SOST
Rev 45
2007-146T04:12 - 2007-148T03:56

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SOST Rev 45

- This segment includes non-targeted flybys of Tethys and Mimas.
- The timeline intersperses Tethys and Mimas requests to obtain varying geometries (for phase/longitude coverage) as well as the Mimas eclipse and also includes time for
  - UVIS Saturn aurora
  - VIMS high phase Rings imaging
  - Enceladus opposition
  - RADAR Rhea
  - ISS zero-phase Rings imaging

SOST Rev 45 Attitude Strategy

Request	Riders	Start(SCET)	Start(Epoch)	Duration	End(SCET)	Primary Pointing	Secondary Pointing	Comments
Sequence S030, length = 37 ...		2007-124T22:00:00	E044_SEQUENCE_030+000	037T05:10:00	2007-162T03:10:00			
SATURN rev 45 Segment		2007-144T04:12:00		002T00:00:00	2007-146T04:12:00			
SP_045EA_G34HEFOTP145_PRIME	M, N	2007-145T19:12:00		000T09:00:00	2007-146T04:12:00	XBAND to Earth	POS_X to North_Pole_Dir	
SP_045EA_G70METOTP145_PRIME	M, N	2007-145T19:12:00		000T09:00:00	2007-146T04:12:00	XBAND to Earth	NEG_X to 283.8/69.6	
SOST rev 45 Segment		2007-146T04:12:00		001T23:44:00	2007-148T03:56:00			
SP_045SA_WAYPTTURN146_PRIME	M	2007-146T04:12:00		000T00:18:00	2007-146T04:30:00	ISS_NAC to Saturn	NEG_X to Sun	15.4 min turn from +X to NEP; safe WP
NEW WAYPOINT		**2007-146T04:30:00**		**000T15:00:00**	**2007-146T19:30:00**	**ISS_NAC to Saturn**	**NEG_X to Sun**	
UVIS_045SA_AURORA001_PRIME	C, M	2007-146T04:30:00		000T01:00:00	2007-146T05:30:00	ISS_NAC to Saturn	NEG_X to Sun	
UVIS_045DI_ICYOCC093_PRIME	M	2007-146T05:30:00		000T01:20:00	2007-146T06:50:00	UVIS_FUV to Dione	NEG_Z to NSP	
UVIS_045SA_AURORA002_PRIME	C, M	2007-146T06:50:00		000T02:40:00	2007-146T09:30:00	ISS_NAC to Saturn	NEG_X to Sun	
SP_045EA_DLTURN146_PRIME	M	2007-146T09:30:00		000T00:27:00	2007-146T09:57:00	XBAND to Earth	POS_X to NEP	15.7 min turn
SP_045EA_M34HEFOTB146_PRIME	M, N	2007-146T09:57:00		000T09:00:00	2007-146T18:57:00	XBAND to Earth	POS_X to NEP	
SP_045TE_WAYPTTURN146_PRIME	M	2007-146T18:57:00		000T00:33:00	2007-146T19:30:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	25.2 min turn; safe WP
NEW WAYPOINT		**2007-146T19:30:00**		**000T10:20:00**	**2007-147T05:50:00**	**ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)**	**NEG_X to Sun**	
VIMS_045TE_TETHYS001_PRIME	C, I, M, U	2007-146T19:30:00		000T00:45:00	2007-146T20:15:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	None
VIMS_045RF_HIPHASE001_PRIME	M, U	2007-146T20:15:00		000T01:45:00	2007-146T22:00:00	VIMS_IR to Rings	NEG_X to Sun	None
VIMS_045TE_TETHYS002_PRIME	C, M, U	2007-146T22:00:00		000T00:30:00	2007-146T22:30:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	None
ISS_045TE_COLORF002_PRIME	C, M, U	2007-146T22:30:00		000T00:30:00	2007-146T23:00:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	S_N_ER_5
CIRS_045MI_MIMASX001_PRIME	C, I, M, U, V	2007-146T23:00:00		000T03:00:00	2007-147T02:00:00	ISS_NAC to Mimas (0.0,30.0,0.0 deg. offset)	POS_Z to Sun	S&ER-2 for RPWS
ISS_045TE_GLOCOL001_PRIME	C, M, U	2007-147T02:00:00		000T00:30:00	2007-147T02:30:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	S_N_ER_5
