09:21:42	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
428	MGS	02-251/09:21:42	65	NOTE: Carrier Only -- No Telemetry Modulation		
429	MGS	02-251/09:24:47		NOTE: Enter Planetary Atmosphere 15652		02-251/09:02:44
430	MGS	02-251/09:27:30		NOTE: Enter Earth Occultation 15652		02-251/09:05:27
431	MGS	02-251/09:27:30	65	NOTE: Loss Of X-Band Signal		
432	MGS	02-251/09:27:49	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
433	MGS	02-251/09:27:59		NOTE: Enter Solar Eclipse 15652		02-251/09:05:57
434	MGS	02-251/09:29:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/09:07:42
435	MGS	02-251/09:29:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/09:07:42
436	MGS	02-251/09:29:45		NOTE: End fixed Sub-Reflector for Radio Science		02-251/09:07:43
437	MGS	02-251/09:29:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/09:07:43
438	MGS	02-251/09:29:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/09:07:43
439	MGS	02-251/09:29:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/09:07:44
440	MGS	02-251/09:29:49		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/09:07:46
441	MGS	02-251/09:29:50		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/09:07:47
442	MGS	02-251/09:33:07		Disable A frame offset	SAAFOX	02-251/09:11:04
443	MGS	02-251/09:33:08		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/09:11:05
444	MGS	02-251/09:33:20		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/09:11:17
445	MGS	02-251/09:33:47	65	NOTE: Transmitter Off in 15 minutes		
446	MGS	02-251/09:36:07		: TRUE	mnadir	02-251/09:14:04
447	MGS	02-251/09:39:20		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/09:17:17
448	MGS	02-251/09:39:21		NOTE: End Block (MAP_PB_BETA_SUP)		02-251/09:17:18
449	MGS	02-251/09:48:47	65	Transmitter Off		
450	MGS	02-251/09:58:37		Enable A frame offset	SAAFOE	02-251/09:36:34
451	MGS	02-251/09:58:38		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/09:36:35
452	MGS	02-251/09:58:39		: FALSE	mnadir	02-251/09:36:36
453	MGS	02-251/10:04:25	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
454	MGS	02-251/10:06:25	65	Range Modulation On: SUP=3.0dB		
455	MGS	02-251/10:06:44		NOTE: Exit Solar Eclipse 15652		02-251/09:44:41
456	MGS	02-251/10:07:14		NOTE: Exit Earth Occultation 15652		02-251/09:45:11
457	MGS	02-251/10:07:25	65	Begin Ranging Acquisition		
458	MGS	02-251/10:07:29		NOTE: Periapsis 15653 ----------		02-251/09:45:26
459	MGS	02-251/10:10:11		NOTE: Exit Planetary Atmosphere 15652		02-251/09:48:08
460	MGS	02-251/10:11:51		NOTE: Start Block (MAP_PB_BETA_SUP)		02-251/09:49:48
461	MGS	02-251/10:11:51		Select Automatic HGA control mode	SAHACE	02-251/09:49:48
462	MGS	02-251/10:11:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/09:49:49
463	MGS	02-251/10:11:53		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/09:49:50
464	MGS	02-251/10:11:54		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART3	STSSRC	02-251/09:49:51
465	MGS	02-251/10:11:55		SSR 2A Data Enable	CSD2AE	02-251/09:49:52
466	MGS	02-251/10:11:55		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=3, BR=21333		02-251/09:49:52
467	MGS	02-251/10:12:00	65	Acquisition Of X-Band Signal		
468	MGS	02-251/10:12:00	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
469	MGS	02-251/10:22:19	65	NOTE: Transmitter Off in 15 minutes		
470	MGS	02-251/10:32:51		SSR 2A Data Disable	CSD2AX	02-251/10:10:48
471	MGS	02-251/10:32:51		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=3, BITS=26794666, DUR=00:20:56		02-251/10:10:48
472	MGS	02-251/10:32:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/10:10:49
473	MGS	02-251/10:32:52	65	NOTE: Loss Of X-Band Signal		
474	MGS	02-251/10:32:53		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/10:10:50
475	MGS	02-251/10:32:54		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/10:10:51
476	MGS	02-251/10:35:10		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/10:13:07
477	MGS	02-251/10:35:20	65	Range Modulation Off		
478	MGS	02-251/10:37:19	65	Transmitter Off		
479	MGS	02-251/10:42:40		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/10:20:37
480	MGS	02-251/10:48:32		Select Automatic HGA control mode	SAHACE	02-251/10:26:29
481	MGS	02-251/10:48:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/10:26:30
482	MGS	02-251/10:48:34		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/10:26:31
483	MGS	02-251/10:48:35		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART3	STSSRC	02-251/10:26:32
484	MGS	02-251/10:48:36		SSR 2B Data Enable	CSD2BE	02-251/10:26:33
485	MGS	02-251/10:48:36		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=3, BR=21333		02-251/10:26:33
486	MGS	02-251/10:48:41	65	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
487	MGS	02-251/10:48:41	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
488	MGS	02-251/11:03:11		NOTE: Start Block (SSRMGR)		02-251/10:41:08
489	MGS	02-251/11:03:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART4	STSSRC	02-251/10:41:08
490	MGS	02-251/11:03:12		SSR 1A Data Enable	CSD1AE	02-251/10:41:09
491	MGS	02-251/11:03:12		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-251/10:41:09
492	MGS	02-251/11:06:18		NOTE: Apoapsis 15653 -		02-251/10:44:15
493	MGS	02-251/11:13:49		SSR 2B Data Disable	CSD2BX	02-251/10:51:46
494	MGS	02-251/11:13:49		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=3, BITS=32277333, DUR=00:25:13		02-251/10:51:46
495	MGS	02-251/11:13:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/10:51:47
496	MGS	02-251/11:13:50	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
497	MGS	02-251/11:14:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/10:52:21
498	MGS	02-251/11:19:11		SSR 1B Data Disable	CSD1BX	02-251/10:57:08
499	MGS	02-251/11:19:11		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=3, BITS=32176000, DUR=02:14:04		02-251/10:57:08
500	MGS	02-251/11:19:12		NOTE: End Block (SSRMGR)		02-251/10:57:09
501	MGS	02-251/11:19:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/10:57:21
502	MGS	02-251/11:19:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/10:57:21
503	MGS	02-251/11:19:24	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
504	MGS	02-251/11:19:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/10:57:22
505	MGS	02-251/11:19:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/10:57:22
506	MGS	02-251/11:19:25	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
507	MGS	02-251/11:19:25	65	NOTE: Carrier Only -- No Telemetry Modulation		
508	MGS	02-251/11:22:27		NOTE: Enter Planetary Atmosphere 15653		02-251/11:00:24
509	MGS	02-251/11:25:10		NOTE: Enter Earth Occultation 15653		02-251/11:03:07
510	MGS	02-251/11:25:10	65	NOTE: Loss Of X-Band Signal		
511	MGS	02-251/11:25:30	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
512	MGS	02-251/11:25:40		NOTE: Enter Solar Eclipse 15653		02-251/11:03:37
513	MGS	02-251/11:27:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/11:05:25
514	MGS	02-251/11:27:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/11:05:25
515	MGS	02-251/11:27:28		NOTE: End fixed Sub-Reflector for Radio Science		02-251/11:05:26
516	MGS	02-251/11:27:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/11:05:26
517	MGS	02-251/11:27:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/11:05:26
518	MGS	02-251/11:27:30		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/11:05:27
519	MGS	02-251/11:27:32		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/11:05:29
520	MGS	02-251/11:27:33		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/11:05:30
521	MGS	02-251/11:31:03		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/11:09:00
522	MGS	02-251/11:31:28	65	NOTE: Transmitter Off in 15 minutes		
523	MGS	02-251/11:37:03		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/11:15:00
524	MGS	02-251/11:37:04		NOTE: End Block (MAP_PB_BETA_SUP)		02-251/11:15:01
525	MGS	02-251/11:46:28	65	Transmitter Off		
526	MGS	02-251/12:02:06	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
527	MGS	02-251/12:04:06	65	Range Modulation On: SUP=3.0dB		
528	MGS	02-251/12:04:25		NOTE: Exit Solar Eclipse 15653		02-251/11:42:22
529	MGS	02-251/12:04:55		NOTE: Exit Earth Occultation 15653		02-251/11:42:52
530	MGS	02-251/12:05:06	65	Begin Ranging Acquisition		
531	MGS	02-251/12:05:09		NOTE: Periapsis 15654 ----------		02-251/11:43:06
532	MGS	02-251/12:07:52		NOTE: Exit Planetary Atmosphere 15653		02-251/11:45:49
533	MGS	02-251/12:09:32		NOTE: Start Block (MAP_PB_BETA_SUP)		02-251/11:47:29
534	MGS	02-251/12:09:32		Select Automatic HGA control mode	SAHACE	02-251/11:47:29
535	MGS	02-251/12:09:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/11:47:30
536	MGS	02-251/12:09:34		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/11:47:31
537	MGS	02-251/12:09:35		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART4	STSSRC	02-251/11:47:32
538	MGS	02-251/12:09:36		SSR 2A Data Enable	CSD2AE	02-251/11:47:33
539	MGS	02-251/12:09:36		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=4, BR=21333		02-251/11:47:33
540	MGS	02-251/12:09:41	65	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
541	MGS	02-251/12:09:41	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
542	MGS	02-251/12:19:59	65	NOTE: Transmitter Off in 15 minutes		
543	MGS	02-251/12:22:03		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-251/12:00:00
544	MGS	02-251/12:30:32		SSR 2A Data Disable	CSD2AX	02-251/12:08:29
545	MGS	02-251/12:30:32		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=4, BITS=26794666, DUR=00:20:56		02-251/12:08:29
546	MGS	02-251/12:30:33		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/12:08:30
547	MGS	02-251/12:30:33	65	NOTE: Loss Of X-Band Signal		
548	MGS	02-251/12:30:34		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/12:08:31
549	MGS	02-251/12:30:35		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/12:08:32
550	MGS	02-251/12:32:51		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/12:10:48
551	MGS	02-251/12:33:00	65	Range Modulation Off		
552	MGS	02-251/12:34:59	65	Transmitter Off		
553	MGS	02-251/12:38:49		NOTE: Start Block (SSRMGR)		02-251/12:16:46
554	MGS	02-251/12:38:49		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART4	STSSRC	02-251/12:16:46
555	MGS	02-251/12:38:50		SSR 1B Data Enable	CSD1BE	02-251/12:16:47
556	MGS	02-251/12:38:50		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-251/12:16:47
557	MGS	02-251/12:40:21		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/12:18:18
558	MGS	02-251/12:46:13		Select Automatic HGA control mode	SAHACE	02-251/12:24:10
559	MGS	02-251/12:46:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/12:24:11
560	MGS	02-251/12:46:15		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/12:24:12
561	MGS	02-251/12:46:16		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART4	STSSRC	02-251/12:24:13
562	MGS	02-251/12:46:17		SSR 2B Data Enable	CSD2BE	02-251/12:24:14
563	MGS	02-251/12:46:17		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=4, BR=21333		02-251/12:24:14
564	MGS	02-251/12:46:22	65	Acquisition Of X-Band Signal		
565	MGS	02-251/12:46:22	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
566	MGS	02-251/12:54:51		SSR 1A Data Disable	CSD1AX	02-251/12:32:48
567	MGS	02-251/12:54:51		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=4, BITS=26796000, DUR=01:51:39		02-251/12:32:48
568	MGS	02-251/12:54:52		NOTE: End Block (SSRMGR)		02-251/12:32:49
569	MGS	02-251/13:04:01		NOTE: Apoapsis 15654 -		02-251/12:41:58
570	MGS	02-251/13:11:30		SSR 2B Data Disable	CSD2BX	02-251/12:49:27
571	MGS	02-251/13:11:30		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=4, BITS=32277333, DUR=00:25:13		02-251/12:49:27
572	MGS	02-251/13:11:31		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/12:49:28
573	MGS	02-251/13:11:31	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
574	MGS	02-251/13:12:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/12:50:02
575	MGS	02-251/13:17:05		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/12:55:02
576	MGS	02-251/13:17:05		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/12:55:02
577	MGS	02-251/13:17:05	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
578	MGS	02-251/13:17:06		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/12:55:03
579	MGS	02-251/13:17:06		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/12:55:03
580	MGS	02-251/13:17:06	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
581	MGS	02-251/13:17:06	65	NOTE: Carrier Only -- No Telemetry Modulation		
582	MGS	02-251/13:20:07		NOTE: Enter Planetary Atmosphere 15654		02-251/12:58:04
583	MGS	02-251/13:22:50		NOTE: Enter Earth Occultation 15654		02-251/13:00:47
584	MGS	02-251/13:22:50	65	NOTE: Loss Of X-Band Signal		
585	MGS	02-251/13:23:09	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
586	MGS	02-251/13:23:20		NOTE: Enter Solar Eclipse 15654		02-251/13:01:17
587	MGS	02-251/13:25:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/13:03:06
588	MGS	02-251/13:25:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/13:03:06
589	MGS	02-251/13:25:09		NOTE: End fixed Sub-Reflector for Radio Science		02-251/13:03:07
590	MGS	02-251/13:25:10		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/13:03:07
591	MGS	02-251/13:25:10		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/13:03:07
592	MGS	02-251/13:25:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/13:03:08
593	MGS	02-251/13:25:13		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/13:03:10
594	MGS	02-251/13:25:14		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/13:03:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
595	MGS	02-251/13:28:27		Disable A frame offset	SAAFOX	02-251/13:06:25
596	MGS	02-251/13:28:28		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/13:06:26
597	MGS	02-251/13:28:43		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/13:06:41
598	MGS	02-251/13:29:08	65	NOTE: Transmitter Off in 15 minutes		
599	MGS	02-251/13:31:27		: TRUE	mnadir	02-251/13:09:25
600	MGS	02-251/13:34:43		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/13:12:41
601	MGS	02-251/13:34:44		NOTE: End Block (MAP_PB_BETA_SUP)		02-251/13:12:42
602	MGS	02-251/13:44:08	65	Transmitter Off		
603	MGS	02-251/13:53:57		Enable A frame offset	SAAFOE	02-251/13:31:55
604	MGS	02-251/13:53:58		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/13:31:56
605	MGS	02-251/13:53:59		: FALSE	mnadir	02-251/13:31:57
606	MGS	02-251/13:59:45	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
607	MGS	02-251/14:01:45	65	Range Modulation On: SUP=3.0dB		
608	MGS	02-251/14:02:04		NOTE: Exit Solar Eclipse 15654		02-251/13:40:01
609	MGS	02-251/14:02:32		NOTE: Periapsis 15655 ----------		02-251/13:40:29
610	MGS	02-251/14:02:34		NOTE: Exit Earth Occultation 15654		02-251/13:40:31
611	MGS	02-251/14:02:45	65	Begin Ranging Acquisition		
612	MGS	02-251/14:05:31		NOTE: Exit Planetary Atmosphere 15654		02-251/13:43:28
613	MGS	02-251/14:07:11		NOTE: Start Block (MAP_PB_BETA_SUP)		02-251/13:45:09
614	MGS	02-251/14:07:11		Select Automatic HGA control mode	SAHACE	02-251/13:45:09
615	MGS	02-251/14:07:12		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/13:45:10
616	MGS	02-251/14:07:13		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/13:45:11
617	MGS	02-251/14:07:14		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART5	STSSRC	02-251/13:45:12
618	MGS	02-251/14:07:15		SSR 2A Data Enable	CSD2AE	02-251/13:45:13
619	MGS	02-251/14:07:15		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=5, BR=21333		02-251/13:45:13
620	MGS	02-251/14:07:20	65	Acquisition Of X-Band Signal		
621	MGS	02-251/14:07:20	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
622	MGS	02-251/14:17:40	65	NOTE: Transmitter Off in 15 minutes		
623	MGS	02-251/14:28:11		SSR 2A Data Disable	CSD2AX	02-251/14:06:09
624	MGS	02-251/14:28:11		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=5, BITS=26794666, DUR=00:20:56		02-251/14:06:09
625	MGS	02-251/14:28:12		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/14:06:10
626	MGS	02-251/14:28:12	65	NOTE: Loss Of X-Band Signal		
627	MGS	02-251/14:28:13		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/14:06:11
628	MGS	02-251/14:28:14		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/14:06:12
629	MGS	02-251/14:30:30		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/14:08:28
630	MGS	02-251/14:30:41	65	Range Modulation Off		
631	MGS	02-251/14:32:40	65	Transmitter Off		
632	MGS	02-251/14:36:53		NOTE: Start Block (SSRMGR)		02-251/14:14:51
633	MGS	02-251/14:36:53		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART5	STSSRC	02-251/14:14:51
634	MGS	02-251/14:36:54		SSR 1A Data Enable	CSD1AE	02-251/14:14:52
635	MGS	02-251/14:36:54		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-251/14:14:52
636	MGS	02-251/14:38:00		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/14:15:58
637	MGS	02-251/14:43:52		Select Automatic HGA control mode	SAHACE	02-251/14:21:50
638	MGS	02-251/14:43:53		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/14:21:51
639	MGS	02-251/14:43:54		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/14:21:52
640	MGS	02-251/14:43:55		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART5	STSSRC	02-251/14:21:53
641	MGS	02-251/14:43:56		SSR 2B Data Enable	CSD2BE	02-251/14:21:54
642	MGS	02-251/14:43:56		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=5, BR=21333		02-251/14:21:54
643	MGS	02-251/14:44:01	65	Acquisition Of X-Band Signal		
644	MGS	02-251/14:44:01	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
645	MGS	02-251/14:52:53		SSR 1B Data Disable	CSD1BX	02-251/14:30:51
646	MGS	02-251/14:52:53		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=4, BITS=32176000, DUR=02:14:04		02-251/14:30:51
647	MGS	02-251/14:52:54		NOTE: End Block (SSRMGR)		02-251/14:30:52
648	MGS	02-251/15:01:23		NOTE: Apoapsis 15655 -		02-251/14:39:21

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
649	MGS	02-251/15:09:09		SSR 2B Data Disable	CSD2BX	02-251/14:47:07
650	MGS	02-251/15:09:09		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=5, BITS=32277333, DUR=00:25:13		02-251/14:47:07
651	MGS	02-251/15:09:10		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/14:47:08
652	MGS	02-251/15:09:10	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
653	MGS	02-251/15:09:44		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/14:47:42
654	MGS	02-251/15:14:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/14:52:42
655	MGS	02-251/15:14:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/14:52:42
656	MGS	02-251/15:14:44	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
657	MGS	02-251/15:14:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/14:52:43
658	MGS	02-251/15:14:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/14:52:43
659	MGS	02-251/15:14:45	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
660	MGS	02-251/15:14:45	65	NOTE: Carrier Only -- No Telemetry Modulation		
661	MGS	02-251/15:17:48		NOTE: Enter Planetary Atmosphere 15655		02-251/14:55:45
662	MGS	02-251/15:20:31		NOTE: Enter Earth Occultation 15655		02-251/14:58:28
663	MGS	02-251/15:20:31	65	NOTE: Loss Of X-Band Signal		
664	MGS	02-251/15:20:50	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
665	MGS	02-251/15:21:01		NOTE: Enter Solar Eclipse 15655		02-251/14:58:58
666	MGS	02-251/15:22:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/15:00:46
667	MGS	02-251/15:22:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/15:00:46
668	MGS	02-251/15:22:49		NOTE: End fixed Sub-Reflector for Radio Science		02-251/15:00:47
669	MGS	02-251/15:22:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/15:00:47
670	MGS	02-251/15:22:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/15:00:47
671	MGS	02-251/15:22:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/15:00:48
672	MGS	02-251/15:22:52		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/15:00:50
673	MGS	02-251/15:22:53		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/15:00:51
674	MGS	02-251/15:26:07		Disable A frame offset	SAAFOX	02-251/15:04:05
675	MGS	02-251/15:26:08		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/15:04:06
676	MGS	02-251/15:26:23		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/15:04:21
677	MGS	02-251/15:26:48	65	NOTE: Transmitter Off in 15 minutes		
678	MGS	02-251/15:29:07		: TRUE	mnadir	02-251/15:07:05
679	MGS	02-251/15:32:23		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/15:10:21
680	MGS	02-251/15:32:24		NOTE: End Block (MAP_PB_BETA_SUP)		02-251/15:10:22
681	MGS	02-251/15:41:48	65	Transmitter Off		
682	MGS	02-251/15:51:37		Enable A frame offset	SAAFOE	02-251/15:29:35
683	MGS	02-251/15:51:38		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/15:29:36
684	MGS	02-251/15:51:39		: FALSE	mnadir	02-251/15:29:37
685	MGS	02-251/15:57:26	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
686	MGS	02-251/15:59:26	65	Range Modulation On: SUP=3.0dB		
687	MGS	02-251/15:59:44		NOTE: Exit Solar Eclipse 15655		02-251/15:37:41
688	MGS	02-251/16:00:06		NOTE: Periapsis 15656 ----------		02-251/15:38:03
689	MGS	02-251/16:00:14		NOTE: Exit Earth Occultation 15655		02-251/15:38:11
690	MGS	02-251/16:00:26	65	Begin Ranging Acquisition		
691	MGS	02-251/16:03:11		NOTE: Exit Planetary Atmosphere 15655		02-251/15:41:08
692	MGS	02-251/16:04:53		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-251/15:42:51
693	MGS	02-251/16:04:53		Select Automatic HGA control mode	SAHACE	02-251/15:42:51
694	MGS	02-251/16:04:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/15:42:52
695	MGS	02-251/16:05:02	65	Acquisition Of X-Band Signal		
696	MGS	02-251/16:05:02	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
697	MGS	02-251/16:06:55		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/15:44:53
698	MGS	02-251/16:06:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/15:44:53
699	MGS	02-251/16:07:20		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/15:45:18
700	MGS	02-251/16:07:22		NOTE: Start Block (SSRMGR)		02-251/15:45:20
701	MGS	02-251/16:07:22		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-251/15:45:20
702	MGS	02-251/16:07:22		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-251/15:45:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
703	MGS	02-251/16:07:23		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/15:45:21
704	MGS	02-251/16:07:24		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART6	STSSRC	02-251/15:45:22
705	MGS	02-251/16:07:25		SSR 2A Data Enable	CSD2AE	02-251/15:45:23
706	MGS	02-251/16:07:25		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=6, BR=21333		02-251/15:45:23
707	MGS	02-251/16:07:25	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
708	MGS	02-251/16:12:31		NOTE: Start Block (SSRMGR)		02-251/15:50:29
709	MGS	02-251/16:12:31		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART5	STSSRC	02-251/15:50:29
710	MGS	02-251/16:12:32		SSR 1B Data Enable	CSD1BE	02-251/15:50:30
711	MGS	02-251/16:12:32		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-251/15:50:30
712	MGS	02-251/16:15:23	65	NOTE: Transmitter Off in 15 minutes		
713	MGS	02-251/16:25:51		SSR 2A Data Disable	CSD2AX	02-251/16:03:49
714	MGS	02-251/16:25:51		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-251/16:03:49
715	MGS	02-251/16:25:51		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:03:49
716	MGS	02-251/16:25:51		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=5, BITS=3196000, DUR=00:13:19		02-251/16:03:49
717	MGS	02-251/16:25:51		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-251/16:03:49
718	MGS	02-251/16:25:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/16:03:49
719	MGS	02-251/16:25:51		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:03:49
720	MGS	02-251/16:25:51		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=5, BITS=3196000, DUR=00:00:00		02-251/16:03:49
721	MGS	02-251/16:25:51		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-251/16:03:49
722	MGS	02-251/16:25:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/16:03:49
723	MGS	02-251/16:25:51	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
724	MGS	02-251/16:25:52		NOTE: End Block (SSRMGR)		02-251/16:03:50
725	MGS	02-251/16:25:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/16:03:50
726	MGS	02-251/16:25:52	65	NOTE: Loss Of X-Band Signal		
727	MGS	02-251/16:25:53		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-251/16:03:51
728	MGS	02-251/16:25:54		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/16:03:52
729	MGS	02-251/16:28:10		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-251/16:06:08
730	MGS	02-251/16:28:24	65	Range Modulation Off		
731	MGS	02-251/16:28:33		SSR 1A Data Disable	CSD1AX	02-251/16:06:31
732	MGS	02-251/16:28:33		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=5, BITS=26796000, DUR=01:51:39		02-251/16:06:31
733	MGS	02-251/16:28:34		NOTE: End Block (SSRMGR)		02-251/16:06:32
734	MGS	02-251/16:30:23	65	Transmitter Off		
735	MGS	02-251/16:35:40		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-251/16:13:38
736	MGS	02-251/16:41:32		Select Automatic HGA control mode	SAHACE	02-251/16:19:30
737	MGS	02-251/16:41:33		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-251/16:19:31
738	MGS	02-251/16:41:41	65	Acquisition Of X-Band Signal		
739	MGS	02-251/16:41:41	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
740	MGS	02-251/16:43:34		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:21:32
741	MGS	02-251/16:43:34		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=5, BITS=7448000, DUR=00:17:43		02-251/16:21:32
742	MGS	02-251/16:43:34		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-251/16:21:32
743	MGS	02-251/16:43:34		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/16:21:32
744	MGS	02-251/16:43:54		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:21:52
745	MGS	02-251/16:43:54		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=5, BITS=7528000, DUR=00:00:20		02-251/16:21:52
746	MGS	02-251/16:43:54		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-251/16:21:52
747	MGS	02-251/16:43:56		NOTE: Start Block (SSRMGR)		02-251/16:21:54
748	MGS	02-251/16:43:56		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-251/16:21:54
749	MGS	02-251/16:43:56		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-251/16:21:54
750	MGS	02-251/16:43:57		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-251/16:21:55
751	MGS	02-251/16:43:57		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, ENBSCR, PART1	STSSRC	02-251/16:21:55
752	MGS	02-251/16:43:58		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART6	STSSRC	02-251/16:21:56
753	MGS	02-251/16:43:59		SSR 2B Data Enable	CSD2BE	02-251/16:21:57
754	MGS	02-251/16:43:59		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=6, BR=21333		02-251/16:21:57
755	MGS	02-251/16:43:59	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
756	MGS	02-251/16:59:07		NOTE: Apoapsis 15656 -		02-251/16:37:05

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
757	MGS	02-251/17:02:25		SSR 2B Data Disable	CSD2BX	02-251/16:40:23
758	MGS	02-251/17:02:25		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-251/16:40:23
759	MGS	02-251/17:02:25		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:40:23
760	MGS	02-251/17:02:25		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/16:40:23
761	MGS	02-251/17:02:25	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
762	MGS	02-251/17:02:26		NOTE: End Block (SSRMGR)		02-251/16:40:24
763	MGS	02-251/17:07:19		NOTE: Begin fixed Sub-Reflector for Radio Science		02-251/16:45:17
764	MGS	02-251/17:12:15		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-251/16:50:13
765	MGS	02-251/17:12:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-251/16:50:13
766	MGS	02-251/17:12:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-251/16:50:17
767	MGS	02-251/17:12:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-251/16:50:17
768	MGS	02-251/17:12:19	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
769	MGS	02-251/17:12:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-251/16:50:18
770	MGS	02-251/17:12:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-251/16:50:18
771	MGS	02-251/17:12:20	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
772	MGS	02-251/17:12:20	65	NOTE: Carrier Only -- No Telemetry Modulation		
773	MGS	02-251/17:15:31		NOTE: Enter Planetary Atmosphere 15656		02-251/16:53:28
774	MGS	02-251/17:18:14		NOTE: Enter Earth Occultation 15656		02-251/16:56:11
775	MGS	02-251/17:18:14	65	NOTE: Loss Of X-Band Signal		
776	MGS	02-251/17:18:44		NOTE: Enter Solar Eclipse 15656		02-251/16:56:42
777	MGS	02-251/17:20:00	65	End Tracking		
778	MGS	02-251/17:20:23		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-251/16:58:21
779	MGS	02-251/17:20:23		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-251/16:58:21
780	MGS	02-251/17:20:24		NOTE: End fixed Sub-Reflector for Radio Science		02-251/16:58:22
781	MGS	02-251/17:20:24		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-251/16:58:22
782	MGS	02-251/17:20:24		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-251/16:58:22
783	MGS	02-251/17:20:24		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-251/16:58:22
784	MGS	02-251/17:20:25		Turn off the MOT Exciter and RPA beam	STRPAF	02-251/16:58:23
785	MGS	02-251/17:20:25		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-251/16:58:23
786	MGS	02-251/17:23:55		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-251/17:01:53
787	MGS	02-251/17:29:55		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-251/17:07:53
788	MGS	02-251/17:29:56		NOTE: End Block (MAP_RT_BETA_SUP)		02-251/17:07:54
789	MGS	02-251/17:35:00	65	End Post-Cal		
790	MGS	02-251/17:57:28		NOTE: Exit Solar Eclipse 15656		02-251/17:35:25
791	MGS	02-251/17:57:58		NOTE: Exit Earth Occultation 15656		02-251/17:35:55
792	MGS	02-251/17:58:12		NOTE: Periapsis 15657 ----------		02-251/17:36:10
793	MGS	02-251/18:00:54		NOTE: Exit Planetary Atmosphere 15656		02-251/17:38:52
794	MGS	02-251/18:10:36		NOTE: Start Block (SSRMGR)		02-251/17:48:34
795	MGS	02-251/18:10:36		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART6	STSSRC	02-251/17:48:34
796	MGS	02-251/18:10:37		SSR 1A Data Enable	CSD1AE	02-251/17:48:35
797	MGS	02-251/18:10:37		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-251/17:48:35
798	MGS	02-251/18:26:36		SSR 1B Data Disable	CSD1BX	02-251/18:04:34
799	MGS	02-251/18:26:36		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=5, BITS=32176000, DUR=02:14:04		02-251/18:04:34
800	MGS	02-251/18:26:37		NOTE: End Block (SSRMGR)		02-251/18:04:35
801	MGS	02-251/18:57:23		NOTE: Apoapsis 15657 -		02-251/18:35:21
802	MGS	02-251/19:13:16		NOTE: Enter Planetary Atmosphere 15657		02-251/18:51:13
803	MGS	02-251/19:15:59		NOTE: Enter Earth Occultation 15657		02-251/18:53:56
804	MGS	02-251/19:16:29		NOTE: Enter Solar Eclipse 15657		02-251/18:54:27
805	MGS	02-251/19:21:36		Disable A frame offset	SAAFOX	02-251/18:59:34
806	MGS	02-251/19:21:37		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/18:59:35
807	MGS	02-251/19:24:36		: TRUE	mnadir	02-251/19:02:34
808	MGS	02-251/19:32:54		NOTE: Start Block (SSRMGR)		02-251/19:10:52
809	MGS	02-251/19:32:54		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART6	STSSRC	02-251/19:10:52
810	MGS	02-251/19:32:55		SSR 1B Data Enable	CSD1BE	02-251/19:10:53

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
811	MGS	02-251/19:32:55		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-251/19:10:53
812	MGS	02-251/19:47:06		Enable A frame offset	SAAFOE	02-251/19:25:04
813	MGS	02-251/19:47:07		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/19:25:05
814	MGS	02-251/19:47:08		: FALSE	mnadir	02-251/19:25:06
815	MGS	02-251/19:48:56		SSR 1A Data Disable	CSD1AX	02-251/19:26:54
816	MGS	02-251/19:48:56		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-251/19:26:54
817	MGS	02-251/19:48:57		NOTE: End Block (SSRMGR)		02-251/19:26:55
818	MGS	02-251/19:55:13		NOTE: Exit Solar Eclipse 15657		02-251/19:33:11
819	MGS	02-251/19:55:43		NOTE: Exit Earth Occultation 15657		02-251/19:33:41
820	MGS	02-251/19:56:22		NOTE: Periapsis 15658 ----------		02-251/19:34:19
821	MGS	02-251/19:58:40		NOTE: Exit Planetary Atmosphere 15657		02-251/19:36:37
822	MGS	02-251/20:05:54		Loads ISH control parameters block (slew’rate, slew’vector, quat’i’from’t): , , ,	SALICP	02-251/19:43:52
823	MGS	02-251/20:05:56		Disables star processing	SASTRX	02-251/19:43:54
824	MGS	02-251/20:06:00		NOTE: Start S/C Maneuver		02-251/19:43:58
825	MGS	02-251/20:06:00		Enter inertial slew-hold attitude control state, this state also used for maneuvers	SAGISH	02-251/19:43:58
826	MGS	02-251/20:06:01		Momentum unload disable	SAUNLX	02-251/19:43:59
827	MGS	02-251/20:18:00		NOTE: Start S/C Turn to Earth-Point		02-251/19:55:58
828	MGS	02-251/20:18:00		Enter csa-back-up attitude control state	SAGCSA	02-251/19:55:58
829	MGS	02-251/20:25:06		Enables star processing	SASTRE	02-251/20:03:04
830	MGS	02-251/20:25:08		Momentum unload enable	SAUNLE	02-251/20:03:06
831	MGS	02-251/20:28:00		NOTE: End S/C Maneuver		02-251/20:05:58
832	MGS	02-251/20:55:13		NOTE: Start Block (SSRMGR)		02-251/20:33:11
833	MGS	02-251/20:55:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART7	STSSRC	02-251/20:33:11
834	MGS	02-251/20:55:14		SSR 1A Data Enable	CSD1AE	02-251/20:33:12
835	MGS	02-251/20:55:14		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=7, BR=4000, SRC=SE_1A		02-251/20:33:12
836	MGS	02-251/20:55:30		NOTE: Apoapsis 15658 -		02-251/20:33:28
837	MGS	02-251/21:11:01		NOTE: Enter Planetary Atmosphere 15658		02-251/20:48:59
838	MGS	02-251/21:11:14		SSR 1B Data Disable	CSD1BX	02-251/20:49:12
839	MGS	02-251/21:11:14		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-251/20:49:12
840	MGS	02-251/21:11:15		NOTE: End Block (SSRMGR)		02-251/20:49:13
841	MGS	02-251/21:13:44		NOTE: Enter Earth Occultation 15658		02-251/20:51:41
842	MGS	02-251/21:14:15		NOTE: Enter Solar Eclipse 15658		02-251/20:52:12
843	MGS	02-251/21:19:21		Disable A frame offset	SAAFOX	02-251/20:57:19
844	MGS	02-251/21:19:22		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-251/20:57:20
845	MGS	02-251/21:22:21		: TRUE	mnadir	02-251/21:00:19
846	MGS	02-251/21:44:51		Enable A frame offset	SAAFOE	02-251/21:22:49
847	MGS	02-251/21:44:52		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-251/21:22:50
848	MGS	02-251/21:44:53		: FALSE	mnadir	02-251/21:22:51
849	MGS	02-251/21:52:59		NOTE: Exit Solar Eclipse 15658		02-251/21:30:56
850	MGS	02-251/21:53:29		NOTE: Exit Earth Occultation 15658		02-251/21:31:26
851	MGS	02-251/21:54:13		NOTE: Periapsis 15659 ----------		02-251/21:32:11
852	MGS	02-251/21:56:26		NOTE: Exit Planetary Atmosphere 15658		02-251/21:34:23
853	MGS	02-251/22:53:07		NOTE: Apoapsis 15659 -		02-251/22:31:05
854	MGS	02-251/23:08:43		NOTE: Enter Planetary Atmosphere 15659		02-251/22:46:41
855	MGS	02-251/23:11:26		NOTE: Enter Earth Occultation 15659		02-251/22:49:23
856	MGS	02-251/23:11:57		NOTE: Enter Solar Eclipse 15659		02-251/22:49:55
857	MGS	02-251/23:50:41		NOTE: Exit Solar Eclipse 15659		02-251/23:28:39
858	MGS	02-251/23:51:11		NOTE: Exit Earth Occultation 15659		02-251/23:29:09
859	MGS	02-251/23:51:37		NOTE: Periapsis 15660 ----------		02-251/23:29:35
860	MGS	02-251/23:54:08		NOTE: Exit Planetary Atmosphere 15659		02-251/23:32:06
861	MGS	02-252/00:00:00		Light Time: OWLT = 22:02, RTLT = 44:04		
862	MGS	02-252/00:08:45		Loads ISH control parameters block (slew’rate, slew’vector, quat’i’from’t): , , ,	SALICP	02-251/23:46:43
863	MGS	02-252/00:08:47		Disables star processing	SASTRX	02-251/23:46:45
864	MGS	02-252/00:08:51		NOTE: Start S/C Maneuver		02-251/23:46:49

