

**TOST: Detailed Integration
021TI (T11)**

Segment Boundary 2006-057T09:06:00 - 2006-059T08:51:00

Titan C/A=2006-058T08:25:19, 1813km

Epoch = GMB_

September 23, 2005

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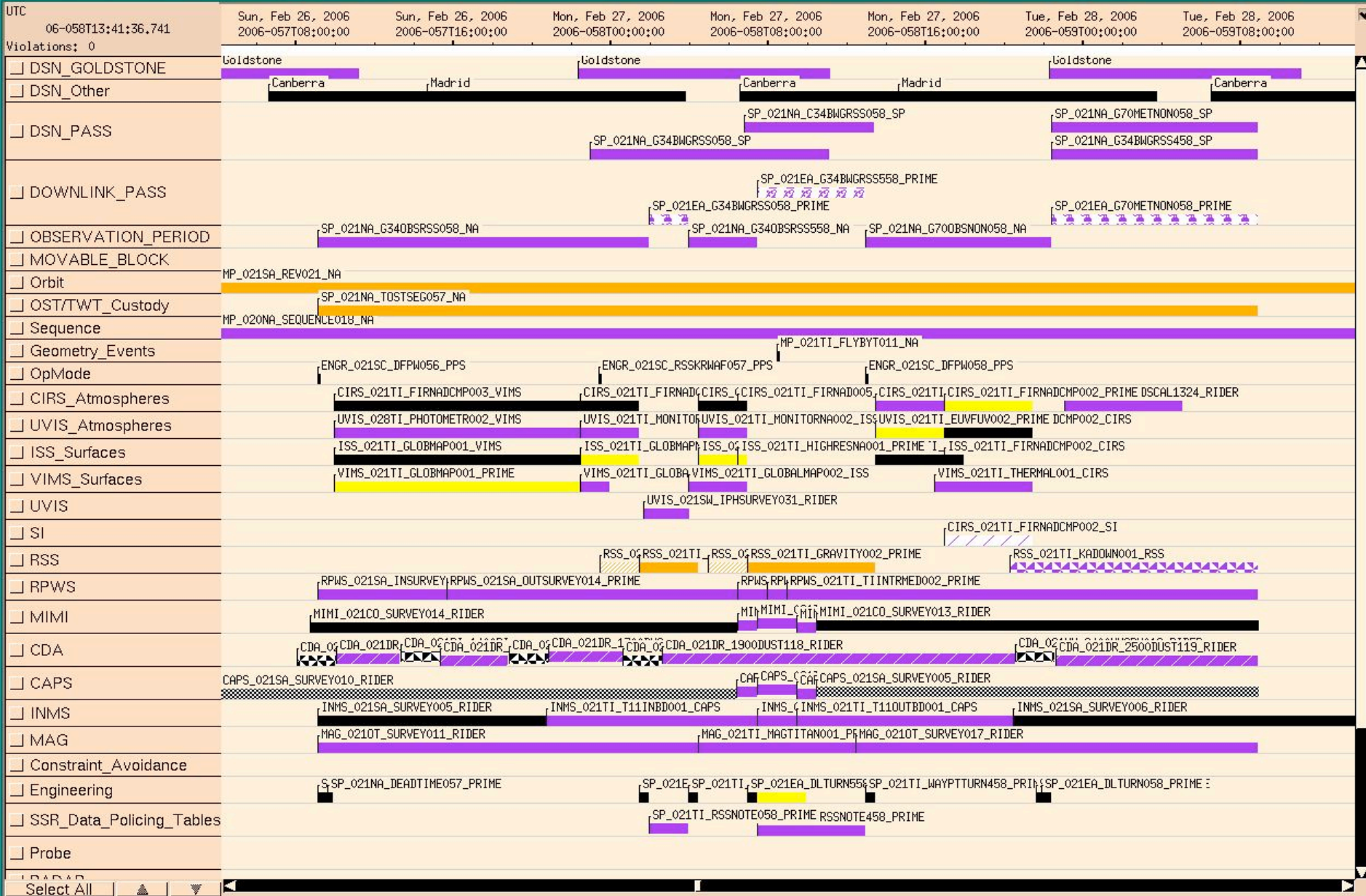


