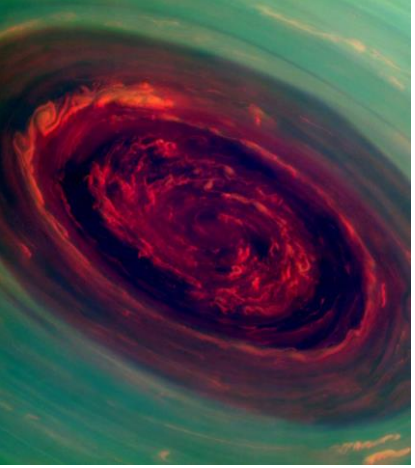

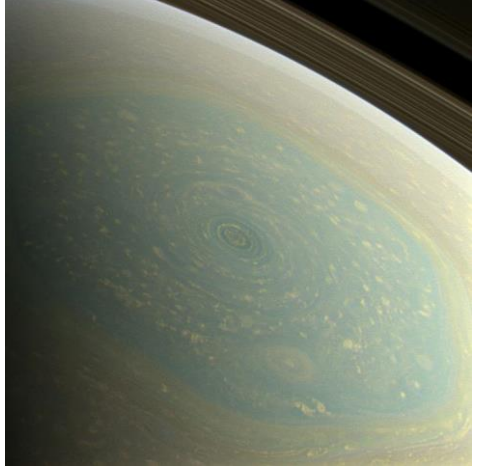
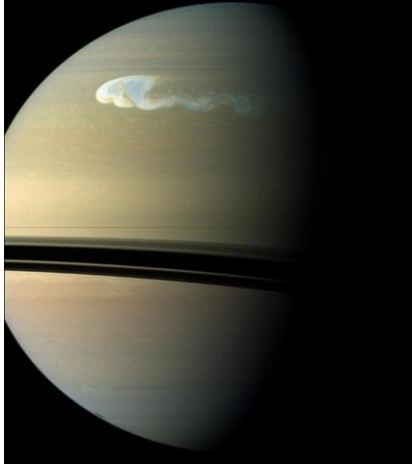

Science Planning & Sequence Team
CASSINI

SATURN TARGET WORKING TEAM

Rev 064_065 Segment Legacy Package

Segment Boundary: Apr 13, 2008 – Apr 19, 2008
2008-104T07:48:00 – 2008-110T07:18:00 (SCET)

Integration Began 09/22/2003
Segment Delivered to S39 Sequence 09/23/2004
Lead Integrator was Scott Edgington and Barbara Larsen

Legacy Package Assembled by Keven Uchida

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*** N.A. = Slide present but content not available.**

Segment Overview and Final Products

Segment Summary

- This was a Prime Mission ~ 6 day long apoapsis segment, with apoapse occurring at the approximate midpoint of the segment. The S/C is in an inclined orbit.
- This segment started with a view of both Saturn's hemispheres, but within ~2 days and then for the remainder of the segment, the view was limited to Saturn's northern hemisphere.
- The majority of the activities were atmospheric studies led either by ISS, UVIS, or VIMS. These included a measurement of Methane fluorescence and views of the poles. ISS performed satellite observations, and CIRS conducted two ring studies. There was one OPNAV (satellite imaging) activity in this segment.
- Notable out-of-discipline activities included CIRS Radial scans of the Rings at different local times, unlit face, mid phase.
- There were no ORS boresight constraints/issues in this segment.

Final Sequenced SPASS (1 of 1)