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
865	MGS	02-252/00:08:51		Enter inertial slew-hold attitude control state, this state also used for maneuvers	SAGISH	02-251/23:46:49
866	MGS	02-252/00:08:52		Momentum unload disable	SAUNLX	02-251/23:46:50
867	MGS	02-252/00:20:51		NOTE: Start S/C Turn to Earth-Point		02-251/23:58:49
868	MGS	02-252/00:20:51		Enter csa-back-up attitude control state	SAGCSA	02-251/23:58:49
869	MGS	02-252/00:22:00		NOTE: Start Block (SSRMGR)		02-251/23:59:58
870	MGS	02-252/00:22:00		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, CLRALL, PART1	STSSRC	02-251/23:59:58
871	MGS	02-252/00:22:01		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART1	STSSRC	02-251/23:59:59
872	MGS	02-252/00:22:02		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-252/00:00:00
873	MGS	02-252/00:22:02		SSR 2A Data Enable	CSD2AE	02-252/00:00:00
874	MGS	02-252/00:22:02		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-252/00:00:00
875	MGS	02-252/00:27:57		Enables star processing	SASTRE	02-252/00:05:55
876	MGS	02-252/00:27:59		Momentum unload enable	SAUNLE	02-252/00:05:57
877	MGS	02-252/00:30:51		NOTE: End S/C Maneuver		02-252/00:08:49
878	MGS	02-252/00:40:02		SSR 1A Data Disable	CSD1AX	02-252/00:18:00
879	MGS	02-252/00:40:02		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=7, BITS=53952000, DUR=03:44:48		02-252/00:18:00
880	MGS	02-252/00:40:03		NOTE: End Block (SSRMGR)		02-252/00:18:01
881	MGS	02-252/00:50:26		NOTE: Apoapsis 15660 -		02-252/00:28:23
882	MGS	02-252/01:06:22		NOTE: Enter Planetary Atmosphere 15660		02-252/00:44:19
883	MGS	02-252/01:09:04		NOTE: Enter Earth Occultation 15660		02-252/00:47:02
884	MGS	02-252/01:09:36		NOTE: Enter Solar Eclipse 15660		02-252/00:47:33
885	MGS	02-252/01:14:42		Disable A frame offset	SAAFOX	02-252/00:52:40
886	MGS	02-252/01:14:43		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/00:52:41
887	MGS	02-252/01:17:42		: TRUE	mnadir	02-252/00:55:40
888	MGS	02-252/01:40:12		Enable A frame offset	SAAFOE	02-252/01:18:10
889	MGS	02-252/01:40:13		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/01:18:11
890	MGS	02-252/01:40:14		: FALSE	mnadir	02-252/01:18:12
891	MGS	02-252/01:45:00	45	Begin Pre-Cal		
892	MGS	02-252/01:45:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
893	MGS	02-252/01:45:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
894	MGS	02-252/01:45:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
895	MGS	02-252/01:45:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
896	MGS	02-252/01:45:00	45	At BOT: S/C Tlm Mode: BR=4000.0, FL=10000, SC=HIGH, MI=80.0		
897	MGS	02-252/01:45:00	45	Config: TGC: DEST=37		
898	MGS	02-252/01:45:00	45	Config: TGC: BAND=X, BR=4000.000000		
899	MGS	02-252/01:45:00	45	Config: FSS: CH=2, PRI_FL=10000		
900	MGS	02-252/01:45:00	45	Config: RSR		
901	MGS	02-252/01:45:00	45	Config: TXL		
902	MGS	02-252/01:45:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
903	MGS	02-252/01:45:00	45	Config: BVR		
904	MGS	02-252/01:45:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
905	MGS	02-252/01:45:00	45	Config: MDA: SMPL=0.1		
906	MGS	02-252/01:45:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
907	MGS	02-252/01:45:00	45	Config: SRA: HIGH=4, LOW=11, SERV=D		
908	MGS	02-252/01:45:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
909	MGS	02-252/01:45:00	45	Config: CMD		
910	MGS	02-252/01:48:20		NOTE: Exit Solar Eclipse 15660		02-252/01:26:17
911	MGS	02-252/01:48:50		NOTE: Exit Earth Occultation 15660		02-252/01:26:47
912	MGS	02-252/01:48:59		NOTE: Periapsis 15661 ----------		02-252/01:26:57
913	MGS	02-252/01:51:46		NOTE: Exit Planetary Atmosphere 15660		02-252/01:29:44
914	MGS	02-252/01:53:28		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/01:31:26
915	MGS	02-252/01:53:28		Select Automatic HGA control mode	SAHACE	02-252/01:31:26
916	MGS	02-252/01:53:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/01:31:27
917	MGS	02-252/01:55:30		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/01:33:28
918	MGS	02-252/01:55:30		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=1, BITS=22432000, DUR=01:33:28		02-252/01:33:28

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
919	MGS	02-252/01:55:30		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-252/01:33:28
920	MGS	02-252/01:55:30		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/01:33:28
921	MGS	02-252/01:57:39		NOTE: Start Block (SSRMGR)		02-252/01:35:37
922	MGS	02-252/01:57:39		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, CLRALL, PART1	STSSRC	02-252/01:35:37
923	MGS	02-252/01:57:40		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART1	STSSRC	02-252/01:35:38
924	MGS	02-252/01:57:41		SSR 2B Data Enable	CSD2BE	02-252/01:35:39
925	MGS	02-252/01:57:41		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-252/01:35:39
926	MGS	02-252/02:13:41		SSR 2A Data Disable	CSD2AX	02-252/01:51:39
927	MGS	02-252/02:13:41		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=1, BITS=26796000, DUR=01:51:39		02-252/01:51:39
928	MGS	02-252/02:13:42		NOTE: End Block (SSRMGR)		02-252/01:51:40
929	MGS	02-252/02:14:26		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/01:52:24
930	MGS	02-252/02:14:26		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=4020000, DUR=00:16:45		02-252/01:52:24
931	MGS	02-252/02:14:26		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-252/01:52:24
932	MGS	02-252/02:14:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/01:52:24
933	MGS	02-252/02:14:27		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/01:52:25
934	MGS	02-252/02:14:28		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/01:52:26
935	MGS	02-252/02:14:29		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/01:52:27
936	MGS	02-252/02:16:45		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/01:54:43
937	MGS	02-252/02:24:15		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/02:02:13
938	MGS	02-252/02:30:07		Select Automatic HGA control mode	SAHACE	02-252/02:08:05
939	MGS	02-252/02:30:08		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/02:08:06
940	MGS	02-252/02:32:09		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/02:10:07
941	MGS	02-252/02:32:09		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=8272000, DUR=00:17:43		02-252/02:10:07
942	MGS	02-252/02:32:09		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-252/02:10:07
943	MGS	02-252/02:32:09		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/02:10:07
944	MGS	02-252/02:45:00	45	Begin Tracking		
945	MGS	02-252/02:45:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
946	MGS	02-252/02:48:10		NOTE: Apoapsis 15661 -		02-252/02:26:07
947	MGS	02-252/02:55:49		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/02:33:47
948	MGS	02-252/03:00:45		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/02:38:43
949	MGS	02-252/03:00:45		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=15136000, DUR=00:28:36		02-252/02:38:43
950	MGS	02-252/03:00:45		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-252/02:38:43
951	MGS	02-252/03:00:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/02:38:43
952	MGS	02-252/03:00:49		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/02:38:47
953	MGS	02-252/03:00:49		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/02:38:47
954	MGS	02-252/03:00:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/02:38:48
955	MGS	02-252/03:00:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/02:38:48
956	MGS	02-252/03:00:50	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
957	MGS	02-252/03:00:50	45	NOTE: Carrier Only -- No Telemetry Modulation		
958	MGS	02-252/03:04:01		NOTE: Enter Planetary Atmosphere 15661		02-252/02:41:59
959	MGS	02-252/03:06:44		NOTE: Enter Earth Occultation 15661		02-252/02:44:41
960	MGS	02-252/03:06:44	45	NOTE: Loss Of X-Band Signal		
961	MGS	02-252/03:07:06	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
962	MGS	02-252/03:07:15		NOTE: Enter Solar Eclipse 15661		02-252/02:45:13
963	MGS	02-252/03:08:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/02:46:51
964	MGS	02-252/03:08:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/02:46:51
965	MGS	02-252/03:08:54		NOTE: End fixed Sub-Reflector for Radio Science		02-252/02:46:52
966	MGS	02-252/03:08:54		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/02:46:52
967	MGS	02-252/03:08:54		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/02:46:52
968	MGS	02-252/03:08:54		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/02:46:52
969	MGS	02-252/03:08:55		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/02:46:53
970	MGS	02-252/03:08:55		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/02:46:53
971	MGS	02-252/03:12:21		Disable A frame offset	SAAFOX	02-252/02:50:19
972	MGS	02-252/03:12:22		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/02:50:20

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
973	MGS	02-252/03:12:25		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/02:50:23
974	MGS	02-252/03:13:04	45	NOTE: Transmitter Off in 15 minutes		
975	MGS	02-252/03:15:21		: TRUE	mnadir	02-252/02:53:19
976	MGS	02-252/03:18:25		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/02:56:23
977	MGS	02-252/03:18:26		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/02:56:24
978	MGS	02-252/03:28:04	45	Transmitter Off		
979	MGS	02-252/03:37:51		Enable A frame offset	SAAFOE	02-252/03:15:49
980	MGS	02-252/03:37:52		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/03:15:50
981	MGS	02-252/03:37:53		: FALSE	mnadir	02-252/03:15:51
982	MGS	02-252/03:43:42	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
983	MGS	02-252/03:45:42	45	Range Modulation On: SUP=3.0dB		
984	MGS	02-252/03:45:59		NOTE: Exit Solar Eclipse 15661		02-252/03:23:56
985	MGS	02-252/03:46:29		NOTE: Exit Earth Occultation 15661		02-252/03:24:26
986	MGS	02-252/03:46:40		NOTE: Periapsis 15662 ----------		02-252/03:24:38
987	MGS	02-252/03:46:42	45	Begin Ranging Acquisition		
988	MGS	02-252/03:49:25		NOTE: Exit Planetary Atmosphere 15661		02-252/03:27:23
989	MGS	02-252/03:51:06		NOTE: Start Block (MAP_PB_BETA_SUP)		02-252/03:29:04
990	MGS	02-252/03:51:06		Select Automatic HGA control mode	SAHACE	02-252/03:29:04
991	MGS	02-252/03:51:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/03:29:05
992	MGS	02-252/03:51:08		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/03:29:06
993	MGS	02-252/03:51:09		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART1	STSSRC	02-252/03:29:07
994	MGS	02-252/03:51:10		SSR 1A Data Enable	CSD1AE	02-252/03:29:08
995	MGS	02-252/03:51:10		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=21333		02-252/03:29:08
996	MGS	02-252/03:51:15	45	Acquisition Of X-Band Signal		
997	MGS	02-252/03:51:15	45	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
998	MGS	02-252/03:55:44		NOTE: Start Block (SSRMGR)		02-252/03:33:42
999	MGS	02-252/03:55:44		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART2	STSSRC	02-252/03:33:42
1000	MGS	02-252/03:55:45		SSR 2A Data Enable	CSD2AE	02-252/03:33:43
1001	MGS	02-252/03:55:45		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-252/03:33:43
1002	MGS	02-252/04:01:38	45	NOTE: Transmitter Off in 15 minutes		
1003	MGS	02-252/04:11:45		SSR 2B Data Disable	CSD2BX	02-252/03:49:43
1004	MGS	02-252/04:11:45		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=1, BITS=32176000, DUR=02:14:04		02-252/03:49:43
1005	MGS	02-252/04:11:46		NOTE: End Block (SSRMGR)		02-252/03:49:44
1006	MGS	02-252/04:12:06		SSR 1A Data Disable	CSD1AX	02-252/03:50:04
1007	MGS	02-252/04:12:06		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=26794666, DUR=00:20:56		02-252/03:50:04
1008	MGS	02-252/04:12:07		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/03:50:05
1009	MGS	02-252/04:12:07	45	NOTE: Loss Of X-Band Signal		
1010	MGS	02-252/04:12:08		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/03:50:06
1011	MGS	02-252/04:12:09		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/03:50:07
1012	MGS	02-252/04:14:25		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/03:52:23
1013	MGS	02-252/04:14:39	45	Range Modulation Off		
1014	MGS	02-252/04:16:38	45	Transmitter Off		
1015	MGS	02-252/04:21:55		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/03:59:53
1016	MGS	02-252/04:27:47		Select Automatic HGA control mode	SAHACE	02-252/04:05:45
1017	MGS	02-252/04:27:48		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/04:05:46
1018	MGS	02-252/04:27:49		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/04:05:47
1019	MGS	02-252/04:27:50		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART1	STSSRC	02-252/04:05:48
1020	MGS	02-252/04:27:51		SSR 1B Data Enable	CSD1BE	02-252/04:05:49
1021	MGS	02-252/04:27:51		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=21333		02-252/04:05:49
1022	MGS	02-252/04:27:56	45	Acquisition Of X-Band Signal		
1023	MGS	02-252/04:27:56	45	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1024	MGS	02-252/04:45:57		NOTE: Apoapsis 15662 -		02-252/04:23:55
1025	MGS	02-252/04:52:59		SSR 1B Data Disable	CSD1BX	02-252/04:30:57
1026	MGS	02-252/04:52:59		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=32170666, DUR=00:25:08		02-252/04:30:57

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1027	MGS	02-252/04:53:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/04:30:58
1028	MGS	02-252/04:53:00	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1029	MGS	02-252/04:53:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/04:31:27
1030	MGS	02-252/04:55:00	65	Begin Pre-Cal		
1031	MGS	02-252/04:55:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1032	MGS	02-252/04:55:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1033	MGS	02-252/04:55:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1034	MGS	02-252/04:55:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1035	MGS	02-252/04:55:00	65	At BOT: S/C Tlm Mode: BR=21333.3, FL=10000, SC=HIGH, MI=80.0		
1036	MGS	02-252/04:55:00	65	Config: TGC: DEST=37		
1037	MGS	02-252/04:55:00	65	Config: TGC: BAND=X, BR=21333.333333		
1038	MGS	02-252/04:55:00	65	Config: FSS: CH=2, PRI_FL=10000		
1039	MGS	02-252/04:55:00	65	Config: RSR		
1040	MGS	02-252/04:55:00	65	Config: TXL		
1041	MGS	02-252/04:55:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
1042	MGS	02-252/04:55:00	65	Config: BVR		
1043	MGS	02-252/04:55:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
1044	MGS	02-252/04:55:00	65	Config: MDA: SMPL=0.1		
1045	MGS	02-252/04:55:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
1046	MGS	02-252/04:55:00	65	Config: SRA: HIGH=4, LOW=11, SERV=D		
1047	MGS	02-252/04:55:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
1048	MGS	02-252/04:55:00	65	Config: CMD		
1049	MGS	02-252/04:58:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/04:36:27
1050	MGS	02-252/04:58:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/04:36:27
1051	MGS	02-252/04:58:29	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1052	MGS	02-252/04:58:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/04:36:28
1053	MGS	02-252/04:58:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/04:36:28
1054	MGS	02-252/04:58:30	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1055	MGS	02-252/04:58:30	45	NOTE: Carrier Only -- No Telemetry Modulation		
1056	MGS	02-252/05:01:46		NOTE: Enter Planetary Atmosphere 15662		02-252/04:39:43
1057	MGS	02-252/05:04:28		NOTE: Enter Earth Occultation 15662		02-252/04:42:26
1058	MGS	02-252/05:04:28	45	NOTE: Loss Of X-Band Signal		
1059	MGS	02-252/05:04:50	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1060	MGS	02-252/05:04:59		NOTE: Enter Solar Eclipse 15662		02-252/04:42:57
1061	MGS	02-252/05:06:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/04:44:31
1062	MGS	02-252/05:06:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/04:44:31
1063	MGS	02-252/05:06:34		NOTE: End fixed Sub-Reflector for Radio Science		02-252/04:44:32
1064	MGS	02-252/05:06:34		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/04:44:32
1065	MGS	02-252/05:06:34		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/04:44:32
1066	MGS	02-252/05:06:35		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/04:44:33
1067	MGS	02-252/05:06:37		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/04:44:35
1068	MGS	02-252/05:06:38		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/04:44:36
1069	MGS	02-252/05:10:08		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/04:48:06
1070	MGS	02-252/05:10:48	45	NOTE: Transmitter Off in 15 minutes		
1071	MGS	02-252/05:16:08		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/04:54:06
1072	MGS	02-252/05:16:09		NOTE: End Block (MAP_PB_BETA_SUP)		02-252/04:54:07
1073	MGS	02-252/05:25:48	45	Transmitter Off		
1074	MGS	02-252/05:31:23		NOTE: Start Block (SSRMGR)		02-252/05:09:21
1075	MGS	02-252/05:31:23		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART2	STSSRC	02-252/05:09:21
1076	MGS	02-252/05:31:24		SSR 2B Data Enable	CSD2BE	02-252/05:09:22
1077	MGS	02-252/05:31:24		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-252/05:09:22
1078	MGS	02-252/05:43:43		NOTE: Exit Solar Eclipse 15662		02-252/05:21:40
1079	MGS	02-252/05:44:13		NOTE: Exit Earth Occultation 15662		02-252/05:22:11
1080	MGS	02-252/05:44:31		NOTE: Periapsis 15663 ----------		02-252/05:22:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1081	MGS	02-252/05:47:09		NOTE: Exit Planetary Atmosphere 15662		02-252/05:25:07
1082	MGS	02-252/05:47:24		SSR 2A Data Disable	CSD2AX	02-252/05:25:22
1083	MGS	02-252/05:47:24		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=2, BITS=26796000, DUR=01:51:39		02-252/05:25:22
1084	MGS	02-252/05:47:25		NOTE: End Block (SSRMGR)		02-252/05:25:23
1085	MGS	02-252/05:48:50		NOTE: Start Block (MAP_PB_BETA_SUP)		02-252/05:26:48
1086	MGS	02-252/05:48:50		Select Automatic HGA control mode	SAHACE	02-252/05:26:48
1087	MGS	02-252/05:48:51		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/05:26:49
1088	MGS	02-252/05:48:52		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/05:26:50
1089	MGS	02-252/05:48:53		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART2	STSSRC	02-252/05:26:51
1090	MGS	02-252/05:48:54		SSR 1A Data Enable	CSD1AE	02-252/05:26:52
1091	MGS	02-252/05:48:54		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=21333		02-252/05:26:52
1092	MGS	02-252/05:48:59	45	Acquisition Of X-Band Signal		
1093	MGS	02-252/05:48:59	45	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1094	MGS	02-252/05:55:00	65	Begin Tracking		
1095	MGS	02-252/05:55:00	65	Acquire D/L: X/16, 3-Way/45, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1096	MGS	02-252/05:59:55	65	NOTE: Above Uplink Interlock Limit		
1097	MGS	02-252/06:04:58	45	NOTE: Below Uplink Interlock Limit		
1098	MGS	02-252/06:09:50		SSR 1A Data Disable	CSD1AX	02-252/05:47:48
1099	MGS	02-252/06:09:50		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=26794666, DUR=00:20:56		02-252/05:47:48
1100	MGS	02-252/06:09:51		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/05:47:49
1101	MGS	02-252/06:09:51	45	NOTE: Loss Of X-Band Signal		
1102	MGS	02-252/06:09:51	65	NOTE: Loss Of X-Band Signal		
1103	MGS	02-252/06:09:52		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/05:47:50
1104	MGS	02-252/06:09:53		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/05:47:51
1105	MGS	02-252/06:12:09		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/05:50:07
1106	MGS	02-252/06:15:00	45	End Tracking		
1107	MGS	02-252/06:19:39		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/05:57:37
1108	MGS	02-252/06:25:31		Select Automatic HGA control mode	SAHACE	02-252/06:03:29
1109	MGS	02-252/06:25:32		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/06:03:30
1110	MGS	02-252/06:25:33		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/06:03:31
1111	MGS	02-252/06:25:34		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART2	STSSRC	02-252/06:03:32
1112	MGS	02-252/06:25:35		SSR 1B Data Enable	CSD1BE	02-252/06:03:33
1113	MGS	02-252/06:25:35		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=21333		02-252/06:03:33
1114	MGS	02-252/06:25:40	65	Acquisition Of X-Band Signal		
1115	MGS	02-252/06:25:40	65	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1116	MGS	02-252/06:30:00	45	End Post-Cal		
1117	MGS	02-252/06:43:37		NOTE: Apoapsis 15663 -		02-252/06:21:35
1118	MGS	02-252/06:50:43		SSR 1B Data Disable	CSD1BX	02-252/06:28:41
1119	MGS	02-252/06:50:43		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=32170666, DUR=00:25:08		02-252/06:28:41
1120	MGS	02-252/06:50:44		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/06:28:42
1121	MGS	02-252/06:50:44	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1122	MGS	02-252/06:51:13		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/06:29:11
1123	MGS	02-252/06:56:13		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/06:34:11
1124	MGS	02-252/06:56:13		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/06:34:11
1125	MGS	02-252/06:56:14		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/06:34:12
1126	MGS	02-252/06:56:14		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/06:34:12
1127	MGS	02-252/06:56:14	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1128	MGS	02-252/06:56:14	65	NOTE: Carrier Only -- No Telemetry Modulation		
1129	MGS	02-252/06:59:31		NOTE: Enter Planetary Atmosphere 15663		02-252/06:37:29
1130	MGS	02-252/07:02:13		NOTE: Enter Earth Occultation 15663		02-252/06:40:11
1131	MGS	02-252/07:02:13	65	NOTE: Loss Of X-Band Signal		
1132	MGS	02-252/07:02:35	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1133	MGS	02-252/07:02:45		NOTE: Enter Solar Eclipse 15663		02-252/06:40:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1134	MGS	02-252/07:04:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/06:42:15
1135	MGS	02-252/07:04:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/06:42:15
1136	MGS	02-252/07:04:18		NOTE: End fixed Sub-Reflector for Radio Science		02-252/06:42:16
1137	MGS	02-252/07:04:18		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/06:42:16
1138	MGS	02-252/07:04:18		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/06:42:16
1139	MGS	02-252/07:04:19		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/06:42:17
1140	MGS	02-252/07:04:21		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/06:42:19
1141	MGS	02-252/07:04:22		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/06:42:20
1142	MGS	02-252/07:07:51		Disable A frame offset	SAAFOX	02-252/06:45:49
1143	MGS	02-252/07:07:52		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/06:45:50
1144	MGS	02-252/07:07:52		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/06:45:50
1145	MGS	02-252/07:08:33	65	NOTE: Transmitter Off in 15 minutes		
1146	MGS	02-252/07:10:51		: TRUE	mnadir	02-252/06:48:49
1147	MGS	02-252/07:13:52		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/06:51:50
1148	MGS	02-252/07:13:53		NOTE: End Block (MAP_PB_BETA_SUP)		02-252/06:51:51
1149	MGS	02-252/07:23:33	65	Transmitter Off		
1150	MGS	02-252/07:29:27		NOTE: Start Block (SSRMGR)		02-252/07:07:25
1151	MGS	02-252/07:29:27		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART3	STSSRC	02-252/07:07:25
1152	MGS	02-252/07:29:28		SSR 2A Data Enable	CSD2AE	02-252/07:07:26
1153	MGS	02-252/07:29:28		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-252/07:07:26
1154	MGS	02-252/07:33:21		Enable A frame offset	SAAFOE	02-252/07:11:19
1155	MGS	02-252/07:33:22		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/07:11:20
1156	MGS	02-252/07:33:23		: FALSE	mnadir	02-252/07:11:21
1157	MGS	02-252/07:39:11	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1158	MGS	02-252/07:41:11	65	Range Modulation On: SUP=3.0dB		
1159	MGS	02-252/07:41:28		NOTE: Exit Solar Eclipse 15663		02-252/07:19:26
1160	MGS	02-252/07:41:58		NOTE: Exit Earth Occultation 15663		02-252/07:19:56
1161	MGS	02-252/07:42:11	65	Begin Ranging Acquisition		
1162	MGS	02-252/07:42:14		NOTE: Periapsis 15664 ----------		02-252/07:20:12
1163	MGS	02-252/07:44:55		NOTE: Exit Planetary Atmosphere 15663		02-252/07:22:53
1164	MGS	02-252/07:45:28		SSR 2B Data Disable	CSD2BX	02-252/07:23:26
1165	MGS	02-252/07:45:28		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=2, BITS=32176000, DUR=02:14:04		02-252/07:23:26
1166	MGS	02-252/07:45:29		NOTE: End Block (SSRMGR)		02-252/07:23:27
1167	MGS	02-252/07:46:35		NOTE: Start Block (MAP_PB_BETA_SUP)		02-252/07:24:33
1168	MGS	02-252/07:46:35		Select Automatic HGA control mode	SAHACE	02-252/07:24:33
1169	MGS	02-252/07:46:36		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/07:24:34
1170	MGS	02-252/07:46:37		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/07:24:35
1171	MGS	02-252/07:46:38		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART3	STSSRC	02-252/07:24:36
1172	MGS	02-252/07:46:39		SSR 1A Data Enable	CSD1AE	02-252/07:24:37
1173	MGS	02-252/07:46:39		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=3, BR=21333		02-252/07:24:37
1174	MGS	02-252/07:46:44	65	Acquisition Of X-Band Signal		
1175	MGS	02-252/07:46:44	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1176	MGS	02-252/07:57:08	65	NOTE: Transmitter Off in 15 minutes		
1177	MGS	02-252/08:07:35		SSR 1A Data Disable	CSD1AX	02-252/07:45:33
1178	MGS	02-252/08:07:35		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=3, BITS=26794666, DUR=00:20:56		02-252/07:45:33
1179	MGS	02-252/08:07:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/07:45:34
1180	MGS	02-252/08:07:36	65	NOTE: Loss Of X-Band Signal		
1181	MGS	02-252/08:07:37		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/07:45:35
1182	MGS	02-252/08:07:38		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/07:45:36
1183	MGS	02-252/08:09:54		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/07:47:52
1184	MGS	02-252/08:10:08	65	Range Modulation Off		
1185	MGS	02-252/08:12:08	65	Transmitter Off		
1186	MGS	02-252/08:17:24		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/07:55:22
1187	MGS	02-252/08:23:16		Select Automatic HGA control mode	SAHACE	02-252/08:01:14

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1188	MGS	02-252/08:23:17		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/08:01:15
1189	MGS	02-252/08:23:18		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/08:01:16
1190	MGS	02-252/08:23:19		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART3	STSSRC	02-252/08:01:17
1191	MGS	02-252/08:23:20		SSR 1B Data Enable	CSD1BE	02-252/08:01:18
1192	MGS	02-252/08:23:20		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=3, BR=21333		02-252/08:01:18
1193	MGS	02-252/08:23:25	65	Acquisition Of X-Band Signal		
1194	MGS	02-252/08:23:25	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1195	MGS	02-252/08:41:04		NOTE: Apoapsis 15664 -		02-252/08:19:02
1196	MGS	02-252/08:48:28		SSR 1B Data Disable	CSD1BX	02-252/08:26:26
1197	MGS	02-252/08:48:28		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=3, BITS=32170666, DUR=00:25:08		02-252/08:26:26
1198	MGS	02-252/08:48:29		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/08:26:27
1199	MGS	02-252/08:48:29	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1200	MGS	02-252/08:48:58		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/08:26:56
1201	MGS	02-252/08:53:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/08:31:56
1202	MGS	02-252/08:53:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/08:31:56
1203	MGS	02-252/08:53:58	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1204	MGS	02-252/08:53:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/08:31:57
1205	MGS	02-252/08:53:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/08:31:57
1206	MGS	02-252/08:53:59	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1207	MGS	02-252/08:53:59	65	NOTE: Carrier Only -- No Telemetry Modulation		
1208	MGS	02-252/08:57:15		NOTE: Enter Planetary Atmosphere 15664		02-252/08:35:13
1209	MGS	02-252/08:59:57		NOTE: Enter Earth Occultation 15664		02-252/08:37:55
1210	MGS	02-252/08:59:57	65	NOTE: Loss Of X-Band Signal		
1211	MGS	02-252/09:00:20	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1212	MGS	02-252/09:00:29		NOTE: Enter Solar Eclipse 15664		02-252/08:38:27
1213	MGS	02-252/09:02:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/08:40:00
1214	MGS	02-252/09:02:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/08:40:00
1215	MGS	02-252/09:02:03		NOTE: End fixed Sub-Reflector for Radio Science		02-252/08:40:01
1216	MGS	02-252/09:02:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/08:40:01
1217	MGS	02-252/09:02:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/08:40:01
1218	MGS	02-252/09:02:04		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/08:40:02
1219	MGS	02-252/09:02:06		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/08:40:04
1220	MGS	02-252/09:02:07		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/08:40:05
1221	MGS	02-252/09:05:05		NOTE: Start Block (SSRMGR)		02-252/08:43:03
1222	MGS	02-252/09:05:05		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART3	STSSRC	02-252/08:43:03
1223	MGS	02-252/09:05:06		SSR 2B Data Enable	CSD2BE	02-252/08:43:04
1224	MGS	02-252/09:05:06		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-252/08:43:04
1225	MGS	02-252/09:05:35		Disable A frame offset	SAAFOX	02-252/08:43:33
1226	MGS	02-252/09:05:36		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/08:43:34
1227	MGS	02-252/09:05:37		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/08:43:35
1228	MGS	02-252/09:06:18	65	NOTE: Transmitter Off in 15 minutes		
1229	MGS	02-252/09:08:35		: TRUE	mnadir	02-252/08:46:33
1230	MGS	02-252/09:11:37		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/08:49:35
1231	MGS	02-252/09:11:38		NOTE: End Block (MAP_PB_BETA_SUP)		02-252/08:49:36
1232	MGS	02-252/09:21:07		SSR 2A Data Disable	CSD2AX	02-252/08:59:05
1233	MGS	02-252/09:21:07		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=3, BITS=26796000, DUR=01:51:39		02-252/08:59:05
1234	MGS	02-252/09:21:08		NOTE: End Block (SSRMGR)		02-252/08:59:06
1235	MGS	02-252/09:21:18	65	Transmitter Off		
1236	MGS	02-252/09:31:05		Enable A frame offset	SAAFOE	02-252/09:09:03
1237	MGS	02-252/09:31:06		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/09:09:04
1238	MGS	02-252/09:31:07		: FALSE	mnadir	02-252/09:09:05
1239	MGS	02-252/09:36:56	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1240	MGS	02-252/09:38:56	65	Range Modulation On: SUP=3.0dB		
1241	MGS	02-252/09:39:12		NOTE: Exit Solar Eclipse 15664		02-252/09:17:10