021TI (T11) Timeline

C/A= 058T08:25:19

Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments
057T09:06	057T09:36	SP Turn to waypoint	NAC to Titan, -X to Sun	DFPW Normal	S_N_ER_3	
057T09:36	-22:30	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3	
-22:30	-10:00	VIMS	Saturn-facing side; Coordinate w/CIRS, prefer 4 microrad/sec slow scan	DFPW Normal	S_N_ER_3	
-10:00	-07:00	ISS Global Map	5 min dwell times	DFPW Normal/RSS_K_RWAF (at T1-09:05)	S_N_ER_3	To calculate RSS KA on time: - 06:30 minus 15 min deadtime, minus 2 hours warmup, minus 20 minutes margin)
-07:00	-06:30	SP Turn to Earth for downlink		RSS_K_RWAF	S_N_ER_3	
-06:30	-04:30	RSS	Gravity Wing	RSS_K_RWAF	RTE_N_SPB	Try for one tlm mode for simplification
-04:30	-04:00	Turn to Titan		RSS_K_RWAF	S_N_ER_3	
-04:00	-01:30	ISS	Good low phase, high resolution opportunity; four 5x3 mosaics; 1 min dwell times	RSS_K_RWAF	S_N_ER_3	
-01:30	-01:00	SP Turn to Earth for downlink		RSS_K_RWAF	S_N_ER_3	
-01:00	+04:30	RSS	Gravity	RSS_K_RWAF	S_N_ER_3	Goldstone and Canberra coverage required; Canberra will still be 3-way with Ka coherent wth Goldstone
+04:30	+05:00	Turn to Titan		RSS_K_RWAF	S_N_ER_3	
+05:00	+08:30	UVIS	6 microrad/sec slow continuous slew across titan; good for CIRS temperature map	RSS_K_RWAF	S_N_ER_3	
+08:30	+13:10	CIRS	Long integration w/FP1; mid-sou8thern latitude at 60 degrees emissionangle; co- aligned ORS boresights on Titan, mayh choose orientation to optimize; VIMS good lighting search opportunity	RSS_K_RWAF	S_N_ER_3	
+13:10	058T21:51	OD Uncertainty Dead Time		RSS_K_RWAF	S_N_ER_3	
058T21:51	058T22:21	SP Turn to Earth for downlink		RSS_K_RWAF	S_N_ER_3	
058T22:21	059T08:51	Goldstone 70-m		RSS	RTE_N_SPB	10.5 hrs needed to return 2 SSRs

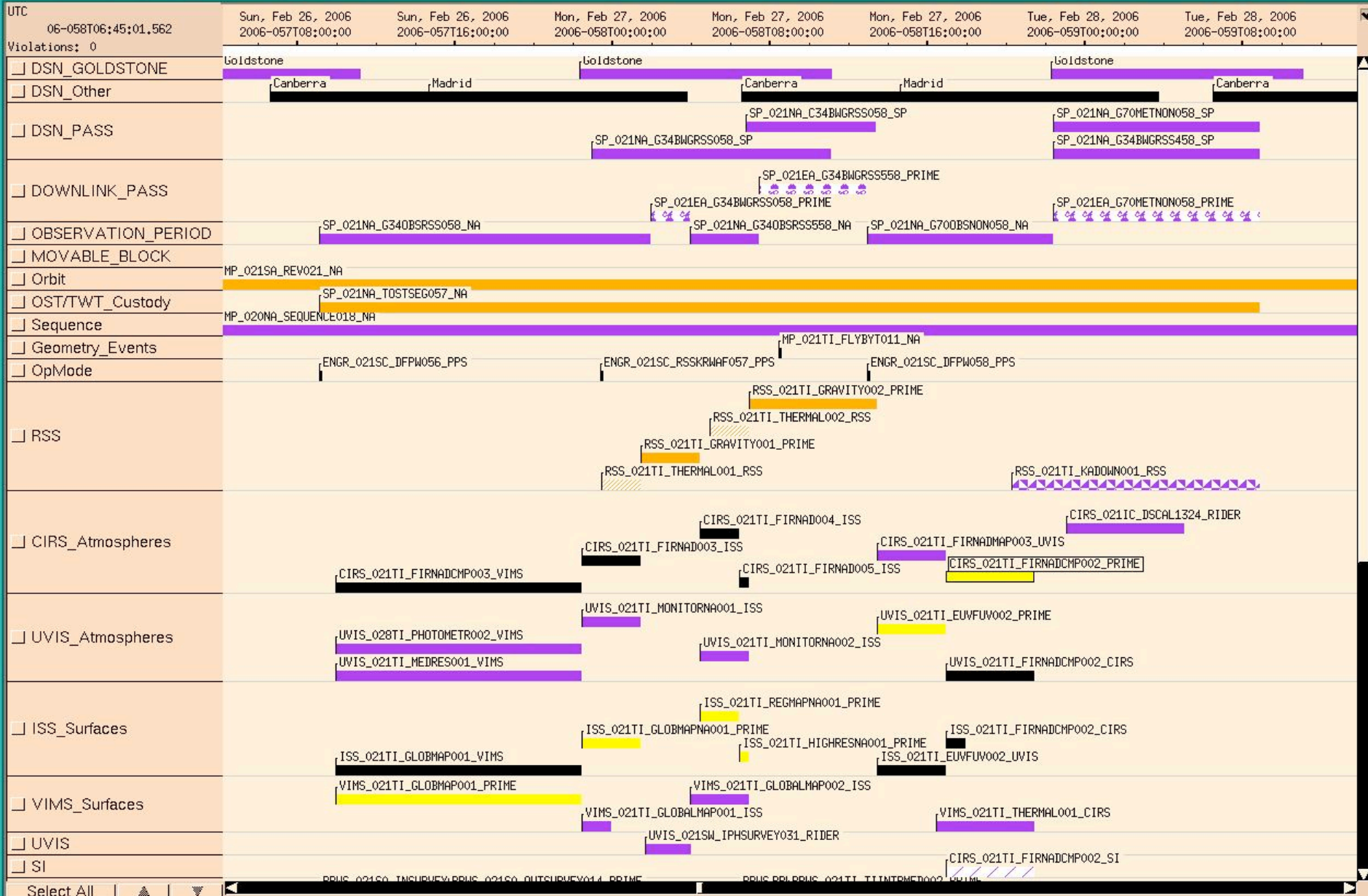
021TI (Titan-11 Flyby)