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
SATURN revs 64/65 Segment		2008-104T07:48:00		005T23:30:00	2008-110T07:18:00			
SP_064SA_WAYPTTURN104_PRIME	M	2008-104T07:48:00		000T00:30:00	2008-104T08:18:00	ISS_NAC to Saturn	POS_Z to NSP	
NEW WAYPOINT		**2008-104T08:18:00**		**002T23:45:00**	**2008-107T08:03:00**	**ISS_NAC to Saturn**	**POS_Z to NSP**	
UVIS_064SA_EUVFUV001_PRIME	M	2008-104T08:18:00		000T14:00:00	2008-104T22:18:00	UVIS_FUV to Saturn	POS_X to NSP	
SP_064EA_DLTURN104_PRIME	M	2008-104T22:18:00		000T00:30:00	2008-104T22:48:00	XBAND to Earth	POS_X to NEP	16.9 min. Turn
SP_064EA_G34BWGNON104_PRIME	C, M	2008-104T22:48:00		000T09:00:00	2008-105T07:48:00	XBAND to Earth	POS_X to NEP	
SP_064SA_WAYPTTURN105_PRIME	M	2008-105T07:48:00		000T00:20:00	2008-105T08:08:00	ISS_NAC to Saturn	POS_Z to NSP	16.1 min. Turn
VIMS_064SA_CH4FLUOR001_PRIME	M, U	2008-105T08:08:00		000T12:25:00	2008-105T20:33:00	ISS_NAC to Saturn	POS_Z to NSP	
ISS_064TE_PHOTOM001_PRIME	C, M, U	2008-105T20:33:00		000T01:00:00	2008-105T21:33:00	ISS_NAC to Tethys	POS_Z to NSP	
ISS_064OT_SATELLORB007_PRIME	C, M	2008-105T21:33:00		000T00:30:00	2008-105T22:03:00	ISS_NAC to Satellites	POS_Z to NSP	
SP_064EA_DLTURN105_PRIME	C, M	2008-105T22:03:00		000T00:30:00	2008-105T22:33:00	XBAND to Earth	POS_X to NEP	15.1 min. Turn
SP_064EA_G34BWGSEQ105_PRIME	C, M	2008-105T22:33:00		000T08:30:00	2008-106T07:03:00	XBAND to Earth	POS_X to NEP	
SP_064SA_WAYPTTURN106_PRIME	C, M	2008-106T07:03:00		000T00:30:00	2008-106T07:33:00	ISS_NAC to Saturn	POS_Z to NSP	14.5 min. Turn
CIRS_064RI_TEMPU15MP001_PRIME	C, M	2008-106T07:33:00		000T04:00:00	2008-106T11:33:00	CIRS_FP1 to Rings	POS_Z to NSP	
VIMS_064SA_POLEMAP001_PRIME	C, I, M, U	2008-106T11:33:00		000T10:40:00	2008-106T22:13:00	ISS_NAC to Saturn	POS_Z to NSP	
SP_064EA_DLTURN106_PRIME	M	2008-106T22:13:00		000T00:16:00	2008-106T22:29:00	XBAND to Earth (0.0,0.0,-10.0 deg	POS_X to NEP	
SP_064EA_DLTURN406_PRIME	M	2008-106T22:29:00		000T00:04:00	2008-106T22:33:00	XBAND to Earth	POS_X to NEP	15.1 min. Turn
SP_064EA_G70METSEQ106_PRIME	C, M	2008-106T22:33:00		000T09:00:00	2008-107T07:33:00	XBAND to Earth	5_Hr_Rolling	
Apoapse Per = 9.6 d, inc =...		2008-107T04:56:04		000T00:00:01	2008-107T04:56:05			
SP_065SA_WAYPTTURN107_PRIME	C, M	2008-107T07:33:00		000T00:30:00	2008-107T08:03:00	ISS_NAC to Saturn	NEG_Z to NEP	20.7 min. Turn
NEW WAYPOINT		**2008-107T08:03:00**		**002T23:15:00**	**2008-110T07:18:00**	**ISS_NAC to Saturn**	**NEG_Z to NEP**	
VIMS_065RI_APOMOSAIC002_PRIME	C, M	2008-107T08:03:00		000T06:30:00	2008-107T14:33:00	VIMS_IR to Rings	POS_X to NSP	
SP_065EA_DLTURN107_PRIME	C, M	2008-107T14:33:00		000T00:30:00	2008-107T15:03:00	XBAND to Earth	POS_X to NEP	20.6 min. Turn
SP_065EA_M34HEFSEQ107_PRIME	C, M	2008-107T15:03:00		000T09:00:00	2008-108T00:03:00	XBAND to Earth	POS_X to NEP	
SP_065SA_WAYPTTURN108_PRIME	M	2008-108T00:03:00		000T00:30:00	2008-108T00:33:00	ISS_NAC to Saturn	NEG_Z to NEP	20.5 min. Turn
ISS_065SA_POLRMOV01001_PRIME	C, M, U, V	2008-108T00:33:00		000T21:15:00	2008-108T21:48:00	ISS_NAC to Saturn	NEG_Z to NSP	Must satisfy needs of VIMS, CIRS, UVIS.
SP_065EA_DLTURN108_PRIME	M	2008-108T21:48:00		000T00:30:00	2008-108T22:18:00	XBAND to Earth	POS_X to NEP	20.1 min. Turn
SP_065EA_G34BWGSEQ108_PRIME	C, M	2008-108T22:18:00		000T09:00:00	2008-109T07:18:00	XBAND to Earth	POS_X to NEP	
NAV_065SK_OPNAV091_PRIME	C, M	2008-109T07:18:00		000T00:59:00	2008-109T08:17:00	ISS_NAC to Satellites	NEG_Z to NSP	Starts at Earth point, ends at waypoint
NAV_065SA_WAYPTTURN091_PRIME	C, M	2008-109T08:17:00		000T00:01:00	2008-109T08:18:00	ISS_NAC to Saturn	NEG_Z to NEP	
UVIS_065SA_NAURMOV001_PRIME	M, V	2008-109T08:18:00		000T07:00:00	2008-109T15:18:00	UVIS_FUV to Saturn	NEG_X to Sun	
ISS_065OT_SATELLORB001_PRIME	C	2008-109T15:18:00		000T00:30:00	2008-109T15:48:00	ISS_NAC to Satellites	NEG_Z to NEP	
CIRS_065RI_VERTULMP001_PRIME	C	2008-109T15:48:00		000T06:00:00	2008-109T21:48:00	CIRS_FP1 to Rings	NEG_Z to NEP	
SP_065EA_DLTURN109_PRIME	C	2008-109T21:48:00		000T00:30:00	2008-109T22:18:00	XBAND to Earth	POS_X to NEP	19.1 min. Turn
SP_065EA_G70METSEQ109_PRIME	C, E	2008-109T22:18:00		000T09:00:00	2008-110T07:18:00	XBAND to Earth	POS_X to NEP	RWA Friction Test

