

TOST: Integration 078TI (T45) Wrap-up

November 30, 2007

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Segment Basics

Segment times:

BEG: 2008-212T07:20:00

END: 2008-214T00:50:00

Altitude: 1591km

Time of C/A: 2008-213T02:13:15

Epoch: GMB_E078_Titan45

<p>At least 2 weeks prior to the Kickoff Meeting make sure that all requests are in CIMS</p>	<p>Kickoff Meeting</p> <p><u>Present</u> Master Timeline</p> <p><u>Discuss</u> Timeline Op Modes Telem Modes Deadbands for RCS</p> <p><u>Homework</u> Custom Handoff Attitudes Unique Op Mode Requirements (SCO) Turn Assignments CCRs High Value Science</p>	<p>Detailed Meeting</p> <p><u>Present</u> Master Timeline SMT Report Timeline Graphic TOL SPASS DSN Reports High Value Science</p> <p><u>Discuss</u> Data Volume Cuts</p> <p><u>Homework</u> CCRs High Level Science Objectives</p>	<p>Wrap-up Meeting</p> <p><u>Present</u> Wrap-up Package Checklist High Level Science Objectives</p> <p><u>Discuss</u> N/A</p> <p><u>Homework</u> N/A</p>
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High-level Science Objectives

- CIRS – will continue to search for trace atmospheric molecular species in Titan's winter polar (northern) hemisphere by limb sounding of the stratosphere.
- ISS - will be acquiring a full-disk mosaic of Titan's leading hemisphere, including coverage of Hotei Arcus :)

RSS –

MAPS – INMS - Titan torus and magnetospheric interaction region observations

Master Timeline for T45

T45		1591					
Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments	
2008-212T07:20:00	2008-212T07:50:00	SP Turn to WP	Neg-Y to Titan, Pos-X to NTP	DFPW Normal	S_N_ER_3	10 minute turn	
2008-212T07:50:00	-18:07:50	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3		
-18:07:50	-14:00	CIRS	Template A (Pos X to NTP Sec.)	DFPW Normal	S_N_ER_3		
-14:00	-12:00	ISS	Template D2	DFPW Normal (RSS_K_RWAF @ -13:35)	S_N_ER_3		
-12:00	-11:30	SP Turn to Earth (was ISS)		RSS_K_RWAF	S_N_ER_3	18 minute turn	
		NEW WAYPOINT	Neg-Z to Earth, Pos-X to NTP				
-11:30	0	RSS	Gravity; Neg_Z to Earth, Pos_X to NTP	RSS_K_RWAF	RTE_N_SPB		
2008-213T02:12:50		CLOSEST APPROACH	Neg_Z to Earth, Pos_X to NTP (Secondary is needed by CAPS)				
0	+04:45	RSS	Gravity, secondary for CAPS +/- 2 hours	RSS_K_RWAF	RTE_N_SPB		
+04:45	+05:15	CIRS Turn to CIRS attitude - Titan		RSS_K_RWAF	S_N_ER_3		
+05:15	+07:45	CIRS	piece of Template R	RSS_K_RWAF	S_N_ER_3		
+07:45	+08:15	CIRS Turn to Earth		RSS_K_RWAF	S_N_ER_3		
+08:15	+12:53:10	RSS		RSS_K_RWAF	S_N_ER_3		
+12:53:10	2008-213T15:35:00						
2008-213T15:35:00	2008-213T15:50:00	OD Uncertainty Dead Time		RSS_K_RWAF	S_N_ER_3		
2008-213T15:50:00	2008-214T00:50:00	G34		RSS_K_RWAF	RTE_N_SPB		