Zoomed out on selected display(s).



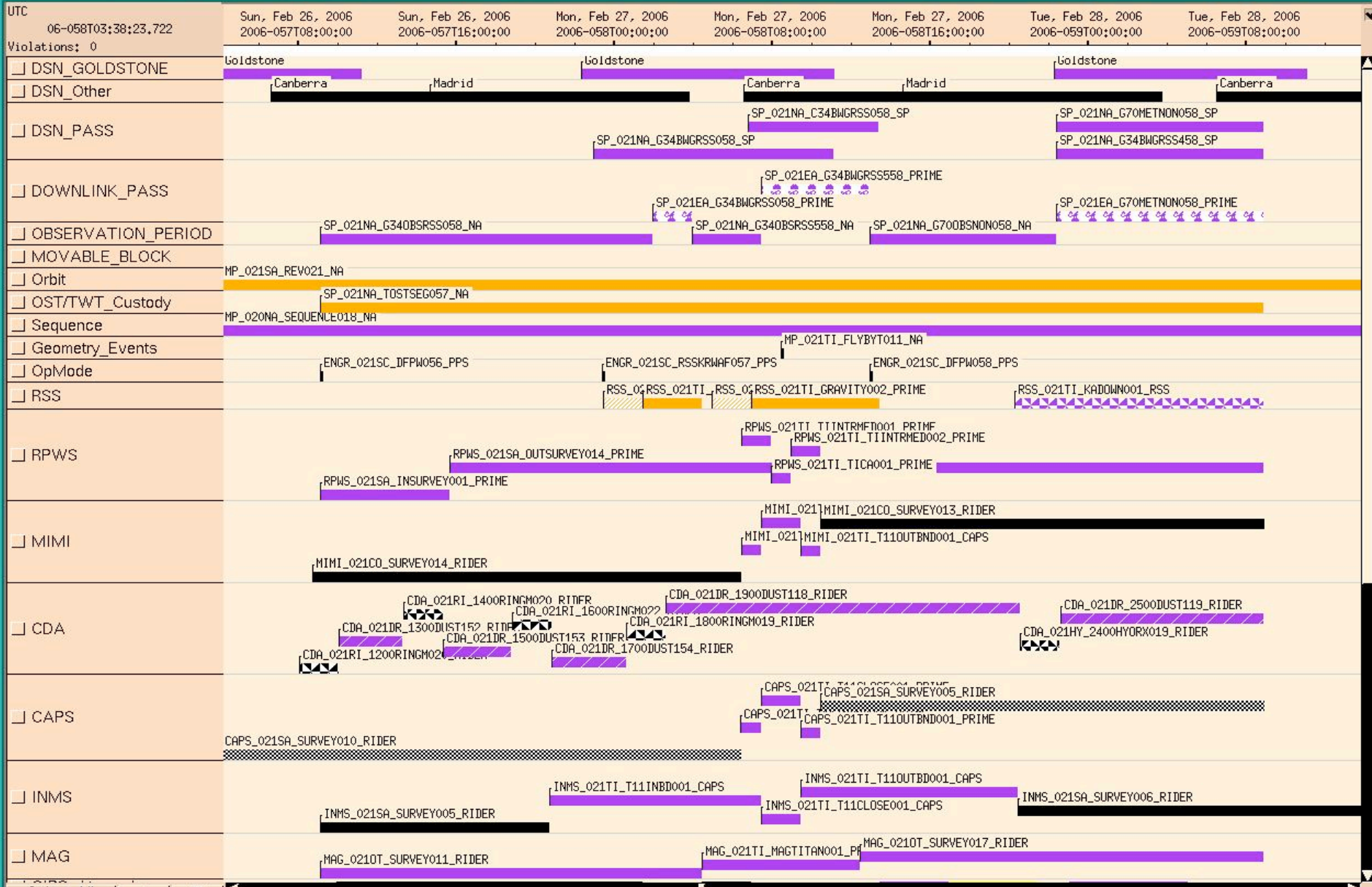
021TI (Titan-11 Flyby)