Final Sequenced SMT and Data Volume

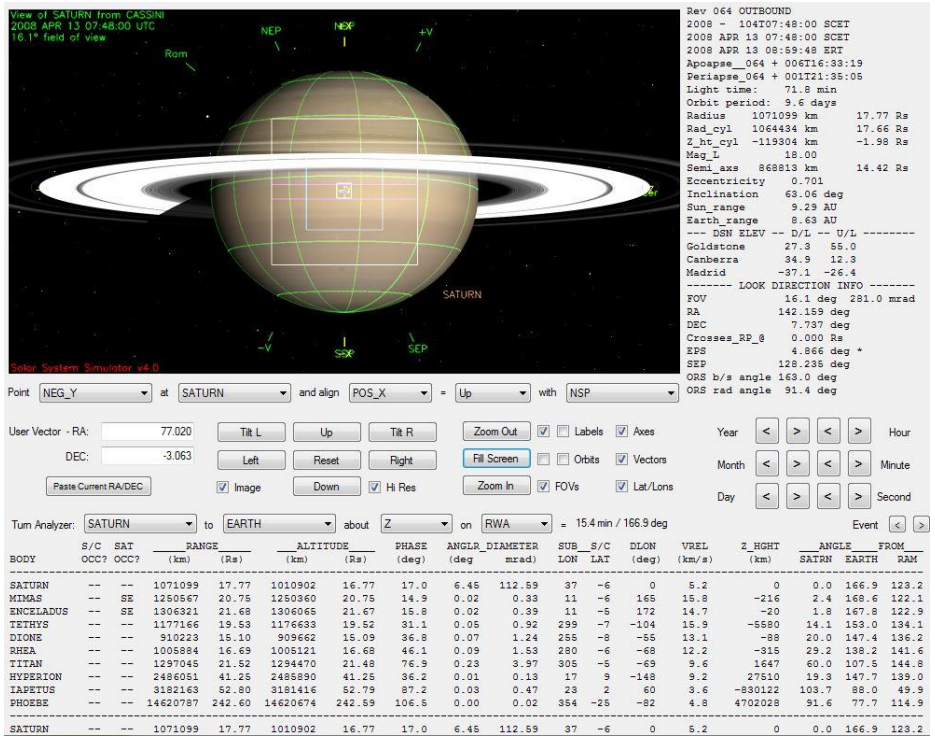
DATA VOLUME SUMMARY --- TRANSFER FRAME OVERHEAD INCLUDED (80 BITS PER 8800-BIT FRAME)

			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 (Mb)	NET_MARGN (%)	CAROVR (Mb)
SP_064EA_G34BWGNON104_PRIME	104 22:48	105 07:48	0	501	63	564	3498	2934	0	236	53	853	918	65	142	1%	0
SP_064EA_G34BWGSEQ105_PRIME	105 22:33	106 07:03	0	1143	62	1205	3498	2293	0	227	50	1483	868	-615	77	1%	615
SP_064EA_G70METSEQ106_PRIME	106 22:33	107 07:33	615	2369	65	3050	3498	448	0	1539	53	4641	4454	-188	77	1%	188
SP_065EA_M34HEFSEQ107_PRIME	107 15:03	108 00:03	188	423	32	643	3498	2855	0	278	53	974	1050	75	77	1%	0
SP_065EA_G34BWGSEQ108_PRIME	108 22:18	109 07:18	0	2609	94	2703	3498	795	0	236	53	2992	913	-2080	1	0%	2079
SP_065EA_G70METSEQ109_PRIME	109 22:18	110 07:18	2079	947	63	3089	3498	409	18	1293	53	4453	4454	1	1	0%	0