Telemetry Mode Report

TELEMETRY MODE REPORT

EPOCH RELATIVE	UTC	DURATION	TELEMETRY MODE	REQUEST
GMB_E078_Titan45-000T11:30:00	2008-212T07:20:00.000	07:23:11	S_N_ER_3	SP_078NA_G34OBSNON212_NA
	2008-212T14:43:11.000	01:06:49	RTE_N_SPB_22120	SP_078EA_G34ARRNON212_PRIME
	2008-212T15:50:00.000	02:45:00	RTE_N_SPB_41475	SP_078EA_G34ARRNON212_PRIME
	2008-212T18:35:00.000	03:45:00	RTE_N_SPB_47400	SP_078EA_G34ARRNON212_PRIME
	2008-212T22:20:00.000	02:30:00	RTE_N_SPB_41475	SP_078EA_G34ARRNON212_PRIME
GMB_E078_Titan45+000T00:06:49	2008-213T00:50:00.000	01:30:00	RTE_N_SPB_22120	SP_078EA_G34ARRNON212_PRIME
	2008-213T02:20:00.000	02:15:00	RTE_N_SPB_27650	SP_078EA_C34BWGNON212_PRIME
	2008-213T04:35:00.000	02:00:00	RTE_N_SPB_22120	SP_078EA_C34BWGNON212_PRIME
	2008-213T06:35:00.000	00:23:11	RTE_N_SPB_14220	SP_078EA_C34BWGNON212_PRIME
	2008-213T06:58:11.000	03:30:49	S_N_ER_3	SP_078NA_M34OBSNON212_NA
GMB_E078_Titan45+000T08:15:49	2008-213T10:29:00.000	04:37:11	RTE_N_SPB_47400	SP_078EA_M34ARRNON212_PRIME
	2008-213T15:06:11.000	00:43:49	S_N_ER_3	SP_078NA_G34OBSNON213_NA
	2008-213T15:50:00.000	02:45:00	RTE_N_SPB_41475	SP_078EA_G34ARRNON213_PRIME
	2008-213T18:35:00.000	03:30:00	RTE_N_SPB_47400	SP_078EA_G34ARRNON213_PRIME
	2008-213T22:05:00.000	02:45:00	RTE_N_SPB_41475	SP_078EA_G34ARRNON213_PRIME

SMT Report

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

DOWNLINK PASS NAME	Start doy hh:mm	End doy hh:mm	OBSERVATION_PERIOD								DOWNLINK_PASS						
			P4					P5	RECORDED		PLAYBACK						
			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)	(%)	CAROVR (Mb)
SP_078EA_G34ARRNON212_PRIME	212 14:43	213 02:20	0	883	31	915	3550	2636	0	958	68	1941	1330	-612	92	3%	611
SP_078EA_C34BWGNON212_PRIME	213 02:20	213 06:58	611	0	0	611	3550	2939	0	664	27	1303	317	-987	92	4%	986
SP_078EA_M34ARRNON212_PRIME	213 10:29	213 15:06	986	294	15	1295	3550	2255	0	74	27	1397	643	754	92	5%	753
SP_078EA_G34ARRNON213_PRIME	213 15:50	214 00:50	753	12	3	768	3550	2782	0	246	53	1068	1159	91	92	8%	0

Rings is giving us 194Mb (not reflected)

SMT Report (con't)

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	212 07:20	212 14:43	26.6	5.6	95.5	2.7	425.0	16.0	31.9	0.0	34.6	149.7	82.0	0.0	6.0	875.4
OBSERVATION_SI	212 07:20	212 14:43	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
SP_078EA_G34ARRNON212_PRIME	212 14:43	213 02:20	155.9	8.8	125.4	9.8	0.0	45.5	54.7	0.0	548.9	0.0	0.0	0.0	0.0	949.0
SP_078EA_C34BWGNON212_PRIME	213 02:20	213 06:58	118.6	3.5	50.1	6.1	0.0	29.3	24.1	0.0	426.5	0.0	0.0	0.0	0.0	658.1
DAILY TOTAL SCIENCE	212 07:20	213 06:58	301.1	17.8	277.0	18.6	425.0	90.7	110.7	0.0	1009.9	149.7	82.0	0.0		
OBSERVATION_NOR	213 06:58	213 10:29	12.6	2.7	50.4	1.3	75.0	7.6	15.2	0.0	16.4	63.4	43.1	0.0	2.9	290.6
OBSERVATION_SI	213 06:58	213 10:29	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
SP_078EA_M34ARRNON212_PRIME	213 10:29	213 15:06	16.6	3.5	0.0	1.7	0.0	10.0	20.0	0.0	21.6	0.0	0.0	0.0	0.0	73.3
DAILY TOTAL SCIENCE	213 06:58	213 15:06	29.3	6.1	54.4	2.9	75.0	17.6	35.1	0.0	38.1	63.4	43.1	0.0		
OBSERVATION_NOR	213 15:06	213 15:50	2.6	0.6	0.0	0.3	0.0	1.6	3.2	0.0	3.4	0.0	0.0	0.0	0.6	12.2
SP_078EA_G34ARRNON213_PRIME	213 15:50	214 00:50	32.4	12.5	86.4	3.2	0.0	19.4	38.9	0.0	46.0	5.2	0.0	0.0	0.0	244.0
DAILY TOTAL SCIENCE	213 15:06	214 00:50	35.0	13.0	86.4	3.5	0.0	21.0	42.0	0.0	49.4	5.2	0.0	0.0		
TOTAL RECORDED (OPNAV data not included)			365.4	37.0	417.8	25.0	500.0	129.3	187.9	0.0	1097.4	218.3	125.1	0.0		