CIRS_045MI_MIMAS002_PRIME	C, I, M, U	2007-147T02:30:00		000T02:00:00	2007-147T04:30:00	ISS_NAC to Mimas	POS_Z to Sun	
CIRS_045TE_FP3GLOBAL383_PRIME	C, M, U	2007-147T04:30:00		000T01:00:00	2007-147T05:30:00	ISS_NAC to Tethys (0.0,-50.0,0.0 deg. offset)	NEG_X to Sun	
SP_045MI_WAYPTTURN147_PRIME	M	2007-147T05:30:00		000T00:20:00	2007-147T05:50:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	10.3 min turn; safe WP
NEW WAYPOINT		**2007-147T05:50:00**		**000T08:10:00**	**2007-147T14:00:00**	**ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)**	**NEG_X to Sun**	
UVIS_045MI_ICYLON034_PRIME	C, I, M	2007-147T05:50:00		000T00:30:00	2007-147T06:20:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	
VIMS_045MI_MIMAS002_PRIME	C, I, M, U	2007-147T06:20:00		000T00:30:00	2007-147T06:50:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	
UVIS_045MI_ICYLON035_PRIME	C, I, M, R	2007-147T06:50:00		000T01:00:00	2007-147T07:50:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	
VIMS_045MI_MIMAS003_PRIME	C, I, M, R, U	2007-147T07:50:00		000T01:10:00	2007-147T09:00:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	None
UVIS_045MI_ICYLON036_PRIME	C, I, M, R	2007-147T09:00:00		000T00:30:00	2007-147T09:30:00	ISS_NAC to Mimas (0.0,-60.0,0.0 deg. offset)	NEG_X to Sun	
ISS_045EN_OPPSGA001_PRIME	M, R, U, V	2007-147T09:30:00		000T01:30:00	2007-147T11:00:00	ISS_NAC to Enceladus	POS_Z to NSP	
RADAR_045RH_SCATTRADL001_PRIME	M	2007-147T11:00:00		000T02:15:00	2007-147T13:15:00	NEG_Z to Rhea	POS_Y to NSP	RADAR must control primary and secondary axes to obtain correct polarization.
SP_045RH_WAYPTTURN147_PRIME	M	2007-147T13:15:00		000T00:29:00	2007-147T13:44:00	ISS_NAC to Rhea	NEG_X to Sun	split turn; 27 min turn
SP_045RH_WAYPTTURN447_PRIME	M	2007-147T13:44:00		000T00:16:00	2007-147T14:00:00	ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	14 min turn; safe WP
NEW WAYPOINT		**2007-147T14:00:00**		**000T13:56:00**	**2007-148T03:56:00**	**ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)**	**NEG_X to Sun**	
ISS_045RH_REGGEOD001_PRIME	C, M, U	2007-147T14:00:00		000T00:30:00	2007-147T14:30:00	ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	
UVIS_045RH_ICYLON029_PRIME	C, M	2007-147T14:30:00		000T00:30:00	2007-147T15:00:00	ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	
VIMS_045RH_RHEA001_PRIME	C, M, U	2007-147T15:00:00		000T01:00:00	2007-147T16:00:00	ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	
CIRS_045RH_FP13MAPS001_PRIME	M, U	2007-147T16:00:00		000T00:30:00	2007-147T16:30:00	CIRS_FP3 to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	
ISS_045RH_REGMAP001_PRIME	C, M, U	2007-147T16:30:00		000T00:30:00	2007-147T17:00:00	ISS_NAC to Rhea (0.0,88.0,0.0 deg. offset)	NEG_X to Sun	
ISS_045RI_OPHASE001_PRIME	M, U, V	2007-147T17:00:00		000T01:30:00	2007-147T18:30:00	ISS_NAC to Rings	NEG_X to Sun	
SP_045EA_DLTURN147_PRIME	C, M	2007-147T18:30:00		000T00:26:00	2007-147T18:56:00	XBAND to Earth	POS_X to NEP	12.9 min turn
SP_045EA_G70METNON147_PRIME	C, M	2007-147T18:56:00		000T09:00:00	2007-148T03:56:00	XBAND to Earth	Rolling	