DATA VOLUME REPORT --- TRANSFER FRAME OVERHEAD NOT INCLUDED

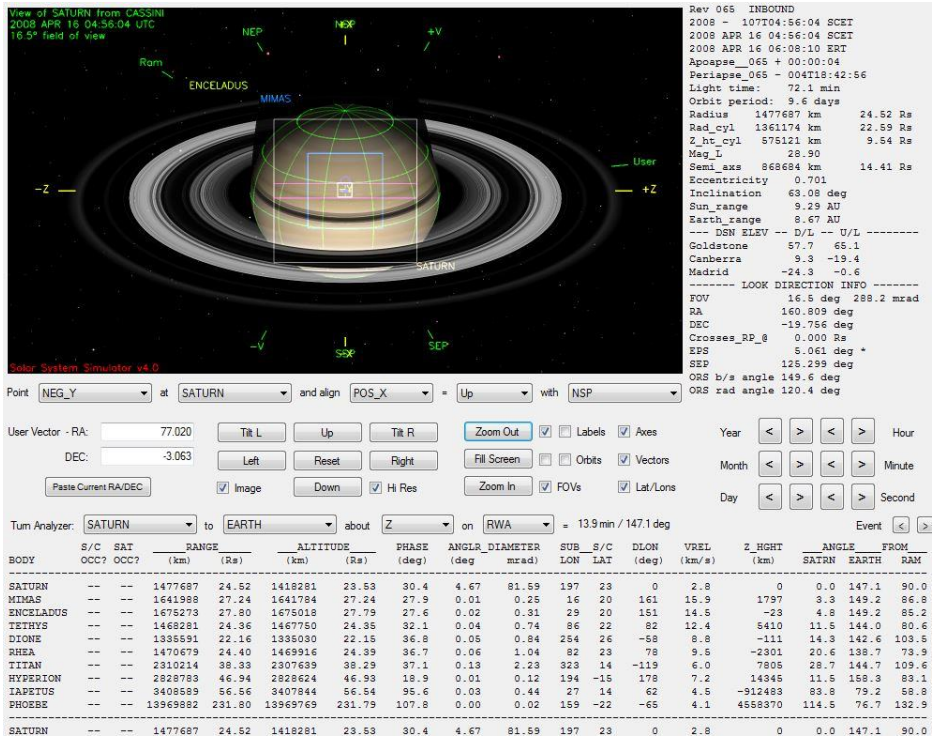
Event	Start doy hh:mm	End doy hh:mm	CAPS (Mb)	CDA (Mb)	CIRS (Mb)	INMS (Mb)	ISS (Mb)	MAG (Mb)	MIMI (Mb)	RADAR (Mb)	RPWS (Mb)	UVIS (Mb)	VIMS (Mb)	PROBE (Mb)	ENGR (Mb)	TOTAL (Mb)
OBSERVATION_NOR	104 07:48	104 22:48	54.0	17.8	0.0	2.7	0.0	32.4	64.8	0.0	70.7	253.6	0.0	0.0	12.3	508.3
SP_064EA_G34BWGNON104_PRIME	104 22:48	105 07:48	32.4	9.7	86.4	1.6	0.0	19.4	38.9	0.0	42.4	2.5	0.0	0.0	0.0	233.4
DAILY TOTAL SCIENCE	104 07:48	105 07:48	86.4	27.5	86.4	4.3	0.0	51.8	103.7	0.0	113.2	256.1	0.0	0.0		
OBSERVATION_NOR	105 07:48	105 22:33	53.1	15.9	28.8	2.7	69.1	31.9	63.7	0.0	69.6	104.9	693.0	0.0	12.1	1144.7
SP_064EA_G34BWGSEQ105_PRIME	105 22:33	106 07:03	30.6	9.2	86.4	1.5	0.0	18.4	36.7	0.0	40.1	2.3	0.0	0.0	0.0	225.2
DAILY TOTAL SCIENCE	105 07:48	106 07:03	83.7	25.1	115.2	4.2	69.1	50.2	100.4	0.0	109.6	107.2	693.0	0.0		
OBSERVATION_NOR	106 07:03	106 22:33	178.7	16.7	218.4	2.8	599.0	33.5	67.0	0.0	511.8	77.0	635.0	0.0	12.7	2352.5
OBSERVATION_SI	106 07:03	106 22:33	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
SP_064EA_G70METSEQ106_PRIME	106 22:33	107 07:33	289.7	9.7	86.4	1.6	0.0	19.4	39.0	0.0	1076.5	2.5	0.0	0.0	0.0	1524.7
DAILY TOTAL SCIENCE	106 07:03	107 07:33	468.4	26.5	312.8	4.4	599.0	52.9	105.9	0.0	1588.2	79.5	635.0	0.0		
OBSERVATION_NOR	107 07:33	107 15:03	27.0	8.1	108.0	1.4	0.0	16.2	32.7	0.0	70.5	0.0	155.7	0.0	6.1	425.6
SP_065EA_M34HEFSEQ107_PRIME	107 15:03	108 00:03	32.4	9.7	86.4	1.6	0.0	19.4	39.2	0.0	84.6	2.5	0.0	0.0	0.0	275.8
DAILY TOTAL SCIENCE	107 07:33	108 00:03	59.4	17.8	194.4	3.0	0.0	35.6	71.9	0.0	155.0	2.5	155.7	0.0		
OBSERVATION_NOR	108 00:03	108 22:18	80.1	24.0	306.0	4.0	420.0	48.1	96.9	0.0	129.6	77.0	1400.0	0.0	18.2	2603.9
SP_065EA_G34BWGSEQ108_PRIME	108 22:18	109 07:18	32.4	9.7	86.4	1.6	0.0	19.4	39.2	0.0	42.4	2.5	0.0	0.0	0.0	233.7
DAILY TOTAL SCIENCE	108 00:03	109 07:18	112.5	33.7	392.4	5.6	420.0	67.5	136.1	0.0	172.1	79.5	1400.0	0.0		
OBSERVATION_NOR	109 07:18	109 22:18	54.0	16.2	115.2	2.7	31.4	32.4	56.5	0.0	70.7	126.8	420.0	0.0	12.3	938.2
OBSERVATION_OPN	109 07:18	109 22:18	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4
OBSERVATION_SI	109 07:18	109 22:18	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
SP_065EA_G70METSEQ109_PRIME	109 22:18	110 07:18	278.2	9.7	86.4	1.6	0.0	19.4	29.2	0.0	854.0	2.5	0.0	0.0	0.0	1281.0
DAILY TOTAL SCIENCE	109 07:18	110 07:18	332.2	25.9	213.6	4.3	31.4	51.8	85.7	0.0	924.7	129.3	420.0	0.0		