DSN Report

CASSINI DOWNLINK/DSN COVERAGE SUMMARY for 078TI_T45_2007-11-28.apf on 2007-Nov-28 16:33:52
 (+ = pass overlaps with previous pass; * = conflicts with DSN maintenance; o = overlaps occultation)

DOWNLINK PASS					DSN PASS						
NAME	START_TO_END SCET	START_TO_END ERT	DUR hh:mm	DATA_RATES kbps	ID	START_TO_END SCET	START_TO_END ERT	DUR hh:mm	CALS min	LABEL	CNFG
G34ARRNON212	212T14:43-02:20	212T16:08-03:45	11:36	22,41,47,41,22	26	212T14:35-02:20	212T16:00-03:45	11:45	60 /15	TP	N003
				^-- and also -->	25*	212T14:35-02:20	212T16:00-03:45	11:45	60 /15	TP	N003
M34BWGRSS212	-----	-----	-----	(no downlink)	55	212T10:15-18:45	212T11:40-20:10	08:30	60 /15	TKG PASS	N003
M34BWG2ND212	-----	-----	-----	(no downlink)	57	212T13:15-18:45	212T14:40-20:10	05:30	60 /15	TKG PASS	N003
+C34BWGNON212	213T02:20-06:58	213T03:45-08:23	04:38	27,22,14	34*	213T22:15-07:40	213T23:40-09:05	09:25	60 /15	TP	N003
M34ARRNON212	213T10:29-15:06	213T11:54-16:31	04:37	47	54	213T06:55-16:05	213T08:20-17:30	09:10	60 /15	TP	N003
				^-- and also -->	55	213T06:55-16:05	213T08:20-17:30	09:10	60 /15	TP	N003
G34ARRNON213	213T15:50-00:50	213T17:15-02:15	09:00	41,47,41	24	213T15:50-00:50	213T17:15-02:15	09:00	60 /15	TP	N003
				^-- and also -->	25	213T15:50-00:50	213T17:15-02:15	09:00	60 /15	TP	N003

Weekly maintenance for gravity should be waivable (J. Frautnick – 11/28/07)