SOST Rev 45 Telemetry Modes

TELEMETRY MODE REPORT

SCET	TELEMETRY MODE	REQUEST
2007-145T19:12:00.000	RTE_N_SPB_110600	SP_045EA_G70METOTP145_PRIME
2007-145T19:12:00.000	RTE_N_SPB_33180	SP_045EA_G34HEFOTP145_PRIME
2007-145T19:27:00.000	RTE_N_SPB_35550	SP_045EA_G34HEFOTP145_PRIME
2007-145T19:42:00.000	RTE_N_SPB_124425	SP_045EA_G70METOTP145_PRIME
2007-145T20:42:00.000	RTE_N_SPB_142200	SP_045EA_G70METOTP145_PRIME
2007-146T02:42:00.000	RTE_N_SPB_124425	SP_045EA_G70METOTP145_PRIME
2007-146T03:57:00.000	RTE_N_SPB_110600	SP_045EA_G70METOTP145_PRIME
2007-146T03:57:00.000	RTE_N_SPB_33180	SP_045EA_G34HEFOTP145_PRIME
2007-146T04:12:00.000	S_N_ER_3	SP_045NA_M34OBSOTB146_NA
2007-146T09:57:00.000	RTE_N_SPB_14220	SP_045EA_M34HEFOTB146_PRIME
2007-146T10:27:00.000	RTE_N_SPB_22120	SP_045EA_M34HEFOTB146_PRIME
2007-146T11:12:00.000	RTE_N_SPB_27650	SP_045EA_M34HEFOTB146_PRIME
2007-146T11:57:00.000	RTE_N_SPB_33180	SP_045EA_M34HEFOTB146_PRIME
2007-146T13:12:00.000	RTE_N_SPB_35550	SP_045EA_M34HEFOTB146_PRIME
2007-146T18:57:00.000	S_N_ER_3	SP_045NA_G34OBSNON147_NA
2007-146T22:30:00.000	S_N_ER_5	SP_045NA_G34OBSNON147_NA
2007-146T23:00:00.000	S_N_ER_2	SP_045NA_G34OBSNON147_NA
2007-147T02:00:00.000	S_N_ER_5	SP_045NA_G34OBSNON147_NA
2007-147T02:30:00.000	S_N_ER_3	SP_045NA_G34OBSNON147_NA
2007-147T07:35:00.000	S_N_ER_5A	SP_045NA_G34OBSNON147_NA
2007-147T07:50:00.000	S_N_ER_3	SP_045NA_G34OBSNON147_NA
2007-147T11:00:00.000	S_N_ER_8	SP_045NA_G34OBSNON147_NA
2007-147T13:15:00.000	S_N_ER_3	SP_045NA_G34OBSNON147_NA
2007-147T18:56:00.000	RTE_N_SPB_110600	SP_045EA_G70METNON147_PRIME
2007-147T19:41:00.000	RTE_N_SPB_124425	SP_045EA_G70METNON147_PRIME
2007-148T03:41:00.000	RTE_N_SPB_110600	SP_045EA_G70METNON147_PRIME

SOST Rev 45 SMT Report

DATA VOLUME SUMMARY --- TRANSFER FRAME OVERHEAD INCLUDED (80 BITS PER 8800-BIT FRAME)

			OBSERVATION_PERIOD							DOWNLINK_PASS						
			P4						P5	RECORDED		PLAYBACK				
DOWNLINK PASS NAME	Start doy hh:mm	End doy hh:mm	START (Mb)	SCI (Mb)	HK+E (Mb)	TOTAL (Mb)	CPACTY (Mb)	MRGN (Mb)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGN (Mb)	NET_MARGN (%)	CAROVR (Mb)
SP_045EA_M34HEFOTB146_PRIME	146 09:57	146 18:57	0	280	20	300	3493	3193	0	322	53	675	840	165	256	6%	0
SP_045EA_G70METNON147_PRIME	147 18:56	148 03:56	0	2964	84	3048	3493	445	0	173	53	3274	3364	91	91	3%	0