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1242	MGS	02-252/09:39:42		NOTE: Exit Earth Occultation 15664		02-252/09:17:40
1243	MGS	02-252/09:39:54		NOTE: Periapsis 15665 ----------		02-252/09:17:52
1244	MGS	02-252/09:39:56	65	Begin Ranging Acquisition		
1245	MGS	02-252/09:42:39		NOTE: Exit Planetary Atmosphere 15664		02-252/09:20:37
1246	MGS	02-252/09:44:20		NOTE: Start Block (MAP_PB_BETA_SUP)		02-252/09:22:18
1247	MGS	02-252/09:44:20		Select Automatic HGA control mode	SAHACE	02-252/09:22:18
1248	MGS	02-252/09:44:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/09:22:19
1249	MGS	02-252/09:44:22		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/09:22:20
1250	MGS	02-252/09:44:23		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART4	STSSRC	02-252/09:22:21
1251	MGS	02-252/09:44:24		SSR 1A Data Enable	CSD1AE	02-252/09:22:22
1252	MGS	02-252/09:44:24		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=4, BR=21333		02-252/09:22:22
1253	MGS	02-252/09:44:29	65	Acquisition Of X-Band Signal		
1254	MGS	02-252/09:44:29	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1255	MGS	02-252/09:54:49	65	NOTE: Transmitter Off in 15 minutes		
1256	MGS	02-252/10:05:20		SSR 1A Data Disable	CSD1AX	02-252/09:43:18
1257	MGS	02-252/10:05:20		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=4, BITS=26794666, DUR=00:20:56		02-252/09:43:18
1258	MGS	02-252/10:05:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/09:43:19
1259	MGS	02-252/10:05:21	65	NOTE: Loss Of X-Band Signal		
1260	MGS	02-252/10:05:22		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/09:43:20
1261	MGS	02-252/10:05:23		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/09:43:21
1262	MGS	02-252/10:07:39		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/09:45:37
1263	MGS	02-252/10:07:50	65	Range Modulation Off		
1264	MGS	02-252/10:09:49	65	Transmitter Off		
1265	MGS	02-252/10:15:09		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/09:53:07
1266	MGS	02-252/10:21:01		Select Automatic HGA control mode	SAHACE	02-252/09:58:59
1267	MGS	02-252/10:21:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/09:59:00
1268	MGS	02-252/10:21:03		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/09:59:01
1269	MGS	02-252/10:21:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART4	STSSRC	02-252/09:59:02
1270	MGS	02-252/10:21:05		SSR 1B Data Enable	CSD1BE	02-252/09:59:03
1271	MGS	02-252/10:21:05		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=4, BR=21333		02-252/09:59:03
1272	MGS	02-252/10:21:10	65	Acquisition Of X-Band Signal		
1273	MGS	02-252/10:21:10	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1274	MGS	02-252/10:38:37		NOTE: Apoapsis 15665 -		02-252/10:16:35
1275	MGS	02-252/10:46:13		SSR 1B Data Disable	CSD1BX	02-252/10:24:11
1276	MGS	02-252/10:46:13		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=4, BITS=32170666, DUR=00:25:08		02-252/10:24:11
1277	MGS	02-252/10:46:14		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/10:24:12
1278	MGS	02-252/10:46:14	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1279	MGS	02-252/10:46:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/10:24:41
1280	MGS	02-252/10:51:43		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/10:29:41
1281	MGS	02-252/10:51:43		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/10:29:41
1282	MGS	02-252/10:51:43	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1283	MGS	02-252/10:51:44		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/10:29:42
1284	MGS	02-252/10:51:44		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/10:29:42
1285	MGS	02-252/10:51:44	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1286	MGS	02-252/10:51:44	65	NOTE: Carrier Only -- No Telemetry Modulation		
1287	MGS	02-252/10:54:56		NOTE: Enter Planetary Atmosphere 15665		02-252/10:32:54
1288	MGS	02-252/10:57:38		NOTE: Enter Earth Occultation 15665		02-252/10:35:36
1289	MGS	02-252/10:57:38	65	NOTE: Loss Of X-Band Signal		
1290	MGS	02-252/10:58:01	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1291	MGS	02-252/10:58:10		NOTE: Enter Solar Eclipse 15665		02-252/10:36:08
1292	MGS	02-252/10:59:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/10:37:45
1293	MGS	02-252/10:59:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/10:37:45
1294	MGS	02-252/10:59:48		NOTE: End fixed Sub-Reflector for Radio Science		02-252/10:37:46
1295	MGS	02-252/10:59:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/10:37:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1296	MGS	02-252/10:59:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/10:37:46
1297	MGS	02-252/10:59:49		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/10:37:47
1298	MGS	02-252/10:59:51		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/10:37:49
1299	MGS	02-252/10:59:52		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/10:37:50
1300	MGS	02-252/11:03:10		NOTE: Start Block (SSRMGR)		02-252/10:41:08
1301	MGS	02-252/11:03:10		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART4	STSSRC	02-252/10:41:08
1302	MGS	02-252/11:03:11		SSR 2A Data Enable	CSD2AE	02-252/10:41:09
1303	MGS	02-252/11:03:11		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-252/10:41:09
1304	MGS	02-252/11:03:22		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/10:41:20
1305	MGS	02-252/11:03:59	65	NOTE: Transmitter Off in 15 minutes		
1306	MGS	02-252/11:09:22		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/10:47:20
1307	MGS	02-252/11:09:23		NOTE: End Block (MAP_PB_BETA_SUP)		02-252/10:47:21
1308	MGS	02-252/11:18:59	65	Transmitter Off		
1309	MGS	02-252/11:19:10		SSR 2B Data Disable	CSD2BX	02-252/10:57:08
1310	MGS	02-252/11:19:10		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=3, BITS=32176000, DUR=02:14:04		02-252/10:57:08
1311	MGS	02-252/11:19:11		NOTE: End Block (SSRMGR)		02-252/10:57:09
1312	MGS	02-252/11:34:37	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1313	MGS	02-252/11:36:37	65	Range Modulation On: SUP=3.0dB		
1314	MGS	02-252/11:36:54		NOTE: Exit Solar Eclipse 15665		02-252/11:14:52
1315	MGS	02-252/11:37:24		NOTE: Exit Earth Occultation 15665		02-252/11:15:22
1316	MGS	02-252/11:37:37	65	Begin Ranging Acquisition		
1317	MGS	02-252/11:37:37		NOTE: Periapsis 15666 ----------		02-252/11:15:35
1318	MGS	02-252/11:40:21		NOTE: Exit Planetary Atmosphere 15665		02-252/11:18:19
1319	MGS	02-252/11:42:01		NOTE: Start Block (MAP_PB_BETA_SUP)		02-252/11:19:59
1320	MGS	02-252/11:42:01		Select Automatic HGA control mode	SAHACE	02-252/11:19:59
1321	MGS	02-252/11:42:02		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/11:20:00
1322	MGS	02-252/11:42:03		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/11:20:01
1323	MGS	02-252/11:42:04		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART5	STSSRC	02-252/11:20:02
1324	MGS	02-252/11:42:05		SSR 1A Data Enable	CSD1AE	02-252/11:20:03
1325	MGS	02-252/11:42:05		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=5, BR=21333		02-252/11:20:03
1326	MGS	02-252/11:42:10	65	Acquisition Of X-Band Signal		
1327	MGS	02-252/11:42:10	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1328	MGS	02-252/11:52:29	65	NOTE: Transmitter Off in 15 minutes		
1329	MGS	02-252/12:03:01		SSR 1A Data Disable	CSD1AX	02-252/11:40:59
1330	MGS	02-252/12:03:01		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=5, BITS=26794666, DUR=00:20:56		02-252/11:40:59
1331	MGS	02-252/12:03:02		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/11:41:00
1332	MGS	02-252/12:03:02	65	NOTE: Loss Of X-Band Signal		
1333	MGS	02-252/12:03:03		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/11:41:01
1334	MGS	02-252/12:03:04		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/11:41:02
1335	MGS	02-252/12:05:20		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/11:43:18
1336	MGS	02-252/12:05:30	65	Range Modulation Off		
1337	MGS	02-252/12:07:29	65	Transmitter Off		
1338	MGS	02-252/12:12:50		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/11:50:48
1339	MGS	02-252/12:18:42		Select Automatic HGA control mode	SAHACE	02-252/11:56:40
1340	MGS	02-252/12:18:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/11:56:41
1341	MGS	02-252/12:18:44		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/11:56:42
1342	MGS	02-252/12:18:45		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART5	STSSRC	02-252/11:56:43
1343	MGS	02-252/12:18:46		SSR 1B Data Enable	CSD1BE	02-252/11:56:44
1344	MGS	02-252/12:18:46		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=5, BR=21333		02-252/11:56:44
1345	MGS	02-252/12:18:51	65	Acquisition Of X-Band Signal		
1346	MGS	02-252/12:18:51	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1347	MGS	02-252/12:22:02		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-252/12:00:00
1348	MGS	02-252/12:36:31		NOTE: Apoapsis 15666 -		02-252/12:14:29
1349	MGS	02-252/12:38:48		NOTE: Start Block (SSRMGR)		02-252/12:16:46

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1350	MGS	02-252/12:38:48		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART4	STSSRC	02-252/12:16:46
1351	MGS	02-252/12:38:49		SSR 2B Data Enable	CSD2BE	02-252/12:16:47
1352	MGS	02-252/12:38:49		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-252/12:16:47
1353	MGS	02-252/12:43:54		SSR 1B Data Disable	CSD1BX	02-252/12:21:52
1354	MGS	02-252/12:43:54		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=5, BITS=32170666, DUR=00:25:08		02-252/12:21:52
1355	MGS	02-252/12:43:55		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/12:21:53
1356	MGS	02-252/12:43:55	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1357	MGS	02-252/12:44:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/12:22:22
1358	MGS	02-252/12:49:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/12:27:22
1359	MGS	02-252/12:49:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/12:27:22
1360	MGS	02-252/12:49:24	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1361	MGS	02-252/12:49:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/12:27:23
1362	MGS	02-252/12:49:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/12:27:23
1363	MGS	02-252/12:49:25	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1364	MGS	02-252/12:49:25	65	NOTE: Carrier Only -- No Telemetry Modulation		
1365	MGS	02-252/12:52:35		NOTE: Enter Planetary Atmosphere 15666		02-252/12:30:33
1366	MGS	02-252/12:54:50		SSR 2A Data Disable	CSD2AX	02-252/12:32:48
1367	MGS	02-252/12:54:50		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=4, BITS=26796000, DUR=01:51:39		02-252/12:32:48
1368	MGS	02-252/12:54:51		NOTE: End Block (SSRMGR)		02-252/12:32:49
1369	MGS	02-252/12:55:18		NOTE: Enter Earth Occultation 15666		02-252/12:33:16
1370	MGS	02-252/12:55:18	65	NOTE: Loss Of X-Band Signal		
1371	MGS	02-252/12:55:41	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1372	MGS	02-252/12:55:50		NOTE: Enter Solar Eclipse 15666		02-252/12:33:48
1373	MGS	02-252/12:57:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/12:35:26
1374	MGS	02-252/12:57:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/12:35:26
1375	MGS	02-252/12:57:28		NOTE: End fixed Sub-Reflector for Radio Science		02-252/12:35:27
1376	MGS	02-252/12:57:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/12:35:27
1377	MGS	02-252/12:57:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/12:35:27
1378	MGS	02-252/12:57:30		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/12:35:28
1379	MGS	02-252/12:57:32		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/12:35:30
1380	MGS	02-252/12:57:33		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/12:35:31
1381	MGS	02-252/13:00:56		Disable A frame offset	SAAFOX	02-252/12:38:54
1382	MGS	02-252/13:00:57		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/12:38:55
1383	MGS	02-252/13:01:03		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/12:39:01
1384	MGS	02-252/13:01:39	65	NOTE: Transmitter Off in 15 minutes		
1385	MGS	02-252/13:03:56		: TRUE	mnadir	02-252/12:41:54
1386	MGS	02-252/13:07:03		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/12:45:01
1387	MGS	02-252/13:07:04		NOTE: End Block (MAP_PB_BETA_SUP)		02-252/12:45:02
1388	MGS	02-252/13:16:39	65	Transmitter Off		
1389	MGS	02-252/13:26:26		Enable A frame offset	SAAFOE	02-252/13:04:24
1390	MGS	02-252/13:26:27		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/13:04:25
1391	MGS	02-252/13:26:28		: FALSE	mnadir	02-252/13:04:26
1392	MGS	02-252/13:32:17	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1393	MGS	02-252/13:34:17	65	Range Modulation On: SUP=3.0dB		
1394	MGS	02-252/13:34:34		NOTE: Exit Solar Eclipse 15666		02-252/13:12:32
1395	MGS	02-252/13:35:04		NOTE: Exit Earth Occultation 15666		02-252/13:13:02
1396	MGS	02-252/13:35:11		NOTE: Periapsis 15667 ----------		02-252/13:13:09
1397	MGS	02-252/13:35:17	65	Begin Ranging Acquisition		
1398	MGS	02-252/13:38:01		NOTE: Exit Planetary Atmosphere 15666		02-252/13:15:59
1399	MGS	02-252/13:39:43		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/13:17:41
1400	MGS	02-252/13:39:43		Select Automatic HGA control mode	SAHACE	02-252/13:17:41
1401	MGS	02-252/13:39:44		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/13:17:42
1402	MGS	02-252/13:39:52	65	Acquisition Of X-Band Signal		
1403	MGS	02-252/13:39:52	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1404	MGS	02-252/13:41:45		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:19:43
1405	MGS	02-252/13:41:45		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=4, BITS=15104000, DUR=01:02:56		02-252/13:19:43
1406	MGS	02-252/13:41:45		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=4, BR=4000, SRC=SE_1A		02-252/13:19:43
1407	MGS	02-252/13:41:45		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/13:19:43
1408	MGS	02-252/13:42:10		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:20:08
1409	MGS	02-252/13:42:10		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=4, BITS=15204000, DUR=00:00:25		02-252/13:20:08
1410	MGS	02-252/13:42:10		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=4, BR=4000, SRC=SE_1A		02-252/13:20:08
1411	MGS	02-252/13:42:12		NOTE: Start Block (SSRMGR)		02-252/13:20:10
1412	MGS	02-252/13:42:12		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-252/13:20:10
1413	MGS	02-252/13:42:12		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-252/13:20:10
1414	MGS	02-252/13:42:13		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/13:20:11
1415	MGS	02-252/13:42:14		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART6	STSSRC	02-252/13:20:12
1416	MGS	02-252/13:42:15		SSR 1A Data Enable	CSD1AE	02-252/13:20:13
1417	MGS	02-252/13:42:15		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=6, BR=21333		02-252/13:20:13
1418	MGS	02-252/13:42:15	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1419	MGS	02-252/13:50:09	65	NOTE: Transmitter Off in 15 minutes		
1420	MGS	02-252/14:00:41		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:38:39
1421	MGS	02-252/14:00:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/13:38:39
1422	MGS	02-252/14:00:41		SSR 1A Data Disable	CSD1AX	02-252/13:38:39
1423	MGS	02-252/14:00:41		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-252/13:38:39
1424	MGS	02-252/14:00:41		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:38:39
1425	MGS	02-252/14:00:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/13:38:39
1426	MGS	02-252/14:00:41	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1427	MGS	02-252/14:00:42		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/13:38:40
1428	MGS	02-252/14:00:42		NOTE: End Block (SSRMGR)		02-252/13:38:40
1429	MGS	02-252/14:00:42	65	NOTE: Loss Of X-Band Signal		
1430	MGS	02-252/14:00:43		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/13:38:41
1431	MGS	02-252/14:00:44		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/13:38:42
1432	MGS	02-252/14:03:00		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/13:40:58
1433	MGS	02-252/14:03:09	65	Range Modulation Off		
1434	MGS	02-252/14:05:09	65	Transmitter Off		
1435	MGS	02-252/14:10:30		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/13:48:28
1436	MGS	02-252/14:16:22		Select Automatic HGA control mode	SAHACE	02-252/13:54:20
1437	MGS	02-252/14:16:23		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/13:54:21
1438	MGS	02-252/14:16:31	65	Acquisition Of X-Band Signal		
1439	MGS	02-252/14:16:31	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1440	MGS	02-252/14:18:24		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:56:22
1441	MGS	02-252/14:18:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/13:56:22
1442	MGS	02-252/14:18:44		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/13:56:42
1443	MGS	02-252/14:18:46		NOTE: Start Block (SSRMGR)		02-252/13:56:44
1444	MGS	02-252/14:18:46		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-252/13:56:44
1445	MGS	02-252/14:18:46		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-252/13:56:44
1446	MGS	02-252/14:18:47		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-252/13:56:45
1447	MGS	02-252/14:18:48		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART6	STSSRC	02-252/13:56:46
1448	MGS	02-252/14:18:49		SSR 1B Data Enable	CSD1BE	02-252/13:56:47
1449	MGS	02-252/14:18:49		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=6, BR=21333		02-252/13:56:47
1450	MGS	02-252/14:18:49	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1451	MGS	02-252/14:34:00		NOTE: Apoapsis 15667 -		02-252/14:11:58
1452	MGS	02-252/14:36:53		NOTE: Start Block (SSRMGR)		02-252/14:14:51
1453	MGS	02-252/14:36:53		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART5	STSSRC	02-252/14:14:51
1454	MGS	02-252/14:36:54		SSR 2A Data Enable	CSD2AE	02-252/14:14:52
1455	MGS	02-252/14:36:54		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-252/14:14:52
1456	MGS	02-252/14:37:15		SSR 1B Data Disable	CSD1BX	02-252/14:15:13
1457	MGS	02-252/14:37:15		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-252/14:15:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1458	MGS	02-252/14:37:15		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/14:15:13
1459	MGS	02-252/14:37:15		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=5, BITS=84000, DUR=00:00:21		02-252/14:15:13
1460	MGS	02-252/14:37:15		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/14:15:13
1461	MGS	02-252/14:37:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/14:15:13
1462	MGS	02-252/14:37:15	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1463	MGS	02-252/14:37:16		NOTE: End Block (SSRMGR)		02-252/14:15:14
1464	MGS	02-252/14:42:03		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/14:20:02
1465	MGS	02-252/14:47:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/14:24:58
1466	MGS	02-252/14:47:00		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=5, BITS=2424000, DUR=00:09:45		02-252/14:24:58
1467	MGS	02-252/14:47:00		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/14:24:58
1468	MGS	02-252/14:47:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/14:24:58
1469	MGS	02-252/14:47:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/14:25:02
1470	MGS	02-252/14:47:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/14:25:02
1471	MGS	02-252/14:47:04	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1472	MGS	02-252/14:47:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/14:25:03
1473	MGS	02-252/14:47:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/14:25:03
1474	MGS	02-252/14:47:05	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1475	MGS	02-252/14:47:05	65	NOTE: Carrier Only -- No Telemetry Modulation		
1476	MGS	02-252/14:50:15		NOTE: Enter Planetary Atmosphere 15667		02-252/14:28:13
1477	MGS	02-252/14:52:53		SSR 2B Data Disable	CSD2BX	02-252/14:30:51
1478	MGS	02-252/14:52:53		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=4, BITS=32176000, DUR=02:14:04		02-252/14:30:51
1479	MGS	02-252/14:52:54		NOTE: End Block (SSRMGR)		02-252/14:30:52
1480	MGS	02-252/14:52:58		NOTE: Enter Earth Occultation 15667		02-252/14:30:56
1481	MGS	02-252/14:52:58	65	NOTE: Loss Of X-Band Signal		
1482	MGS	02-252/14:53:21	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1483	MGS	02-252/14:53:30		NOTE: Enter Solar Eclipse 15667		02-252/14:31:28
1484	MGS	02-252/14:55:08		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/14:33:06
1485	MGS	02-252/14:55:08		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/14:33:06
1486	MGS	02-252/14:55:08		NOTE: End fixed Sub-Reflector for Radio Science		02-252/14:33:07
1487	MGS	02-252/14:55:09		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/14:33:07
1488	MGS	02-252/14:55:09		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/14:33:07
1489	MGS	02-252/14:55:09		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/14:33:07
1490	MGS	02-252/14:55:10		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/14:33:08
1491	MGS	02-252/14:55:10		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/14:33:08
1492	MGS	02-252/14:58:36		Disable A frame offset	SAAFOX	02-252/14:36:34
1493	MGS	02-252/14:58:37		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/14:36:35
1494	MGS	02-252/14:58:40		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/14:36:38
1495	MGS	02-252/14:59:19	65	NOTE: Transmitter Off in 15 minutes		
1496	MGS	02-252/15:01:36		: TRUE	mnadir	02-252/14:39:34
1497	MGS	02-252/15:04:40		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/14:42:38
1498	MGS	02-252/15:04:41		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/14:42:39
1499	MGS	02-252/15:14:19	65	Transmitter Off		
1500	MGS	02-252/15:20:00	15	Begin Pre-Cal		
1501	MGS	02-252/15:20:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1502	MGS	02-252/15:20:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
1503	MGS	02-252/15:20:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1504	MGS	02-252/15:20:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1505	MGS	02-252/15:20:00	15	At BOT: S/C Tlm Mode: BR=21333.3, FL=10000, SC=HIGH, MI=80.0		
1506	MGS	02-252/15:20:00	15	Config: TGC: DEST=37		
1507	MGS	02-252/15:20:00	15	Config: TGC: BAND=X, BR=21333.333333		
1508	MGS	02-252/15:20:00	15	Config: FSS: CH=2, PRI_FL=10000		
1509	MGS	02-252/15:20:00	15	Config: RSR		
1510	MGS	02-252/15:20:00	15	Config: TXL		
1511	MGS	02-252/15:20:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1512	MGS	02-252/15:20:00	15	Config: BVR		
1513	MGS	02-252/15:20:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
1514	MGS	02-252/15:20:00	15	Config: MDA: SMPL=0.1		
1515	MGS	02-252/15:20:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
1516	MGS	02-252/15:20:00	15	Config: SRA: HIGH=4, LOW=11, SERV=D		
1517	MGS	02-252/15:20:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
1518	MGS	02-252/15:20:00	15	Config: CMD		
1519	MGS	02-252/15:24:06		Enable A frame offset	SAAFOE	02-252/15:02:04
1520	MGS	02-252/15:24:07		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/15:02:05
1521	MGS	02-252/15:24:08		: FALSE	mnadir	02-252/15:02:06
1522	MGS	02-252/15:29:57	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1523	MGS	02-252/15:31:57	65	Range Modulation On: SUP=3.0dB		
1524	MGS	02-252/15:32:13		NOTE: Exit Solar Eclipse 15667		02-252/15:10:11
1525	MGS	02-252/15:32:29		NOTE: Periapsis 15668 ----------		02-252/15:10:28
1526	MGS	02-252/15:32:43		NOTE: Exit Earth Occultation 15667		02-252/15:10:41
1527	MGS	02-252/15:32:57	65	Begin Ranging Acquisition		
1528	MGS	02-252/15:35:40		NOTE: Exit Planetary Atmosphere 15667		02-252/15:13:38
1529	MGS	02-252/15:37:23		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/15:15:21
1530	MGS	02-252/15:37:23		Select Automatic HGA control mode	SAHACE	02-252/15:15:21
1531	MGS	02-252/15:37:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/15:15:22
1532	MGS	02-252/15:37:32	65	Acquisition Of X-Band Signal		
1533	MGS	02-252/15:37:32	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1534	MGS	02-252/15:39:25		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:17:23
1535	MGS	02-252/15:39:25		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=5, BITS=15004000, DUR=00:52:25		02-252/15:17:23
1536	MGS	02-252/15:39:25		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/15:17:23
1537	MGS	02-252/15:39:25		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/15:17:23
1538	MGS	02-252/15:39:50		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:17:48
1539	MGS	02-252/15:39:50		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=5, BITS=15104000, DUR=00:00:25		02-252/15:17:48
1540	MGS	02-252/15:39:50		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/15:17:48
1541	MGS	02-252/15:39:52		NOTE: Start Block (SSRMGR)		02-252/15:17:50
1542	MGS	02-252/15:39:52		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-252/15:17:50
1543	MGS	02-252/15:39:52		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-252/15:17:50
1544	MGS	02-252/15:39:53		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/15:17:51
1545	MGS	02-252/15:39:54		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART7	STSSRC	02-252/15:17:52
1546	MGS	02-252/15:39:55		SSR 1A Data Enable	CSD1AE	02-252/15:17:53
1547	MGS	02-252/15:39:55		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=7, BR=21333		02-252/15:17:53
1548	MGS	02-252/15:39:55	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1549	MGS	02-252/15:47:51	65	NOTE: Transmitter Off in 15 minutes		
1550	MGS	02-252/15:58:21		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:36:19
1551	MGS	02-252/15:58:21		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/15:36:19
1552	MGS	02-252/15:58:21		SSR 1A Data Disable	CSD1AX	02-252/15:36:19
1553	MGS	02-252/15:58:21		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=7, BITS=23594666, DUR=00:18:26		02-252/15:36:19
1554	MGS	02-252/15:58:21	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1555	MGS	02-252/15:58:22		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/15:36:20
1556	MGS	02-252/15:58:22		NOTE: End Block (SSRMGR)		02-252/15:36:20
1557	MGS	02-252/15:58:22		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:36:20
1558	MGS	02-252/15:58:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/15:36:20
1559	MGS	02-252/15:58:22	65	NOTE: Loss Of X-Band Signal		
1560	MGS	02-252/15:58:23		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/15:36:21
1561	MGS	02-252/15:58:24		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/15:36:22
1562	MGS	02-252/16:00:40		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/15:38:38
1563	MGS	02-252/16:00:51	65	Range Modulation Off		
1564	MGS	02-252/16:02:51	65	Transmitter Off		
1565	MGS	02-252/16:08:10		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/15:46:08

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1566	MGS	02-252/16:12:31		NOTE: Start Block (SSRMGR)		02-252/15:50:29
1567	MGS	02-252/16:12:31		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART5	STSSRC	02-252/15:50:29
1568	MGS	02-252/16:12:32		SSR 2B Data Enable	CSD2BE	02-252/15:50:30
1569	MGS	02-252/16:12:32		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-252/15:50:30
1570	MGS	02-252/16:14:02		Select Automatic HGA control mode	SAHACE	02-252/15:52:00
1571	MGS	02-252/16:14:03		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/15:52:01
1572	MGS	02-252/16:14:11	65	Acquisition Of X-Band Signal		
1573	MGS	02-252/16:14:11	65	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1574	MGS	02-252/16:16:04		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:54:02
1575	MGS	02-252/16:16:04		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=848000, DUR=00:03:32		02-252/15:54:02
1576	MGS	02-252/16:16:04		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/15:54:02
1577	MGS	02-252/16:16:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/15:54:02
1578	MGS	02-252/16:16:29		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/15:54:27
1579	MGS	02-252/16:16:29		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=948000, DUR=00:00:25		02-252/15:54:27
1580	MGS	02-252/16:16:29		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/15:54:27
1581	MGS	02-252/16:16:33		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-252/15:54:31
1582	MGS	02-252/16:16:34		SSR 1A Data Enable	CSD1AE	02-252/15:54:32
1583	MGS	02-252/16:16:34		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=7, BR=21333		02-252/15:54:32
1584	MGS	02-252/16:16:34	65	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1585	MGS	02-252/16:20:00	15	Begin Tracking		
1586	MGS	02-252/16:20:00	15	Acquire D/L: X/16, 3-Way/65, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1587	MGS	02-252/16:28:33		SSR 2A Data Disable	CSD2AX	02-252/16:06:31
1588	MGS	02-252/16:28:33		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=5, BITS=26796000, DUR=01:51:39		02-252/16:06:31
1589	MGS	02-252/16:28:34		NOTE: End Block (SSRMGR)		02-252/16:06:32
1590	MGS	02-252/16:31:24		NOTE: Apoapsis 15668 -		02-252/16:09:22
1591	MGS	02-252/16:39:43		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/16:17:42
1592	MGS	02-252/16:40:00	65	End Tracking		
1593	MGS	02-252/16:40:17		SSR 1A Data Disable	CSD1AX	02-252/16:18:15
1594	MGS	02-252/16:40:17		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=7, BITS=30357333, DUR=00:23:43		02-252/16:18:15
1595	MGS	02-252/16:40:18		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/16:18:16
1596	MGS	02-252/16:40:18		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=6664000, DUR=00:23:49		02-252/16:18:16
1597	MGS	02-252/16:40:18		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/16:18:16
1598	MGS	02-252/16:40:18		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/16:18:16
1599	MGS	02-252/16:40:18	15	D/L Change: X/16, 3-Way/65, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1600	MGS	02-252/16:44:40		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/16:22:38
1601	MGS	02-252/16:44:40		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=7712000, DUR=00:04:22		02-252/16:22:38
1602	MGS	02-252/16:44:40		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/16:22:38
1603	MGS	02-252/16:44:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/16:22:38
1604	MGS	02-252/16:44:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/16:22:42
1605	MGS	02-252/16:44:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/16:22:42
1606	MGS	02-252/16:44:44	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1607	MGS	02-252/16:44:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/16:22:43
1608	MGS	02-252/16:44:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/16:22:43
1609	MGS	02-252/16:44:45	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1610	MGS	02-252/16:44:45	15	NOTE: Carrier Only -- No Telemetry Modulation		
1611	MGS	02-252/16:47:57		NOTE: Enter Planetary Atmosphere 15668		02-252/16:25:55
1612	MGS	02-252/16:50:39		NOTE: Enter Earth Occultation 15668		02-252/16:28:38
1613	MGS	02-252/16:50:39	15	NOTE: Loss Of X-Band Signal		
1614	MGS	02-252/16:51:12		NOTE: Enter Solar Eclipse 15668		02-252/16:29:10
1615	MGS	02-252/16:52:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/16:30:46
1616	MGS	02-252/16:52:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/16:30:46
1617	MGS	02-252/16:52:48		NOTE: End fixed Sub-Reflector for Radio Science		02-252/16:30:47
1618	MGS	02-252/16:52:49		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/16:30:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1619	MGS	02-252/16:52:49		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/16:30:47
1620	MGS	02-252/16:52:49		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/16:30:47
1621	MGS	02-252/16:52:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/16:30:48
1622	MGS	02-252/16:52:50		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/16:30:48
1623	MGS	02-252/16:55:00	65	End Post-Cal		
1624	MGS	02-252/16:56:20		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/16:34:18
1625	MGS	02-252/17:02:20		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/16:40:18
1626	MGS	02-252/17:02:21		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/16:40:19
1627	MGS	02-252/17:29:55		NOTE: Exit Solar Eclipse 15668		02-252/17:07:53
1628	MGS	02-252/17:30:20		NOTE: Periapsis 15669 ----------		02-252/17:08:18
1629	MGS	02-252/17:30:25		NOTE: Exit Earth Occultation 15668		02-252/17:08:23
1630	MGS	02-252/17:33:21		NOTE: Exit Planetary Atmosphere 15668		02-252/17:11:19
1631	MGS	02-252/17:35:03		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/17:13:02
1632	MGS	02-252/17:35:03		Select Automatic HGA control mode	SAHACE	02-252/17:13:02
1633	MGS	02-252/17:35:04		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/17:13:03
1634	MGS	02-252/17:35:12	15	Acquisition Of X-Band Signal		
1635	MGS	02-252/17:35:12	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1636	MGS	02-252/17:37:05		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-252/17:15:04
1637	MGS	02-252/17:37:05		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=20296000, DUR=00:52:26		02-252/17:15:04
1638	MGS	02-252/17:37:05		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/17:15:04
1639	MGS	02-252/17:37:05		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-252/17:15:04
1640	MGS	02-252/17:37:05	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1641	MGS	02-252/17:56:01		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/17:34:00
1642	MGS	02-252/17:56:01		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=24840000, DUR=00:18:56		02-252/17:34:00
1643	MGS	02-252/17:56:01		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-252/17:34:00
1644	MGS	02-252/17:56:01		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/17:34:00
1645	MGS	02-252/17:56:01	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1646	MGS	02-252/17:56:02		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/17:34:01
1647	MGS	02-252/17:56:02	15	NOTE: Loss Of X-Band Signal		
1648	MGS	02-252/17:56:03		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/17:34:02
1649	MGS	02-252/17:56:04		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/17:34:03
1650	MGS	02-252/17:58:20		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/17:36:19
1651	MGS	02-252/18:05:50		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/17:43:49
1652	MGS	02-252/18:10:35		NOTE: Start Block (SSRMGR)		02-252/17:48:34
1653	MGS	02-252/18:10:35		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART6	STSSRC	02-252/17:48:34
1654	MGS	02-252/18:10:36		SSR 2A Data Enable	CSD2AE	02-252/17:48:35
1655	MGS	02-252/18:10:36		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-252/17:48:35
1656	MGS	02-252/18:11:42		Select Automatic HGA control mode	SAHACE	02-252/17:49:41
1657	MGS	02-252/18:11:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/17:49:42
1658	MGS	02-252/18:11:51	15	Acquisition Of X-Band Signal		
1659	MGS	02-252/18:11:51	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1660	MGS	02-252/18:13:44		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-252/17:51:43
1661	MGS	02-252/18:13:44		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=6, BITS=752000, DUR=00:03:08		02-252/17:51:43
1662	MGS	02-252/18:13:44		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/17:51:43
1663	MGS	02-252/18:13:44		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-252/17:51:43
1664	MGS	02-252/18:13:44	15	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1665	MGS	02-252/18:26:35		SSR 2B Data Disable	CSD2BX	02-252/18:04:34
1666	MGS	02-252/18:26:35		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=5, BITS=32176000, DUR=02:14:04		02-252/18:04:34
1667	MGS	02-252/18:26:36		NOTE: End Block (SSRMGR)		02-252/18:04:35
1668	MGS	02-252/18:29:24		NOTE: Apoapsis 15669 -		02-252/18:07:23
1669	MGS	02-252/18:37:24		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/18:15:23
1670	MGS	02-252/18:42:20		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/18:20:19
1671	MGS	02-252/18:42:20		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=6, BITS=7616000, DUR=00:28:36		02-252/18:20:19
1672	MGS	02-252/18:42:20		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/18:20:19

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1673	MGS	02-252/18:42:20		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/18:20:19
1674	MGS	02-252/18:42:20	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1675	MGS	02-252/18:42:24		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/18:20:23
1676	MGS	02-252/18:42:24		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/18:20:23
1677	MGS	02-252/18:42:25		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/18:20:24
1678	MGS	02-252/18:42:25		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/18:20:24
1679	MGS	02-252/18:42:25	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1680	MGS	02-252/18:42:25	15	NOTE: Carrier Only -- No Telemetry Modulation		
1681	MGS	02-252/18:45:41		NOTE: Enter Planetary Atmosphere 15669		02-252/18:23:39
1682	MGS	02-252/18:48:23		NOTE: Enter Earth Occultation 15669		02-252/18:26:21
1683	MGS	02-252/18:48:23	15	NOTE: Loss Of X-Band Signal		
1684	MGS	02-252/18:48:56		NOTE: Enter Solar Eclipse 15669		02-252/18:26:54
1685	MGS	02-252/18:50:28		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/18:28:27
1686	MGS	02-252/18:50:28		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/18:28:27
1687	MGS	02-252/18:50:29		NOTE: End fixed Sub-Reflector for Radio Science		02-252/18:28:28
1688	MGS	02-252/18:50:29		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/18:28:28
1689	MGS	02-252/18:50:29		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/18:28:28
1690	MGS	02-252/18:50:29		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/18:28:28
1691	MGS	02-252/18:50:30		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/18:28:29
1692	MGS	02-252/18:50:30		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/18:28:29
1693	MGS	02-252/18:54:00		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/18:31:59
1694	MGS	02-252/18:54:01		Disable A frame offset	SAAFOX	02-252/18:32:00
1695	MGS	02-252/18:54:02		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/18:32:01
1696	MGS	02-252/18:57:01		: TRUE	mnadir	02-252/18:35:00
1697	MGS	02-252/19:00:00		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/18:37:59
1698	MGS	02-252/19:00:01		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/18:38:00
1699	MGS	02-252/19:15:00	45	Begin Pre-Cal		
1700	MGS	02-252/19:15:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
1701	MGS	02-252/19:15:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
1702	MGS	02-252/19:15:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
1703	MGS	02-252/19:15:00	45	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
1704	MGS	02-252/19:15:00	45	At BOT: S/C Tlm Mode: BR=4000.0, FL=10000, SC=OFF, MI=0.0		
1705	MGS	02-252/19:15:00	45	Config: TGC: DEST=37		
1706	MGS	02-252/19:15:00	45	Config: TGC: BAND=X, BR=4000.000000		
1707	MGS	02-252/19:15:00	45	Config: FSS: CH=2, PRI_FL=10000		
1708	MGS	02-252/19:15:00	45	Config: RSR		
1709	MGS	02-252/19:15:00	45	Config: TXL		
1710	MGS	02-252/19:15:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
1711	MGS	02-252/19:15:00	45	Config: BVR		
1712	MGS	02-252/19:15:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
1713	MGS	02-252/19:15:00	45	Config: MDA: SMPL=0.1		
1714	MGS	02-252/19:15:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
1715	MGS	02-252/19:15:00	45	Config: SRA: HIGH=4, LOW=11, SERV=D		
1716	MGS	02-252/19:15:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
1717	MGS	02-252/19:15:00	45	Config: CMD		
1718	MGS	02-252/19:19:31		Enable A frame offset	SAAFOE	02-252/18:57:30
1719	MGS	02-252/19:19:32		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/18:57:31
1720	MGS	02-252/19:19:33		: FALSE	mnadir	02-252/18:57:32
1721	MGS	02-252/19:27:39		NOTE: Exit Solar Eclipse 15669		02-252/19:05:37
1722	MGS	02-252/19:28:09		NOTE: Exit Earth Occultation 15669		02-252/19:06:07
1723	MGS	02-252/19:28:31		NOTE: Periapsis 15670 ----------		02-252/19:06:29
1724	MGS	02-252/19:31:05		NOTE: Exit Planetary Atmosphere 15669		02-252/19:09:04
1725	MGS	02-252/19:32:48		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/19:10:47
1726	MGS	02-252/19:32:48		Select Automatic HGA control mode	SAHACE	02-252/19:10:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1727	MGS	02-252/19:32:49		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/19:10:48
1728	MGS	02-252/19:32:53		NOTE: Start Block (SSRMGR)		02-252/19:10:52
1729	MGS	02-252/19:32:53		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART6	STSSRC	02-252/19:10:52
1730	MGS	02-252/19:32:54		SSR 2B Data Enable	CSD2BE	02-252/19:10:53
1731	MGS	02-252/19:32:54		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-252/19:10:53
1732	MGS	02-252/19:32:57	15	Acquisition Of X-Band Signal		
1733	MGS	02-252/19:32:57	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1734	MGS	02-252/19:34:50		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/19:12:49
1735	MGS	02-252/19:34:50		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=464000, DUR=00:01:56		02-252/19:12:49
1736	MGS	02-252/19:34:50		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/19:12:49
1737	MGS	02-252/19:34:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/19:12:49
1738	MGS	02-252/19:48:55		SSR 2A Data Disable	CSD2AX	02-252/19:26:54
1739	MGS	02-252/19:48:55		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-252/19:26:54
1740	MGS	02-252/19:48:56		NOTE: End Block (SSRMGR)		02-252/19:26:55
1741	MGS	02-252/19:53:46		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/19:31:45
1742	MGS	02-252/19:53:46		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=5008000, DUR=00:18:56		02-252/19:31:45
1743	MGS	02-252/19:53:46		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/19:31:45
1744	MGS	02-252/19:53:46		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/19:31:45
1745	MGS	02-252/19:53:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/19:31:46
1746	MGS	02-252/19:53:47	15	NOTE: Loss Of X-Band Signal		
1747	MGS	02-252/19:53:48		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/19:31:47
1748	MGS	02-252/19:53:49		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/19:31:48
1749	MGS	02-252/19:56:05		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/19:34:04
1750	MGS	02-252/20:00:00	15	End Tracking		
1751	MGS	02-252/20:03:35		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/19:41:34
1752	MGS	02-252/20:09:27		Select Automatic HGA control mode	SAHACE	02-252/19:47:26
1753	MGS	02-252/20:09:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/19:47:27
1754	MGS	02-252/20:11:29		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/19:49:28
1755	MGS	02-252/20:11:29		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=9260000, DUR=00:17:43		02-252/19:49:28
1756	MGS	02-252/20:11:29		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/19:49:28
1757	MGS	02-252/20:11:29		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/19:49:28
1758	MGS	02-252/20:15:00	15	End Post-Cal		
1759	MGS	02-252/20:27:42		NOTE: Apoapsis 15670 -		02-252/20:05:41
1760	MGS	02-252/20:35:09		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/20:13:08
1761	MGS	02-252/20:40:05		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/20:18:04
1762	MGS	02-252/20:40:05		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=16124000, DUR=00:28:36		02-252/20:18:04
1763	MGS	02-252/20:40:05		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-252/20:18:04
1764	MGS	02-252/20:40:05		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/20:18:04
1765	MGS	02-252/20:40:09		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/20:18:08
1766	MGS	02-252/20:40:09		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/20:18:08
1767	MGS	02-252/20:40:10		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/20:18:09
1768	MGS	02-252/20:40:10		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/20:18:09
1769	MGS	02-252/20:43:25		NOTE: Enter Planetary Atmosphere 15670		02-252/20:21:24
1770	MGS	02-252/20:45:00	45	Begin Tracking		
1771	MGS	02-252/20:45:00	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1772	MGS	02-252/20:45:00	45	NOTE: Carrier Only -- No Telemetry Modulation		
1773	MGS	02-252/20:46:08		NOTE: Enter Earth Occultation 15670		02-252/20:24:06
1774	MGS	02-252/20:46:08	45	NOTE: Loss Of X-Band Signal		
1775	MGS	02-252/20:46:41		NOTE: Enter Solar Eclipse 15670		02-252/20:24:39
1776	MGS	02-252/20:48:13		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/20:26:12
1777	MGS	02-252/20:48:13		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/20:26:12
1778	MGS	02-252/20:48:14		NOTE: End fixed Sub-Reflector for Radio Science		02-252/20:26:13
1779	MGS	02-252/20:48:14		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/20:26:13
1780	MGS	02-252/20:48:14		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/20:26:13