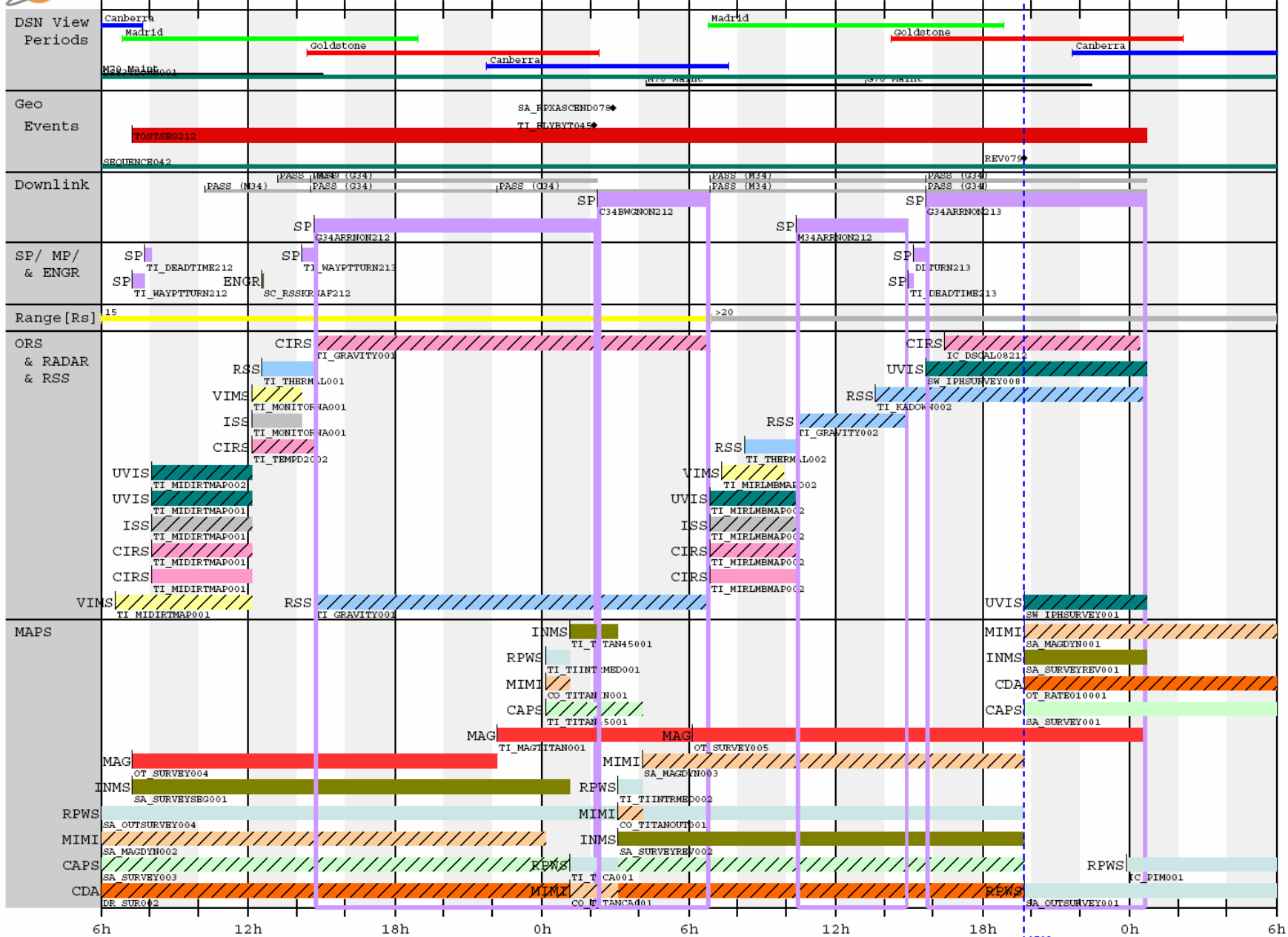


T45

2008 DOY 212
6h 12h 18h

DOY 213
0h 6h 12h 18h

DOY 214
0h 6h



TOL for T45 (1 of 2)