DATA VOLUME REPORT --- TRANSFER FRAME OVERHEAD NOT INCLUDED

Event	Start doy hh:mm	End doy hh:mm	CAPS (Mb)	CDA (Mb)	CIRS (Mb)	INMS (Mb)	ISS (Mb)	MAG (Mb)	MIMI (Mb)	RADAR (Mb)	RPWS (Mb)	UVIS (Mb)	VIMS (Mb)	PROBE (Mb)	ENGR (Mb)	TOTAL (Mb)
OBSERVATION_NOR	146 04:12	146 09:57	20.7	3.1	26.4	2.1	0.0	12.4	18.6	0.0	27.1	167.3	0.0	0.0	0.0	277.8
SP_045EA_M34HEFOTB146_PRIME	146 09:57	146 18:57	100.0	5.3	0.0	3.2	0.0	26.9	29.2	0.0	152.4	2.5	0.0	0.0	0.0	319.5
DAILY TOTAL SCIENCE	146 04:12	146 18:57	185.5	18.1	26.4	8.6	0.0	78.2	125.6	0.0	248.2	174.7	0.0	0.0		
OBSERVATION_NOR	146 18:57	147 18:56	336.9	19.5	155.1	4.3	816.8	102.4	98.9	281.5	520.4	240.6	346.7	0.0	0.0	2923.1
OBSERVATION_SI	146 18:57	147 18:56	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
SP_045EA_G70METNON147_PRIME	147 18:56	148 03:56	32.4	6.4	37.0	1.6	0.0	19.4	29.2	0.0	42.4	2.5	0.0	0.0	0.0	171.0
DAILY TOTAL SCIENCE	146 18:57	148 03:56	369.3	26.0	206.0	5.9	816.8	121.8	128.2	281.5	562.8	243.1	346.7	0.0		

AVERAGE DATA RATE REPORT (calculated over observation periods and downlink passes)

Event	Start doy hh:mm	End doy hh:mm	CAPS (bps)	CDA (bps)	INMS (bps)	MAG (bps)	MIMI (bps)	RPWS (bps)	UVIS (bps)
SP_045NA_M34OBSOTB146_NA	146 04:12	146 09:57	1000.0	149.9	100.0	600.0	900.0	1310.0	8084.3
SP_045EA_M34HEFOTB146_PRIME	146 09:57	146 18:57	3087.0	163.5	100.0	831.4	900.0	4702.9	76.0
SP_045NA_G34OBSNON147_NA	146 18:57	147 18:56	3901.7	226.0	50.0	1186.0	1146.0	6027.3	2786.6
SP_045EA_G70METNON147_PRIME	147 18:56	148 03:56	1000.0	198.9	50.0	600.0	902.2	1310.0	76.0

SOST Rev 45 NAV Report

CASSINI NAVIGATION SUMMARY for rev45_040414.apf generated on 2004-Apr-14 16:24:22
(+ = pass overlaps with previous pass; * = conflicts with DSN weekly maintenance; o = overlaps occultation)

ON EARTH-LINE FOR DOWNLINK			TRACKING SUPPORT						
NAME	START_TO_END SCET	DUR hh:mm	ID	BOT_TO_EOT UTC	GND_UPLINK UTC	ARRIV_SC SCET	RCV_GND ERT	2-WAY hh:mm	DOP OK?	RNG ON?
M34HEFOTB146	146T09:57-18:57	09:00	65	146T11:15-20:15	11:25-20:10	12:43-18:57	14:01-20:15	06:14	YES	YES
G70METNON147	147T18:56-03:56	09:00	14	147T20:15-05:15	20:25-05:10	21:44-03:56	23:03-05:15	06:12	YES	YES

TWT/OST Integration Constraint and Guideline Checklist

Below are Target Working Team (TWT) and Orbiter Science Team (OST) constraints that must be followed during segment implementation. Any exceptions to constraint numbers 3, 4, 6, or 7 must be approved by the Science Planning Manager.

Constraint	C=Comply V=Violate N/A=Not Applicable	Comments	Disposition
1. A. SP has checked all waypoints turns to and from waypoints.	C		
B. All initial downlink attitudes have been checked as waypoints.	C		
2. All turns to and from waypoints checked for violations and margins. ☐CAPS ☐CDA ☐CIRS ☐INMS ☐ISS ☐MIMI ☐MAG ☐NAV ☐RADAR ☐RPWS ☐RSS ☐UVIS ☐VIMS Each Prime Instrument agrees to accept a reduction in observation time during implementation if problems arise.		SOST agreement that all teams are OK	
3. Custom handoffs limited to:			
A. ±3 hours from targeted Icy Satellite flyby	C		
B. ±3 hours from targeted Titan Flyby	N/A		
C. OpNavs preceding/following a downlink	N/A		
4. Minimum 30 min SPASS Prime request duration outside ±5 hours from targeted satellite flyby (5 min. integer duration if >30 min.)	C		
5. Live and Ground Movable Blocks include appropriate time margins.	N/A	K. Klaasen's margin for flyby is min. according to memo dated .	
6. Waypoints changes are ≤3 per day	C		
A. All turns that accomplish the waypoint strategy are requested by SP or OpNav.	C		
7. Live Movable Blocks limited to the following orbits: 7, 8, 9, 10, 12, 28, 51, 56, 57, 60, 63, 64	N/A		

Guideline	Yes / No	Comments
1. Were repeatable/reusable templates used where possible?		
2. During Pre-Integration: Was 30 min. used for 90º RWA turns and/or 10 min. for RCS turns?		