Segment Geometry (1 of 2)



Seg Start (Left)

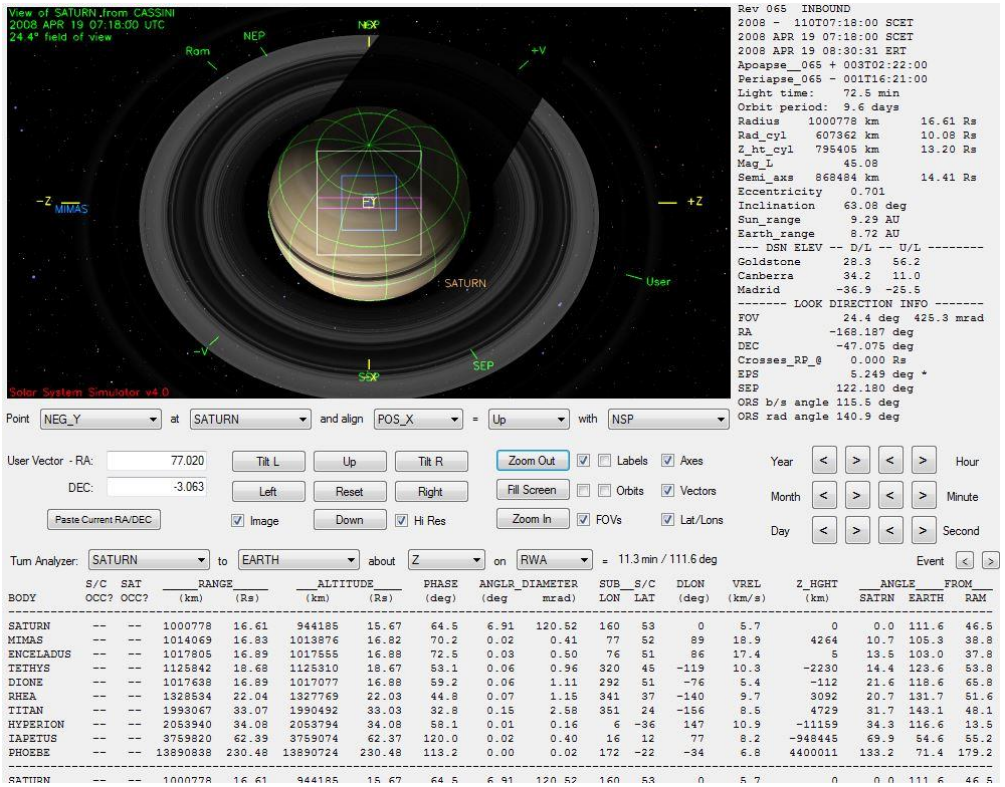
Apoapse [107T04:56:04] (below)



	Saturn Range	Phase Angle	Sub-S/C Lat.
Segment Start	17.77	17.0	-6
Apoapse	24.52	30.4	+23
Segment End	16.61	64.5	+53

Segment Geometry (2 of 2)

Seg End (Below)



BODY	S/C OCC?	SAT OCC?	RANGE (km)	RANGE (Rs)	ALTITUDE (km)	ALTITUDE (Rs)	PHASE (deg)	ANGLR_DIAMETER (deg	ANGLR_DIAMETER mrad)	SUB_S/C LON	SUB_S/C LAT	DLON (deg)	VREL (km/s)	Z_HGHT (km)	ANGLE FROM SATRN	ANGLE FROM EARTH	ANGLE FROM RAM
SATURN	--	--	1000778	16.61	944185	15.67	64.5	6.91	120.52	160	53	0	5.7	0	0.0	111.6	46.5
MIMAS	--	--	1014069	16.83	1013876	16.82	70.2	0.02	0.41	77	52	89	18.9	4264	10.7	105.3	38.8
ENCELADUS	--	--	1017805	16.89	1017555	16.88	72.5	0.03	0.50	76	51	86	17.4	5	13.5	103.0	37.8
TETHYS	--	--	1125842	18.68	1125310	18.67	53.1	0.06	0.96	320	45	-119	10.3	-2230	14.4	123.6	53.8
DIONE	--	--	1017638	16.89	1017077	16.88	59.2	0.06	1.11	292	51	-76	5.4	-112	21.6	118.6	65.8
RHEA	--	--	1328534	22.04	1327769	22.03	44.8	0.07	1.15	341	37	-140	9.7	3092	20.7	131.7	51.6
TITAN	--	--	1993067	33.07	1990492	33.03	32.8	0.15	2.58	351	24	-156	8.5	4729	31.7	143.1	48.1
HYPERION	--	--	2053940	34.08	2053794	34.08	58.1	0.01	0.16	6	-36	147	10.9	-11159	34.3	116.6	13.5
IAPETUS	--	--	3759820	62.39	3759074	62.37	120.0	0.02	0.40	16	12	77	8.2	-948445	69.9	54.6	55.2
PHOEBE	--	--	13890838	230.48	13890724	230.48	113.2	0.00	0.02	172	-22	-34	6.8	4400011	133.2	71.4	179.2
SATURN	--	--	1000778	16.61	944185	15.67	64.5	6.91	120.52	160	53	0	5.7	0	0.0	111.6	46.5