Request	Start Time	Epoch	Duration	End Time	Rate	Data Volume	SPASS Type	Primary Pointing	Secondary Pointing	Pointing Agreement
CAPS_078SA_SURVEY003_RIDER	2008-210T22:40:00		002T21:10:00	2008-213T19:50:00	1000	249	Non-SPASS			
CAPS_078TI_TITAN45001_PRIME	2008-213T00:13:11	GMB_E078_Titan45-000T02:00:00	000T04:00:00	2008-213T04:13:11	15000	216	SPASS Rider			
CAPS_079SA_SURVEY001_PRIME	2008-213T19:50:00	E079_Apo+000T00:00:00	003T05:00:00	2008-217T00:50:00	1000	277.2	Non-SPASS			
CDA_078DR_SUR002_RIDER	2008-210T12:30:00		003T07:20:00	2008-213T19:50:00	209.6	59.862	Non-SPASS			
CDA_079OT_RATE010001_RIDER	2008-213T19:50:00		003T15:18:00	2008-217T11:08:00	524	164.683	Non-SPASS			
CIRS_078TI_MDIRTMAP001_PRIME	2008-212T08:05:21	GMB_E078_Titan45-000T18:07:50	000T04:07:50	2008-212T12:13:11	4000	59.48	Prime	CIRS_FPB to Titan	POS_X to North_Pole_Dir	
CIRS_078TI_MDIRTMAP001_SI	2008-212T08:05:21	GMB_E078_Titan45-000T18:07:50	000T04:07:50	2008-212T12:13:11	0	6	SPASS Rider			
CIRS_078TI_TEMP02002_ISS	2008-212T12:13:11	GMB_E078_Titan45-000T14:00:00	000T02:30:00	2008-212T14:43:11	4000	36	SPASS Rider			
CIRS_078TI_GRAVITY001_RSS	2008-212T14:43:11	GMB_E078_Titan45-000T11:30:00	000T16:15:00	2008-213T06:58:11	3000	175.5	SPASS Rider			
CIRS_078TI_MIRLMBMAP002_PRIME	2008-213T06:58:11	GMB_E078_Titan45+000T04:45:00	000T03:30:00	2008-213T10:28:11	4000	50.4	Prime	CIRS_FPB to Titan	PIC	
CIRS_078TI_MIRLMBMAP002_SI	2008-213T06:58:11	GMB_E078_Titan45+000T04:45:00	000T03:30:00	2008-213T10:28:11	0	4	SPASS Rider			
CIRS_078IC_DSCAL08212_RIDER	2008-213T16:35:00		000T08:00:00	2008-214T00:35:00	3000	86.4	SPASS Rider			
ENGR_078SC_RSSKRWAF212_PPS	2008-212T12:38:11	GMB_E078_Titan45-000T13:35:00	000T00:05:04	2008-212T12:43:15	0	0	Non-SPASS			
INMS_078SA_SURVEYSEG001_INMS	2008-212T07:20:00		000T17:53:08	2008-213T01:13:08	100	6.439	Non-SPASS			
INMS_078TI_TITAN45001_INMS	2008-213T01:13:08		000T02:00:00	2008-213T03:13:08	1498	10.786	Non-SPASS			
INMS_078SA_SURVEYREV002_INMS	2008-213T03:13:08		000T16:36:52	2008-213T19:50:00	100	5.982	Non-SPASS			
INMS_079SA_SURVEYREV001_INMS	2008-213T19:50:00	E079_Apo+000T00:00:00	000T05:00:00	2008-214T00:50:00	100	1.8	Non-SPASS			
ISS_078TI_MDIRTMAP001_CIRS	2008-212T08:05:21	GMB_E078_Titan45-000T18:07:50	000T04:07:50	2008-212T12:13:11	0	75	SPASS Rider			
ISS_078TI_MONITORNA001_PRIME	2008-212T12:13:11	GMB_E078_Titan45-000T14:00:00	000T02:00:00	2008-212T14:13:11	0	350	Prime	ISS_NAC to Titan	NEG_X to Sun	
ISS_078TI_MIRLMBMAP002_CIRS	2008-213T06:58:11	GMB_E078_Titan45+000T04:45:00	000T03:30:00	2008-213T10:28:11	0	75	SPASS Rider			
MAG_078OT_SURVEY004_PRIME	2008-212T07:20:00		000T14:53:11	2008-212T22:13:11	600	32.155	Non-SPASS			
MAG_078TI_MAGTITAN001_PRIME	2008-212T22:13:11	GMB_E078_Titan45-000T04:00:00	000T08:00:00	2008-213T06:13:11	1976	56.909	Non-SPASS			
MAG_078OT_SURVEY005_PRIME	2008-213T06:13:11	GMB_E078_Titan45+000T04:00:00	000T18:36:49	2008-214T00:50:00	600	40.205	Non-SPASS			
MIMI_078SA_MAGDYN002_RIDER	2008-210T23:25:00		002T00:48:11	2008-213T00:13:11	1200	210.829	Non-SPASS			
MIMI_078CO_TITANIN001_RIDER	2008-213T00:13:11	GMB_E078_Titan45-000T02:00:00	000T01:00:00	2008-213T01:13:11	1800	6.48	Non-SPASS			
MIMI_078CO_TITANCA001_RIDER	2008-213T01:13:11	GMB_E078_Titan45-000T01:00:00	000T02:00:00	2008-213T03:13:11	1800	12.96	Non-SPASS			
MIMI_078CO_TITANOUT001_RIDER	2008-213T03:13:11	GMB_E078_Titan45+000T01:00:00	000T01:00:00	2008-213T04:13:11	1800	6.48	Non-SPASS			
MIMI_078SA_MAGDYN003_RIDER	2008-213T04:13:11	GMB_E078_Titan45+000T02:00:00	000T15:36:49	2008-213T19:50:00	1200	67.451	Non-SPASS			
MIMI_079SA_MAGDYN001_RIDER	2008-213T19:50:00	E079_Apo+000T00:00:00	003T05:00:00	2008-217T00:50:00	1200	332.64	Non-SPASS			
MP_074NA_SEQUENCE042_NA	2008-183T19:08:00		040T05:12:00	2008-224T00:20:00	0	0	SPASS Note			
MP_076NA_DSS34DOWN001_NA	2008-196T00:00:00		076T23:59:59	2008-272T23:59:59	0	0	Non-SPASS			
MP_078TI_FLYBYT045_NA	2008-213T02:13:15		000T00:00:01	2008-213T02:13:16	0	0	SPASS Note			
MP_078SA_RPXASCEND078_NA	2008-213T03:01:26		000T00:00:01	2008-213T03:01:27	0	0	Non-SPASS			
MP_079SA_APOAPSE079_NA	2008-213T19:50:03		000T00:00:01	2008-213T19:50:04	0	0	SPASS Note			
MP_079SA_REV079_NA	2008-213T19:50:03		000T00:00:01	2008-213T19:50:04	0	0	Non-SPASS			