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1781	MGS	02-252/20:48:14		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/20:26:13
1782	MGS	02-252/20:48:15		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/20:26:14
1783	MGS	02-252/20:48:15		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/20:26:14
1784	MGS	02-252/20:48:22	45	NOTE: Above Uplink Interlock Limit		
1785	MGS	02-252/20:51:45		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/20:29:44
1786	MGS	02-252/20:51:46		Disable A frame offset	SAAFOX	02-252/20:29:45
1787	MGS	02-252/20:51:47		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-252/20:29:46
1788	MGS	02-252/20:52:30	45	NOTE: Transmitter Off in 15 minutes		
1789	MGS	02-252/20:54:46		: TRUE	mnadir	02-252/20:32:45
1790	MGS	02-252/20:55:00	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1791	MGS	02-252/20:55:12		NOTE: Start Block (SSRMGR)		02-252/20:33:11
1792	MGS	02-252/20:55:12		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART7	STSSRC	02-252/20:33:11
1793	MGS	02-252/20:55:13		SSR 2A Data Enable	CSD2AE	02-252/20:33:12
1794	MGS	02-252/20:55:13		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=7, BR=4000, SRC=SE_1A		02-252/20:33:12
1795	MGS	02-252/20:57:45		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/20:35:44
1796	MGS	02-252/20:57:46		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/20:35:45
1797	MGS	02-252/21:07:30	45	Transmitter Off		
1798	MGS	02-252/21:11:13		SSR 2B Data Disable	CSD2BX	02-252/20:49:12
1799	MGS	02-252/21:11:13		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-252/20:49:12
1800	MGS	02-252/21:11:14		NOTE: End Block (SSRMGR)		02-252/20:49:13
1801	MGS	02-252/21:17:16		Enable A frame offset	SAAFOE	02-252/20:55:15
1802	MGS	02-252/21:17:17		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-252/20:55:16
1803	MGS	02-252/21:17:18		: FALSE	mnadir	02-252/20:55:17
1804	MGS	02-252/21:23:08	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1805	MGS	02-252/21:25:08	45	Range Modulation On: SUP=3.0dB		
1806	MGS	02-252/21:25:24		NOTE: Exit Solar Eclipse 15670		02-252/21:03:23
1807	MGS	02-252/21:25:54		NOTE: Exit Earth Occultation 15670		02-252/21:03:53
1808	MGS	02-252/21:26:08	45	Begin Ranging Acquisition		
1809	MGS	02-252/21:26:33		NOTE: Periapsis 15671 ----------		02-252/21:04:32
1810	MGS	02-252/21:28:51		NOTE: Exit Planetary Atmosphere 15670		02-252/21:06:49
1811	MGS	02-252/21:30:33		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/21:08:32
1812	MGS	02-252/21:30:33		Select Automatic HGA control mode	SAHACE	02-252/21:08:32
1813	MGS	02-252/21:30:34		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/21:08:33
1814	MGS	02-252/21:30:42	45	Acquisition Of X-Band Signal		
1815	MGS	02-252/21:30:42	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1816	MGS	02-252/21:32:35		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/21:10:34
1817	MGS	02-252/21:32:35		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=8968000, DUR=00:37:22		02-252/21:10:34
1818	MGS	02-252/21:32:35		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/21:10:34
1819	MGS	02-252/21:32:35		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/21:10:34
1820	MGS	02-252/21:39:03	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1821	MGS	02-252/21:41:04	45	NOTE: Transmitter Off in 15 minutes		
1822	MGS	02-252/21:51:31		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/21:29:30
1823	MGS	02-252/21:51:31		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=13512000, DUR=00:18:56		02-252/21:29:30
1824	MGS	02-252/21:51:31		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/21:29:30
1825	MGS	02-252/21:51:31		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/21:29:30
1826	MGS	02-252/21:51:32		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/21:29:31
1827	MGS	02-252/21:51:32	45	NOTE: Loss Of X-Band Signal		
1828	MGS	02-252/21:51:33		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/21:29:32
1829	MGS	02-252/21:51:34		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/21:29:33
1830	MGS	02-252/21:53:50		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/21:31:49
1831	MGS	02-252/21:54:04	45	Range Modulation Off		
1832	MGS	02-252/21:56:04	45	Transmitter Off		
1833	MGS	02-252/22:01:20		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/21:39:19
1834	MGS	02-252/22:07:12		Select Automatic HGA control mode	SAHACE	02-252/21:45:11

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1835	MGS	02-252/22:07:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/21:45:12
1836	MGS	02-252/22:07:21	45	Acquisition Of X-Band Signal		
1837	MGS	02-252/22:07:21	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1838	MGS	02-252/22:09:14		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/21:47:13
1839	MGS	02-252/22:09:14		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=17764000, DUR=00:17:43		02-252/21:47:13
1840	MGS	02-252/22:09:14		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/21:47:13
1841	MGS	02-252/22:09:14		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/21:47:13
1842	MGS	02-252/22:25:35		NOTE: Apoapsis 15671 -		02-252/22:03:33
1843	MGS	02-252/22:32:58		NOTE: Begin fixed Sub-Reflector for Radio Science		02-252/22:10:57
1844	MGS	02-252/22:37:54		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/22:15:53
1845	MGS	02-252/22:37:54		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=24644000, DUR=00:28:40		02-252/22:15:53
1846	MGS	02-252/22:37:54		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/22:15:53
1847	MGS	02-252/22:37:54		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/22:15:53
1848	MGS	02-252/22:37:58		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-252/22:15:57
1849	MGS	02-252/22:37:58		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-252/22:15:57
1850	MGS	02-252/22:37:58	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1851	MGS	02-252/22:37:59		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-252/22:15:58
1852	MGS	02-252/22:37:59		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-252/22:15:58
1853	MGS	02-252/22:37:59	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1854	MGS	02-252/22:37:59	45	NOTE: Carrier Only -- No Telemetry Modulation		
1855	MGS	02-252/22:41:10		NOTE: Enter Planetary Atmosphere 15671		02-252/22:19:08
1856	MGS	02-252/22:43:52		NOTE: Enter Earth Occultation 15671		02-252/22:21:50
1857	MGS	02-252/22:43:52	45	NOTE: Loss Of X-Band Signal		
1858	MGS	02-252/22:44:16	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1859	MGS	02-252/22:44:25		NOTE: Enter Solar Eclipse 15671		02-252/22:22:23
1860	MGS	02-252/22:46:01		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-252/22:24:00
1861	MGS	02-252/22:46:01		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-252/22:24:00
1862	MGS	02-252/22:46:02		NOTE: End fixed Sub-Reflector for Radio Science		02-252/22:24:01
1863	MGS	02-252/22:46:02		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-252/22:24:01
1864	MGS	02-252/22:46:02		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-252/22:24:01
1865	MGS	02-252/22:46:02		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-252/22:24:01
1866	MGS	02-252/22:46:03		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/22:24:02
1867	MGS	02-252/22:46:03		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/22:24:02
1868	MGS	02-252/22:49:33		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-252/22:27:32
1869	MGS	02-252/22:50:14	45	NOTE: Transmitter Off in 15 minutes		
1870	MGS	02-252/22:55:33		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-252/22:33:32
1871	MGS	02-252/22:55:34		NOTE: End Block (MAP_RT_BETA_SUP)		02-252/22:33:33
1872	MGS	02-252/23:05:14	45	Transmitter Off		
1873	MGS	02-252/23:20:52	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1874	MGS	02-252/23:22:52	45	Range Modulation On: SUP=3.0dB		
1875	MGS	02-252/23:23:09		NOTE: Exit Solar Eclipse 15671		02-252/23:01:07
1876	MGS	02-252/23:23:38		NOTE: Exit Earth Occultation 15671		02-252/23:01:37
1877	MGS	02-252/23:23:52	45	Begin Ranging Acquisition		
1878	MGS	02-252/23:24:11		NOTE: Periapsis 15672 ----------		02-252/23:02:09
1879	MGS	02-252/23:26:35		NOTE: Exit Planetary Atmosphere 15671		02-252/23:04:34
1880	MGS	02-252/23:28:17		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-252/23:06:16
1881	MGS	02-252/23:28:17		Select Automatic HGA control mode	SAHACE	02-252/23:06:16
1882	MGS	02-252/23:28:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/23:06:17
1883	MGS	02-252/23:28:26	45	Acquisition Of X-Band Signal		
1884	MGS	02-252/23:28:26	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1885	MGS	02-252/23:30:19		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/23:08:18
1886	MGS	02-252/23:30:19		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=37224000, DUR=00:52:25		02-252/23:08:18
1887	MGS	02-252/23:30:19		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/23:08:18
1888	MGS	02-252/23:30:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/23:08:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1889	MGS	02-252/23:38:44	45	NOTE: Transmitter Off in 15 minutes		
1890	MGS	02-252/23:49:15		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/23:27:14
1891	MGS	02-252/23:49:15		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=41768000, DUR=00:18:56		02-252/23:27:14
1892	MGS	02-252/23:49:15		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/23:27:14
1893	MGS	02-252/23:49:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/23:27:14
1894	MGS	02-252/23:49:16		Turn off the MOT Exciter and RPA beam	STRPAF	02-252/23:27:15
1895	MGS	02-252/23:49:16	45	NOTE: Loss Of X-Band Signal		
1896	MGS	02-252/23:49:17		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-252/23:27:16
1897	MGS	02-252/23:49:18		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-252/23:27:17
1898	MGS	02-252/23:51:34		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-252/23:29:33
1899	MGS	02-252/23:51:45	45	Range Modulation Off		
1900	MGS	02-252/23:53:44	45	Transmitter Off		
1901	MGS	02-252/23:59:04		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-252/23:37:03
1902	MGS	02-253/00:00:00		Light Time: OWLT = 22:01, RTLT = 44:03		
1903	MGS	02-253/00:04:56		Select Automatic HGA control mode	SAHACE	02-252/23:42:55
1904	MGS	02-253/00:04:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-252/23:42:56
1905	MGS	02-253/00:05:05	45	Acquisition Of X-Band Signal		
1906	MGS	02-253/00:05:05	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1907	MGS	02-253/00:06:58		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-252/23:44:57
1908	MGS	02-253/00:06:58		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=46020000, DUR=00:17:43		02-252/23:44:57
1909	MGS	02-253/00:06:58		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-252/23:44:57
1910	MGS	02-253/00:06:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-252/23:44:57
1911	MGS	02-253/00:21:59		NOTE: Start Block (SSRMGR)		02-252/23:59:58
1912	MGS	02-253/00:21:59		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, CLRALL, PART1	STSSRC	02-252/23:59:58
1913	MGS	02-253/00:22:00		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART1	STSSRC	02-252/23:59:59
1914	MGS	02-253/00:22:01		SSR 1A Data Enable	CSD1AE	02-253/00:00:00
1915	MGS	02-253/00:22:01		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-253/00:00:00
1916	MGS	02-253/00:22:01		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-253/00:00:00
1917	MGS	02-253/00:22:58		NOTE: Apoapsis 15672 -		02-253/00:00:56
1918	MGS	02-253/00:30:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/00:08:41
1919	MGS	02-253/00:35:38		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/00:13:37
1920	MGS	02-253/00:35:38		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=3268000, DUR=00:13:37		02-253/00:13:37
1921	MGS	02-253/00:35:38		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/00:13:37
1922	MGS	02-253/00:35:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/00:13:37
1923	MGS	02-253/00:35:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/00:13:41
1924	MGS	02-253/00:35:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/00:13:41
1925	MGS	02-253/00:35:42	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1926	MGS	02-253/00:35:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/00:13:42
1927	MGS	02-253/00:35:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/00:13:42
1928	MGS	02-253/00:35:43	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
1929	MGS	02-253/00:35:43	45	NOTE: Carrier Only -- No Telemetry Modulation		
1930	MGS	02-253/00:38:50		NOTE: Enter Planetary Atmosphere 15672		02-253/00:16:48
1931	MGS	02-253/00:40:01		SSR 2A Data Disable	CSD2AX	02-253/00:18:00
1932	MGS	02-253/00:40:01		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=7, BITS=53952000, DUR=03:44:48		02-253/00:18:00
1933	MGS	02-253/00:40:02		NOTE: End Block (SSRMGR)		02-253/00:18:01
1934	MGS	02-253/00:41:32		NOTE: Enter Earth Occultation 15672		02-253/00:19:31
1935	MGS	02-253/00:41:32	45	NOTE: Loss Of X-Band Signal		
1936	MGS	02-253/00:41:57	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1937	MGS	02-253/00:42:05		NOTE: Enter Solar Eclipse 15672		02-253/00:20:04
1938	MGS	02-253/00:43:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/00:21:44
1939	MGS	02-253/00:43:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/00:21:44
1940	MGS	02-253/00:43:46		NOTE: End fixed Sub-Reflector for Radio Science		02-253/00:21:45
1941	MGS	02-253/00:43:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/00:21:45
1942	MGS	02-253/00:43:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/00:21:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1943	MGS	02-253/00:43:46		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/00:21:45
1944	MGS	02-253/00:43:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/00:21:46
1945	MGS	02-253/00:43:47		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/00:21:46
1946	MGS	02-253/00:47:10		Disable A frame offset	SAAFOX	02-253/00:25:09
1947	MGS	02-253/00:47:11		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/00:25:10
1948	MGS	02-253/00:47:17		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/00:25:16
1949	MGS	02-253/00:47:55	45	NOTE: Transmitter Off in 15 minutes		
1950	MGS	02-253/00:50:10		: TRUE	mnadir	02-253/00:28:09
1951	MGS	02-253/00:53:17		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/00:31:16
1952	MGS	02-253/00:53:18		NOTE: End Block (MAP_RT_BETA_SUP)		02-253/00:31:17
1953	MGS	02-253/01:02:55	45	Transmitter Off		
1954	MGS	02-253/01:12:40		Enable A frame offset	SAAFOE	02-253/00:50:39
1955	MGS	02-253/01:12:41		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/00:50:40
1956	MGS	02-253/01:12:42		: FALSE	mnadir	02-253/00:50:41
1957	MGS	02-253/01:18:33	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
1958	MGS	02-253/01:20:33	45	Range Modulation On: SUP=3.0dB		
1959	MGS	02-253/01:20:49		NOTE: Exit Solar Eclipse 15672		02-253/00:58:48
1960	MGS	02-253/01:21:19		NOTE: Exit Earth Occultation 15672		02-253/00:59:17
1961	MGS	02-253/01:21:29		NOTE: Periapsis 15673 ----------		02-253/00:59:28
1962	MGS	02-253/01:21:33	45	Begin Ranging Acquisition		
1963	MGS	02-253/01:24:16		NOTE: Exit Planetary Atmosphere 15672		02-253/01:02:14
1964	MGS	02-253/01:25:58		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-253/01:03:57
1965	MGS	02-253/01:25:58		Select Automatic HGA control mode	SAHACE	02-253/01:03:57
1966	MGS	02-253/01:25:59		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/01:03:58
1967	MGS	02-253/01:26:07	45	Acquisition Of X-Band Signal		
1968	MGS	02-253/01:26:07	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1969	MGS	02-253/01:28:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:05:59
1970	MGS	02-253/01:28:00		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=15836000, DUR=00:52:22		02-253/01:05:59
1971	MGS	02-253/01:28:00		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/01:05:59
1972	MGS	02-253/01:28:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/01:05:59
1973	MGS	02-253/01:28:25		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:06:24
1974	MGS	02-253/01:28:25		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=1, BITS=15936000, DUR=00:00:25		02-253/01:06:24
1975	MGS	02-253/01:28:25		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/01:06:24
1976	MGS	02-253/01:28:27		NOTE: Start Block (SSRMGR)		02-253/01:06:26
1977	MGS	02-253/01:28:27		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-253/01:06:26
1978	MGS	02-253/01:28:27		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-253/01:06:26
1979	MGS	02-253/01:28:28		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/01:06:27
1980	MGS	02-253/01:28:29		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART7	STSSRC	02-253/01:06:28
1981	MGS	02-253/01:28:30		SSR 2A Data Enable	CSD2AE	02-253/01:06:29
1982	MGS	02-253/01:28:30		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=7, BR=21333		02-253/01:06:29
1983	MGS	02-253/01:28:30	45	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1984	MGS	02-253/01:36:22	45	NOTE: Transmitter Off in 15 minutes		
1985	MGS	02-253/01:46:56		SSR 2A Data Disable	CSD2AX	02-253/01:24:55
1986	MGS	02-253/01:46:56		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=7, BITS=23594666, DUR=00:18:26		02-253/01:24:55
1987	MGS	02-253/01:46:56		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:24:55
1988	MGS	02-253/01:46:56		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/01:24:55
1989	MGS	02-253/01:46:56	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
1990	MGS	02-253/01:46:57		NOTE: End Block (SSRMGR)		02-253/01:24:56
1991	MGS	02-253/01:46:57		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:24:56
1992	MGS	02-253/01:46:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/01:24:56
1993	MGS	02-253/01:46:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/01:24:56
1994	MGS	02-253/01:46:57	45	NOTE: Loss Of X-Band Signal		
1995	MGS	02-253/01:46:58		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/01:24:57
1996	MGS	02-253/01:46:59		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/01:24:58

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
1997	MGS	02-253/01:49:15		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/01:27:14
1998	MGS	02-253/01:49:22	45	Range Modulation Off		
1999	MGS	02-253/01:51:22	45	Transmitter Off		
2000	MGS	02-253/01:56:45		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/01:34:44
2001	MGS	02-253/01:57:38		NOTE: Start Block (SSRMGR)		02-253/01:35:37
2002	MGS	02-253/01:57:38		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, CLRALL, PART1	STSSRC	02-253/01:35:37
2003	MGS	02-253/01:57:39		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART1	STSSRC	02-253/01:35:38
2004	MGS	02-253/01:57:40		SSR 1B Data Enable	CSD1BE	02-253/01:35:39
2005	MGS	02-253/01:57:40		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-253/01:35:39
2006	MGS	02-253/02:02:37		Select Automatic HGA control mode	SAHACE	02-253/01:40:36
2007	MGS	02-253/02:02:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/01:40:37
2008	MGS	02-253/02:02:46	45	Acquisition Of X-Band Signal		
2009	MGS	02-253/02:02:46	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2010	MGS	02-253/02:04:39		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:42:38
2011	MGS	02-253/02:04:39		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=1676000, DUR=00:06:59		02-253/01:42:38
2012	MGS	02-253/02:04:39		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/01:42:38
2013	MGS	02-253/02:04:39		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/01:42:38
2014	MGS	02-253/02:05:02		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/01:43:01
2015	MGS	02-253/02:05:02		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=1768000, DUR=00:00:23		02-253/01:43:01
2016	MGS	02-253/02:05:02		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/01:43:01
2017	MGS	02-253/02:05:03		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/01:43:02
2018	MGS	02-253/02:05:04		SSR 2A Data Enable	CSD2AE	02-253/01:43:03
2019	MGS	02-253/02:05:04		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=7, BR=21333		02-253/01:43:03
2020	MGS	02-253/02:05:04	45	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2021	MGS	02-253/02:13:40		SSR 1A Data Disable	CSD1AX	02-253/01:51:39
2022	MGS	02-253/02:13:40		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=1, BITS=26796000, DUR=01:51:39		02-253/01:51:39
2023	MGS	02-253/02:13:41		NOTE: End Block (SSRMGR)		02-253/01:51:40
2024	MGS	02-253/02:20:24		NOTE: Apoapsis 15673 -		02-253/01:58:22
2025	MGS	02-253/02:28:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/02:06:22
2026	MGS	02-253/02:28:48		SSR 2A Data Disable	CSD2AX	02-253/02:06:47
2027	MGS	02-253/02:28:48		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=7, BITS=30378666, DUR=00:23:44		02-253/02:06:47
2028	MGS	02-253/02:28:49		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/02:06:48
2029	MGS	02-253/02:28:49		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=7476000, DUR=00:23:47		02-253/02:06:48
2030	MGS	02-253/02:28:49		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/02:06:48
2031	MGS	02-253/02:28:49		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/02:06:48
2032	MGS	02-253/02:28:49	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2033	MGS	02-253/02:33:19		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/02:11:18
2034	MGS	02-253/02:33:19		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=8556000, DUR=00:04:30		02-253/02:11:18
2035	MGS	02-253/02:33:19		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/02:11:18
2036	MGS	02-253/02:33:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/02:11:18
2037	MGS	02-253/02:33:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/02:11:22
2038	MGS	02-253/02:33:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/02:11:22
2039	MGS	02-253/02:33:23	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2040	MGS	02-253/02:33:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/02:11:23
2041	MGS	02-253/02:33:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/02:11:23
2042	MGS	02-253/02:33:24	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2043	MGS	02-253/02:33:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
2044	MGS	02-253/02:36:27		NOTE: Enter Planetary Atmosphere 15673		02-253/02:14:26
2045	MGS	02-253/02:39:10		NOTE: Enter Earth Occultation 15673		02-253/02:17:08
2046	MGS	02-253/02:39:10	45	NOTE: Loss Of X-Band Signal		
2047	MGS	02-253/02:39:35	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2048	MGS	02-253/02:39:43		NOTE: Enter Solar Eclipse 15673		02-253/02:17:42
2049	MGS	02-253/02:41:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/02:19:25
2050	MGS	02-253/02:41:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/02:19:25

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2051	MGS	02-253/02:41:27		NOTE: End fixed Sub-Reflector for Radio Science		02-253/02:19:26
2052	MGS	02-253/02:41:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/02:19:26
2053	MGS	02-253/02:41:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/02:19:26
2054	MGS	02-253/02:41:27		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/02:19:26
2055	MGS	02-253/02:41:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/02:19:27
2056	MGS	02-253/02:41:28		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/02:19:27
2057	MGS	02-253/02:44:48		Disable A frame offset	SAAFOX	02-253/02:22:47
2058	MGS	02-253/02:44:49		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/02:22:48
2059	MGS	02-253/02:44:58		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/02:22:57
2060	MGS	02-253/02:45:33	45	NOTE: Transmitter Off in 15 minutes		
2061	MGS	02-253/02:47:48		: TRUE	mnadir	02-253/02:25:47
2062	MGS	02-253/02:50:58		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/02:28:57
2063	MGS	02-253/02:50:59		NOTE: End Block (MAP_RT_BETA_SUP)		02-253/02:28:58
2064	MGS	02-253/03:00:33	45	Transmitter Off		
2065	MGS	02-253/03:10:18		Enable A frame offset	SAAFOE	02-253/02:48:17
2066	MGS	02-253/03:10:19		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/02:48:18
2067	MGS	02-253/03:10:20		: FALSE	mnadir	02-253/02:48:19
2068	MGS	02-253/03:16:11	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2069	MGS	02-253/03:18:11	45	Range Modulation On: SUP=3.0dB		
2070	MGS	02-253/03:18:27		NOTE: Exit Solar Eclipse 15673		02-253/02:56:25
2071	MGS	02-253/03:18:57		NOTE: Exit Earth Occultation 15673		02-253/02:56:55
2072	MGS	02-253/03:18:58		NOTE: Periapsis 15674 ----------		02-253/02:56:57
2073	MGS	02-253/03:19:11	45	Begin Ranging Acquisition		
2074	MGS	02-253/03:21:53		NOTE: Exit Planetary Atmosphere 15673		02-253/02:59:52
2075	MGS	02-253/03:23:36		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-253/03:01:35
2076	MGS	02-253/03:23:36		Select Automatic HGA control mode	SAHACE	02-253/03:01:35
2077	MGS	02-253/03:23:37		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/03:01:36
2078	MGS	02-253/03:23:45	45	Acquisition Of X-Band Signal		
2079	MGS	02-253/03:23:45	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2080	MGS	02-253/03:25:38		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/03:03:37
2081	MGS	02-253/03:25:38		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=21112000, DUR=00:52:19		02-253/03:03:37
2082	MGS	02-253/03:25:38		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/03:03:37
2083	MGS	02-253/03:25:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/03:03:37
2084	MGS	02-253/03:34:04	45	NOTE: Transmitter Off in 15 minutes		
2085	MGS	02-253/03:44:34		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/03:22:33
2086	MGS	02-253/03:44:34		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=1, BITS=25656000, DUR=00:18:56		02-253/03:22:33
2087	MGS	02-253/03:44:34		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-253/03:22:33
2088	MGS	02-253/03:44:34		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/03:22:33
2089	MGS	02-253/03:44:35		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/03:22:34
2090	MGS	02-253/03:44:35	45	NOTE: Loss Of X-Band Signal		
2091	MGS	02-253/03:44:36		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/03:22:35
2092	MGS	02-253/03:44:37		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/03:22:36
2093	MGS	02-253/03:46:53		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/03:24:52
2094	MGS	02-253/03:47:04	45	Range Modulation Off		
2095	MGS	02-253/03:49:04	45	Transmitter Off		
2096	MGS	02-253/03:54:23		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/03:32:22
2097	MGS	02-253/03:55:43		NOTE: Start Block (SSRMGR)		02-253/03:33:42
2098	MGS	02-253/03:55:43		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART2	STSSRC	02-253/03:33:42
2099	MGS	02-253/03:55:44		SSR 1A Data Enable	CSD1AE	02-253/03:33:43
2100	MGS	02-253/03:55:44		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-253/03:33:43
2101	MGS	02-253/04:00:15		Select Automatic HGA control mode	SAHACE	02-253/03:38:14
2102	MGS	02-253/04:00:16		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/03:38:15
2103	MGS	02-253/04:00:24	45	Acquisition Of X-Band Signal		
2104	MGS	02-253/04:00:24	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2105	MGS	02-253/04:02:17		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/03:40:16
2106	MGS	02-253/04:02:17		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=1572000, DUR=00:06:33		02-253/03:40:16
2107	MGS	02-253/04:02:17		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/03:40:16
2108	MGS	02-253/04:02:17		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/03:40:16
2109	MGS	02-253/04:11:44		SSR 1B Data Disable	CSD1BX	02-253/03:49:43
2110	MGS	02-253/04:11:44		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=1, BITS=32176000, DUR=02:14:04		02-253/03:49:43
2111	MGS	02-253/04:11:45		NOTE: End Block (SSRMGR)		02-253/03:49:44
2112	MGS	02-253/04:18:13		NOTE: Apoapsis 15674 -		02-253/03:56:12
2113	MGS	02-253/04:26:01		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/04:04:00
2114	MGS	02-253/04:30:57		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/04:08:56
2115	MGS	02-253/04:30:57		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=8452000, DUR=00:28:40		02-253/04:08:56
2116	MGS	02-253/04:30:57		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/04:08:56
2117	MGS	02-253/04:30:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/04:08:56
2118	MGS	02-253/04:31:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/04:09:00
2119	MGS	02-253/04:31:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/04:09:00
2120	MGS	02-253/04:31:01	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2121	MGS	02-253/04:31:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/04:09:01
2122	MGS	02-253/04:31:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/04:09:01
2123	MGS	02-253/04:31:02	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2124	MGS	02-253/04:31:02	45	NOTE: Carrier Only -- No Telemetry Modulation		
2125	MGS	02-253/04:34:09		NOTE: Enter Planetary Atmosphere 15674		02-253/04:12:08
2126	MGS	02-253/04:36:51		NOTE: Enter Earth Occultation 15674		02-253/04:14:50
2127	MGS	02-253/04:36:51	45	NOTE: Loss Of X-Band Signal		
2128	MGS	02-253/04:37:16	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2129	MGS	02-253/04:37:25		NOTE: Enter Solar Eclipse 15674		02-253/04:15:24
2130	MGS	02-253/04:39:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/04:17:03
2131	MGS	02-253/04:39:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/04:17:03
2132	MGS	02-253/04:39:05		NOTE: End fixed Sub-Reflector for Radio Science		02-253/04:17:04
2133	MGS	02-253/04:39:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/04:17:04
2134	MGS	02-253/04:39:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/04:17:04
2135	MGS	02-253/04:39:05		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/04:17:04
2136	MGS	02-253/04:39:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/04:17:05
2137	MGS	02-253/04:39:06		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/04:17:05
2138	MGS	02-253/04:42:36		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/04:20:35
2139	MGS	02-253/04:43:14	45	NOTE: Transmitter Off in 15 minutes		
2140	MGS	02-253/04:48:36		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/04:26:35
2141	MGS	02-253/04:48:37		NOTE: End Block (MAP_RT_BETA_SUP)		02-253/04:26:36
2142	MGS	02-253/04:58:14	45	Transmitter Off		
2143	MGS	02-253/05:13:52	45	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2144	MGS	02-253/05:15:52	45	Range Modulation On: SUP=3.0dB		
2145	MGS	02-253/05:16:08		NOTE: Exit Solar Eclipse 15674		02-253/04:54:07
2146	MGS	02-253/05:16:38		NOTE: Exit Earth Occultation 15674		02-253/04:54:36
2147	MGS	02-253/05:16:47		NOTE: Periapsis 15675 ----------		02-253/04:54:46
2148	MGS	02-253/05:16:52	45	Begin Ranging Acquisition		
2149	MGS	02-253/05:19:34		NOTE: Exit Planetary Atmosphere 15674		02-253/04:57:33
2150	MGS	02-253/05:21:17		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-253/04:59:16
2151	MGS	02-253/05:21:17		Select Automatic HGA control mode	SAHACE	02-253/04:59:16
2152	MGS	02-253/05:21:18		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/04:59:17
2153	MGS	02-253/05:21:26	45	Acquisition Of X-Band Signal		
2154	MGS	02-253/05:21:26	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2155	MGS	02-253/05:23:19		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/05:01:18
2156	MGS	02-253/05:23:19		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=2, BITS=21020000, DUR=00:52:22		02-253/05:01:18
2157	MGS	02-253/05:23:19		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/05:01:18
2158	MGS	02-253/05:23:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/05:01:18