Solar Geometry – ORS Boresight Concerns

No ORS Boresight Solar Constraints on Science Pointing

Monday, April 14 (DOY 105):

Science today began with a continuation of the study of Saturn with a methane fluorescence map taken by the Visual and Infrared Mapping Spectrometer (VIMS) with the Ultraviolet Imaging Spectrograph (UVIS) participating. The next target was Tethys with observations at various wavelengths including Imaging Science (ISS) color photometry, UVIS albedo measurements, and Composite Infrared Spectrometer (CIRS) infrared measurements. As part of the ongoing campaign to better determine the orbits of minor satellites, images were taken of Atlas, Janus, Polydeuces, Prometheus, and Calypso.

DOY 106-109:

No Science Highlights Provided

Friday, April 18 (DOY 109):

Study of the north polar region of Saturn continued today with a scan by the Ultraviolet Imaging Spectrograph (UVIS) extreme ultra-violet slit searching for auroral activity, with the Visual and Infrared Mapping Spectrometer (VIMS) riding along. Distant images of Mimas and Enceladus were taken for optical navigation, as were images of Epimetheus, Pan, Methone, and Pandora as part of the campaign to better determine the orbits of minor satellites. Finally, the Composite Infrared Spectrometer (CIRS) observed the C ring in a continuous azimuthal scan at a constant radial distance of 83,000 km.

Segment Integration Planning

Timeline Gaps and Suggested Observations

Rev 64/65 TOL

Activity	Start	Duration	Pointing	Notes	TLM
Segment Start/SPTurn to Waypoint	2008-104T07:48:00	00:30:00			
New Waypoint	**2008-104T08:18:00**				
ISS or UVIS Atmospheres	2008-104T08:18:00	14:00:00			
SP Turn to Downlink	2008-104T22:18:00	00:30:00			
Downlink	2008-0104T22:48:00	09:00:00	XBAND to Earth;	Goldstone 34 HEF	
SP Turn to Waypoint	2008-105T07:48:00	00:30:00			
VIMS Saturn CH4 Flourecence	2008-105T08:18:00	11:00:00			
OPEN	2008-105T19:18:00	02:15:00			
ISS Satellorb	2008-105T21:33:00	00:30:00			
SP Turn to Downlink	2008-105T22:03:00	00:30:00	XBAND to Earth;		
Downlink	2008-105T22:33:00	09:00:00	XBAND to Earth;	Goldstone 34 HEF	
SP Turn to Waypoint	2008-106T07:33:00	00:30:00			
CIRS Rings Temp	2008-106T08:03:00	04:00:00			
VIMS Saturn Pole Map	2008-106T12:03:00	10:00:00			
SP Turn to Downlink	2008-106T22:03:00	00:30:00	XBAND to Earth;		
Downlink	2008-106T22:33:00	09:00:00	XBAND to Earth;	Goldstone 34 HEF SEQ U/L	
Rev 65 Apoapsis	**2008-107T05:19:24**				
SP Turn to Waypoint	2008-107T07:33:00	00:30:00			
RINGS	2008-107T08:03:00	06:30:00			
SP Turn to Downlink	2008-107T14:33:00	00:30:00			
Downlink	2008-107T15:03:00	09:00:00	XBAND to Earth;	Madrid 34 HEF SEQ U/L	
SP Turn to Waypoint	2008-108T00:03:00	00:30:00		**VIMS DECON PERIOD**	
OPEN	2008-108T00:33:00	05:45:00		**VIMS DECON PERIOD**	
ISS Polar Movie	2008-108T06:18:00	15:00:00		**VIMS DECON PERIOD**	
SP Turn to Downlink	2008-108T21:48:00	00:30:00		**VIMS DECON PERIOD**	
Downlink	2008-108T22:18:00	09:00:00	XBAND to Earth;	Goldstone 34 HEF SEQ U/L	
SP Turn to Waypoint	2008-109T07:18:00	00:30:00		**VIMS DECON PERIOD**	
ISS Polar Movie	2008-109T07:48:00	07:00:00		**VIMS DECON PERIOD**	
ISS Satellorb	2008-109T14:48:00	01:00:00		**VIMS DECON PERIOD**	
CIRS Rings Vert.	2008-109T15:48:00	06:00:00		**VIMS DECON PERIOD**	
SP Turn to Downlink	2008-109T21:48:00	00:30:00		**VIMS DECON PERIOD**	
Downlink	2008-109T22:18:00	09:00:00	XBAND to Earth;	Goldstone 34 HEF SEQ U/L	