(DOUBLE-CLICK TO MAKE CHANGES)

Issues

- Waypoints have been checked and are safe.
- Data volume is OK - checked using SMT 10.2
- One 9-hr pass per day is scheduled, for 6+hr of 2-way tracking.

- MAG-critical period 146T21:25-147T03:50
  - Waypoints and attitudes are OK with MAG during this period
  - Attitudes have also been OK'd with other instruments (esp. UVIS)
  - The next 4 pages display the pertinent angles during the Tethys waypoint and Mimas attitudes to confirm good MAG pointing.
  - **Please note the attitudes in the SPLAT so no team tries to change the 2nd axis or offset during implementation.**

Angles during Tethys waypoint (NAC to TE), (-X to Sun) (0,-50,0 offset) (MAG period)

TIME	X_2_SUN	NAC_2_SUN	X_2_SAT	X_2_B	FR VIOLATED
2007-146T19:30:00	128.85	77.40	144.67	112.00	OK
2007-146T19:40:01	129.28	80.06	143.79	108.02	OK
2007-146T19:50:02	129.63	82.87	142.68	103.84	OK
2007-146T20:00:03	129.87	85.83	141.34	99.46	OK
2007-146T20:10:04	129.99	88.95	139.75	94.88	OK
2007-146T20:19:55	129.96	92.21	137.94	90.10	OK
2007-146T20:29:56	129.77	95.60	135.91	85.14	OK
2007-146T20:39:57	129.40	99.09	133.68	80.00	OK
2007-146T20:49:58	128.84	102.67	131.29	74.71	OK
2007-146T21:00:00	128.09	106.30	128.78	69.30	OK
2007-146T21:10:01	127.17	109.95	126.19	63.80	OK
2007-146T21:20:02	126.10	113.57	123.56	58.26	OK
2007-146T21:30:03	124.89	117.15	120.95	52.69	OK
2007-146T21:40:04	123.58	120.63	118.41	47.19	OK
2007-146T21:49:55	122.20	124.00	115.98	41.78	OK
2007-146T21:59:56	120.79	127.21	113.72	36.55	OK
2007-146T22:09:57	119.37	130.28	111.66	31.54	OK
2007-146T22:19:58	117.96	133.17	109.83	26.86	OK
2007-146T22:30:00	116.58	135.88	108.27	22.63	OK
2007-146T22:40:01	115.26	138.41	106.98	18.99	OK
2007-146T22:50:02	113.98	140.78	106.00	16.15	OK
2007-146T23:00:03	112.77	142.98	105.31	14.32	OK
2007-146T23:10:04	111.62	145.03	104.92	13.62	OK
2007-146T23:19:55	110.53	146.94	104.83	13.92	OK
2007-146T23:29:56	109.49	148.73	105.02	14.87	OK
2007-146T23:39:57	108.51	150.40	105.48	16.12	OK
2007-146T23:49:58	107.59	151.96	106.19	17.38	OK
2007-147T00:00:00	106.70	153.45	107.13	18.50	OK
2007-147T00:10:01	105.85	154.85	108.30	19.35	OK
2007-147T00:20:02	105.05	156.18	109.66	19.89	OK
2007-147T00:30:03	104.27	157.45	111.20	20.07	OK
2007-147T00:40:04	103.52	158.67	112.91	19.88	OK
2007-147T00:49:55	102.80	159.84	114.77	19.32	OK
2007-147T00:59:56	102.10	160.97	116.79	18.40	OK
2007-147T01:09:57	101.42	162.06	118.94	17.11	OK