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2159	MGS	02-253/05:31:22		NOTE: Start Block (SSRMGR)		02-253/05:09:21
2160	MGS	02-253/05:31:22		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART2	STSSRC	02-253/05:09:21
2161	MGS	02-253/05:31:23		SSR 1B Data Enable	CSD1BE	02-253/05:09:22
2162	MGS	02-253/05:31:23		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-253/05:09:22
2163	MGS	02-253/05:31:49	45	NOTE: Transmitter Off in 15 minutes		
2164	MGS	02-253/05:42:15		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/05:20:14
2165	MGS	02-253/05:42:15		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=2608000, DUR=00:10:52		02-253/05:20:14
2166	MGS	02-253/05:42:15		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/05:20:14
2167	MGS	02-253/05:42:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/05:20:14
2168	MGS	02-253/05:42:16		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/05:20:15
2169	MGS	02-253/05:42:16	45	NOTE: Loss Of X-Band Signal		
2170	MGS	02-253/05:42:17		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/05:20:16
2171	MGS	02-253/05:42:18		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/05:20:17
2172	MGS	02-253/05:44:34		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/05:22:33
2173	MGS	02-253/05:44:50	45	Range Modulation Off		
2174	MGS	02-253/05:46:49	45	Transmitter Off		
2175	MGS	02-253/05:47:23		SSR 1A Data Disable	CSD1AX	02-253/05:25:22
2176	MGS	02-253/05:47:23		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=2, BITS=26796000, DUR=01:51:39		02-253/05:25:22
2177	MGS	02-253/05:47:24		NOTE: End Block (SSRMGR)		02-253/05:25:23
2178	MGS	02-253/05:52:04		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/05:30:03
2179	MGS	02-253/05:57:56		Select Automatic HGA control mode	SAHACE	02-253/05:35:55
2180	MGS	02-253/05:57:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/05:35:56
2181	MGS	02-253/05:58:05	45	Acquisition Of X-Band Signal		
2182	MGS	02-253/05:58:05	45	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2183	MGS	02-253/05:59:58		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/05:37:57
2184	MGS	02-253/05:59:58		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=6860000, DUR=00:17:43		02-253/05:37:57
2185	MGS	02-253/05:59:58		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/05:37:57
2186	MGS	02-253/05:59:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/05:37:57
2187	MGS	02-253/06:04:12	45	NOTE: Below Uplink Interlock Limit		
2188	MGS	02-253/06:14:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/05:51:59
2189	MGS	02-253/06:14:00		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=10228000, DUR=00:14:02		02-253/05:51:59
2190	MGS	02-253/06:14:00		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/05:51:59
2191	MGS	02-253/06:14:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/05:51:59
2192	MGS	02-253/06:15:00	45	End Tracking		
2193	MGS	02-253/06:15:58		NOTE: Apoapsis 15675 -		02-253/05:53:57
2194	MGS	02-253/06:23:42		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/06:01:41
2195	MGS	02-253/06:28:38		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/06:06:37
2196	MGS	02-253/06:28:38		SSR Activity: ID=SSR_1B, FCN=End Old Recording Rate, PRT=2, BITS=13740000, DUR=00:14:38		02-253/06:06:37
2197	MGS	02-253/06:28:38		SSR Activity: ID=SSR_1B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-253/06:06:37
2198	MGS	02-253/06:28:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/06:06:37
2199	MGS	02-253/06:28:42		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/06:06:41
2200	MGS	02-253/06:28:42		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/06:06:41
2201	MGS	02-253/06:28:43		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/06:06:42
2202	MGS	02-253/06:28:43		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/06:06:42
2203	MGS	02-253/06:30:00	45	End Post-Cal		
2204	MGS	02-253/06:31:55		NOTE: Enter Planetary Atmosphere 15675		02-253/06:09:53
2205	MGS	02-253/06:34:37		NOTE: Enter Earth Occultation 15675		02-253/06:12:35
2206	MGS	02-253/06:35:10		NOTE: Enter Solar Eclipse 15675		02-253/06:13:09
2207	MGS	02-253/06:36:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/06:14:44
2208	MGS	02-253/06:36:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/06:14:44
2209	MGS	02-253/06:36:46		NOTE: End fixed Sub-Reflector for Radio Science		02-253/06:14:45
2210	MGS	02-253/06:36:46		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/06:14:45
2211	MGS	02-253/06:36:46		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/06:14:45
2212	MGS	02-253/06:36:46		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/06:14:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2213	MGS	02-253/06:36:47		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/06:14:46
2214	MGS	02-253/06:36:47		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/06:14:46
2215	MGS	02-253/06:40:15		Disable A frame offset	SAAFOX	02-253/06:18:14
2216	MGS	02-253/06:40:16		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/06:18:15
2217	MGS	02-253/06:40:17		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/06:18:16
2218	MGS	02-253/06:43:15		: TRUE	mnadir	02-253/06:21:14
2219	MGS	02-253/06:46:17		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/06:24:16
2220	MGS	02-253/06:46:18		NOTE: End Block (MAP_RT_BETA_SUP)		02-253/06:24:17
2221	MGS	02-253/07:05:45		Enable A frame offset	SAAFOE	02-253/06:43:44
2222	MGS	02-253/07:05:46		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/06:43:45
2223	MGS	02-253/07:05:47		: FALSE	mnadir	02-253/06:43:46
2224	MGS	02-253/07:13:53		NOTE: Exit Solar Eclipse 15675		02-253/06:51:52
2225	MGS	02-253/07:14:23		NOTE: Exit Earth Occultation 15675		02-253/06:52:22
2226	MGS	02-253/07:14:36		NOTE: Periapsis 15676 ----------		02-253/06:52:35
2227	MGS	02-253/07:17:19		NOTE: Exit Planetary Atmosphere 15675		02-253/06:55:18
2228	MGS	02-253/07:29:26		NOTE: Start Block (SSRMGR)		02-253/07:07:25
2229	MGS	02-253/07:29:26		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART3	STSSRC	02-253/07:07:25
2230	MGS	02-253/07:29:27		SSR 1A Data Enable	CSD1AE	02-253/07:07:26
2231	MGS	02-253/07:29:27		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-253/07:07:26
2232	MGS	02-253/07:35:52		Loads ISH control parameters block (slew’rate, slew’vector, quat’i’from’t): , , ,	SALICP	02-253/07:13:51
2233	MGS	02-253/07:35:54		Disables star processing	SASTRX	02-253/07:13:53
2234	MGS	02-253/07:35:58		NOTE: Start S/C Maneuver		02-253/07:13:56
2235	MGS	02-253/07:35:58		Enter inertial slew-hold attitude control state, this state also used for maneuvers	SAGISH	02-253/07:13:57
2236	MGS	02-253/07:35:59		Momentum unload disable	SAUNLX	02-253/07:13:58
2237	MGS	02-253/07:45:27		SSR 1B Data Disable	CSD1BX	02-253/07:23:26
2238	MGS	02-253/07:45:27		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=2, BITS=32176000, DUR=02:14:04		02-253/07:23:26
2239	MGS	02-253/07:45:28		NOTE: End Block (SSRMGR)		02-253/07:23:27
2240	MGS	02-253/07:47:58		NOTE: Start S/C Turn to Earth-Point		02-253/07:25:56
2241	MGS	02-253/07:47:58		Enter csa-back-up attitude control state	SAGCSA	02-253/07:25:57
2242	MGS	02-253/07:55:04		Enables star processing	SASTRE	02-253/07:33:03
2243	MGS	02-253/07:55:06		Momentum unload enable	SAUNLE	02-253/07:33:05
2244	MGS	02-253/07:57:58		NOTE: End S/C Maneuver		02-253/07:35:56
2245	MGS	02-253/08:13:34		NOTE: Apoapsis 15676 -		02-253/07:51:32
2246	MGS	02-253/08:29:40		NOTE: Enter Planetary Atmosphere 15676		02-253/08:07:38
2247	MGS	02-253/08:32:22		NOTE: Enter Earth Occultation 15676		02-253/08:10:20
2248	MGS	02-253/08:32:55		NOTE: Enter Solar Eclipse 15676		02-253/08:10:54
2249	MGS	02-253/08:38:00		Disable A frame offset	SAAFOX	02-253/08:15:59
2250	MGS	02-253/08:38:01		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/08:16:00
2251	MGS	02-253/08:41:00		: TRUE	mnadir	02-253/08:18:59
2252	MGS	02-253/09:03:30		Enable A frame offset	SAAFOE	02-253/08:41:29
2253	MGS	02-253/09:03:31		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/08:41:30
2254	MGS	02-253/09:03:32		: FALSE	mnadir	02-253/08:41:31
2255	MGS	02-253/09:05:04		NOTE: Start Block (SSRMGR)		02-253/08:43:03
2256	MGS	02-253/09:05:04		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART3	STSSRC	02-253/08:43:03
2257	MGS	02-253/09:05:05		SSR 1B Data Enable	CSD1BE	02-253/08:43:04
2258	MGS	02-253/09:05:05		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-253/08:43:04
2259	MGS	02-253/09:10:00	63	Begin Pre-Cal		
2260	MGS	02-253/09:10:00	63	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2261	MGS	02-253/09:10:00	63	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2262	MGS	02-253/09:10:00	63	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2263	MGS	02-253/09:10:00	63	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
2264	MGS	02-253/09:10:00	63	Config: TGC: DEST=37		
2265	MGS	02-253/09:10:00	63	Config: TGC: BAND=X, BR=4000.000000		
2266	MGS	02-253/09:10:00	63	Config: FSS: CH=2, PRI_FL=10000		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2267	MGS	02-253/09:10:00	63	Config: RSR		
2268	MGS	02-253/09:10:00	63	Config: UWV: AMP=XHEMT, MODE=LISTEN ONLY, POL_UL=RCP, POL_DL=RCP		
2269	MGS	02-253/09:10:00	63	Config: BVR		
2270	MGS	02-253/09:10:00	63	Config: Doppler Extractor: BIAS=+1MHZ		
2271	MGS	02-253/09:10:00	63	Config: MDA: SMPL=0.1		
2272	MGS	02-253/09:11:38		NOTE: Exit Solar Eclipse 15676		02-253/08:49:37
2273	MGS	02-253/09:12:08		NOTE: Exit Earth Occultation 15676		02-253/08:50:07
2274	MGS	02-253/09:12:16		NOTE: Periapsis 15677 ----------		02-253/08:50:14
2275	MGS	02-253/09:15:04		NOTE: Exit Planetary Atmosphere 15676		02-253/08:53:03
2276	MGS	02-253/09:21:06		SSR 1A Data Disable	CSD1AX	02-253/08:59:05
2277	MGS	02-253/09:21:06		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=3, BITS=26796000, DUR=01:51:39		02-253/08:59:05
2278	MGS	02-253/09:21:07		NOTE: End Block (SSRMGR)		02-253/08:59:06
2279	MGS	02-253/10:11:01		NOTE: Apoapsis 15677 -		02-253/09:49:00
2280	MGS	02-253/10:27:22		NOTE: Enter Planetary Atmosphere 15677		02-253/10:05:21
2281	MGS	02-253/10:30:04		NOTE: Enter Earth Occultation 15677		02-253/10:08:03
2282	MGS	02-253/10:30:38		NOTE: Enter Solar Eclipse 15677		02-253/10:08:37
2283	MGS	02-253/10:40:00	63	Begin Tracking		
2284	MGS	02-253/11:03:09		NOTE: Start Block (SSRMGR)		02-253/10:41:08
2285	MGS	02-253/11:03:09		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART4	STSSRC	02-253/10:41:08
2286	MGS	02-253/11:03:10		SSR 1A Data Enable	CSD1AE	02-253/10:41:09
2287	MGS	02-253/11:03:10		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-253/10:41:09
2288	MGS	02-253/11:09:22		NOTE: Exit Solar Eclipse 15677		02-253/10:47:21
2289	MGS	02-253/11:09:52		NOTE: Exit Earth Occultation 15677		02-253/10:47:50
2290	MGS	02-253/11:10:01		NOTE: Periapsis 15678 ----------		02-253/10:47:59
2291	MGS	02-253/11:12:48		NOTE: Exit Planetary Atmosphere 15677		02-253/10:50:47
2292	MGS	02-253/11:14:28		NOTE: Start Block (MAP_PB_BETA_SUP)		02-253/10:52:27
2293	MGS	02-253/11:14:28		Select Automatic HGA control mode	SAHACE	02-253/10:52:27
2294	MGS	02-253/11:14:29		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/10:52:28
2295	MGS	02-253/11:14:30		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/10:52:29
2296	MGS	02-253/11:14:31		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART1	STSSRC	02-253/10:52:30
2297	MGS	02-253/11:14:32		SSR 2A Data Enable	CSD2AE	02-253/10:52:31
2298	MGS	02-253/11:14:32		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=1, BR=21333		02-253/10:52:31
2299	MGS	02-253/11:14:37	63	Acquisition Of X-Band Signal		
2300	MGS	02-253/11:14:37	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2301	MGS	02-253/11:19:09		SSR 1B Data Disable	CSD1BX	02-253/10:57:08
2302	MGS	02-253/11:19:09		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=3, BITS=32176000, DUR=02:14:04		02-253/10:57:08
2303	MGS	02-253/11:19:10		NOTE: End Block (SSRMGR)		02-253/10:57:09
2304	MGS	02-253/11:35:28		SSR 2A Data Disable	CSD2AX	02-253/11:13:27
2305	MGS	02-253/11:35:28		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=1, BITS=26794666, DUR=00:20:56		02-253/11:13:27
2306	MGS	02-253/11:35:29		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/11:13:28
2307	MGS	02-253/11:35:29	63	NOTE: Loss Of X-Band Signal		
2308	MGS	02-253/11:35:30		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/11:13:29
2309	MGS	02-253/11:35:31		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/11:13:30
2310	MGS	02-253/11:37:47		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/11:15:46
2311	MGS	02-253/11:45:17		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/11:23:16
2312	MGS	02-253/11:51:09		Select Automatic HGA control mode	SAHACE	02-253/11:29:08
2313	MGS	02-253/11:51:10		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/11:29:09
2314	MGS	02-253/11:51:11		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/11:29:10
2315	MGS	02-253/11:51:12		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART1	STSSRC	02-253/11:29:11
2316	MGS	02-253/11:51:13		SSR 2B Data Enable	CSD2BE	02-253/11:29:12
2317	MGS	02-253/11:51:13		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=1, BR=21333		02-253/11:29:12
2318	MGS	02-253/11:51:18	63	Acquisition Of X-Band Signal		
2319	MGS	02-253/11:51:18	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2320	MGS	02-253/12:08:46		NOTE: Apoapsis 15678 -		02-253/11:46:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2321	MGS	02-253/12:16:21		SSR 2B Data Disable	CSD2BX	02-253/11:54:20
2322	MGS	02-253/12:16:21		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=1, BITS=32170666, DUR=00:25:08		02-253/11:54:20
2323	MGS	02-253/12:16:22		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/11:54:21
2324	MGS	02-253/12:16:22	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2325	MGS	02-253/12:16:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/11:54:53
2326	MGS	02-253/12:21:54		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/11:59:53
2327	MGS	02-253/12:21:54		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/11:59:53
2328	MGS	02-253/12:21:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/11:59:54
2329	MGS	02-253/12:21:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/11:59:54
2330	MGS	02-253/12:21:55	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2331	MGS	02-253/12:21:55	63	NOTE: Carrier Only -- No Telemetry Modulation		
2332	MGS	02-253/12:22:01		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-253/12:00:00
2333	MGS	02-253/12:25:03		NOTE: Enter Planetary Atmosphere 15678		02-253/12:03:01
2334	MGS	02-253/12:27:45		NOTE: Enter Earth Occultation 15678		02-253/12:05:44
2335	MGS	02-253/12:27:45	63	NOTE: Loss Of X-Band Signal		
2336	MGS	02-253/12:28:19		NOTE: Enter Solar Eclipse 15678		02-253/12:06:18
2337	MGS	02-253/12:29:57		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/12:07:56
2338	MGS	02-253/12:29:57		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/12:07:56
2339	MGS	02-253/12:29:58		NOTE: End fixed Sub-Reflector for Radio Science		02-253/12:07:57
2340	MGS	02-253/12:29:58		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/12:07:57
2341	MGS	02-253/12:29:58		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/12:07:57
2342	MGS	02-253/12:29:59		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/12:07:58
2343	MGS	02-253/12:30:01		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/12:08:00
2344	MGS	02-253/12:30:02		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/12:08:01
2345	MGS	02-253/12:33:24		Disable A frame offset	SAAFOX	02-253/12:11:23
2346	MGS	02-253/12:33:25		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/12:11:24
2347	MGS	02-253/12:33:32		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/12:11:31
2348	MGS	02-253/12:36:24		: TRUE	mnadir	02-253/12:14:23
2349	MGS	02-253/12:38:47		NOTE: Start Block (SSRMGR)		02-253/12:16:46
2350	MGS	02-253/12:38:47		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART4	STSSRC	02-253/12:16:46
2351	MGS	02-253/12:38:48		SSR 1B Data Enable	CSD1BE	02-253/12:16:47
2352	MGS	02-253/12:38:48		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-253/12:16:47
2353	MGS	02-253/12:39:32		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/12:17:31
2354	MGS	02-253/12:39:33		NOTE: End Block (MAP_PB_BETA_SUP)		02-253/12:17:32
2355	MGS	02-253/12:54:49		SSR 1A Data Disable	CSD1AX	02-253/12:32:48
2356	MGS	02-253/12:54:49		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=4, BITS=26796000, DUR=01:51:39		02-253/12:32:48
2357	MGS	02-253/12:54:50		NOTE: End Block (SSRMGR)		02-253/12:32:49
2358	MGS	02-253/12:58:54		Enable A frame offset	SAAFOE	02-253/12:36:53
2359	MGS	02-253/12:58:55		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/12:36:54
2360	MGS	02-253/12:58:56		: FALSE	mnadir	02-253/12:36:55
2361	MGS	02-253/13:07:03		NOTE: Exit Solar Eclipse 15678		02-253/12:45:02
2362	MGS	02-253/13:07:32		NOTE: Exit Earth Occultation 15678		02-253/12:45:31
2363	MGS	02-253/13:07:42		NOTE: Periapsis 15679 ----------		02-253/12:45:40
2364	MGS	02-253/13:10:29		NOTE: Exit Planetary Atmosphere 15678		02-253/12:48:28
2365	MGS	02-253/13:12:10		NOTE: Start Block (MAP_PB_BETA_SUP)		02-253/12:50:09
2366	MGS	02-253/13:12:10		Select Automatic HGA control mode	SAHACE	02-253/12:50:09
2367	MGS	02-253/13:12:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/12:50:10
2368	MGS	02-253/13:12:12		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/12:50:11
2369	MGS	02-253/13:12:13		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART2	STSSRC	02-253/12:50:12
2370	MGS	02-253/13:12:14		SSR 2A Data Enable	CSD2AE	02-253/12:50:13
2371	MGS	02-253/13:12:14		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=2, BR=21333		02-253/12:50:13
2372	MGS	02-253/13:12:19	63	Acquisition Of X-Band Signal		
2373	MGS	02-253/13:12:19	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2374	MGS	02-253/13:33:10		SSR 2A Data Disable	CSD2AX	02-253/13:11:09

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2375	MGS	02-253/13:33:10		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=2, BITS=26794666, DUR=00:20:56		02-253/13:11:09
2376	MGS	02-253/13:33:11		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/13:11:10
2377	MGS	02-253/13:33:11	63	NOTE: Loss Of X-Band Signal		
2378	MGS	02-253/13:33:12		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/13:11:11
2379	MGS	02-253/13:33:13		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/13:11:12
2380	MGS	02-253/13:35:29		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/13:13:28
2381	MGS	02-253/13:42:59		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/13:20:58
2382	MGS	02-253/13:48:51		Select Automatic HGA control mode	SAHACE	02-253/13:26:50
2383	MGS	02-253/13:48:52		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/13:26:51
2384	MGS	02-253/13:48:53		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/13:26:52
2385	MGS	02-253/13:48:54		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART2	STSSRC	02-253/13:26:53
2386	MGS	02-253/13:48:55		SSR 2B Data Enable	CSD2BE	02-253/13:26:54
2387	MGS	02-253/13:48:55		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=2, BR=21333		02-253/13:26:54
2388	MGS	02-253/13:49:00	63	Acquisition Of X-Band Signal		
2389	MGS	02-253/13:49:00	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2390	MGS	02-253/14:06:33		NOTE: Apoapsis 15679 -		02-253/13:44:32
2391	MGS	02-253/14:14:03		SSR 2B Data Disable	CSD2BX	02-253/13:52:02
2392	MGS	02-253/14:14:03		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=2, BITS=32170666, DUR=00:25:08		02-253/13:52:02
2393	MGS	02-253/14:14:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/13:52:03
2394	MGS	02-253/14:14:04	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2395	MGS	02-253/14:14:36		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/13:52:35
2396	MGS	02-253/14:19:36		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/13:57:35
2397	MGS	02-253/14:19:36		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/13:57:35
2398	MGS	02-253/14:19:37		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/13:57:36
2399	MGS	02-253/14:19:37		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/13:57:36
2400	MGS	02-253/14:19:37	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2401	MGS	02-253/14:19:37	63	NOTE: Carrier Only -- No Telemetry Modulation		
2402	MGS	02-253/14:22:42		NOTE: Enter Planetary Atmosphere 15679		02-253/14:00:41
2403	MGS	02-253/14:25:25		NOTE: Enter Earth Occultation 15679		02-253/14:03:24
2404	MGS	02-253/14:25:25	63	NOTE: Loss Of X-Band Signal		
2405	MGS	02-253/14:25:59		NOTE: Enter Solar Eclipse 15679		02-253/14:03:58
2406	MGS	02-253/14:27:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/14:05:38
2407	MGS	02-253/14:27:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/14:05:38
2408	MGS	02-253/14:27:40		NOTE: End fixed Sub-Reflector for Radio Science		02-253/14:05:39
2409	MGS	02-253/14:27:40		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/14:05:39
2410	MGS	02-253/14:27:40		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/14:05:39
2411	MGS	02-253/14:27:41		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/14:05:40
2412	MGS	02-253/14:27:43		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/14:05:42
2413	MGS	02-253/14:27:44		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/14:05:43
2414	MGS	02-253/14:31:04		Disable A frame offset	SAAFOX	02-253/14:09:03
2415	MGS	02-253/14:31:05		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/14:09:04
2416	MGS	02-253/14:31:14		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/14:09:13
2417	MGS	02-253/14:34:04		: TRUE	mnadir	02-253/14:12:03
2418	MGS	02-253/14:36:52		NOTE: Start Block (SSRMGR)		02-253/14:14:51
2419	MGS	02-253/14:36:52		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART5	STSSRC	02-253/14:14:51
2420	MGS	02-253/14:36:53		SSR 1A Data Enable	CSD1AE	02-253/14:14:52
2421	MGS	02-253/14:36:53		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-253/14:14:52
2422	MGS	02-253/14:37:14		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/14:15:13
2423	MGS	02-253/14:37:15		NOTE: End Block (MAP_PB_BETA_SUP)		02-253/14:15:14
2424	MGS	02-253/14:52:52		SSR 1B Data Disable	CSD1BX	02-253/14:30:51
2425	MGS	02-253/14:52:52		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=4, BITS=32176000, DUR=02:14:04		02-253/14:30:51
2426	MGS	02-253/14:52:53		NOTE: End Block (SSRMGR)		02-253/14:30:52
2427	MGS	02-253/14:55:00	15	Begin Pre-Cal		
2428	MGS	02-253/14:55:00	15	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2429	MGS	02-253/14:55:00	15	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=ON, RCVR2=ON, TWNC=ON		
2430	MGS	02-253/14:55:00	15	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2431	MGS	02-253/14:55:00	15	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
2432	MGS	02-253/14:55:00	15	At BOT: S/C Tlm Mode: BR=4000.0, FL=10000, SC=OFF, MI=0.0		
2433	MGS	02-253/14:55:00	15	Config: TGC: DEST=37		
2434	MGS	02-253/14:55:00	15	Config: TGC: BAND=X, BR=4000.000000		
2435	MGS	02-253/14:55:00	15	Config: FSS: CH=2, PRI_FL=10000		
2436	MGS	02-253/14:55:00	15	Config: RSR		
2437	MGS	02-253/14:55:00	15	Config: TXL		
2438	MGS	02-253/14:55:00	15	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
2439	MGS	02-253/14:55:00	15	Config: BVR		
2440	MGS	02-253/14:55:00	15	Config: Doppler Extractor: BIAS=+1MHZ		
2441	MGS	02-253/14:55:00	15	Config: MDA: SMPL=0.1		
2442	MGS	02-253/14:55:00	15	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
2443	MGS	02-253/14:55:00	15	Config: SRA: HIGH=4, LOW=11, SERV=D		
2444	MGS	02-253/14:55:00	15	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
2445	MGS	02-253/14:55:00	15	Config: CMD		
2446	MGS	02-253/14:56:34		Enable A frame offset	SAAFOE	02-253/14:34:33
2447	MGS	02-253/14:56:35		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/14:34:34
2448	MGS	02-253/14:56:36		: FALSE	mnadir	02-253/14:34:35
2449	MGS	02-253/15:04:42		NOTE: Exit Solar Eclipse 15679		02-253/14:42:41
2450	MGS	02-253/15:05:07		NOTE: Periapsis 15680 ----------		02-253/14:43:06
2451	MGS	02-253/15:05:12		NOTE: Exit Earth Occultation 15679		02-253/14:43:11
2452	MGS	02-253/15:08:08		NOTE: Exit Planetary Atmosphere 15679		02-253/14:46:07
2453	MGS	02-253/15:09:49		NOTE: Start Block (MAP_PB_BETA_SUP)		02-253/14:47:48
2454	MGS	02-253/15:09:49		Select Automatic HGA control mode	SAHACE	02-253/14:47:48
2455	MGS	02-253/15:09:50		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/14:47:49
2456	MGS	02-253/15:09:51		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/14:47:50
2457	MGS	02-253/15:09:52		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART3	STSSRC	02-253/14:47:51
2458	MGS	02-253/15:09:53		SSR 2A Data Enable	CSD2AE	02-253/14:47:52
2459	MGS	02-253/15:09:53		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=3, BR=21333		02-253/14:47:52
2460	MGS	02-253/15:09:58	63	Acquisition Of X-Band Signal		
2461	MGS	02-253/15:09:58	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2462	MGS	02-253/15:30:49		SSR 2A Data Disable	CSD2AX	02-253/15:08:48
2463	MGS	02-253/15:30:49		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=3, BITS=26794666, DUR=00:20:56		02-253/15:08:48
2464	MGS	02-253/15:30:50		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/15:08:49
2465	MGS	02-253/15:30:50	63	NOTE: Loss Of X-Band Signal		
2466	MGS	02-253/15:30:51		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/15:08:50
2467	MGS	02-253/15:30:52		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/15:08:51
2468	MGS	02-253/15:33:08		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/15:11:07
2469	MGS	02-253/15:40:38		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/15:18:37
2470	MGS	02-253/15:46:30		Select Automatic HGA control mode	SAHACE	02-253/15:24:29
2471	MGS	02-253/15:46:31		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/15:24:30
2472	MGS	02-253/15:46:32		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/15:24:31
2473	MGS	02-253/15:46:33		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART3	STSSRC	02-253/15:24:32
2474	MGS	02-253/15:46:34		SSR 2B Data Enable	CSD2BE	02-253/15:24:33
2475	MGS	02-253/15:46:34		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=3, BR=21333		02-253/15:24:33
2476	MGS	02-253/15:46:39	63	Acquisition Of X-Band Signal		
2477	MGS	02-253/15:46:39	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2478	MGS	02-253/16:03:57		NOTE: Apoapsis 15680 -		02-253/15:41:56
2479	MGS	02-253/16:11:42		SSR 2B Data Disable	CSD2BX	02-253/15:49:41
2480	MGS	02-253/16:11:42		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=3, BITS=32170666, DUR=00:25:08		02-253/15:49:41
2481	MGS	02-253/16:11:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/15:49:42
2482	MGS	02-253/16:11:43	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2483	MGS	02-253/16:12:14		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/15:50:14
2484	MGS	02-253/16:12:30		NOTE: Start Block (SSRMGR)		02-253/15:50:29
2485	MGS	02-253/16:12:30		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART5	STSSRC	02-253/15:50:29
2486	MGS	02-253/16:12:31		SSR 1B Data Enable	CSD1BE	02-253/15:50:30
2487	MGS	02-253/16:12:31		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-253/15:50:30
2488	MGS	02-253/16:17:15		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/15:55:14
2489	MGS	02-253/16:17:15		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/15:55:14
2490	MGS	02-253/16:17:16		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/15:55:15
2491	MGS	02-253/16:17:16		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/15:55:15
2492	MGS	02-253/16:17:16	63	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2493	MGS	02-253/16:17:16	63	NOTE: Carrier Only -- No Telemetry Modulation		
2494	MGS	02-253/16:20:23		NOTE: Enter Planetary Atmosphere 15680		02-253/15:58:22
2495	MGS	02-253/16:23:05		NOTE: Enter Earth Occultation 15680		02-253/16:01:04
2496	MGS	02-253/16:23:05	63	NOTE: Loss Of X-Band Signal		
2497	MGS	02-253/16:23:40		NOTE: Enter Solar Eclipse 15680		02-253/16:01:39
2498	MGS	02-253/16:25:00	15	Begin Tracking		
2499	MGS	02-253/16:25:18		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/16:03:17
2500	MGS	02-253/16:25:18		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/16:03:17
2501	MGS	02-253/16:25:18		NOTE: End fixed Sub-Reflector for Radio Science		02-253/16:03:18
2502	MGS	02-253/16:25:19		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/16:03:18
2503	MGS	02-253/16:25:19		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/16:03:18
2504	MGS	02-253/16:25:20		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/16:03:19
2505	MGS	02-253/16:25:22		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/16:03:21
2506	MGS	02-253/16:25:23		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/16:03:22
2507	MGS	02-253/16:28:32		SSR 1A Data Disable	CSD1AX	02-253/16:06:31
2508	MGS	02-253/16:28:32		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=5, BITS=26796000, DUR=01:51:39		02-253/16:06:31
2509	MGS	02-253/16:28:33		NOTE: End Block (SSRMGR)		02-253/16:06:32
2510	MGS	02-253/16:28:53		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/16:06:52
2511	MGS	02-253/16:34:53		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/16:12:52
2512	MGS	02-253/16:34:54		NOTE: End Block (MAP_PB_BETA_SUP)		02-253/16:12:53
2513	MGS	02-253/17:00:07	15	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2514	MGS	02-253/17:02:07	15	Range Modulation On: SUP=3.0dB		
2515	MGS	02-253/17:02:22		NOTE: Exit Solar Eclipse 15680		02-253/16:40:21
2516	MGS	02-253/17:02:35		NOTE: Periapsis 15681 ----------		02-253/16:40:34
2517	MGS	02-253/17:02:52		NOTE: Exit Earth Occultation 15680		02-253/16:40:51
2518	MGS	02-253/17:03:07	15	Begin Ranging Acquisition		
2519	MGS	02-253/17:05:48		NOTE: Exit Planetary Atmosphere 15680		02-253/16:43:47
2520	MGS	02-253/17:07:29		NOTE: Start Block (MAP_PB_BETA_SUP)		02-253/16:45:28
2521	MGS	02-253/17:07:29		Select Automatic HGA control mode	SAHACE	02-253/16:45:28
2522	MGS	02-253/17:07:30		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/16:45:29
2523	MGS	02-253/17:07:31		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/16:45:30
2524	MGS	02-253/17:07:32		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART4	STSSRC	02-253/16:45:31
2525	MGS	02-253/17:07:33		SSR 2A Data Enable	CSD2AE	02-253/16:45:32
2526	MGS	02-253/17:07:33		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=4, BR=21333		02-253/16:45:32
2527	MGS	02-253/17:07:38	15	Acquisition Of X-Band Signal		
2528	MGS	02-253/17:07:38	15	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2529	MGS	02-253/17:07:38	63	Acquisition Of X-Band Signal		
2530	MGS	02-253/17:07:38	63	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2531	MGS	02-253/17:12:04	63	NOTE: Below Uplink Interlock Limit		
2532	MGS	02-253/17:18:01	15	NOTE: Transmitter Off in 15 minutes		
2533	MGS	02-253/17:25:00	63	End Tracking		
2534	MGS	02-253/17:28:29		SSR 2A Data Disable	CSD2AX	02-253/17:06:28
2535	MGS	02-253/17:28:29		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=4, BITS=26794666, DUR=00:20:56		02-253/17:06:28
2536	MGS	02-253/17:28:30		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/17:06:29

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2537	MGS	02-253/17:28:30	15	NOTE: Loss Of X-Band Signal		
2538	MGS	02-253/17:28:31		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/17:06:30
2539	MGS	02-253/17:28:32		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/17:06:31
2540	MGS	02-253/17:30:48		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/17:08:47
2541	MGS	02-253/17:31:02	15	Range Modulation Off		
2542	MGS	02-253/17:33:01	15	Transmitter Off		
2543	MGS	02-253/17:38:18		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/17:16:17
2544	MGS	02-253/17:40:00	63	End Post-Cal		
2545	MGS	02-253/17:44:10		Select Automatic HGA control mode	SAHACE	02-253/17:22:09
2546	MGS	02-253/17:44:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/17:22:10
2547	MGS	02-253/17:44:12		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/17:22:11
2548	MGS	02-253/17:44:13		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART4	STSSRC	02-253/17:22:12
2549	MGS	02-253/17:44:14		SSR 2B Data Enable	CSD2BE	02-253/17:22:13
2550	MGS	02-253/17:44:14		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=4, BR=21333		02-253/17:22:13
2551	MGS	02-253/17:44:19	15	Acquisition Of X-Band Signal		
2552	MGS	02-253/17:44:19	15	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2553	MGS	02-253/18:01:33		NOTE: Apoapsis 15681 -		02-253/17:39:32
2554	MGS	02-253/18:09:22		SSR 2B Data Disable	CSD2BX	02-253/17:47:21
2555	MGS	02-253/18:09:22		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=4, BITS=32170666, DUR=00:25:08		02-253/17:47:21
2556	MGS	02-253/18:09:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/17:47:22
2557	MGS	02-253/18:09:23	15	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2558	MGS	02-253/18:09:54		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/17:47:54
2559	MGS	02-253/18:10:35		NOTE: Start Block (SSRMGR)		02-253/17:48:34
2560	MGS	02-253/18:10:35		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART6	STSSRC	02-253/17:48:34
2561	MGS	02-253/18:10:36		SSR 1A Data Enable	CSD1AE	02-253/17:48:35
2562	MGS	02-253/18:10:36		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-253/17:48:35
2563	MGS	02-253/18:14:55		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/17:52:54
2564	MGS	02-253/18:14:55		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/17:52:54
2565	MGS	02-253/18:14:55	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2566	MGS	02-253/18:14:56		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/17:52:55
2567	MGS	02-253/18:14:56		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/17:52:55
2568	MGS	02-253/18:14:56	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2569	MGS	02-253/18:14:56	15	NOTE: Carrier Only -- No Telemetry Modulation		
2570	MGS	02-253/18:18:06		NOTE: Enter Planetary Atmosphere 15681		02-253/17:56:05
2571	MGS	02-253/18:20:48		NOTE: Enter Earth Occultation 15681		02-253/17:58:47
2572	MGS	02-253/18:20:48	15	NOTE: Loss Of X-Band Signal		
2573	MGS	02-253/18:21:14	15	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2574	MGS	02-253/18:21:23		NOTE: Enter Solar Eclipse 15681		02-253/17:59:22
2575	MGS	02-253/18:22:58		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/18:00:57
2576	MGS	02-253/18:22:58		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/18:00:57
2577	MGS	02-253/18:22:58		NOTE: End fixed Sub-Reflector for Radio Science		02-253/18:00:58
2578	MGS	02-253/18:22:59		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/18:00:58
2579	MGS	02-253/18:22:59		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/18:00:58
2580	MGS	02-253/18:23:00		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/18:00:59
2581	MGS	02-253/18:23:02		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/18:01:01
2582	MGS	02-253/18:23:03		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/18:01:02
2583	MGS	02-253/18:26:27		Disable A frame offset	SAAFOX	02-253/18:04:26
2584	MGS	02-253/18:26:28		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/18:04:27
2585	MGS	02-253/18:26:33		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/18:04:32
2586	MGS	02-253/18:26:35		SSR 1B Data Disable	CSD1BX	02-253/18:04:34
2587	MGS	02-253/18:26:35		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=5, BITS=32176000, DUR=02:14:04		02-253/18:04:34
2588	MGS	02-253/18:26:36		NOTE: End Block (SSRMGR)		02-253/18:04:35
2589	MGS	02-253/18:27:12	15	NOTE: Transmitter Off in 15 minutes		
2590	MGS	02-253/18:29:27		: TRUE	mnadir	02-253/18:07:26