Initial SMT and Data Volume (1/2)

Beginning of Integration:

Rev 64/65 Data Volume

DATA VOLUME SUMMARY

	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)	MARGIN (Mb)	(%)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGIN (Mb)	(%)	CAROVR (Mb)
SP_064EA_G34HEFNON104_PRIME	104 22:48	105 07:48	0	490	52	542	3568	3027	85%	0	229	53	823	1087	264	24%	0
SP_064EA_G34HEFNON105_PRIME	105 22:33	106 07:03	0	1020	51	1071	3568	2497	70%	0	229	50	1350	1028	-322	-31%	322
SP_064EA_G34HEFSEQ106_PRIME	106 22:33	107 07:33	322	913	54	1289	3534	2245	64%	17	239	53	1598	1089	-509	-47%	509
SP_065EA_M34HEFSEQ107_PRIME	107 15:03	108 00:03	509	415	26	950	3568	2617	73%	0	271	53	1274	1043	-232	-22%	232
SP_065EA_G34HEFSEQ108_PRIME	108 22:18	109 07:18	232	2574	77	2883	3568	686	19%	0	229	53	3165	1084	-2080	-192%	2080
SP_065EA_G34HEFSEQ109_PRIME	109 22:18	110 07:18	2080	930	52	3062	3534	472	13%	17	220	53	3352	1083	-2270	-210%	2270

Initial SMT and Data Volume (1/2)

Beginning of Integration:

Rev 64/65 Data Volume cont…

DATA VOLUME REPORT

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	104 07:48	104 22:48	54.0	11.3	0.0	2.7	0.0	32.4	64.8	0.0	70.7	253.6	0.0	0.0	0.0	489.6
SP_064EA_G34HEFNON104_PRIME	104 22:48	105 07:48	32.4	4.9	86.4	1.6	0.0	19.4	38.9	0.0	42.4	2.5	0.0	0.0	0.0	228.5
DAILY TOTAL SCIENCE	104 07:48	105 07:48	86.4	16.2	86.4	4.3	0.0	51.8	103.7	0.0	113.2	256.1	0.0	0.0		
OBSERVATION_NOR	105 07:48	105 22:33	53.1	8.0	28.8	2.7	69.1	31.9	63.7	0.0	69.6	0.0	693.0	0.0	0.0	1019.8
SP_064EA_G34HEFNON105_PRIME	105 22:33	106 07:03	32.4	4.9	86.4	1.6	0.0	19.4	38.9	0.0	42.4	2.5	0.0	0.0	0.0	228.5
DAILY TOTAL SCIENCE	105 07:48	106 07:03	85.5	12.8	115.2	4.3	69.1	51.3	102.6	0.0	112.0	2.5	693.0	0.0		
OBSERVATION_NOR	106 07:03	106 22:33	54.0	8.1	72.0	2.7	0.0	32.4	64.8	0.0	70.7	0.0	600.0	0.0	0.0	904.7
OBSERVATION_OPN	106 07:03	106 22:33	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4
OBSERVATION_SI	106 07:03	106 22:33	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
SP_064EA_G34HEFSEQ106_PRIME	106 22:33	107 07:33	32.4	4.6	86.4	1.6	0.0	19.4	39.0	0.0	52.9	2.5	0.0	0.0	0.0	238.7
DAILY TOTAL SCIENCE	106 07:03	107 07:33	86.4	12.7	166.4	4.3	0.0	51.8	103.8	0.0	123.6	2.5	600.0	0.0		
OBSERVATION_NOR	107 07:33	107 15:03	27.0	4.0	108.0	1.4	0.0	16.2	32.7	0.0	70.5	0.0	155.7	0.0	0.0	415.4
SP_065EA_M34HEFSEQ107_PRIME	107 15:03	108 00:03	32.4	4.9	86.4	1.6	0.0	19.4	39.2	0.0	84.6	2.5	0.0	0.0	0.0	270.9
DAILY TOTAL SCIENCE	107 07:33	108 00:03	59.4	8.9	194.4	3.0	0.0	35.6	71.9	0.0	155.0	2.5	155.7	0.0		
OBSERVATION_NOR	108 00:03	108 22:18	80.1	12.0	306.0	4.0	420.0	48.1	96.9	0.0	129.6	77.0	1400.0	0.0	0.0	2573.7
SP_065EA_G34HEFSEQ108_PRIME	108 22:18	109 07:18	32.4	4.9	86.4	1.6	0.0	19.4	39.2	0.0	42.4	2.5	0.0	0.0	0.0	228.8
DAILY TOTAL SCIENCE	108 00:03	109 07:18	112.5	16.9	392.4	5.6	420.0	67.5	136.1	0.0	172.1	79.5	1400.0	0.0		
OBSERVATION_NOR	109 07:18	109 22:18	54.0	8.1	115.2	2.7	31.4	32.4	56.5	0.0	70.7	126.8	420.0	0.0	0.0	917.9
OBSERVATION_OPN	109 07:18	109 22:18	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.4
OBSERVATION_SI	109 07:18	109 22:18	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
SP_065EA_G34HEFSEQ109_PRIME	109 22:18	110 07:18	32.4	5.9	86.4	1.6	0.0	19.4	29.2	0.0	42.4	2.5	0.0	0.0	0.0	219.8
DAILY TOTAL SCIENCE	109 07:18	110 07:18	86.4	14.0	213.6	4.3	31.4	51.8	85.7	0.0	113.2	129.3	420.0	0.0		