Zoomed out on selected display(s).



021TI (Titan-11 Flyby)



Zoomed out on selected display(s).





TOL

Request	AGPEN	Start Time	Epoch	Duration	End Time	Rate	Data Volume	SPASS Type	Primary Pointing	Secondary Pointing	Pointing Agreement
CAPS 021SA SURVEY010 RIDER	CAPS 16000	2006-055T09:37:00		002T20:48:19	2006-058T06:25:19	1000	247.317	Non-SPASS			
CAPS 021TI T11INBND001 PRIME	CAPS 16000	2006-058T06:20:44		000T01:04:35	2006-058T07:25:19	4000	13.972	SPASS Rider			
CAPS 021TI T11CLOSE001 PRIME	CAPS 16000	2006-058T07:25:19	GMB E021 Titan11-000T01:00:00	000T02:00:00	2006-058T09:25:19	16000	115.2	SPASS Rider			
CAPS 021TI T11OUTBND001 PRIME	CAPS 16000	2006-058T09:25:19	GMB E021 Titan11+000T01:00:00	000T01:00:00	2006-058T10:25:19	4000	14.4	SPASS Rider			
CAPS 021SA SURVEY005 RIDER	CAPS 16000	2006-058T10:25:19	GMB E021 Titan11+000T02:00:00	000T22:30:16	2006-059T08:55:35	1000	81.016	Non-SPASS			
CDA 021RI 1200RINGM020 RIDER	CDA 524	2006-057T08:02:09		000T01:59:59	2006-057T10:02:08	524	3.772	Non-SPASS			
CDA 021DR 1300DUST152 RIDER	CDA 524	2006-057T10:03:09		000T03:13:21	2006-057T13:16:30	524	6.079	Non-SPASS			
CDA 021RI 1400RINGM020 RIDER	CDA 524	2006-057T13:17:30		000T01:59:59	2006-057T15:17:29	524	3.772	Non-SPASS			
CDA 021DR 1500DUST153 RIDER	CDA 524	2006-057T15:18:30		000T03:27:45	2006-057T18:46:15	524	6.532	Non-SPASS			
CDA 021RI 1600RINGM022 RIDER	CDA 524	2006-057T18:47:16		000T01:59:59	2006-057T20:47:15	524	3.772	Non-SPASS			
CDA 021DR 1700DUST154 RIDER	CDA 524	2006-057T20:48:16		000T03:45:46	2006-058T00:34:02	524	7.098	Non-SPASS			
CDA 021RI 1800RINGM019 RIDER	CDA 524	2006-058T00:35:03		000T01:59:59	2006-058T02:35:02	524	3.772	Non-SPASS			
CDA 021DR 1900DUST118 RIDER	CDA 524	2006-058T02:36:03		000T17:55:19	2006-058T20:31:22	149.9	9.669	Non-SPASS			
CDA 021HY 2400HYORX019 RIDER	CDA 524	2006-058T20:32:23		000T01:59:59	2006-058T22:32:22	524	3.772	Non-SPASS			
CDA 021DR 2500DUST119 RIDER	CDA 524	2006-058T22:33:23		000T10:17:36	2006-059T08:50:59	149.9	5.553	Non-SPASS			
CIRS 021TI FIRNADCMP003 VIMS	CIRS 4000	2006-057T09:55:19	GMB E021 Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	2532	113.94	SPASS Rider			
CIRS 021TI FIRNAD003 ISS	CIRS 4000	2006-057T22:25:19	GMB E021 Titan11-000T10:00:00	000T03:00:00	2006-058T01:25:19	4000	43.2	SPASS Rider			
CIRS 021TI FIRNAD004 ISS	CIRS 4000	2006-058T04:25:19	GMB E021 Titan11-000T04:00:00	000T02:00:00	2006-058T06:25:19	4000	28.8	SPASS Rider			
CIRS 021TI FIRNAD005 ISS	CIRS 4000	2006-058T06:25:19	GMB E021 Titan11-000T02:00:00	000T00:30:00	2006-058T06:55:19	4000	7.2	SPASS Rider			