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2591	MGS	02-253/18:32:33		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/18:10:32
2592	MGS	02-253/18:32:34		NOTE: End Block (MAP_PB_BETA_SUP)		02-253/18:10:33
2593	MGS	02-253/18:42:12	15	Transmitter Off		
2594	MGS	02-253/18:51:57		Enable A frame offset	SAAFOE	02-253/18:29:56
2595	MGS	02-253/18:51:58		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/18:29:57
2596	MGS	02-253/18:51:59		: FALSE	mnadir	02-253/18:29:58
2597	MGS	02-253/18:57:50	15	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2598	MGS	02-253/18:59:50	15	Range Modulation On: SUP=3.0dB		
2599	MGS	02-253/19:00:05		NOTE: Exit Solar Eclipse 15681		02-253/18:38:04
2600	MGS	02-253/19:00:35		NOTE: Exit Earth Occultation 15681		02-253/18:38:34
2601	MGS	02-253/19:00:37		NOTE: Periapsis 15682 ----------		02-253/18:38:37
2602	MGS	02-253/19:00:50	15	Begin Ranging Acquisition		
2603	MGS	02-253/19:03:31		NOTE: Exit Planetary Atmosphere 15681		02-253/18:41:30
2604	MGS	02-253/19:05:13		NOTE: Start Block (MAP_PB_BETA_SUP)		02-253/18:43:12
2605	MGS	02-253/19:05:13		Select Automatic HGA control mode	SAHACE	02-253/18:43:12
2606	MGS	02-253/19:05:14		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/18:43:13
2607	MGS	02-253/19:05:15		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/18:43:14
2608	MGS	02-253/19:05:16		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART5	STSSRC	02-253/18:43:15
2609	MGS	02-253/19:05:17		SSR 2A Data Enable	CSD2AE	02-253/18:43:16
2610	MGS	02-253/19:05:17		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=5, BR=21333		02-253/18:43:16
2611	MGS	02-253/19:05:22	15	Acquisition Of X-Band Signal		
2612	MGS	02-253/19:05:22	15	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2613	MGS	02-253/19:15:46	15	NOTE: Transmitter Off in 15 minutes		
2614	MGS	02-253/19:26:13		SSR 2A Data Disable	CSD2AX	02-253/19:04:12
2615	MGS	02-253/19:26:13		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=5, BITS=26794666, DUR=00:20:56		02-253/19:04:12
2616	MGS	02-253/19:26:13	15	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2617	MGS	02-253/19:26:14		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/19:04:13
2618	MGS	02-253/19:26:14	15	NOTE: Loss Of X-Band Signal		
2619	MGS	02-253/19:26:15		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/19:04:14
2620	MGS	02-253/19:26:16		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/19:04:15
2621	MGS	02-253/19:28:32		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/19:06:31
2622	MGS	02-253/19:28:46	15	Range Modulation Off		
2623	MGS	02-253/19:30:46	15	Transmitter Off		
2624	MGS	02-253/19:32:53		NOTE: Start Block (SSRMGR)		02-253/19:10:52
2625	MGS	02-253/19:32:53		Sends a one-word SSR command to the XSU command SOB: SSR_1B, SE_1A, RECORD, PART6	STSSRC	02-253/19:10:52
2626	MGS	02-253/19:32:54		SSR 1B Data Enable	CSD1BE	02-253/19:10:53
2627	MGS	02-253/19:32:54		SSR Activity: ID=SSR_1B, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-253/19:10:53
2628	MGS	02-253/19:36:02		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/19:14:01
2629	MGS	02-253/19:41:54		Select Automatic HGA control mode	SAHACE	02-253/19:19:53
2630	MGS	02-253/19:41:55		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/19:19:54
2631	MGS	02-253/19:41:56		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/19:19:55
2632	MGS	02-253/19:41:57		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART5	STSSRC	02-253/19:19:56
2633	MGS	02-253/19:41:58		SSR 2B Data Enable	CSD2BE	02-253/19:19:57
2634	MGS	02-253/19:41:58		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=5, BR=21333		02-253/19:19:57
2635	MGS	02-253/19:42:03	15	Acquisition Of X-Band Signal		
2636	MGS	02-253/19:42:03	15	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2637	MGS	02-253/19:48:55		SSR 1A Data Disable	CSD1AX	02-253/19:26:54
2638	MGS	02-253/19:48:55		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-253/19:26:54
2639	MGS	02-253/19:48:56		NOTE: End Block (SSRMGR)		02-253/19:26:55
2640	MGS	02-253/19:50:00	45	Begin Pre-Cal		
2641	MGS	02-253/19:50:00	45	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
2642	MGS	02-253/19:50:00	45	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
2643	MGS	02-253/19:50:00	45	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
2644	MGS	02-253/19:50:00	45	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
2645	MGS	02-253/19:50:00	45	Config: TGC: DEST=37		
2646	MGS	02-253/19:50:00	45	Config: TGC: BAND=X, BR=4000.000000		
2647	MGS	02-253/19:50:00	45	Config: FSS: CH=2, PRI_FL=10000		
2648	MGS	02-253/19:50:00	45	Config: RSR		
2649	MGS	02-253/19:50:00	45	Config: TXL		
2650	MGS	02-253/19:50:00	45	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
2651	MGS	02-253/19:50:00	45	Config: BVR		
2652	MGS	02-253/19:50:00	45	Config: Doppler Extractor: BIAS=+1MHZ		
2653	MGS	02-253/19:50:00	45	Config: MDA: SMPL=0.1		
2654	MGS	02-253/19:50:00	45	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
2655	MGS	02-253/19:50:00	45	Config: SRA: HIGH=4, LOW=11, SERV=D		
2656	MGS	02-253/19:50:00	45	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
2657	MGS	02-253/19:50:00	45	Config: CMD		
2658	MGS	02-253/19:59:45		NOTE: Apoapsis 15682 -		02-253/19:37:44
2659	MGS	02-253/20:07:05		SSR 2B Data Disable	CSD2BX	02-253/19:45:05
2660	MGS	02-253/20:07:05		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=5, BITS=32170666, DUR=00:25:08		02-253/19:45:05
2661	MGS	02-253/20:07:06		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/19:45:06
2662	MGS	02-253/20:07:06	15	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2663	MGS	02-253/20:07:38		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/19:45:38
2664	MGS	02-253/20:12:38		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/19:50:38
2665	MGS	02-253/20:12:38		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/19:50:38
2666	MGS	02-253/20:12:38	15	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2667	MGS	02-253/20:12:39		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/19:50:39
2668	MGS	02-253/20:12:39		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/19:50:39
2669	MGS	02-253/20:12:39	15	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2670	MGS	02-253/20:12:39	15	NOTE: Carrier Only -- No Telemetry Modulation		
2671	MGS	02-253/20:15:50		NOTE: Enter Planetary Atmosphere 15682		02-253/19:53:50
2672	MGS	02-253/20:18:33		NOTE: Enter Earth Occultation 15682		02-253/19:56:32
2673	MGS	02-253/20:18:33	15	NOTE: Loss Of X-Band Signal		
2674	MGS	02-253/20:18:59	15	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2675	MGS	02-253/20:19:07		NOTE: Enter Solar Eclipse 15682		02-253/19:57:07
2676	MGS	02-253/20:20:41		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/19:58:41
2677	MGS	02-253/20:20:41		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/19:58:41
2678	MGS	02-253/20:20:42		NOTE: End fixed Sub-Reflector for Radio Science		02-253/19:58:42
2679	MGS	02-253/20:20:42		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/19:58:42
2680	MGS	02-253/20:20:42		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/19:58:42
2681	MGS	02-253/20:20:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/19:58:43
2682	MGS	02-253/20:20:45		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/19:58:45
2683	MGS	02-253/20:20:46		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/19:58:46
2684	MGS	02-253/20:24:11		Disable A frame offset	SAAFOX	02-253/20:02:11
2685	MGS	02-253/20:24:12		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/20:02:12
2686	MGS	02-253/20:24:16		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/20:02:16
2687	MGS	02-253/20:24:57	15	NOTE: Transmitter Off in 15 minutes		
2688	MGS	02-253/20:27:11		: TRUE	mnadir	02-253/20:05:11
2689	MGS	02-253/20:30:16		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/20:08:16
2690	MGS	02-253/20:30:17		NOTE: End Block (MAP_PB_BETA_SUP)		02-253/20:08:17
2691	MGS	02-253/20:39:57	15	Transmitter Off		
2692	MGS	02-253/20:49:41		Enable A frame offset	SAAFOE	02-253/20:27:41
2693	MGS	02-253/20:49:42		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-253/20:27:42
2694	MGS	02-253/20:49:43		: FALSE	mnadir	02-253/20:27:43
2695	MGS	02-253/20:50:00	45	Begin Tracking		
2696	MGS	02-253/20:55:11		NOTE: Start Block (SSRMGR)		02-253/20:33:11
2697	MGS	02-253/20:55:11		Sends a one-word SSR command to the XSU command SOB: SSR_1A, SE_1A, RECORD, PART7	STSSRC	02-253/20:33:11
2698	MGS	02-253/20:55:12		SSR 1A Data Enable	CSD1AE	02-253/20:33:12

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2699	MGS	02-253/20:55:12		SSR Activity: ID=SSR_1A, FCN=Start Recording, PRT=7, BR=4000, SRC=SE_1A		02-253/20:33:12
2700	MGS	02-253/20:55:35	15	Acquire U/L: X/16, PWR=20.0, BR=125.0		
2701	MGS	02-253/20:57:35	15	Range Modulation On: SUP=3.0dB		
2702	MGS	02-253/20:57:50		NOTE: Exit Solar Eclipse 15682		02-253/20:35:50
2703	MGS	02-253/20:58:00	15	Range Modulation Off		
2704	MGS	02-253/20:58:20		NOTE: Exit Earth Occultation 15682		02-253/20:36:19
2705	MGS	02-253/20:58:35	15	Begin Ranging Acquisition		
2706	MGS	02-253/20:58:48		NOTE: Periapsis 15683 ----------		02-253/20:36:47
2707	MGS	02-253/21:00:00	45	U/L Transfer From DSS-15 to DSS-45: PWR=20.0, BR=125.0		
2708	MGS	02-253/21:01:16		NOTE: Exit Planetary Atmosphere 15682		02-253/20:39:15
2709	MGS	02-253/21:02:00	45	Range Modulation On: SUP=3.0dB		
2710	MGS	02-253/21:02:59		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-253/20:40:59
2711	MGS	02-253/21:02:59		Select Automatic HGA control mode	SAHACE	02-253/20:40:59
2712	MGS	02-253/21:03:00	45	Begin Ranging Acquisition		
2713	MGS	02-253/21:03:00		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/20:41:00
2714	MGS	02-253/21:03:08	15	Acquisition Of X-Band Signal		
2715	MGS	02-253/21:03:08	15	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2716	MGS	02-253/21:03:08	45	Acquisition Of X-Band Signal		
2717	MGS	02-253/21:03:08	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2718	MGS	02-253/21:05:01		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/20:43:01
2719	MGS	02-253/21:05:01		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=7, BITS=2356000, DUR=00:09:49		02-253/20:43:01
2720	MGS	02-253/21:05:01		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-253/20:43:01
2721	MGS	02-253/21:05:01		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/20:43:01
2722	MGS	02-253/21:05:26		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/20:43:26
2723	MGS	02-253/21:05:26		SSR Activity: ID=SSR_1A, FCN=End Old Recording Rate, PRT=7, BITS=2456000, DUR=00:00:25		02-253/20:43:26
2724	MGS	02-253/21:05:26		SSR Activity: ID=SSR_1A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-253/20:43:26
2725	MGS	02-253/21:05:28		NOTE: Start Block (SSRMGR)		02-253/20:43:28
2726	MGS	02-253/21:05:28		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-253/20:43:28
2727	MGS	02-253/21:05:28		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-253/20:43:28
2728	MGS	02-253/21:05:29		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/20:43:29
2729	MGS	02-253/21:05:30		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, PLYBCK, PART6	STSSRC	02-253/20:43:30
2730	MGS	02-253/21:05:31		SSR 2A Data Enable	CSD2AE	02-253/20:43:31
2731	MGS	02-253/21:05:31		SSR Activity: ID=SSR_2A, FCN=Start Playback, PRT=6, BR=21333		02-253/20:43:31
2732	MGS	02-253/21:05:31	15	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2733	MGS	02-253/21:05:31	45	D/L Change: X/16, 3-Way/15, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2734	MGS	02-253/21:10:00	15	End Tracking		
2735	MGS	02-253/21:11:12		SSR 1B Data Disable	CSD1BX	02-253/20:49:12
2736	MGS	02-253/21:11:12		SSR Activity: ID=SSR_1B, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-253/20:49:12
2737	MGS	02-253/21:11:13		NOTE: End Block (SSRMGR)		02-253/20:49:13
2738	MGS	02-253/21:13:31	45	NOTE: Transmitter Off in 15 minutes		
2739	MGS	02-253/21:23:57		SSR 2A Data Disable	CSD2AX	02-253/21:01:57
2740	MGS	02-253/21:23:57		SSR Activity: ID=SSR_2A, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-253/21:01:57
2741	MGS	02-253/21:23:57		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:01:57
2742	MGS	02-253/21:23:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/21:01:57
2743	MGS	02-253/21:23:57		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:01:57
2744	MGS	02-253/21:23:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/21:01:57
2745	MGS	02-253/21:23:57	45	D/L Change: X/16, 3-Way/15, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2746	MGS	02-253/21:23:58	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2747	MGS	02-253/21:23:58		NOTE: End Block (SSRMGR)		02-253/21:01:58
2748	MGS	02-253/21:23:58		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/21:01:58
2749	MGS	02-253/21:23:58	45	NOTE: Loss Of X-Band Signal		
2750	MGS	02-253/21:23:59		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/21:01:59
2751	MGS	02-253/21:24:00		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/21:02:00
2752	MGS	02-253/21:25:00	15	End Post-Cal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2753	MGS	02-253/21:26:16		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/21:04:16
2754	MGS	02-253/21:26:32	45	Range Modulation Off		
2755	MGS	02-253/21:28:31	45	Transmitter Off		
2756	MGS	02-253/21:33:46		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/21:11:46
2757	MGS	02-253/21:39:38		Select Automatic HGA control mode	SAHACE	02-253/21:17:38
2758	MGS	02-253/21:39:39		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/21:17:39
2759	MGS	02-253/21:39:47	45	Acquisition Of X-Band Signal		
2760	MGS	02-253/21:39:47	45	Acquire D/L: X/16, 3-Way/15, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2761	MGS	02-253/21:41:40		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:19:40
2762	MGS	02-253/21:41:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/21:19:40
2763	MGS	02-253/21:42:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:20:00
2764	MGS	02-253/21:42:02		NOTE: Start Block (SSRMGR)		02-253/21:20:02
2765	MGS	02-253/21:42:02		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-253/21:20:02
2766	MGS	02-253/21:42:02		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-253/21:20:02
2767	MGS	02-253/21:42:03		Sends a one-word MOT command to the XSU command SOB: SSR_2	STMOTC	02-253/21:20:03
2768	MGS	02-253/21:42:03		Sends a one-word SSR command to the XSU command SOB: SSR_2A, F21KHZ, ENBSCR, PART1	STSSRC	02-253/21:20:03
2769	MGS	02-253/21:42:04		Sends a one-word SSR command to the XSU command SOB: SSR_2B, F21KHZ, PLYBCK, PART6	STSSRC	02-253/21:20:04
2770	MGS	02-253/21:42:05		SSR 2B Data Enable	CSD2BE	02-253/21:20:05
2771	MGS	02-253/21:42:05		SSR Activity: ID=SSR_2B, FCN=Start Playback, PRT=6, BR=21333		02-253/21:20:05
2772	MGS	02-253/21:42:05	45	D/L Change: X/16, 3-Way/15, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2773	MGS	02-253/21:44:01	45	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2774	MGS	02-253/21:57:56		NOTE: Apoapsis 15683 -		02-253/21:35:55
2775	MGS	02-253/22:00:31		SSR 2B Data Disable	CSD2BX	02-253/21:38:31
2776	MGS	02-253/22:00:31		SSR Activity: ID=SSR_2B, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-253/21:38:31
2777	MGS	02-253/22:00:31		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:38:31
2778	MGS	02-253/22:00:31		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/21:38:31
2779	MGS	02-253/22:00:31	45	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2780	MGS	02-253/22:00:32		NOTE: End Block (SSRMGR)		02-253/21:38:32
2781	MGS	02-253/22:05:23		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/21:43:23
2782	MGS	02-253/22:10:19		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/21:48:19
2783	MGS	02-253/22:10:19		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/21:48:19
2784	MGS	02-253/22:10:23		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/21:48:23
2785	MGS	02-253/22:10:23		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/21:48:23
2786	MGS	02-253/22:10:23	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2787	MGS	02-253/22:10:24		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/21:48:24
2788	MGS	02-253/22:10:24		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/21:48:24
2789	MGS	02-253/22:10:24	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2790	MGS	02-253/22:10:24	45	NOTE: Carrier Only -- No Telemetry Modulation		
2791	MGS	02-253/22:13:36		NOTE: Enter Planetary Atmosphere 15683		02-253/21:51:35
2792	MGS	02-253/22:16:18		NOTE: Enter Earth Occultation 15683		02-253/21:54:17
2793	MGS	02-253/22:16:18	45	NOTE: Loss Of X-Band Signal		
2794	MGS	02-253/22:16:53		NOTE: Enter Solar Eclipse 15683		02-253/21:54:52
2795	MGS	02-253/22:18:26		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/21:56:26
2796	MGS	02-253/22:18:26		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/21:56:26
2797	MGS	02-253/22:18:27		NOTE: End fixed Sub-Reflector for Radio Science		02-253/21:56:27
2798	MGS	02-253/22:18:27		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/21:56:27
2799	MGS	02-253/22:18:27		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/21:56:27
2800	MGS	02-253/22:18:27		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/21:56:27
2801	MGS	02-253/22:18:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/21:56:28
2802	MGS	02-253/22:18:28		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/21:56:28
2803	MGS	02-253/22:21:58		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/21:59:58
2804	MGS	02-253/22:27:58		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-253/22:05:58
2805	MGS	02-253/22:27:59		NOTE: End Block (MAP_RT_BETA_SUP)		02-253/22:05:59
2806	MGS	02-253/22:55:36		NOTE: Exit Solar Eclipse 15683		02-253/22:33:35

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2807	MGS	02-253/22:56:06		NOTE: Exit Earth Occultation 15683		02-253/22:34:05
2808	MGS	02-253/22:56:43		NOTE: Periapsis 15684 ----------		02-253/22:34:43
2809	MGS	02-253/22:59:02		NOTE: Exit Planetary Atmosphere 15683		02-253/22:37:01
2810	MGS	02-253/23:00:44		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-253/22:38:44
2811	MGS	02-253/23:00:44		Select Automatic HGA control mode	SAHACE	02-253/22:38:44
2812	MGS	02-253/23:00:45		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/22:38:45
2813	MGS	02-253/23:00:53	45	Acquisition Of X-Band Signal		
2814	MGS	02-253/23:00:53	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2815	MGS	02-253/23:02:46		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-253/22:40:46
2816	MGS	02-253/23:02:46		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-253/22:40:46
2817	MGS	02-253/23:02:46	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2818	MGS	02-253/23:21:42		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/22:59:42
2819	MGS	02-253/23:21:42		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/22:59:42
2820	MGS	02-253/23:21:42	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2821	MGS	02-253/23:21:43		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/22:59:43
2822	MGS	02-253/23:21:43	45	NOTE: Loss Of X-Band Signal		
2823	MGS	02-253/23:21:44		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-253/22:59:44
2824	MGS	02-253/23:21:45		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/22:59:45
2825	MGS	02-253/23:24:01		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-253/23:02:01
2826	MGS	02-253/23:31:31		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-253/23:09:31
2827	MGS	02-253/23:37:23		Select Automatic HGA control mode	SAHACE	02-253/23:15:23
2828	MGS	02-253/23:37:24		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-253/23:15:24
2829	MGS	02-253/23:37:32	45	Acquisition Of X-Band Signal		
2830	MGS	02-253/23:37:32	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2831	MGS	02-253/23:39:25		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-253/23:17:25
2832	MGS	02-253/23:39:25		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-253/23:17:25
2833	MGS	02-253/23:39:25	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2834	MGS	02-253/23:55:38		NOTE: Apoapsis 15684 -		02-253/23:33:37
2835	MGS	02-254/00:00:00		Light Time: OWLT = 22:00, RTLT = 44:01		
2836	MGS	02-254/00:03:08		NOTE: Begin fixed Sub-Reflector for Radio Science		02-253/23:41:08
2837	MGS	02-254/00:08:04		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-253/23:46:04
2838	MGS	02-254/00:08:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-253/23:46:04
2839	MGS	02-254/00:08:04	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2840	MGS	02-254/00:08:08		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-253/23:46:08
2841	MGS	02-254/00:08:08		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-253/23:46:08
2842	MGS	02-254/00:08:09		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-253/23:46:09
2843	MGS	02-254/00:08:09		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-253/23:46:09
2844	MGS	02-254/00:08:09	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2845	MGS	02-254/00:08:09	45	NOTE: Carrier Only -- No Telemetry Modulation		
2846	MGS	02-254/00:11:18		NOTE: Enter Planetary Atmosphere 15684		02-253/23:49:18
2847	MGS	02-254/00:14:00		NOTE: Enter Earth Occultation 15684		02-253/23:52:00
2848	MGS	02-254/00:14:00	45	NOTE: Loss Of X-Band Signal		
2849	MGS	02-254/00:14:36		NOTE: Enter Solar Eclipse 15684		02-253/23:52:35
2850	MGS	02-254/00:16:11		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-253/23:54:11
2851	MGS	02-254/00:16:11		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-253/23:54:11
2852	MGS	02-254/00:16:12		NOTE: End fixed Sub-Reflector for Radio Science		02-253/23:54:12
2853	MGS	02-254/00:16:12		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-253/23:54:12
2854	MGS	02-254/00:16:12		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-253/23:54:12
2855	MGS	02-254/00:16:12		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-253/23:54:12
2856	MGS	02-254/00:16:13		Turn off the MOT Exciter and RPA beam	STRPAF	02-253/23:54:13
2857	MGS	02-254/00:16:13		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-253/23:54:13
2858	MGS	02-254/00:19:39		Disable A frame offset	SAAFOX	02-253/23:57:39
2859	MGS	02-254/00:19:40		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-253/23:57:40
2860	MGS	02-254/00:19:43		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-253/23:57:43

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2861	MGS	02-254/00:21:58		NOTE: Start Block (SSRMGR)		02-253/23:59:58
2862	MGS	02-254/00:21:58		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, CLRALL, PART1	STSSRC	02-253/23:59:58
2863	MGS	02-254/00:21:59		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART1	STSSRC	02-253/23:59:59
2864	MGS	02-254/00:22:00		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-254/00:00:00
2865	MGS	02-254/00:22:00		SSR 2A Data Enable	CSD2AE	02-254/00:00:00
2866	MGS	02-254/00:22:00		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-254/00:00:00
2867	MGS	02-254/00:22:39		: TRUE	mnadir	02-254/00:00:39
2868	MGS	02-254/00:25:43		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/00:03:43
2869	MGS	02-254/00:25:44		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/00:03:44
2870	MGS	02-254/00:40:00		SSR 1A Data Disable	CSD1AX	02-254/00:18:00
2871	MGS	02-254/00:40:00		SSR Activity: ID=SSR_1A, FCN=End Recording, PRT=7, BITS=53952000, DUR=03:44:48		02-254/00:18:00
2872	MGS	02-254/00:40:01		NOTE: End Block (SSRMGR)		02-254/00:18:01
2873	MGS	02-254/00:45:09		Enable A frame offset	SAAFOE	02-254/00:23:09
2874	MGS	02-254/00:45:10		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/00:23:10
2875	MGS	02-254/00:45:11		: FALSE	mnadir	02-254/00:23:11
2876	MGS	02-254/00:53:19		NOTE: Exit Solar Eclipse 15684		02-254/00:31:18
2877	MGS	02-254/00:53:48		NOTE: Exit Earth Occultation 15684		02-254/00:31:48
2878	MGS	02-254/00:54:10		NOTE: Periapsis 15685 ----------		02-254/00:32:10
2879	MGS	02-254/00:56:45		NOTE: Exit Planetary Atmosphere 15684		02-254/00:34:44
2880	MGS	02-254/00:58:27		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/00:36:27
2881	MGS	02-254/00:58:27		Select Automatic HGA control mode	SAHACE	02-254/00:36:27
2882	MGS	02-254/00:58:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/00:36:28
2883	MGS	02-254/00:58:36	45	Acquisition Of X-Band Signal		
2884	MGS	02-254/00:58:36	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2885	MGS	02-254/01:00:29		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-254/00:38:29
2886	MGS	02-254/01:00:29		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=1, BITS=9236000, DUR=00:38:29		02-254/00:38:29
2887	MGS	02-254/01:00:29		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/00:38:29
2888	MGS	02-254/01:00:29		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-254/00:38:29
2889	MGS	02-254/01:00:29	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2890	MGS	02-254/01:19:25		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/00:57:25
2891	MGS	02-254/01:19:25		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=1, BITS=13780000, DUR=00:18:56		02-254/00:57:25
2892	MGS	02-254/01:19:25		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/00:57:25
2893	MGS	02-254/01:19:25		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/00:57:25
2894	MGS	02-254/01:19:25	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2895	MGS	02-254/01:19:26		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/00:57:26
2896	MGS	02-254/01:19:26	45	NOTE: Loss Of X-Band Signal		
2897	MGS	02-254/01:19:27		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/00:57:27
2898	MGS	02-254/01:19:28		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/00:57:28
2899	MGS	02-254/01:21:44		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/00:59:44
2900	MGS	02-254/01:29:14		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/01:07:14
2901	MGS	02-254/01:35:06		Select Automatic HGA control mode	SAHACE	02-254/01:13:06
2902	MGS	02-254/01:35:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/01:13:07
2903	MGS	02-254/01:35:15	45	Acquisition Of X-Band Signal		
2904	MGS	02-254/01:35:15	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2905	MGS	02-254/01:37:08		Sends a block of payload commands to the PDS: PDS, [3985]	SCPDSC	02-254/01:15:08
2906	MGS	02-254/01:37:08		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=1, BITS=18032000, DUR=00:17:43		02-254/01:15:08
2907	MGS	02-254/01:37:08		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/01:15:08
2908	MGS	02-254/01:37:08		Sends a one-word MOT command to the XSU command SOB: SE_2A	STMOTC	02-254/01:15:08
2909	MGS	02-254/01:37:08	45	D/L Change: X/20, 1-Way, BW=10, BR=40000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2910	MGS	02-254/01:52:56		NOTE: Apoapsis 15685 -		02-254/01:30:56
2911	MGS	02-254/01:57:37		NOTE: Start Block (SSRMGR)		02-254/01:35:37
2912	MGS	02-254/01:57:37		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, CLRALL, PART1	STSSRC	02-254/01:35:37
2913	MGS	02-254/01:57:38		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART1	STSSRC	02-254/01:35:38
2914	MGS	02-254/01:57:39		SSR 2B Data Enable	CSD2BE	02-254/01:35:39

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2915	MGS	02-254/01:57:39		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=1, BR=4000, SRC=SE_1A		02-254/01:35:39
2916	MGS	02-254/02:00:52		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/01:38:52
2917	MGS	02-254/02:05:48		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/01:43:48
2918	MGS	02-254/02:05:48		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=1956000, DUR=00:08:09		02-254/01:43:48
2919	MGS	02-254/02:05:48		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/01:43:48
2920	MGS	02-254/02:05:48		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/01:43:48
2921	MGS	02-254/02:05:48	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2922	MGS	02-254/02:05:52		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/01:43:52
2923	MGS	02-254/02:05:52		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/01:43:52
2924	MGS	02-254/02:05:53		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/01:43:53
2925	MGS	02-254/02:05:53		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/01:43:53
2926	MGS	02-254/02:05:53	45	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
2927	MGS	02-254/02:05:53	45	NOTE: Carrier Only -- No Telemetry Modulation		
2928	MGS	02-254/02:08:57		NOTE: Enter Planetary Atmosphere 15685		02-254/01:46:57
2929	MGS	02-254/02:11:39		NOTE: Enter Earth Occultation 15685		02-254/01:49:39
2930	MGS	02-254/02:11:39	45	NOTE: Loss Of X-Band Signal		
2931	MGS	02-254/02:12:15		NOTE: Enter Solar Eclipse 15685		02-254/01:50:14
2932	MGS	02-254/02:13:39		SSR 2A Data Disable	CSD2AX	02-254/01:51:39
2933	MGS	02-254/02:13:39		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=1, BITS=26796000, DUR=01:51:39		02-254/01:51:39
2934	MGS	02-254/02:13:40		NOTE: End Block (SSRMGR)		02-254/01:51:40
2935	MGS	02-254/02:13:55		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/01:51:55
2936	MGS	02-254/02:13:55		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/01:51:55
2937	MGS	02-254/02:13:56		NOTE: End fixed Sub-Reflector for Radio Science		02-254/01:51:56
2938	MGS	02-254/02:13:56		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/01:51:56
2939	MGS	02-254/02:13:56		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/01:51:56
2940	MGS	02-254/02:13:56		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/01:51:56
2941	MGS	02-254/02:13:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/01:51:57
2942	MGS	02-254/02:13:57		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/01:51:57
2943	MGS	02-254/02:17:18		Disable A frame offset	SAAFOX	02-254/01:55:18
2944	MGS	02-254/02:17:19		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/01:55:19
2945	MGS	02-254/02:17:27		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/01:55:27
2946	MGS	02-254/02:20:18		: TRUE	mnadir	02-254/01:58:18
2947	MGS	02-254/02:23:27		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/02:01:27
2948	MGS	02-254/02:23:28		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/02:01:28
2949	MGS	02-254/02:42:48		Enable A frame offset	SAAFOE	02-254/02:20:48
2950	MGS	02-254/02:42:49		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/02:20:49
2951	MGS	02-254/02:42:50		: FALSE	mnadir	02-254/02:20:50
2952	MGS	02-254/02:50:58		NOTE: Exit Solar Eclipse 15685		02-254/02:28:58
2953	MGS	02-254/02:51:27		NOTE: Exit Earth Occultation 15685		02-254/02:29:27
2954	MGS	02-254/02:51:32		NOTE: Periapsis 15686 ----------		02-254/02:29:31
2955	MGS	02-254/02:54:24		NOTE: Exit Planetary Atmosphere 15685		02-254/02:32:23
2956	MGS	02-254/02:56:06		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/02:34:06
2957	MGS	02-254/02:56:06		Select Automatic HGA control mode	SAHACE	02-254/02:34:06
2958	MGS	02-254/02:56:07		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/02:34:07
2959	MGS	02-254/02:56:15	45	Acquisition Of X-Band Signal		
2960	MGS	02-254/02:56:15	45	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
2961	MGS	02-254/02:58:08		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/02:36:08
2962	MGS	02-254/02:58:08		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=14516000, DUR=00:52:20		02-254/02:36:08
2963	MGS	02-254/02:58:08		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/02:36:08
2964	MGS	02-254/02:58:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/02:36:08
2965	MGS	02-254/03:17:04		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/02:55:04
2966	MGS	02-254/03:17:04		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=19060000, DUR=00:18:56		02-254/02:55:04
2967	MGS	02-254/03:17:04		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/02:55:04
2968	MGS	02-254/03:17:04		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/02:55:04

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
2969	MGS	02-254/03:17:05		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/02:55:05
2970	MGS	02-254/03:17:05	45	NOTE: Loss Of X-Band Signal		
2971	MGS	02-254/03:17:06		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/02:55:06
2972	MGS	02-254/03:17:07		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/02:55:07
2973	MGS	02-254/03:19:23		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/02:57:23
2974	MGS	02-254/03:20:00	45	End Tracking		
2975	MGS	02-254/03:26:53		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/03:04:53
2976	MGS	02-254/03:32:45		Select Automatic HGA control mode	SAHACE	02-254/03:10:45
2977	MGS	02-254/03:32:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/03:10:46
2978	MGS	02-254/03:34:47		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/03:12:47
2979	MGS	02-254/03:34:47		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=1, BITS=23312000, DUR=00:17:43		02-254/03:12:47
2980	MGS	02-254/03:34:47		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=1, BR=4000, SRC=SE_1A		02-254/03:12:47
2981	MGS	02-254/03:34:47		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/03:12:47
2982	MGS	02-254/03:35:00	45	End Post-Cal		
2983	MGS	02-254/03:50:40		NOTE: Apoapsis 15686 -		02-254/03:28:40
2984	MGS	02-254/03:55:42		NOTE: Start Block (SSRMGR)		02-254/03:33:42
2985	MGS	02-254/03:55:42		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART2	STSSRC	02-254/03:33:42
2986	MGS	02-254/03:55:43		SSR 2A Data Enable	CSD2AE	02-254/03:33:43
2987	MGS	02-254/03:55:43		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-254/03:33:43
2988	MGS	02-254/03:58:31		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/03:36:31
2989	MGS	02-254/04:03:27		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/03:41:27
2990	MGS	02-254/04:03:27		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=2, BITS=1856000, DUR=00:07:44		02-254/03:41:27
2991	MGS	02-254/04:03:27		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-254/03:41:27
2992	MGS	02-254/04:03:27		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/03:41:27
2993	MGS	02-254/04:03:31		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/03:41:31
2994	MGS	02-254/04:03:31		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/03:41:31
2995	MGS	02-254/04:03:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/03:41:32
2996	MGS	02-254/04:03:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/03:41:32
2997	MGS	02-254/04:06:36		NOTE: Enter Planetary Atmosphere 15686		02-254/03:44:35
2998	MGS	02-254/04:09:18		NOTE: Enter Earth Occultation 15686		02-254/03:47:17
2999	MGS	02-254/04:09:54		NOTE: Enter Solar Eclipse 15686		02-254/03:47:53
3000	MGS	02-254/04:11:34		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/03:49:34
3001	MGS	02-254/04:11:34		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/03:49:34
3002	MGS	02-254/04:11:35		NOTE: End fixed Sub-Reflector for Radio Science		02-254/03:49:35
3003	MGS	02-254/04:11:35		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/03:49:35
3004	MGS	02-254/04:11:35		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/03:49:35
3005	MGS	02-254/04:11:35		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/03:49:35
3006	MGS	02-254/04:11:36		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/03:49:36
3007	MGS	02-254/04:11:36		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/03:49:36
3008	MGS	02-254/04:11:43		SSR 2B Data Disable	CSD2BX	02-254/03:49:43
3009	MGS	02-254/04:11:43		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=1, BITS=32176000, DUR=02:14:04		02-254/03:49:43
3010	MGS	02-254/04:11:44		NOTE: End Block (SSRMGR)		02-254/03:49:44
3011	MGS	02-254/04:15:00	65	Begin Pre-Cal		
3012	MGS	02-254/04:15:00	65	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3013	MGS	02-254/04:15:00	65	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3014	MGS	02-254/04:15:00	65	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3015	MGS	02-254/04:15:00	65	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=ON, EXC=2		
3016	MGS	02-254/04:15:00	65	At BOT: S/C Tlm Mode: BR=4000.0, FL=10000, SC=HIGH, MI=80.0		
3017	MGS	02-254/04:15:00	65	Config: TGC: DEST=37		
3018	MGS	02-254/04:15:00	65	Config: TGC: BAND=X, BR=4000.000000		
3019	MGS	02-254/04:15:00	65	Config: FSS: CH=2, PRI_FL=10000		
3020	MGS	02-254/04:15:00	65	Config: RSR		
3021	MGS	02-254/04:15:00	65	Config: TXL		
3022	MGS	02-254/04:15:00	65	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3023	MGS	02-254/04:15:00	65	Config: BVR		
3024	MGS	02-254/04:15:00	65	Config: Doppler Extractor: BIAS=+1MHZ		
3025	MGS	02-254/04:15:00	65	Config: MDA: SMPL=0.1		
3026	MGS	02-254/04:15:00	65	Config: SRA: SUP= 3.0dB, T1=62, T2=10, T3=0		
3027	MGS	02-254/04:15:00	65	Config: SRA: HIGH=4, LOW=11, SERV=D		
3028	MGS	02-254/04:15:00	65	Config: SRA: CHOP=E, MDL=SIN, DRVD=0		
3029	MGS	02-254/04:15:00	65	Config: CMD		
3030	MGS	02-254/04:15:06		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/03:53:06
3031	MGS	02-254/04:21:06		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/03:59:06
3032	MGS	02-254/04:21:07		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/03:59:07
3033	MGS	02-254/04:48:37		NOTE: Exit Solar Eclipse 15686		02-254/04:26:36
3034	MGS	02-254/04:49:06		NOTE: Exit Earth Occultation 15686		02-254/04:27:06
3035	MGS	02-254/04:49:12		NOTE: Periapsis 15687 ----------		02-254/04:27:11
3036	MGS	02-254/04:52:02		NOTE: Exit Planetary Atmosphere 15686		02-254/04:30:02
3037	MGS	02-254/04:53:45		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/04:31:45
3038	MGS	02-254/04:53:45		Select Automatic HGA control mode	SAHACE	02-254/04:31:45
3039	MGS	02-254/04:53:46		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/04:31:46
3040	MGS	02-254/04:55:47		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/04:33:47
3041	MGS	02-254/04:55:47		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=2, BITS=14416000, DUR=00:52:20		02-254/04:33:47
3042	MGS	02-254/04:55:47		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-254/04:33:47
3043	MGS	02-254/04:55:47		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/04:33:47
3044	MGS	02-254/05:14:43		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/04:52:43
3045	MGS	02-254/05:14:43		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=2, BITS=18960000, DUR=00:18:56		02-254/04:52:43
3046	MGS	02-254/05:14:43		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-254/04:52:43
3047	MGS	02-254/05:14:43		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/04:52:43
3048	MGS	02-254/05:14:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/04:52:44
3049	MGS	02-254/05:14:45		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/04:52:45
3050	MGS	02-254/05:14:46		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/04:52:46
3051	MGS	02-254/05:17:02		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/04:55:02
3052	MGS	02-254/05:24:32		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/05:02:32
3053	MGS	02-254/05:30:24		Select Automatic HGA control mode	SAHACE	02-254/05:08:24
3054	MGS	02-254/05:30:25		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/05:08:25
3055	MGS	02-254/05:31:21		NOTE: Start Block (SSRMGR)		02-254/05:09:21
3056	MGS	02-254/05:31:21		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART2	STSSRC	02-254/05:09:21
3057	MGS	02-254/05:31:22		SSR 2B Data Enable	CSD2BE	02-254/05:09:22
3058	MGS	02-254/05:31:22		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=2, BR=4000, SRC=SE_1A		02-254/05:09:22
3059	MGS	02-254/05:32:26		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/05:10:26
3060	MGS	02-254/05:32:26		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=2, BITS=256000, DUR=00:01:04		02-254/05:10:26
3061	MGS	02-254/05:32:26		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-254/05:10:26
3062	MGS	02-254/05:32:26		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/05:10:26
3063	MGS	02-254/05:45:00	65	Begin Tracking		
3064	MGS	02-254/05:45:00	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3065	MGS	02-254/05:47:22		SSR 2A Data Disable	CSD2AX	02-254/05:25:22
3066	MGS	02-254/05:47:22		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=2, BITS=26796000, DUR=01:51:39		02-254/05:25:22
3067	MGS	02-254/05:47:23		NOTE: End Block (SSRMGR)		02-254/05:25:23
3068	MGS	02-254/05:48:29		NOTE: Apoapsis 15687 -		02-254/05:26:29
3069	MGS	02-254/05:56:04		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/05:34:04
3070	MGS	02-254/05:58:25	65	NOTE: Above Uplink Interlock Limit		
3071	MGS	02-254/06:01:00		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/05:39:00
3072	MGS	02-254/06:01:00		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=2, BITS=7112000, DUR=00:28:34		02-254/05:39:00
3073	MGS	02-254/06:01:00		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=2, BR=4000, SRC=SE_1A		02-254/05:39:00
3074	MGS	02-254/06:01:00		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/05:39:00
3075	MGS	02-254/06:01:04		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/05:39:04
3076	MGS	02-254/06:01:04		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/05:39:04