TOL for T45 (2 of 2)

RPWS_078SA_OUTSURVEY004_PRIME	2008-212T01:00:00		001T18:50:00	2008-213T19:50:00	1300	200.458	Non-SPASS			
RPWS_078TI_TINTRMED001_PRIME	2008-213T00:13:11	GMB_E078_Titan45-000T02:00:00	000T01:00:00	2008-213T01:13:11	15232	54.835	Non-SPASS			
RPWS_078TI_TICA001_PRIME	2008-213T01:13:11	GMB_E078_Titan45-000T01:00:00	000T02:00:00	2008-213T03:13:11	109670.4	789.627	Non-SPASS			
RPWS_078TI_TINTRMED002_PRIME	2008-213T03:13:11	GMB_E078_Titan45+000T01:00:00	000T01:00:00	2008-213T04:13:11	15232	54.835	Non-SPASS			
RPWS_078SA_OUTSURVEY001_PRIME	2008-213T19:50:00		002T04:10:00	2008-216T00:00:00	1300	244.138	Non-SPASS			
RPWS_079IC_PIM001_PRIME	2008-214T00:00:00		001T00:00:00	2008-215T00:00:00	1300	112.319	Non-SPASS			
RSS_078TI_THERMAL001_RSS	2008-212T12:39:00		000T02:05:00	2008-212T14:44:00	0	0	Non-SPASS			
RSS_078TI_GRAVITY001_PRIME	2008-212T14:43:11	GMB_E078_Titan45-000T11:30:00	000T16:15:00	2008-213T06:58:11	0	0	SPASS Rider			
RSS_078TI_THERMAL002_RSS	2008-213T08:24:00		000T02:05:00	2008-213T10:29:00	0	0	Non-SPASS			
RSS_078TI_GRAVITY002_PRIME	2008-213T10:29:00	GMB_E078_Titan45+000T08:15:49	000T04:37:00	2008-213T15:06:00	0	0	SPASS Rider			
RSS_078TI_KADOWN002_RSS	2008-213T13:45:00		000T11:05:00	2008-214T00:50:00	0	0	SPASS Rider			
SP_078NA_G34OBSNON212_NA	2008-212T07:20:00		000T07:23:11	2008-212T14:43:11	0	0	Non-SPASS			
SP_078NA_TOSTSEG212_NA	2008-212T07:20:00		001T17:30:00	2008-214T00:50:00	0	0	SPASS Note			
SP_078TI_WAYPTTURN212_PRIME	2008-212T07:20:00		000T00:30:00	2008-212T07:50:00	0	0	New Waypoint	ISS_NAC to Titan	POS_X to NTP	SP Turn to Waypoint
SP_078TI_DEADTIME212_PRIME	2008-212T07:50:21		000T00:15:00	2008-212T08:05:21	0	0	Prime	ISS_NAC to Titan	POS_X to NTP	
SP_078NA_M34BWGRSS212_SP	2008-212T10:15:00		000T08:30:00	2008-212T18:45:00	0	0	Non-SPASS			
SP_078NA_M34BWG2ND212_SP	2008-212T13:15:00		000T05:30:00	2008-212T18:45:00	0	0	Non-SPASS			
SP_078TI_WAYPTTURN213_PRIME	2008-212T14:13:11	GMB_E078_Titan45-000T12:00:00	000T00:30:00	2008-212T14:43:11	0	0	New Waypoint	NEG_Z to Earth	POS_X to NTP	SP Turn to Waypoint
SP_078NA_G34BWG2ND212_SP	2008-212T14:35:00		000T11:45:00	2008-213T02:20:00	0	0	Non-SPASS			
SP_078NA_G34BWGRSS212_SP	2008-212T14:35:00		000T11:45:00	2008-213T02:20:00	0	0	Non-SPASS			
SP_078EA_G34ARRNON212_PRIME	2008-212T14:43:11	GMB_E078_Titan45-000T11:30:00	000T11:36:49	2008-213T02:20:00	0	0	Prime	XBAND to Earth	POS_X to NEP	