Cont'd: Angles during Tethys waypoint

2007-147T01:19:58	100.77	163.10	121.23	15.47	OK
2007-147T01:30:00	100.13	164.12	123.66	13.47	OK
2007-147T01:40:01	99.52	165.10	126.24	11.11	OK
2007-147T01:50:02	98.92	166.03	128.97	8.40	OK
2007-147T02:00:03	98.36	166.93	131.87	5.31	OK
2007-147T02:10:04	97.81	167.79	134.92	1.97	OK
2007-147T02:19:55	97.30	168.60	138.13	2.50	OK
2007-147T02:29:56	96.82	169.35	141.46	6.80	OK
2007-147T02:39:57	96.38	170.04	144.85	11.73	OK
2007-147T02:49:58	95.98	170.67	148.14	17.22	OK
2007-147T03:00:00	95.63	171.22	151.05	23.30	OK
2007-147T03:10:01	95.34	171.68	153.13	29.93	OK
2007-147T03:20:02	95.11	172.04	153.84	37.07	OK
2007-147T03:30:03	94.95	172.29	152.77	44.61	OK
2007-147T03:40:04	94.86	172.43	149.94	52.38	OK
2007-147T03:49:55	94.84	172.46	145.78	60.19	OK
2007-147T03:59:56	94.89	172.38	140.87	67.82	OK
2007-147T04:09:57	95.00	172.21	135.66	75.12	OK
2007-147T04:19:58	95.17	171.94	130.51	81.96	OK
2007-147T04:30:00	95.38	171.61	125.60	88.26	OK
2007-147T04:40:01	95.64	171.21	121.06	93.99	OK
2007-147T04:50:02	95.93	170.76	116.92	99.18	OK
2007-147T05:00:03	96.24	170.27	113.18	103.86	OK
2007-147T05:10:04	96.57	169.75	109.83	108.09	OK
2007-147T05:19:55	96.91	169.21	106.82	111.90	OK
2007-147T05:29:56	97.26	168.66	104.12	115.35	OK
2007-147T05:39:57	97.62	168.09	101.69	118.49	OK
2007-147T05:49:58	97.98	167.52	99.50	121.35	OK

Angles during CIRS Mimas #1 (NAC to MI), (+Z to Sun) (0,30,0 offset) (MAG period)

TIME	X_2_SUN	NAC_2_SUN	X_2_SAT	X_2_B	FR VIOLATED
2007-146T23:00:03	119.97	87.51	105.45	13.59	OK
2007-146T23:10:04	119.98	91.75	105.46	10.03	OK
2007-146T23:19:55	119.82	96.00	105.61	6.66	OK
2007-146T23:29:56	119.47	100.24	105.89	3.69	OK
2007-146T23:39:57	118.96	104.41	106.33	2.13	OK
2007-146T23:49:58	118.30	108.50	106.93	3.53	OK
2007-147T00:00:00	117.52	112.47	107.71	5.67	OK
2007-147T00:10:01	116.63	116.29	108.66	7.64	OK
2007-147T00:20:02	115.67	119.94	109.79	9.27	OK
2007-147T00:30:03	114.67	123.42	111.10	10.50	OK
2007-147T00:40:04	113.63	126.70	112.58	11.33	OK
2007-147T00:49:55	112.59	129.79	114.22	11.73	OK
2007-147T00:59:56	111.57	132.68	116.02	11.73	OK
2007-147T01:09:57	110.57	135.37	117.96	11.34	OK
2007-147T01:19:58	109.60	137.86	120.02	10.63	OK
2007-147T01:30:00	108.68	140.16	122.18	9.68	OK
2007-147T01:40:01	107.81	142.28	124.41	8.64	OK
2007-147T01:50:02	107.00	144.21	126.68	7.79	OK
2007-147T02:00:03	106.25	145.96	128.95	7.55	OK

Angles during CIRS Mimas #2 (NAC to MI), (+Z to Sun)
(MAG period)

TIME	X_2_SUN	NAC_2_SUN	X_2_SAT	X_2_B	FR VIOLATED
2007-147T02:29:56	90.00	150.20	113.43	25.74	OK
2007-147T02:39:57	90.00	151.30	116.36	23.04	OK
2007-147T02:49:58	90.00	152.25	119.20	20.53	OK
2007-147T03:00:00	90.00	153.06	121.91	18.43	OK
2007-147T03:10:01	90.00	153.73	124.44	16.99	OK
2007-147T03:20:02	90.00	154.28	126.73	16.46	OK
2007-147T03:30:03	90.00	154.72	128.76	16.96	OK
2007-147T03:40:04	90.00	155.05	130.48	18.38	OK
2007-147T03:49:55	90.00	155.29	131.88	20.51	OK
2007-147T03:59:56	90.00	155.45	132.93	23.08	OK
2007-147T04:09:57	90.00	155.53	133.66	25.91	OK
2007-147T04:19:58	90.00	155.55	134.06	28.84	OK
2007-147T04:30:00	90.00	155.53	134.17	31.80	OK