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3077	MGS	02-254/06:01:05		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/05:39:05
3078	MGS	02-254/06:01:05		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/05:39:05
3079	MGS	02-254/06:01:05	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3080	MGS	02-254/06:01:05	65	NOTE: Carrier Only -- No Telemetry Modulation		
3081	MGS	02-254/06:04:20		NOTE: Enter Planetary Atmosphere 15687		02-254/05:42:19
3082	MGS	02-254/06:07:02		NOTE: Enter Earth Occultation 15687		02-254/05:45:01
3083	MGS	02-254/06:07:02	65	NOTE: Loss Of X-Band Signal		
3084	MGS	02-254/06:07:30	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3085	MGS	02-254/06:07:38		NOTE: Enter Solar Eclipse 15687		02-254/05:45:37
3086	MGS	02-254/06:09:07		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/05:47:07
3087	MGS	02-254/06:09:07		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/05:47:07
3088	MGS	02-254/06:09:08		NOTE: End fixed Sub-Reflector for Radio Science		02-254/05:47:08
3089	MGS	02-254/06:09:08		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/05:47:08
3090	MGS	02-254/06:09:08		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/05:47:08
3091	MGS	02-254/06:09:08		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/05:47:08
3092	MGS	02-254/06:09:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/05:47:09
3093	MGS	02-254/06:09:09		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/05:47:09
3094	MGS	02-254/06:12:39		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/05:50:39
3095	MGS	02-254/06:12:41		Disable A frame offset	SAAFOX	02-254/05:50:41
3096	MGS	02-254/06:12:42		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/05:50:42
3097	MGS	02-254/06:13:28	65	NOTE: Transmitter Off in 15 minutes		
3098	MGS	02-254/06:15:41		: TRUE	mnadir	02-254/05:53:41
3099	MGS	02-254/06:18:39		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/05:56:39
3100	MGS	02-254/06:18:40		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/05:56:40
3101	MGS	02-254/06:28:28	65	Transmitter Off		
3102	MGS	02-254/06:38:11		Enable A frame offset	SAAFOE	02-254/06:16:11
3103	MGS	02-254/06:38:12		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/06:16:12
3104	MGS	02-254/06:38:13		: FALSE	mnadir	02-254/06:16:13
3105	MGS	02-254/06:44:06	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3106	MGS	02-254/06:46:06	65	Range Modulation On: SUP=3.0dB		
3107	MGS	02-254/06:46:20		NOTE: Exit Solar Eclipse 15687		02-254/06:24:20
3108	MGS	02-254/06:46:50		NOTE: Exit Earth Occultation 15687		02-254/06:24:49
3109	MGS	02-254/06:47:03		NOTE: Periapsis 15688 ----------		02-254/06:25:02
3110	MGS	02-254/06:47:06	65	Begin Ranging Acquisition		
3111	MGS	02-254/06:49:46		NOTE: Exit Planetary Atmosphere 15687		02-254/06:27:45
3112	MGS	02-254/06:51:27		NOTE: Start Block (MAP_PB_BETA_SUP)		02-254/06:29:27
3113	MGS	02-254/06:51:27		Select Automatic HGA control mode	SAHACE	02-254/06:29:27
3114	MGS	02-254/06:51:28		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/06:29:28
3115	MGS	02-254/06:51:29		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/06:29:29
3116	MGS	02-254/06:51:30		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART1	STSSRC	02-254/06:29:30
3117	MGS	02-254/06:51:31		SSR 1A Data Enable	CSD1AE	02-254/06:29:31
3118	MGS	02-254/06:51:31		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=1, BR=21333		02-254/06:29:31
3119	MGS	02-254/06:51:36	65	Acquisition Of X-Band Signal		
3120	MGS	02-254/06:51:36	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3121	MGS	02-254/07:02:01	65	NOTE: Transmitter Off in 15 minutes		
3122	MGS	02-254/07:12:27		SSR 1A Data Disable	CSD1AX	02-254/06:50:27
3123	MGS	02-254/07:12:27		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=1, BITS=26794666, DUR=00:20:56		02-254/06:50:27
3124	MGS	02-254/07:12:28		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/06:50:28
3125	MGS	02-254/07:12:28	65	NOTE: Loss Of X-Band Signal		
3126	MGS	02-254/07:12:29		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/06:50:29
3127	MGS	02-254/07:12:30		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/06:50:30
3128	MGS	02-254/07:14:46		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/06:52:46
3129	MGS	02-254/07:15:02	65	Range Modulation Off		
3130	MGS	02-254/07:17:01	65	Transmitter Off		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3131	MGS	02-254/07:22:16		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/07:00:16
3132	MGS	02-254/07:28:08		Select Automatic HGA control mode	SAHACE	02-254/07:06:08
3133	MGS	02-254/07:28:09		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/07:06:09
3134	MGS	02-254/07:28:10		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/07:06:10
3135	MGS	02-254/07:28:11		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART1	STSSRC	02-254/07:06:11
3136	MGS	02-254/07:28:12		SSR 1B Data Enable	CSD1BE	02-254/07:06:12
3137	MGS	02-254/07:28:12		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=1, BR=21333		02-254/07:06:12
3138	MGS	02-254/07:28:17	65	Acquisition Of X-Band Signal		
3139	MGS	02-254/07:28:17	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3140	MGS	02-254/07:29:25		NOTE: Start Block (SSRMGR)		02-254/07:07:25
3141	MGS	02-254/07:29:25		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART3	STSSRC	02-254/07:07:25
3142	MGS	02-254/07:29:26		SSR 2A Data Enable	CSD2AE	02-254/07:07:26
3143	MGS	02-254/07:29:26		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-254/07:07:26
3144	MGS	02-254/07:45:26		SSR 2B Data Disable	CSD2BX	02-254/07:23:26
3145	MGS	02-254/07:45:26		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=2, BITS=32176000, DUR=02:14:04		02-254/07:23:26
3146	MGS	02-254/07:45:27		NOTE: End Block (SSRMGR)		02-254/07:23:27
3147	MGS	02-254/07:46:10		NOTE: Apoapsis 15688 -		02-254/07:24:09
3148	MGS	02-254/07:53:20		SSR 1B Data Disable	CSD1BX	02-254/07:31:20
3149	MGS	02-254/07:53:20		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=1, BITS=32170666, DUR=00:25:08		02-254/07:31:20
3150	MGS	02-254/07:53:21		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/07:31:21
3151	MGS	02-254/07:53:21	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3152	MGS	02-254/07:53:47		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/07:31:47
3153	MGS	02-254/07:58:47		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/07:36:47
3154	MGS	02-254/07:58:47		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/07:36:47
3155	MGS	02-254/07:58:47	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3156	MGS	02-254/07:58:48		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/07:36:48
3157	MGS	02-254/07:58:48		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/07:36:48
3158	MGS	02-254/07:58:48	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3159	MGS	02-254/07:58:48	65	NOTE: Carrier Only -- No Telemetry Modulation		
3160	MGS	02-254/08:02:06		NOTE: Enter Planetary Atmosphere 15688		02-254/07:40:05
3161	MGS	02-254/08:04:47		NOTE: Enter Earth Occultation 15688		02-254/07:42:47
3162	MGS	02-254/08:04:47	65	NOTE: Loss Of X-Band Signal		
3163	MGS	02-254/08:05:16	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3164	MGS	02-254/08:05:23		NOTE: Enter Solar Eclipse 15688		02-254/07:43:23
3165	MGS	02-254/08:06:50		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/07:44:50
3166	MGS	02-254/08:06:50		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/07:44:50
3167	MGS	02-254/08:06:51		NOTE: End fixed Sub-Reflector for Radio Science		02-254/07:44:51
3168	MGS	02-254/08:06:51		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/07:44:51
3169	MGS	02-254/08:06:51		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/07:44:51
3170	MGS	02-254/08:06:52		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/07:44:52
3171	MGS	02-254/08:06:54		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/07:44:54
3172	MGS	02-254/08:06:55		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/07:44:55
3173	MGS	02-254/08:10:25		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/07:48:25
3174	MGS	02-254/08:10:26		Disable A frame offset	SAAFOX	02-254/07:48:26
3175	MGS	02-254/08:10:27		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/07:48:27
3176	MGS	02-254/08:11:13	65	NOTE: Transmitter Off in 15 minutes		
3177	MGS	02-254/08:13:26		: TRUE	mnadir	02-254/07:51:26
3178	MGS	02-254/08:16:25		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/07:54:25
3179	MGS	02-254/08:16:26		NOTE: End Block (MAP_PB_BETA_SUP)		02-254/07:54:26
3180	MGS	02-254/08:26:13	65	Transmitter Off		
3181	MGS	02-254/08:35:56		Enable A frame offset	SAAFOE	02-254/08:13:56
3182	MGS	02-254/08:35:57		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/08:13:57
3183	MGS	02-254/08:35:58		: FALSE	mnadir	02-254/08:13:58
3184	MGS	02-254/08:41:52	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3185	MGS	02-254/08:43:52	65	Range Modulation On: SUP=3.0dB		
3186	MGS	02-254/08:44:05		NOTE: Exit Solar Eclipse 15688		02-254/08:22:05
3187	MGS	02-254/08:44:35		NOTE: Exit Earth Occultation 15688		02-254/08:22:35
3188	MGS	02-254/08:44:47		NOTE: Periapsis 15689 ----------		02-254/08:22:47
3189	MGS	02-254/08:44:52	65	Begin Ranging Acquisition		
3190	MGS	02-254/08:47:31		NOTE: Exit Planetary Atmosphere 15688		02-254/08:25:31
3191	MGS	02-254/08:49:12		NOTE: Start Block (MAP_PB_BETA_SUP)		02-254/08:27:12
3192	MGS	02-254/08:49:12		Select Automatic HGA control mode	SAHACE	02-254/08:27:12
3193	MGS	02-254/08:49:13		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/08:27:13
3194	MGS	02-254/08:49:14		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/08:27:14
3195	MGS	02-254/08:49:15		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART2	STSSRC	02-254/08:27:15
3196	MGS	02-254/08:49:16		SSR 1A Data Enable	CSD1AE	02-254/08:27:16
3197	MGS	02-254/08:49:16		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=2, BR=21333		02-254/08:27:16
3198	MGS	02-254/08:49:21	65	Acquisition Of X-Band Signal		
3199	MGS	02-254/08:49:21	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3200	MGS	02-254/08:59:46	65	NOTE: Transmitter Off in 15 minutes		
3201	MGS	02-254/09:05:03		NOTE: Start Block (SSRMGR)		02-254/08:43:03
3202	MGS	02-254/09:05:03		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART3	STSSRC	02-254/08:43:03
3203	MGS	02-254/09:05:04		SSR 2B Data Enable	CSD2BE	02-254/08:43:04
3204	MGS	02-254/09:05:04		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=3, BR=4000, SRC=SE_1A		02-254/08:43:04
3205	MGS	02-254/09:10:12		SSR 1A Data Disable	CSD1AX	02-254/08:48:12
3206	MGS	02-254/09:10:12		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=2, BITS=26794666, DUR=00:20:56		02-254/08:48:12
3207	MGS	02-254/09:10:13		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/08:48:13
3208	MGS	02-254/09:10:13	65	NOTE: Loss Of X-Band Signal		
3209	MGS	02-254/09:10:14		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/08:48:14
3210	MGS	02-254/09:10:15		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/08:48:15
3211	MGS	02-254/09:12:31		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/08:50:31
3212	MGS	02-254/09:12:46	65	Range Modulation Off		
3213	MGS	02-254/09:14:46	65	Transmitter Off		
3214	MGS	02-254/09:20:01		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/08:58:01
3215	MGS	02-254/09:21:05		SSR 2A Data Disable	CSD2AX	02-254/08:59:05
3216	MGS	02-254/09:21:05		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=3, BITS=26796000, DUR=01:51:39		02-254/08:59:05
3217	MGS	02-254/09:21:06		NOTE: End Block (SSRMGR)		02-254/08:59:06
3218	MGS	02-254/09:25:53		Select Automatic HGA control mode	SAHACE	02-254/09:03:53
3219	MGS	02-254/09:25:54		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/09:03:54
3220	MGS	02-254/09:25:55		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/09:03:55
3221	MGS	02-254/09:25:56		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART2	STSSRC	02-254/09:03:56
3222	MGS	02-254/09:25:57		SSR 1B Data Enable	CSD1BE	02-254/09:03:57
3223	MGS	02-254/09:25:57		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=2, BR=21333		02-254/09:03:57
3224	MGS	02-254/09:26:02	65	Acquisition Of X-Band Signal		
3225	MGS	02-254/09:26:02	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3226	MGS	02-254/09:43:38		NOTE: Apoapsis 15689 -		02-254/09:21:38
3227	MGS	02-254/09:51:05		SSR 1B Data Disable	CSD1BX	02-254/09:29:05
3228	MGS	02-254/09:51:05		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=2, BITS=32170666, DUR=00:25:08		02-254/09:29:05
3229	MGS	02-254/09:51:06		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/09:29:06
3230	MGS	02-254/09:51:06	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3231	MGS	02-254/09:51:32		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/09:29:32
3232	MGS	02-254/09:56:32		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/09:34:32
3233	MGS	02-254/09:56:32		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/09:34:32
3234	MGS	02-254/09:56:32	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3235	MGS	02-254/09:56:33		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/09:34:33
3236	MGS	02-254/09:56:33		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/09:34:33
3237	MGS	02-254/09:56:33	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3238	MGS	02-254/09:56:33	65	NOTE: Carrier Only -- No Telemetry Modulation		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3239	MGS	02-254/09:59:49		NOTE: Enter Planetary Atmosphere 15689		02-254/09:37:49
3240	MGS	02-254/10:02:31		NOTE: Enter Earth Occultation 15689		02-254/09:40:31
3241	MGS	02-254/10:02:31	65	NOTE: Loss Of X-Band Signal		
3242	MGS	02-254/10:03:00	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3243	MGS	02-254/10:03:07		NOTE: Enter Solar Eclipse 15689		02-254/09:41:07
3244	MGS	02-254/10:04:35		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/09:42:35
3245	MGS	02-254/10:04:35		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/09:42:35
3246	MGS	02-254/10:04:36		NOTE: End fixed Sub-Reflector for Radio Science		02-254/09:42:36
3247	MGS	02-254/10:04:36		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/09:42:36
3248	MGS	02-254/10:04:36		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/09:42:36
3249	MGS	02-254/10:04:37		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/09:42:37
3250	MGS	02-254/10:04:39		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/09:42:39
3251	MGS	02-254/10:04:40		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/09:42:40
3252	MGS	02-254/10:08:10		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/09:46:10
3253	MGS	02-254/10:08:57	65	NOTE: Transmitter Off in 15 minutes		
3254	MGS	02-254/10:14:10		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/09:52:10
3255	MGS	02-254/10:14:11		NOTE: End Block (MAP_PB_BETA_SUP)		02-254/09:52:11
3256	MGS	02-254/10:23:57	65	Transmitter Off		
3257	MGS	02-254/10:39:36	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3258	MGS	02-254/10:41:36	65	Range Modulation On: SUP=3.0dB		
3259	MGS	02-254/10:41:50		NOTE: Exit Solar Eclipse 15689		02-254/10:19:50
3260	MGS	02-254/10:42:19		NOTE: Exit Earth Occultation 15689		02-254/10:20:19
3261	MGS	02-254/10:42:26		NOTE: Periapsis 15690 ----------		02-254/10:20:26
3262	MGS	02-254/10:42:36	65	Begin Ranging Acquisition		
3263	MGS	02-254/10:45:16		NOTE: Exit Planetary Atmosphere 15689		02-254/10:23:15
3264	MGS	02-254/10:46:56		NOTE: Start Block (MAP_PB_BETA_SUP)		02-254/10:24:56
3265	MGS	02-254/10:46:56		Select Automatic HGA control mode	SAHACE	02-254/10:24:56
3266	MGS	02-254/10:46:57		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/10:24:57
3267	MGS	02-254/10:46:58		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/10:24:58
3268	MGS	02-254/10:46:59		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART3	STSSRC	02-254/10:24:59
3269	MGS	02-254/10:47:00		SSR 1A Data Enable	CSD1AE	02-254/10:25:00
3270	MGS	02-254/10:47:00		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=3, BR=21333		02-254/10:25:00
3271	MGS	02-254/10:47:05	65	Acquisition Of X-Band Signal		
3272	MGS	02-254/10:47:05	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3273	MGS	02-254/10:57:27	65	NOTE: Transmitter Off in 15 minutes		
3274	MGS	02-254/11:03:08		NOTE: Start Block (SSRMGR)		02-254/10:41:08
3275	MGS	02-254/11:03:08		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART4	STSSRC	02-254/10:41:08
3276	MGS	02-254/11:03:09		SSR 2A Data Enable	CSD2AE	02-254/10:41:09
3277	MGS	02-254/11:03:09		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-254/10:41:09
3278	MGS	02-254/11:07:56		SSR 1A Data Disable	CSD1AX	02-254/10:45:56
3279	MGS	02-254/11:07:56		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=3, BITS=26794666, DUR=00:20:56		02-254/10:45:56
3280	MGS	02-254/11:07:57		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/10:45:57
3281	MGS	02-254/11:07:57	65	NOTE: Loss Of X-Band Signal		
3282	MGS	02-254/11:07:58		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/10:45:58
3283	MGS	02-254/11:07:59		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/10:45:59
3284	MGS	02-254/11:10:15		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/10:48:15
3285	MGS	02-254/11:10:28	65	Range Modulation Off		
3286	MGS	02-254/11:12:27	65	Transmitter Off		
3287	MGS	02-254/11:17:45		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/10:55:45
3288	MGS	02-254/11:19:08		SSR 2B Data Disable	CSD2BX	02-254/10:57:08
3289	MGS	02-254/11:19:08		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=3, BITS=32176000, DUR=02:14:04		02-254/10:57:08
3290	MGS	02-254/11:19:09		NOTE: End Block (SSRMGR)		02-254/10:57:09
3291	MGS	02-254/11:23:37		Select Automatic HGA control mode	SAHACE	02-254/11:01:37
3292	MGS	02-254/11:23:38		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/11:01:38

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3293	MGS	02-254/11:23:39		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/11:01:39
3294	MGS	02-254/11:23:40		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART3	STSSRC	02-254/11:01:40
3295	MGS	02-254/11:23:41		SSR 1B Data Enable	CSD1BE	02-254/11:01:41
3296	MGS	02-254/11:23:41		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=3, BR=21333		02-254/11:01:41
3297	MGS	02-254/11:23:46	65	Acquisition Of X-Band Signal		
3298	MGS	02-254/11:23:46	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3299	MGS	02-254/11:41:08		NOTE: Apoapsis 15690 -		02-254/11:19:08
3300	MGS	02-254/11:48:49		SSR 1B Data Disable	CSD1BX	02-254/11:26:49
3301	MGS	02-254/11:48:49		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=3, BITS=32170666, DUR=00:25:08		02-254/11:26:49
3302	MGS	02-254/11:48:50		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/11:26:50
3303	MGS	02-254/11:48:50	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3304	MGS	02-254/11:49:16		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/11:27:16
3305	MGS	02-254/11:54:16		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/11:32:16
3306	MGS	02-254/11:54:16		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/11:32:16
3307	MGS	02-254/11:54:16	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3308	MGS	02-254/11:54:17		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/11:32:17
3309	MGS	02-254/11:54:17		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/11:32:17
3310	MGS	02-254/11:54:17	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3311	MGS	02-254/11:54:17	65	NOTE: Carrier Only -- No Telemetry Modulation		
3312	MGS	02-254/11:57:31		NOTE: Enter Planetary Atmosphere 15690		02-254/11:35:30
3313	MGS	02-254/12:00:13		NOTE: Enter Earth Occultation 15690		02-254/11:38:13
3314	MGS	02-254/12:00:13	65	NOTE: Loss Of X-Band Signal		
3315	MGS	02-254/12:00:42	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3316	MGS	02-254/12:00:49		NOTE: Enter Solar Eclipse 15690		02-254/11:38:49
3317	MGS	02-254/12:02:19		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/11:40:19
3318	MGS	02-254/12:02:19		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/11:40:19
3319	MGS	02-254/12:02:20		NOTE: End fixed Sub-Reflector for Radio Science		02-254/11:40:20
3320	MGS	02-254/12:02:20		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/11:40:20
3321	MGS	02-254/12:02:20		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/11:40:20
3322	MGS	02-254/12:02:21		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/11:40:21
3323	MGS	02-254/12:02:23		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/11:40:23
3324	MGS	02-254/12:02:24		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/11:40:24
3325	MGS	02-254/12:05:52		Disable A frame offset	SAAFOX	02-254/11:43:52
3326	MGS	02-254/12:05:53		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/11:43:53
3327	MGS	02-254/12:05:54		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/11:43:54
3328	MGS	02-254/12:06:40	65	NOTE: Transmitter Off in 15 minutes		
3329	MGS	02-254/12:08:52		: TRUE	mnadir	02-254/11:46:52
3330	MGS	02-254/12:11:54		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/11:49:54
3331	MGS	02-254/12:11:55		NOTE: End Block (MAP_PB_BETA_SUP)		02-254/11:49:55
3332	MGS	02-254/12:21:40	65	Transmitter Off		
3333	MGS	02-254/12:22:00		Dump SCP memory to the EDF using physical addressing arguments: 56A4, 240	SCDSCM	02-254/12:00:00
3334	MGS	02-254/12:31:22		Enable A frame offset	SAAFOE	02-254/12:09:22
3335	MGS	02-254/12:31:23		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/12:09:23
3336	MGS	02-254/12:31:24		: FALSE	mnadir	02-254/12:09:24
3337	MGS	02-254/12:35:00	25	Begin Pre-Cal		
3338	MGS	02-254/12:35:00	25	At BOT: S/C Antenna Status: U/L=HGA, D/L=HGA		
3339	MGS	02-254/12:35:00	25	At BOT: S/C Receiver Status: RCVR1=ON, TWNC=OFF, RCVR2=ON, TWNC=OFF		
3340	MGS	02-254/12:35:00	25	At BOT: S/C Ranging Mode: RNG=ON, DOR=OFF		
3341	MGS	02-254/12:35:00	25	At BOT: S/C Transmitter Status: PWR=OFF, EXC=1, PWR=OFF, EXC=2		
3342	MGS	02-254/12:35:00	25	Config: TGC: DEST=37		
3343	MGS	02-254/12:35:00	25	Config: TGC: BAND=X, BR=21333.333333		
3344	MGS	02-254/12:35:00	25	Config: FSS: CH=2, PRI_FL=10000		
3345	MGS	02-254/12:35:00	25	Config: RSR		
3346	MGS	02-254/12:35:00	25	Config: TXL		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3347	MGS	02-254/12:35:00	25	Config: UWV: AMP=XTWM1, MODE=DIPLEX, POL_UL=RCP, POL_DL=RCP		
3348	MGS	02-254/12:35:00	25	Config: BVR		
3349	MGS	02-254/12:35:00	25	Config: Doppler Extractor: BIAS=+1MHZ		
3350	MGS	02-254/12:35:00	25	Config: MDA: SMPL=0.1		
3351	MGS	02-254/12:35:00	25	Config: CMD		
3352	MGS	02-254/12:37:18	65	Acquire U/L: X/16, PWR=20.0, BR=125.0		
3353	MGS	02-254/12:38:46		NOTE: Start Block (SSRMGR)		02-254/12:16:46
3354	MGS	02-254/12:38:46		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART4	STSSRC	02-254/12:16:46
3355	MGS	02-254/12:38:47		SSR 2B Data Enable	CSD2BE	02-254/12:16:47
3356	MGS	02-254/12:38:47		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=4, BR=4000, SRC=SE_1A		02-254/12:16:47
3357	MGS	02-254/12:39:18	65	Range Modulation On: SUP=3.0dB		
3358	MGS	02-254/12:39:32		NOTE: Exit Solar Eclipse 15690		02-254/12:17:32
3359	MGS	02-254/12:40:02		NOTE: Exit Earth Occultation 15690		02-254/12:18:01
3360	MGS	02-254/12:40:09		NOTE: Periapsis 15691 ----------		02-254/12:18:09
3361	MGS	02-254/12:40:18	65	Begin Ranging Acquisition		
3362	MGS	02-254/12:42:58		NOTE: Exit Planetary Atmosphere 15690		02-254/12:20:58
3363	MGS	02-254/12:44:39		NOTE: Start Block (MAP_PB_BETA_SUP)		02-254/12:22:39
3364	MGS	02-254/12:44:39		Select Automatic HGA control mode	SAHACE	02-254/12:22:39
3365	MGS	02-254/12:44:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/12:22:40
3366	MGS	02-254/12:44:41		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/12:22:41
3367	MGS	02-254/12:44:42		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART4	STSSRC	02-254/12:22:42
3368	MGS	02-254/12:44:43		SSR 1A Data Enable	CSD1AE	02-254/12:22:43
3369	MGS	02-254/12:44:43		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=4, BR=21333		02-254/12:22:43
3370	MGS	02-254/12:44:48	65	Acquisition Of X-Band Signal		
3371	MGS	02-254/12:44:48	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3372	MGS	02-254/12:54:48		SSR 2A Data Disable	CSD2AX	02-254/12:32:48
3373	MGS	02-254/12:54:48		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=4, BITS=26796000, DUR=01:51:39		02-254/12:32:48
3374	MGS	02-254/12:54:49		NOTE: End Block (SSRMGR)		02-254/12:32:49
3375	MGS	02-254/12:55:07	65	NOTE: Transmitter Off in 15 minutes		
3376	MGS	02-254/13:05:39		SSR 1A Data Disable	CSD1AX	02-254/12:43:39
3377	MGS	02-254/13:05:39		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=4, BITS=26794666, DUR=00:20:56		02-254/12:43:39
3378	MGS	02-254/13:05:40		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/12:43:40
3379	MGS	02-254/13:05:40	65	NOTE: Loss Of X-Band Signal		
3380	MGS	02-254/13:05:41		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/12:43:41
3381	MGS	02-254/13:05:42		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/12:43:42
3382	MGS	02-254/13:07:58		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/12:45:58
3383	MGS	02-254/13:08:08	65	Range Modulation Off		
3384	MGS	02-254/13:10:07	65	Transmitter Off		
3385	MGS	02-254/13:15:28		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/12:53:28
3386	MGS	02-254/13:20:00	25	Begin Tracking		
3387	MGS	02-254/13:21:20		Select Automatic HGA control mode	SAHACE	02-254/12:59:20
3388	MGS	02-254/13:21:21		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/12:59:21
3389	MGS	02-254/13:21:22		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/12:59:22
3390	MGS	02-254/13:21:23		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART4	STSSRC	02-254/12:59:23
3391	MGS	02-254/13:21:24		SSR 1B Data Enable	CSD1BE	02-254/12:59:24
3392	MGS	02-254/13:21:24		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=4, BR=21333		02-254/12:59:24
3393	MGS	02-254/13:21:29	25	Acquisition Of X-Band Signal		
3394	MGS	02-254/13:21:29	25	Acquire D/L: X/16, 3-Way/65, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3395	MGS	02-254/13:21:29	65	Acquisition Of X-Band Signal		
3396	MGS	02-254/13:21:29	65	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3397	MGS	02-254/13:31:33	25	NOTE: Above Uplink Interlock Limit		
3398	MGS	02-254/13:39:00		NOTE: Apoapsis 15691 -		02-254/13:17:00
3399	MGS	02-254/13:46:32		SSR 1B Data Disable	CSD1BX	02-254/13:24:32

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3400	MGS	02-254/13:46:32		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=4, BITS=32170666, DUR=00:25:08		02-254/13:24:32
3401	MGS	02-254/13:46:33		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/13:24:33
3402	MGS	02-254/13:46:33	25	D/L Change: X/16, 3-Way/65, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3403	MGS	02-254/13:46:33	65	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3404	MGS	02-254/13:46:59		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/13:24:59
3405	MGS	02-254/13:51:59		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/13:29:59
3406	MGS	02-254/13:51:59		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/13:29:59
3407	MGS	02-254/13:51:59	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3408	MGS	02-254/13:51:59	65	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3409	MGS	02-254/13:52:00		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/13:30:00
3410	MGS	02-254/13:52:00		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/13:30:00
3411	MGS	02-254/13:52:00	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3412	MGS	02-254/13:52:00	25	NOTE: Carrier Only -- No Telemetry Modulation		
3413	MGS	02-254/13:52:00	65	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3414	MGS	02-254/13:52:00	65	NOTE: Carrier Only -- No Telemetry Modulation		
3415	MGS	02-254/13:55:10		NOTE: Enter Planetary Atmosphere 15691		02-254/13:33:10
3416	MGS	02-254/13:57:53		NOTE: Enter Earth Occultation 15691		02-254/13:35:52
3417	MGS	02-254/13:57:53	25	NOTE: Loss Of X-Band Signal		
3418	MGS	02-254/13:57:53	65	NOTE: Loss Of X-Band Signal		
3419	MGS	02-254/13:58:23	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3420	MGS	02-254/13:58:29		NOTE: Enter Solar Eclipse 15691		02-254/13:36:29
3421	MGS	02-254/14:00:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/13:38:02
3422	MGS	02-254/14:00:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/13:38:02
3423	MGS	02-254/14:00:03		NOTE: End fixed Sub-Reflector for Radio Science		02-254/13:38:03
3424	MGS	02-254/14:00:03		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/13:38:03
3425	MGS	02-254/14:00:03		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/13:38:03
3426	MGS	02-254/14:00:04		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/13:38:04
3427	MGS	02-254/14:00:06		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/13:38:06
3428	MGS	02-254/14:00:07		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/13:38:07
3429	MGS	02-254/14:03:33		Disable A frame offset	SAAFOX	02-254/13:41:33
3430	MGS	02-254/14:03:34		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/13:41:34
3431	MGS	02-254/14:03:37		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/13:41:37
3432	MGS	02-254/14:04:20	25	NOTE: Transmitter Off in 15 minutes		
3433	MGS	02-254/14:06:33		: TRUE	mnadir	02-254/13:44:33
3434	MGS	02-254/14:09:37		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/13:47:37
3435	MGS	02-254/14:09:38		NOTE: End Block (MAP_PB_BETA_SUP)		02-254/13:47:38
3436	MGS	02-254/14:19:20	25	Transmitter Off		
3437	MGS	02-254/14:29:03		Enable A frame offset	SAAFOE	02-254/14:07:03
3438	MGS	02-254/14:29:04		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/14:07:04
3439	MGS	02-254/14:29:05		: FALSE	mnadir	02-254/14:07:05
3440	MGS	02-254/14:34:59	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3441	MGS	02-254/14:35:00	65	End Tracking		
3442	MGS	02-254/14:36:51		NOTE: Start Block (SSRMGR)		02-254/14:14:51
3443	MGS	02-254/14:36:51		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART5	STSSRC	02-254/14:14:51
3444	MGS	02-254/14:36:52		SSR 2A Data Enable	CSD2AE	02-254/14:14:52
3445	MGS	02-254/14:36:52		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-254/14:14:52
3446	MGS	02-254/14:37:13		NOTE: Exit Solar Eclipse 15691		02-254/14:15:12
3447	MGS	02-254/14:37:42		NOTE: Exit Earth Occultation 15691		02-254/14:15:42
3448	MGS	02-254/14:37:46		NOTE: Periapsis 15692 ----------		02-254/14:15:46
3449	MGS	02-254/14:40:38		NOTE: Exit Planetary Atmosphere 15691		02-254/14:18:38
3450	MGS	02-254/14:42:19		NOTE: Start Block (MAP_PB_BETA_SUP)		02-254/14:20:19
3451	MGS	02-254/14:42:19		Select Automatic HGA control mode	SAHACE	02-254/14:20:19
3452	MGS	02-254/14:42:20		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/14:20:20
3453	MGS	02-254/14:42:21		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/14:20:21