SP_078NA_C34BWGRSS212_SP	2008-212T22:15:00		000T09:25:00	2008-213T07:40:00	0	0	Non-SPASS			
SP_078EA_C34BWGNON212_PRIME	2008-213T02:20:00	GMB_E078_Titan45+000T00:06:49	000T04:38:11	2008-213T06:58:11	0	0	Prime	XBAND to Earth	POS_X to NEP	
SP_078NA_M34BWG2ND213_SP	2008-213T06:55:00		000T09:10:00	2008-213T16:05:00	0	0	Non-SPASS			
SP_078NA_M34BWGRSS213_SP	2008-213T06:55:00		000T09:10:00	2008-213T16:05:00	0	0	Non-SPASS			
SP_078NA_M34OBSNON212_NA	2008-213T06:58:11		000T03:30:49	2008-213T10:29:00	0	0	Non-SPASS			
SP_078EA_M34ARRNON212_PRIME	2008-213T10:29:00	GMB_E078_Titan45+000T08:15:49	000T04:37:11	2008-213T15:06:11	0	0	Prime	XBAND to Earth	POS_X to NEP	
SP_078NA_G34OBSNON213_NA	2008-213T15:06:11		000T00:43:49	2008-213T15:50:00	0	0	Non-SPASS			
SP_078TI_DEADTIME213_PRIME	2008-213T15:06:11	GMB_E078_Titan45+000T12:53:00	000T00:13:49	2008-213T15:20:00	0	0	Prime	NEG_Z to Earth	POS_X to NTP	
SP_078EA_DLTURN213_PRIME	2008-213T15:20:00		000T00:30:00	2008-213T15:50:00	0	0	Prime	XBAND to Earth	POS_X to NEP	SP Turn to Earth
SP_078EA_G34ARRNON213_PRIME	2008-213T15:50:00		000T09:00:00	2008-214T00:50:00	0	0	Prime	XBAND to Earth	POS_X to NEP	
SP_078NA_G34B24NON213_SP	2008-213T15:50:00		000T09:00:00	2008-214T00:50:00	0	0	Non-SPASS			
SP_078NA_G34BWGRSS213_SP	2008-213T15:50:00		000T09:00:00	2008-214T00:50:00	0	0	Non-SPASS			
UVIS_078TI_MDIRTMAP001_CIRS	2008-212T08:05:21	GMB_E078_Titan45-000T18:07:50	000T04:07:50	2008-212T12:13:11	5032	74.826	SPASS Rider			
UVIS_078TI_MDIRTMAP002_CIRS	2008-212T08:05:21	GMB_E078_Titan45-000T18:07:50	000T04:07:50	2008-212T12:13:11	5032	74.826	SPASS Rider			
UVIS_078TI_MIRLMBMAP002_CIRS	2008-213T06:58:11	GMB_E078_Titan45+000T04:45:00	000T03:30:00	2008-213T10:28:11	5032	63.403	SPASS Rider			
UVIS_078SW_IPHSURVEY008_RIDER	2008-213T15:50:00		000T09:00:00	2008-214T00:50:00	76	2.462	Non-SPASS			
UVIS_079SW_IPHSURVEY001_RIDER	2008-213T19:50:00		000T05:00:00	2008-214T00:50:00	152.5	2.744	Non-SPASS			
VIMS_078TI_MDIRTMAP001_CIRS	2008-212T06:35:21	GMB_E078_Titan45-000T19:37:50	000T05:37:50	2008-212T12:13:11	2396.2	48.57	SPASS Rider			
VIMS_078TI_MONITORNA001_JSS	2008-212T12:13:11	GMB_E078_Titan45-000T14:00:00	000T02:00:00	2008-212T14:13:11	5529.6	39.813	SPASS Rider			
VIMS_078TI_MIRLMBMAP002_CIRS	2008-213T07:28:11	GMB_E078_Titan45+000T05:15:00	000T02:30:00	2008-213T09:58:11	4792.3	43.131	SPASS Rider			