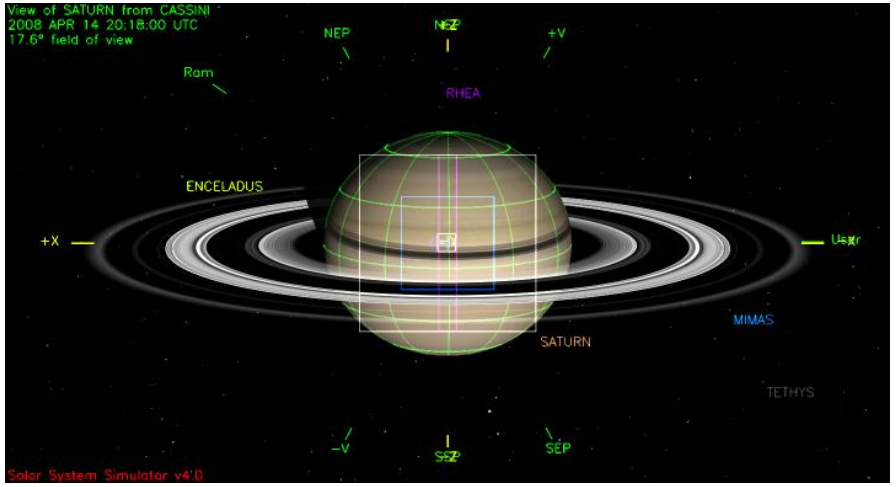
	CAPS (Mb)	CDA (Mb)	CIRS (Mb)	INMS (Mb)	ISS (Mb)	MAG (Mb)	MIMI (Mb)	RADAR (Mb)	RPWS (Mb)	UVIS (Mb)	VIMS (Mb)	PROBE (Mb)
TOTAL RECORDED (OPNAV data not included)	516.6	81.4	1168.4	25.8	520.5	310.0	603.7	0.0	789.1	472.2	3268.7	0.0

Waypoint Selection

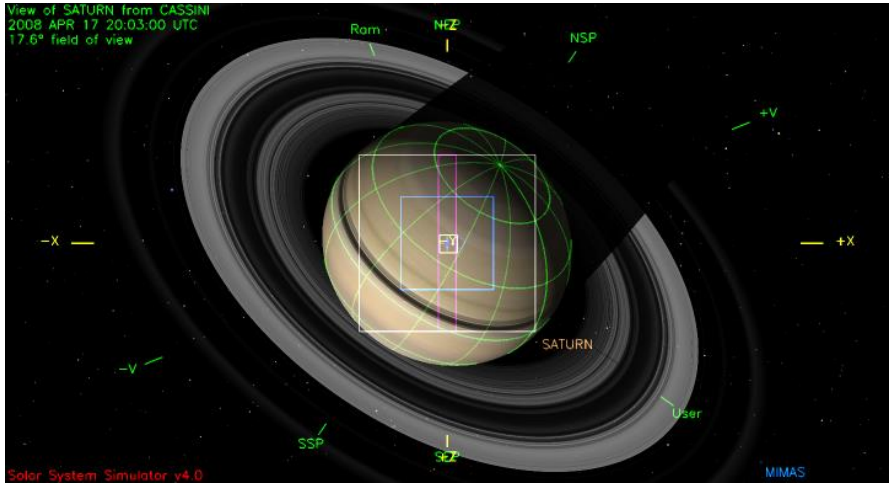
No Waypoint Selection Info Available

Waypoints Chosen

Waypoint 1 (2008-104T08:18:00 – 107T08:03:00): NEG_Y to Saturn, POS_Z to NSP



Waypoint 2 (2008-104T08:03:00 – 110T07:18:00): NEG_Y to Saturn, NEG_Z to NEP



Saturn Rev 064/065 Open Issues and Liens

- **Pointing Issues**
  - None
- **Data Volume Issues**
  - None
- **Telemetry Mode Issues**
  - None
- **NAV Issues**
  - 2-Way Tracking Support during G34HEFNON105 is 05:56
- **CIMS Issues**
  - A gap of 000T00:42:00 exits between SP_064SA_WAYPTTURN105_PRIME, which ends at 2008-105T08:18:00 GMT and VIMS_064SA_CH4FLUOR001_PRIME, which starts at 2008-105T09:00:00 GMT
- **Power/OPMODE Issues**
  - None
- **Flight Rule/Mission Planning Guideline and Constraint Issues**
  - Not checked
- **Other Issues**
  - None