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3454	MGS	02-254/14:42:22		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART5	STSSRC	02-254/14:20:22
3455	MGS	02-254/14:42:23		SSR 1A Data Enable	CSD1AE	02-254/14:20:23
3456	MGS	02-254/14:42:23		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=5, BR=21333		02-254/14:20:23
3457	MGS	02-254/14:42:28	25	Acquisition Of X-Band Signal		
3458	MGS	02-254/14:42:28	25	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3459	MGS	02-254/14:50:00	65	End Post-Cal		
3460	MGS	02-254/14:52:47	25	NOTE: Transmitter Off in 15 minutes		
3461	MGS	02-254/14:52:51		SSR 2B Data Disable	CSD2BX	02-254/14:30:51
3462	MGS	02-254/14:52:51		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=4, BITS=32176000, DUR=02:14:04		02-254/14:30:51
3463	MGS	02-254/14:52:52		NOTE: End Block (SSRMGR)		02-254/14:30:52
3464	MGS	02-254/15:03:19		SSR 1A Data Disable	CSD1AX	02-254/14:41:19
3465	MGS	02-254/15:03:19		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=5, BITS=26794666, DUR=00:20:56		02-254/14:41:19
3466	MGS	02-254/15:03:20	25	Acquire D/L: X/20, 1-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3467	MGS	02-254/15:03:20		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/14:41:20
3468	MGS	02-254/15:03:20	25	NOTE: Loss Of X-Band Signal		
3469	MGS	02-254/15:03:21		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/14:41:21
3470	MGS	02-254/15:03:22		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/14:41:22
3471	MGS	02-254/15:05:38		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/14:43:38
3472	MGS	02-254/15:07:47	25	Transmitter Off		
3473	MGS	02-254/15:13:08		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/14:51:08
3474	MGS	02-254/15:19:00		Select Automatic HGA control mode	SAHACE	02-254/14:57:00
3475	MGS	02-254/15:19:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/14:57:01
3476	MGS	02-254/15:19:02		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/14:57:02
3477	MGS	02-254/15:19:03		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART5	STSSRC	02-254/14:57:03
3478	MGS	02-254/15:19:04		SSR 1B Data Enable	CSD1BE	02-254/14:57:04
3479	MGS	02-254/15:19:04		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=5, BR=21333		02-254/14:57:04
3480	MGS	02-254/15:19:09	25	Acquisition Of X-Band Signal		
3481	MGS	02-254/15:19:09	25	Acquire D/L: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3482	MGS	02-254/15:36:35		NOTE: Apoapsis 15692 -		02-254/15:14:35
3483	MGS	02-254/15:44:12		SSR 1B Data Disable	CSD1BX	02-254/15:22:12
3484	MGS	02-254/15:44:12		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=5, BITS=32170666, DUR=00:25:08		02-254/15:22:12
3485	MGS	02-254/15:44:13		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/15:22:13
3486	MGS	02-254/15:44:13	25	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3487	MGS	02-254/15:44:39		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/15:22:39
3488	MGS	02-254/15:49:39		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/15:27:39
3489	MGS	02-254/15:49:39		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/15:27:39
3490	MGS	02-254/15:49:39	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3491	MGS	02-254/15:49:40		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/15:27:40
3492	MGS	02-254/15:49:40		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/15:27:40
3493	MGS	02-254/15:49:40	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3494	MGS	02-254/15:49:40	25	NOTE: Carrier Only -- No Telemetry Modulation		
3495	MGS	02-254/15:52:50		NOTE: Enter Planetary Atmosphere 15692		02-254/15:30:50
3496	MGS	02-254/15:55:32		NOTE: Enter Earth Occultation 15692		02-254/15:33:32
3497	MGS	02-254/15:55:32	25	NOTE: Loss Of X-Band Signal		
3498	MGS	02-254/15:56:02	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3499	MGS	02-254/15:56:09		NOTE: Enter Solar Eclipse 15692		02-254/15:34:09
3500	MGS	02-254/15:57:42		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/15:35:42
3501	MGS	02-254/15:57:42		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/15:35:42
3502	MGS	02-254/15:57:43		NOTE: End fixed Sub-Reflector for Radio Science		02-254/15:35:43
3503	MGS	02-254/15:57:43		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/15:35:43
3504	MGS	02-254/15:57:43		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/15:35:43
3505	MGS	02-254/15:57:44		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/15:35:44
3506	MGS	02-254/15:57:46		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/15:35:46
3507	MGS	02-254/15:57:47		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/15:35:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3508	MGS	02-254/16:01:17		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/15:39:17
3509	MGS	02-254/16:01:59	25	NOTE: Transmitter Off in 15 minutes		
3510	MGS	02-254/16:07:17		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/15:45:17
3511	MGS	02-254/16:07:18		NOTE: End Block (MAP_PB_BETA_SUP)		02-254/15:45:18
3512	MGS	02-254/16:12:29		NOTE: Start Block (SSRMGR)		02-254/15:50:29
3513	MGS	02-254/16:12:29		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART5	STSSRC	02-254/15:50:29
3514	MGS	02-254/16:12:30		SSR 2B Data Enable	CSD2BE	02-254/15:50:30
3515	MGS	02-254/16:12:30		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=5, BR=4000, SRC=SE_1A		02-254/15:50:30
3516	MGS	02-254/16:16:59	25	Transmitter Off		
3517	MGS	02-254/16:28:31		SSR 2A Data Disable	CSD2AX	02-254/16:06:31
3518	MGS	02-254/16:28:31		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=5, BITS=26796000, DUR=01:51:39		02-254/16:06:31
3519	MGS	02-254/16:28:32		NOTE: End Block (SSRMGR)		02-254/16:06:32
3520	MGS	02-254/16:32:38	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3521	MGS	02-254/16:34:51		NOTE: Exit Solar Eclipse 15692		02-254/16:12:51
3522	MGS	02-254/16:35:05		NOTE: Periapsis 15693 ----------		02-254/16:13:05
3523	MGS	02-254/16:35:20		NOTE: Exit Earth Occultation 15692		02-254/16:13:20
3524	MGS	02-254/16:38:17		NOTE: Exit Planetary Atmosphere 15692		02-254/16:16:17
3525	MGS	02-254/16:40:00		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/16:18:00
3526	MGS	02-254/16:40:00		Select Automatic HGA control mode	SAHACE	02-254/16:18:00
3527	MGS	02-254/16:40:01		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/16:18:01
3528	MGS	02-254/16:40:09	25	Acquisition Of X-Band Signal		
3529	MGS	02-254/16:40:09	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3530	MGS	02-254/16:42:02		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:20:02
3531	MGS	02-254/16:42:02		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=7088000, DUR=00:29:32		02-254/16:20:02
3532	MGS	02-254/16:42:02		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-254/16:20:02
3533	MGS	02-254/16:42:02		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/16:20:02
3534	MGS	02-254/16:42:27		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:20:27
3535	MGS	02-254/16:42:27		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=5, BITS=7188000, DUR=00:00:25		02-254/16:20:27
3536	MGS	02-254/16:42:27		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=5, BR=4000, SRC=SE_1A		02-254/16:20:27
3537	MGS	02-254/16:42:29		NOTE: Start Block (SSRMGR)		02-254/16:20:29
3538	MGS	02-254/16:42:29		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-254/16:20:29
3539	MGS	02-254/16:42:29		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-254/16:20:29
3540	MGS	02-254/16:42:30		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/16:20:30
3541	MGS	02-254/16:42:31		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART6	STSSRC	02-254/16:20:31
3542	MGS	02-254/16:42:32		SSR 1A Data Enable	CSD1AE	02-254/16:20:32
3543	MGS	02-254/16:42:32		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=6, BR=21333		02-254/16:20:32
3544	MGS	02-254/16:42:32	25	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3545	MGS	02-254/16:50:28	25	NOTE: Transmitter Off in 15 minutes		
3546	MGS	02-254/17:00:58		SSR 1A Data Disable	CSD1AX	02-254/16:38:58
3547	MGS	02-254/17:00:58		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-254/16:38:58
3548	MGS	02-254/17:00:58		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:38:58
3549	MGS	02-254/17:00:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/16:38:58
3550	MGS	02-254/17:00:58		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:38:58
3551	MGS	02-254/17:00:58		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/16:38:58
3552	MGS	02-254/17:00:58	25	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3553	MGS	02-254/17:00:59	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3554	MGS	02-254/17:00:59		NOTE: End Block (SSRMGR)		02-254/16:38:59
3555	MGS	02-254/17:00:59		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/16:38:59
3556	MGS	02-254/17:00:59	25	NOTE: Loss Of X-Band Signal		
3557	MGS	02-254/17:01:00		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/16:39:00
3558	MGS	02-254/17:01:01		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/16:39:01
3559	MGS	02-254/17:03:17		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/16:41:17
3560	MGS	02-254/17:05:28	25	Transmitter Off		
3561	MGS	02-254/17:10:47		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/16:48:47

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3562	MGS	02-254/17:16:39		Select Automatic HGA control mode	SAHACE	02-254/16:54:39
3563	MGS	02-254/17:16:40		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/16:54:40
3564	MGS	02-254/17:16:48	25	Acquisition Of X-Band Signal		
3565	MGS	02-254/17:16:48	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3566	MGS	02-254/17:18:41		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:56:41
3567	MGS	02-254/17:18:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/16:56:41
3568	MGS	02-254/17:19:01		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/16:57:01
3569	MGS	02-254/17:19:03		NOTE: Start Block (SSRMGR)		02-254/16:57:03
3570	MGS	02-254/17:19:03		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-254/16:57:03
3571	MGS	02-254/17:19:03		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-254/16:57:03
3572	MGS	02-254/17:19:04		Sends a one-word MOT command to the XSU command SOB: SSR_1B	STMOTC	02-254/16:57:04
3573	MGS	02-254/17:19:05		Sends a one-word SSR command to the XSU command SOB: SSR_1B, F21KHZ, PLYBCK, PART6	STSSRC	02-254/16:57:05
3574	MGS	02-254/17:19:06		SSR 1B Data Enable	CSD1BE	02-254/16:57:06
3575	MGS	02-254/17:19:06		SSR Activity: ID=SSR_1B, FCN=Start Playback, PRT=6, BR=21333		02-254/16:57:06
3576	MGS	02-254/17:19:06	25	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3577	MGS	02-254/17:33:58		NOTE: Apoapsis 15693 -		02-254/17:11:58
3578	MGS	02-254/17:37:32		SSR 1B Data Disable	CSD1BX	02-254/17:15:32
3579	MGS	02-254/17:37:32		SSR Activity: ID=SSR_1B, FCN=End Playback, PRT=6, BITS=23594666, DUR=00:18:26		02-254/17:15:32
3580	MGS	02-254/17:37:32		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/17:15:32
3581	MGS	02-254/17:37:32		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/17:15:32
3582	MGS	02-254/17:37:32	25	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3583	MGS	02-254/17:37:33		NOTE: End Block (SSRMGR)		02-254/17:15:33
3584	MGS	02-254/17:42:18		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/17:20:19
3585	MGS	02-254/17:47:15		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/17:25:15
3586	MGS	02-254/17:47:15		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/17:25:15
3587	MGS	02-254/17:47:19		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/17:25:19
3588	MGS	02-254/17:47:19		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/17:25:19
3589	MGS	02-254/17:47:19	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3590	MGS	02-254/17:47:20		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/17:25:20
3591	MGS	02-254/17:47:20		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/17:25:20
3592	MGS	02-254/17:47:20	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3593	MGS	02-254/17:47:20	25	NOTE: Carrier Only -- No Telemetry Modulation		
3594	MGS	02-254/17:50:32		NOTE: Enter Planetary Atmosphere 15693		02-254/17:28:32
3595	MGS	02-254/17:53:13		NOTE: Enter Earth Occultation 15693		02-254/17:31:14
3596	MGS	02-254/17:53:13	25	NOTE: Loss Of X-Band Signal		
3597	MGS	02-254/17:53:43	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3598	MGS	02-254/17:53:50		NOTE: Enter Solar Eclipse 15693		02-254/17:31:50
3599	MGS	02-254/17:55:22		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/17:33:22
3600	MGS	02-254/17:55:22		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/17:33:22
3601	MGS	02-254/17:55:22		NOTE: End fixed Sub-Reflector for Radio Science		02-254/17:33:23
3602	MGS	02-254/17:55:23		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/17:33:23
3603	MGS	02-254/17:55:23		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/17:33:23
3604	MGS	02-254/17:55:23		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/17:33:23
3605	MGS	02-254/17:55:24		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/17:33:24
3606	MGS	02-254/17:55:24		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/17:33:24
3607	MGS	02-254/17:58:53		Disable A frame offset	SAAFOX	02-254/17:36:53
3608	MGS	02-254/17:58:54		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/17:36:54
3609	MGS	02-254/17:58:54		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/17:36:54
3610	MGS	02-254/17:59:41	25	NOTE: Transmitter Off in 15 minutes		
3611	MGS	02-254/18:01:53		: TRUE	mnadir	02-254/17:39:53
3612	MGS	02-254/18:04:54		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/17:42:54
3613	MGS	02-254/18:04:55		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/17:42:55
3614	MGS	02-254/18:10:34		NOTE: Start Block (SSRMGR)		02-254/17:48:34
3615	MGS	02-254/18:10:34		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART6	STSSRC	02-254/17:48:34

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3616	MGS	02-254/18:10:35		SSR 2A Data Enable	CSD2AE	02-254/17:48:35
3617	MGS	02-254/18:10:35		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-254/17:48:35
3618	MGS	02-254/18:14:41	25	Transmitter Off		
3619	MGS	02-254/18:24:23		Enable A frame offset	SAAFOE	02-254/18:02:23
3620	MGS	02-254/18:24:24		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/18:02:24
3621	MGS	02-254/18:24:25		: FALSE	mnadir	02-254/18:02:25
3622	MGS	02-254/18:26:34		SSR 2B Data Disable	CSD2BX	02-254/18:04:34
3623	MGS	02-254/18:26:34		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=5, BITS=32176000, DUR=02:14:04		02-254/18:04:34
3624	MGS	02-254/18:26:35		NOTE: End Block (SSRMGR)		02-254/18:04:35
3625	MGS	02-254/18:30:19	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3626	MGS	02-254/18:32:32		NOTE: Exit Solar Eclipse 15693		02-254/18:10:32
3627	MGS	02-254/18:32:51		NOTE: Periapsis 15694 ----------		02-254/18:10:51
3628	MGS	02-254/18:33:02		NOTE: Exit Earth Occultation 15693		02-254/18:11:02
3629	MGS	02-254/18:35:58		NOTE: Exit Planetary Atmosphere 15693		02-254/18:13:58
3630	MGS	02-254/18:37:42		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/18:15:42
3631	MGS	02-254/18:37:42		Select Automatic HGA control mode	SAHACE	02-254/18:15:42
3632	MGS	02-254/18:37:43		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/18:15:43
3633	MGS	02-254/18:37:51	25	Acquisition Of X-Band Signal		
3634	MGS	02-254/18:37:51	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3635	MGS	02-254/18:39:44		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:17:44
3636	MGS	02-254/18:39:44		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=6, BITS=6996000, DUR=00:29:09		02-254/18:17:44
3637	MGS	02-254/18:39:44		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-254/18:17:44
3638	MGS	02-254/18:39:44		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/18:17:44
3639	MGS	02-254/18:40:09		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:18:09
3640	MGS	02-254/18:40:09		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=6, BITS=7096000, DUR=00:00:25		02-254/18:18:09
3641	MGS	02-254/18:40:09		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-254/18:18:09
3642	MGS	02-254/18:40:11		NOTE: Start Block (SSRMGR)		02-254/18:18:11
3643	MGS	02-254/18:40:11		XSU PGC Bit 0,1,2,3 Side 1: 15	CXSPG1	02-254/18:18:11
3644	MGS	02-254/18:40:11		XSU PGC Bit 0,1,2,3 Side 2: 15	CXSPG2	02-254/18:18:11
3645	MGS	02-254/18:40:12		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/18:18:12
3646	MGS	02-254/18:40:13		Sends a one-word SSR command to the XSU command SOB: SSR_1A, F21KHZ, PLYBCK, PART7	STSSRC	02-254/18:18:13
3647	MGS	02-254/18:40:14		SSR 1A Data Enable	CSD1AE	02-254/18:18:14
3648	MGS	02-254/18:40:14		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=7, BR=21333		02-254/18:18:14
3649	MGS	02-254/18:40:14	25	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3650	MGS	02-254/18:48:12	25	NOTE: Transmitter Off in 15 minutes		
3651	MGS	02-254/18:58:40		SSR 1A Data Disable	CSD1AX	02-254/18:36:40
3652	MGS	02-254/18:58:40		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=7, BITS=23594666, DUR=00:18:26		02-254/18:36:40
3653	MGS	02-254/18:58:40		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:36:40
3654	MGS	02-254/18:58:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/18:36:40
3655	MGS	02-254/18:58:40	25	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3656	MGS	02-254/18:58:40	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3657	MGS	02-254/18:58:41		NOTE: End Block (SSRMGR)		02-254/18:36:41
3658	MGS	02-254/18:58:41		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:36:41
3659	MGS	02-254/18:58:41		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/18:36:41
3660	MGS	02-254/18:58:41		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/18:36:41
3661	MGS	02-254/18:58:41	25	NOTE: Loss Of X-Band Signal		
3662	MGS	02-254/18:58:42		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/18:36:42
3663	MGS	02-254/18:58:43		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/18:36:43
3664	MGS	02-254/19:00:59		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/18:38:59
3665	MGS	02-254/19:03:12	25	Transmitter Off		
3666	MGS	02-254/19:08:29		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/18:46:29
3667	MGS	02-254/19:14:21		Select Automatic HGA control mode	SAHACE	02-254/18:52:21
3668	MGS	02-254/19:14:22		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/18:52:22
3669	MGS	02-254/19:14:30	25	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3670	MGS	02-254/19:14:30	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3671	MGS	02-254/19:16:23		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:54:23
3672	MGS	02-254/19:16:23		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/18:54:23
3673	MGS	02-254/19:16:48		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/18:54:48
3674	MGS	02-254/19:16:52		Sends a one-word MOT command to the XSU command SOB: SSR_1A	STMOTC	02-254/18:54:52
3675	MGS	02-254/19:16:53		SSR 1A Data Enable	CSD1AE	02-254/18:54:53
3676	MGS	02-254/19:16:53		SSR Activity: ID=SSR_1A, FCN=Start Playback, PRT=7, BR=21333		02-254/18:54:53
3677	MGS	02-254/19:16:53	25	D/L Change: X/16, 2-Way, BW=10, BR=21333.3, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3678	MGS	02-254/19:31:55		NOTE: Apoapsis 15694 -		02-254/19:09:55
3679	MGS	02-254/19:32:52		NOTE: Start Block (SSRMGR)		02-254/19:10:52
3680	MGS	02-254/19:32:52		Sends a one-word SSR command to the XSU command SOB: SSR_2B, SE_1A, RECORD, PART6	STSSRC	02-254/19:10:52
3681	MGS	02-254/19:32:53		SSR 2B Data Enable	CSD2BE	02-254/19:10:53
3682	MGS	02-254/19:32:53		SSR Activity: ID=SSR_2B, FCN=Start Recording, PRT=6, BR=4000, SRC=SE_1A		02-254/19:10:53
3683	MGS	02-254/19:40:00		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/19:18:01
3684	MGS	02-254/19:40:37		SSR 1A Data Disable	CSD1AX	02-254/19:18:37
3685	MGS	02-254/19:40:37		SSR Activity: ID=SSR_1A, FCN=End Playback, PRT=7, BITS=30378666, DUR=00:23:44		02-254/19:18:37
3686	MGS	02-254/19:40:38		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/19:18:38
3687	MGS	02-254/19:40:38		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=1860000, DUR=00:07:45		02-254/19:18:38
3688	MGS	02-254/19:40:38		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-254/19:18:38
3689	MGS	02-254/19:40:38		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/19:18:38
3690	MGS	02-254/19:40:38	25	D/L Change: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3691	MGS	02-254/19:44:57		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/19:22:57
3692	MGS	02-254/19:44:57		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=2896000, DUR=00:04:19		02-254/19:22:57
3693	MGS	02-254/19:44:57		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-254/19:22:57
3694	MGS	02-254/19:44:57		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/19:22:57
3695	MGS	02-254/19:45:01		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/19:23:01
3696	MGS	02-254/19:45:01		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/19:23:01
3697	MGS	02-254/19:45:01	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3698	MGS	02-254/19:45:02		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/19:23:02
3699	MGS	02-254/19:45:02		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/19:23:02
3700	MGS	02-254/19:45:02	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3701	MGS	02-254/19:45:02	25	NOTE: Carrier Only -- No Telemetry Modulation		
3702	MGS	02-254/19:48:15		NOTE: Enter Planetary Atmosphere 15694		02-254/19:26:15
3703	MGS	02-254/19:48:54		SSR 2A Data Disable	CSD2AX	02-254/19:26:54
3704	MGS	02-254/19:48:54		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-254/19:26:54
3705	MGS	02-254/19:48:55		NOTE: End Block (SSRMGR)		02-254/19:26:55
3706	MGS	02-254/19:50:57		NOTE: Enter Earth Occultation 15694		02-254/19:28:57
3707	MGS	02-254/19:50:57	25	NOTE: Loss Of X-Band Signal		
3708	MGS	02-254/19:51:27	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3709	MGS	02-254/19:51:34		NOTE: Enter Solar Eclipse 15694		02-254/19:29:34
3710	MGS	02-254/19:53:04		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/19:31:04
3711	MGS	02-254/19:53:04		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/19:31:04
3712	MGS	02-254/19:53:04		NOTE: End fixed Sub-Reflector for Radio Science		02-254/19:31:05
3713	MGS	02-254/19:53:05		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/19:31:05
3714	MGS	02-254/19:53:05		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/19:31:05
3715	MGS	02-254/19:53:05		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/19:31:05
3716	MGS	02-254/19:53:06		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/19:31:06
3717	MGS	02-254/19:53:06		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/19:31:06
3718	MGS	02-254/19:56:36		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/19:34:36
3719	MGS	02-254/19:56:37		Disable A frame offset	SAAFOX	02-254/19:34:37
3720	MGS	02-254/19:56:38		Load SCP memory at a physical address: 14A34, [0000]	SCGNLD	02-254/19:34:38
3721	MGS	02-254/19:57:25	25	NOTE: Transmitter Off in 15 minutes		
3722	MGS	02-254/19:59:37		: TRUE	mnadir	02-254/19:37:37
3723	MGS	02-254/20:02:36		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/19:40:36

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3724	MGS	02-254/20:02:37		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/19:40:37
3725	MGS	02-254/20:12:25	25	Transmitter Off		
3726	MGS	02-254/20:22:07		Enable A frame offset	SAAFOE	02-254/20:00:07
3727	MGS	02-254/20:22:08		Load SCP memory at a physical address: 14A34, [0001]	SCGNLD	02-254/20:00:08
3728	MGS	02-254/20:22:09		: FALSE	mnadir	02-254/20:00:09
3729	MGS	02-254/20:28:03	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3730	MGS	02-254/20:30:16		NOTE: Exit Solar Eclipse 15694		02-254/20:08:17
3731	MGS	02-254/20:30:46		NOTE: Exit Earth Occultation 15694		02-254/20:08:46
3732	MGS	02-254/20:31:01		NOTE: Periapsis 15695 ----------		02-254/20:09:01
3733	MGS	02-254/20:33:42		NOTE: Exit Planetary Atmosphere 15694		02-254/20:11:42
3734	MGS	02-254/20:35:26		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/20:13:26
3735	MGS	02-254/20:35:26		Select Automatic HGA control mode	SAHACE	02-254/20:13:26
3736	MGS	02-254/20:35:27		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/20:13:27
3737	MGS	02-254/20:35:35	25	Acquisition Of X-Band Signal		
3738	MGS	02-254/20:35:35	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3739	MGS	02-254/20:37:28		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/20:15:28
3740	MGS	02-254/20:37:28		SSR Activity: ID=SSR_2B, FCN=End Old Recording Rate, PRT=6, BITS=15500000, DUR=00:52:31		02-254/20:15:28
3741	MGS	02-254/20:37:28		SSR Activity: ID=SSR_2B, FCN=Start New Recording Rate, PRT=6, BR=4000, SRC=SE_1A		02-254/20:15:28
3742	MGS	02-254/20:37:28		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/20:15:28
3743	MGS	02-254/20:45:57	25	NOTE: Transmitter Off in 15 minutes		
3744	MGS	02-254/20:55:11		NOTE: Start Block (SSRMGR)		02-254/20:33:11
3745	MGS	02-254/20:55:11		Sends a one-word SSR command to the XSU command SOB: SSR_2A, SE_1A, RECORD, PART7	STSSRC	02-254/20:33:11
3746	MGS	02-254/20:55:12		SSR 2A Data Enable	CSD2AE	02-254/20:33:12
3747	MGS	02-254/20:55:12		SSR Activity: ID=SSR_2A, FCN=Start Recording, PRT=7, BR=4000, SRC=SE_1A		02-254/20:33:12
3748	MGS	02-254/20:56:24		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/20:34:24
3749	MGS	02-254/20:56:24		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=288000, DUR=00:01:12		02-254/20:34:24
3750	MGS	02-254/20:56:24		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/20:34:24
3751	MGS	02-254/20:56:24		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/20:34:24
3752	MGS	02-254/20:56:24	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3753	MGS	02-254/20:56:25		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/20:34:25
3754	MGS	02-254/20:56:25	25	NOTE: Loss Of X-Band Signal		
3755	MGS	02-254/20:56:26		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/20:34:26
3756	MGS	02-254/20:56:27		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/20:34:27
3757	MGS	02-254/20:58:43		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/20:36:43
3758	MGS	02-254/21:00:57	25	Transmitter Off		
3759	MGS	02-254/21:06:13		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/20:44:13
3760	MGS	02-254/21:11:12		SSR 2B Data Disable	CSD2BX	02-254/20:49:12
3761	MGS	02-254/21:11:12		SSR Activity: ID=SSR_2B, FCN=End Recording, PRT=6, BITS=23596000, DUR=01:38:19		02-254/20:49:12
3762	MGS	02-254/21:11:13		NOTE: End Block (SSRMGR)		02-254/20:49:13
3763	MGS	02-254/21:12:05		Select Automatic HGA control mode	SAHACE	02-254/20:50:05
3764	MGS	02-254/21:12:06		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/20:50:06
3765	MGS	02-254/21:12:14	25	Acquisition Of X-Band Signal		
3766	MGS	02-254/21:12:14	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3767	MGS	02-254/21:14:07		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/20:52:07
3768	MGS	02-254/21:14:07		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=4540000, DUR=00:17:43		02-254/20:52:07
3769	MGS	02-254/21:14:07		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/20:52:07
3770	MGS	02-254/21:14:07		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/20:52:07
3771	MGS	02-254/21:30:13		NOTE: Apoapsis 15695 -		02-254/21:08:13
3772	MGS	02-254/21:37:44		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/21:15:45
3773	MGS	02-254/21:42:40		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/21:20:41
3774	MGS	02-254/21:42:40		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=11396000, DUR=00:28:34		02-254/21:20:41
3775	MGS	02-254/21:42:40		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/21:20:41
3776	MGS	02-254/21:42:40		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/21:20:41
3777	MGS	02-254/21:42:44		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/21:20:45

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3778	MGS	02-254/21:42:44		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/21:20:45
3779	MGS	02-254/21:42:44	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3780	MGS	02-254/21:42:45		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/21:20:46
3781	MGS	02-254/21:42:45		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/21:20:46
3782	MGS	02-254/21:42:45	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3783	MGS	02-254/21:42:45	25	NOTE: Carrier Only -- No Telemetry Modulation		
3784	MGS	02-254/21:46:00		NOTE: Enter Planetary Atmosphere 15695		02-254/21:24:00
3785	MGS	02-254/21:48:42		NOTE: Enter Earth Occultation 15695		02-254/21:26:42
3786	MGS	02-254/21:48:42	25	NOTE: Loss Of X-Band Signal		
3787	MGS	02-254/21:49:12	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3788	MGS	02-254/21:49:19		NOTE: Enter Solar Eclipse 15695		02-254/21:27:19
3789	MGS	02-254/21:50:47		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/21:28:48
3790	MGS	02-254/21:50:47		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/21:28:48
3791	MGS	02-254/21:50:48		NOTE: End fixed Sub-Reflector for Radio Science		02-254/21:28:49
3792	MGS	02-254/21:50:48		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/21:28:49
3793	MGS	02-254/21:50:48		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/21:28:49
3794	MGS	02-254/21:50:48		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/21:28:49
3795	MGS	02-254/21:50:49		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/21:28:50
3796	MGS	02-254/21:50:49		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/21:28:50
3797	MGS	02-254/21:54:19		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/21:32:20
3798	MGS	02-254/21:55:10	25	NOTE: Transmitter Off in 15 minutes		
3799	MGS	02-254/22:00:19		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/21:38:20
3800	MGS	02-254/22:00:20		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/21:38:21
3801	MGS	02-254/22:10:10	25	Transmitter Off		
3802	MGS	02-254/22:25:48	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3803	MGS	02-254/22:28:02		NOTE: Exit Solar Eclipse 15695		02-254/22:06:02
3804	MGS	02-254/22:28:31		NOTE: Exit Earth Occultation 15695		02-254/22:06:31
3805	MGS	02-254/22:29:06		NOTE: Periapsis 15696 ----------		02-254/22:07:06
3806	MGS	02-254/22:31:27		NOTE: Exit Planetary Atmosphere 15695		02-254/22:09:27
3807	MGS	02-254/22:33:10		NOTE: Start Block (MAP_RT_BETA_SUPP)		02-254/22:11:11
3808	MGS	02-254/22:33:10		Select Automatic HGA control mode	SAHACE	02-254/22:11:11
3809	MGS	02-254/22:33:11		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/22:11:12
3810	MGS	02-254/22:33:19	25	Acquisition Of X-Band Signal		
3811	MGS	02-254/22:33:19	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3812	MGS	02-254/22:35:12		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/22:13:13
3813	MGS	02-254/22:35:12		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=24004000, DUR=00:52:32		02-254/22:13:13
3814	MGS	02-254/22:35:12		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/22:13:13
3815	MGS	02-254/22:35:12		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/22:13:13
3816	MGS	02-254/22:43:42	25	NOTE: Transmitter Off in 15 minutes		
3817	MGS	02-254/22:54:08		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/22:32:09
3818	MGS	02-254/22:54:08		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=28548000, DUR=00:18:56		02-254/22:32:09
3819	MGS	02-254/22:54:08		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/22:32:09
3820	MGS	02-254/22:54:08		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/22:32:09
3821	MGS	02-254/22:54:09	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3822	MGS	02-254/22:54:09		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/22:32:10
3823	MGS	02-254/22:54:09	25	NOTE: Loss Of X-Band Signal		
3824	MGS	02-254/22:54:10		HGA azi/ele target angles in manual rate mode only: 1.570796, -2.740137	SALHTA	02-254/22:32:11
3825	MGS	02-254/22:54:11		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/22:32:12
3826	MGS	02-254/22:56:27		HGA azi/ele target angles in manual rate mode only: 1.570796, 2.70526	SALHTA	02-254/22:34:28
3827	MGS	02-254/22:58:42	25	Transmitter Off		
3828	MGS	02-254/23:03:57		HGA azi/ele target angles in manual rate mode only: 2.727658, 2.70526	SALHTA	02-254/22:41:58
3829	MGS	02-254/23:09:49		Select Automatic HGA control mode	SAHACE	02-254/22:47:50
3830	MGS	02-254/23:09:50		Turn on RPA Beam and MOT Exciter for the selected configuration	STRPAN	02-254/22:47:51
3831	MGS	02-254/23:09:58	25	Acquisition Of X-Band Signal		

ITEM	S/C	GND TIME (GMT)	STN	ACTIVITY/EVENT DESCRIPTION	CMD	SCET
3832	MGS	02-254/23:09:58	25	Acquire D/L: X/16, 2-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3833	MGS	02-254/23:11:51		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/22:49:52
3834	MGS	02-254/23:11:51		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=32800000, DUR=00:17:43		02-254/22:49:52
3835	MGS	02-254/23:11:51		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/22:49:52
3836	MGS	02-254/23:11:51		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/22:49:52
3837	MGS	02-254/23:28:10		NOTE: Apoapsis 15696 -		02-254/23:06:11
3838	MGS	02-254/23:35:29		NOTE: Begin fixed Sub-Reflector for Radio Science		02-254/23:13:30
3839	MGS	02-254/23:40:25		Sends a block of payload commands to the PDS: PDS, [3902]	SCPDSC	02-254/23:18:26
3840	MGS	02-254/23:40:25		SSR Activity: ID=SSR_2A, FCN=End Old Recording Rate, PRT=7, BITS=39656000, DUR=00:28:34		02-254/23:18:26
3841	MGS	02-254/23:40:25		SSR Activity: ID=SSR_2A, FCN=Start New Recording Rate, PRT=7, BR=4000, SRC=SE_1A		02-254/23:18:26
3842	MGS	02-254/23:40:25		Sends a one-word MOT command to the XSU command SOB: SE_1A	STMOTC	02-254/23:18:26
3843	MGS	02-254/23:40:29		MOT 1 Two-Way Non-Coherent Mode Enable	TCM12E	02-254/23:18:30
3844	MGS	02-254/23:40:29		MOT 2 Two-Way Non-Coherent Mode Enable	TCM22E	02-254/23:18:30
3845	MGS	02-254/23:40:29	25	Acquire D/L: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=ON, MI=80.0, ANT=HGA		
3846	MGS	02-254/23:40:30		MOT 1 Telemetry Signal Path To X-Band Phase Mod Off	TCM1MF	02-254/23:18:31
3847	MGS	02-254/23:40:30		MOT 2 Telemetry Signal Path To X-Band Phase Mod Off	TCM2MF	02-254/23:18:31
3848	MGS	02-254/23:40:30	25	D/L Change: X/20, 1-Way, BW=10, BR=4000.0, FL=10000, SC=HIGH, MOD=OFF, MI=80.0, ANT=HGA		
3849	MGS	02-254/23:40:30	25	NOTE: Carrier Only -- No Telemetry Modulation		
3850	MGS	02-254/23:43:44		NOTE: Enter Planetary Atmosphere 15696		02-254/23:21:45
3851	MGS	02-254/23:46:26		NOTE: Enter Earth Occultation 15696		02-254/23:24:26
3852	MGS	02-254/23:46:26	25	NOTE: Loss Of X-Band Signal		
3853	MGS	02-254/23:46:57	25	Acquire U/L: X/16, PWR=4.0, BR=125.0		
3854	MGS	02-254/23:47:03		NOTE: Enter Solar Eclipse 15696		02-254/23:25:04
3855	MGS	02-254/23:48:32		MOT 1 Telemetry Signal Path To X-Band Phase Mod On	TCM1MN	02-254/23:26:33
3856	MGS	02-254/23:48:32		MOT 2 Telemetry Signal Path To X-Band Phase Mod On	TCM2MN	02-254/23:26:33
3857	MGS	02-254/23:48:33		NOTE: End fixed Sub-Reflector for Radio Science		02-254/23:26:34
3858	MGS	02-254/23:48:33		MOT 1 Two-Way Non-Coherent Mode Disabled	TCM12X	02-254/23:26:34
3859	MGS	02-254/23:48:33		MOT 2 Two-Way Non-Coherent Mode Disabled	TCM22X	02-254/23:26:34
3860	MGS	02-254/23:48:33		HGA azi/ele target angles in manual rate mode only: 1.570796, 0.743543	SALHTA	02-254/23:26:34
3861	MGS	02-254/23:48:34		Turn off the MOT Exciter and RPA beam	STRPAF	02-254/23:26:35
3862	MGS	02-254/23:48:34		Select manual HGA control mode (gde is in rate mode)	SAHRCE	02-254/23:26:35
3863	MGS	02-254/23:51:22		CDU-1 Uplink Rate Select (Based on 3 bit Code): 7	TCC1BS	02-254/23:29:23
3864	MGS	02-254/23:51:22		CDU-2 Uplink Rate Select (Based on 3 bit Code): 7	TCC2BS	02-254/23:29:23
3865	MGS	02-254/23:52:04		HGA azi/ele target angles in manual rate mode only: 1.570796, -1.60641	SALHTA	02-254/23:30:05
3866	MGS	02-254/23:58:04		HGA azi/ele target angles in manual rate mode only: 2.727658, -1.60641	SALHTA	02-254/23:36:05
3867	MGS	02-254/23:58:05		NOTE: End Block (MAP_RT_BETA_SUP)		02-254/23:36:06
3868	MGS	02-255/00:00:00		Light Time: OWLT = 21:59, RTLT = 43:59		
3869	MGS	02-255/00:15:00	25	NOTE: Transmitter Off in 15 minutes		
3870	MGS	02-255/00:25:46		NOTE: Exit Solar Eclipse 15696		02-255/00:03:47
3871	MGS	02-255/00:26:16		NOTE: Exit Earth Occultation 15696		02-255/00:04:16
3872	MGS	02-255/00:26:48		NOTE: Periapsis 15697 ----------		02-255/00:04:48
3873	MGS	02-255/00:29:12		NOTE: Exit Planetary Atmosphere 15696		02-255/00:07:12
3874	MGS	02-255/00:30:00	25	Transmitter Off		
3875	MGS	02-255/00:39:59		SSR 2A Data Disable	CSD2AX	02-255/00:18:00
3876	MGS	02-255/00:39:59		SSR Activity: ID=SSR_2A, FCN=End Recording, PRT=7, BITS=53952000, DUR=03:44:48		02-255/00:18:00
3877	MGS	02-255/00:40:00		NOTE: End Block (SSRMGR)		02-255/00:18:01
3878	MGS	02-255/00:41:52	25	NOTE: Below Uplink Interlock Limit		
3879	MGS	02-255/00:45:00	25	End Tracking		
3880	MGS	02-255/01:00:00	25	End Post-Cal		