T45 SPASS

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
Sequence S42, length = 40 days		2008-183T19:08:00		040T05:12:00	2008-224T00:20:00			
Titan Flyby T45 Segment		2008-212T07:20:00		001T17:30:00	2008-214T00:50:00			
SP_078TI_WAYPTTURN212_PRIME	V	2008-212T07:20:00		000T00:30:00	2008-212T07:50:00	ISS_NAC to Titan	POS_X to NTP	SP Turn to Waypoint
NEW WAYPOINT		2008-212T07:50:00		000T06:53:11	2008-212T14:43:11	ISS_NAC to Titan	POS_X to NTP	
SP_078TI_DEADTIME212_PRIME	V	2008-212T07:50:21		000T00:15:00	2008-212T08:05:21	ISS_NAC to Titan	POS_X to NTP	
CIRS_078TI_MIDIRTMAP001_PRIME	C, I, U, V	2008-212T08:05:21	GMB_E078_Titan45-000T18:000T04:07:50	000T04:07:50	2008-212T12:13:11	CIRS_FPB to Titan	POS_X to North_Pole_Dir	
ISS_078TI_MONITORNAD001_PRIME	C, V	2008-212T12:13:11	GMB_E078_Titan45-000T14:000T02:00:00	000T02:00:00	2008-212T14:13:11	ISS_NAC to Titan	NEG_X to Sun	
SP_078TI_WAYPTTURN213_PRIME	C	2008-212T14:13:11	GMB_E078_Titan45-000T12:000T00:30:00	000T00:30:00	2008-212T14:43:11	NEG_Z to Earth	POS_X to NTP	SP Turn to Waypoint
NEW WAYPOINT		2008-212T14:43:11		001T10:06:49	2008-214T00:50:00	NEG_Z to Earth	POS_X to NTP	
SP_078EA_G34ARRNON212_PRIME	C, M, R	2008-212T14:43:11	GMB_E078_Titan45-000T11:000T11:36:49	000T11:36:49	2008-213T02:20:00	XBAND to Earth	POS_X to NEP	
78TI (t) T45 TITAN Outbou...		2008-213T02:13:15		000T00:00:01	2008-213T02:13:16			
SP_078EA_C34BWGNON212_PRIME	C, M, R	2008-213T02:20:00	GMB_E078_Titan45+000T00:000T04:38:11	000T04:38:11	2008-213T06:58:11	XBAND to Earth	POS_X to NEP	
CIRS_078TI_MIRLMBMAP002_PRIME	C, I, U, V	2008-213T06:58:11	GMB_E078_Titan45+000T04:000T03:30:00	000T03:30:00	2008-213T10:28:11	CIRS_FPB to Titan	PIC	
SP_078EA_M34ARRNON212_PRIME	R	2008-213T10:29:00	GMB_E078_Titan45+000T08:000T04:37:11	000T04:37:11	2008-213T15:06:11	XBAND to Earth	POS_X to NEP	
SP_078TI_DEADTIME213_PRIME	R	2008-213T15:06:11	GMB_E078_Titan45+000T12:000T00:13:49	000T00:13:49	2008-213T15:20:00	NEG_Z to Earth	POS_X to NTP	
SP_078EA_DLTURN213_PRIME	R	2008-213T15:20:00		000T00:30:00	2008-213T15:50:00	XBAND to Earth	POS_X to NEP	SP Turn to Earth
SP_078EA_G34ARRNON213_PRIME	C, R	2008-213T15:50:00		000T09:00:00	2008-214T00:50:00	XBAND to Earth	POS_X to NEP	
Apoapse Per = 7.4 d, inc =...		2008-213T19:50:03		000T00:00:01	2008-213T19:50:04			

No High Value Science Identified

Primary
Pointing
OK

Secondary
Pointing
OK

Issues

Prime Mission (not XM) RWA Rates are used for T45

G70 downgraded to G34 for Rings

194Mb carry-over from Rings - ~100Mb carry-over to Rings

Need to waive maintenance for DSS-25

from 2008-212T14:35:00 to 2008-213T02:20:00

Jim Frautnick optimistic (11/28)

DSS-34 Down for Ka-band Phase 2 install and depot level maintenance-NIB – Waive?

(not flagged with AP_downlink, flagged with Resource Checker)

Will severely impact RSS on T45 and Enceladus on DOY 224

This is in work. Might not be possible.

Need High Level Science Objectives from RSS