CIRS 021TI FIRNADMAP003 UVIS	CIRS 4000	2006-058T13:25:19	GMB E021 Titan11+000T05:00:00	000T03:30:00	2006-058T16:55:19	4000	50.4	SPASS Rider			
CIRS 021TI FIRNADCMP002 PRIME	CIRS 4000	2006-058T16:55:19	GMB E021 Titan11+000T08:30:00	000T04:40:00		4000	64.8	Prime	CIRS_FP1 to Titan	PIC	Long integration w/FP1; coaligned ORS boresights on Titan, may choose orientation to optimize
CIRS 021TI FIRNADCMP002 SI	ISS SUPPO	2006-058T16:55:19	GMB E021 Titan11+000T08:30:00	000T04:30:00	2006-058T21:25:19	0	4	SPASS Rider			
CIRS 021IC DSCAL1324 RIDER	CIRS 4000	2006-058T23:06:00		000T06:00:00	2006-059T05:06:00	4000	86.4	SPASS Rider			
ENGR 021SC DFPW056 PPS	OpMode	2006-056T01:05:00		000T00:00:47	2006-056T01:05:47	0	0	Non-SPASS			
ENGR 021SC RSSKRWAF057 PPS	OpMode	2006-057T23:20:19	GMB E021 Titan11-000T09:05:00	000T00:05:04	2006-057T23:25:23	0	0	Non-SPASS			
ENGR 021SC ROUTEREU001 CDS	ENGR 1638	2006-058T06:55:19	GMB E021 Titan11-000T01:30:00	000T03:00:00	2006-058T09:55:19	0	0	Non-SPASS			
ENGR 021SC DFPW058 PPS	OpMode	2006-059T08:51		000T00:00:30	2006-059T08:51:30	0	0	Non-SPASS			
INMS 021SA SURVEY005 RIDER	INMS 1498	2006-056T01:05:00		001T19:36:54	2006-057T20:41:54	50	7.851	Non-SPASS			
INMS 021TI T11INBND001 CAPS	INMS 1498	2006-057T20:41:54		000T10:43:25	2006-058T07:25:19	100	3.822	Non-SPASS			
INMS 021TI T11CLOSE001 CAPS	INMS 1498	2006-058T07:25:19	GMB E021 Titan11-000T01:00:00	000T02:00:00	2006-058T09:25:19	1498	10.786	Non-SPASS			
INMS 021TI T11OUTBND001 CAPS	INMS 1498	2006-058T09:25:19	GMB E021 Titan11+000T01:00:00	000T11:00:00	2006-058T20:25:19	100	3.96	Non-SPASS			
INMS 021SA SURVEY006 RIDER	INMS 1498	2006-058T20:25:19	GMB E021 Titan11+000T12:00:00	002T12:25:41	2006-061T08:51:00	50	10.877	Non-SPASS			
ISS 021TI GLOBMAP001 VIMS	ISS Phot 1	2006-057T09:55:19	GMB E021 Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	0	20	SPASS Rider			
ISS 021TI GLOBMAPNA001 PRIME	ISS Phot 1	2006-057T22:25:19	GMB E021 Titan11-000T10:00:00	000T03:00:00	2006-058T01:25:19	0	300	Prime	ISS_NAC to Titan	NEG X to Sun	5 min dwell times
ISS 021TI REGMAPNA001 PRIME	ISS Phot 1	2006-058T04:25:19	GMB E021 Titan11-000T04:00:00	000T02:00:00	2006-058T06:25:19	0	414	Prime	ISS_NAC to Titan	NEG X to Sun	4 5x3 NAC mosaics; 1 min dwells
ISS 021TI HIGHRESNA001 PRIME	ISS Phot 1	2006-058T06:25:19	GMB E021 Titan11-000T02:00:00	000T00:30:00	2006-058T06:55:19	0	117	Prime	ISS_NAC to Titan	NEG X to Sun	
ISS 021TI EUVUV002 UVIS	ISS Phot 1	2006-058T13:25:19	GMB E021 Titan11+000T05:00:00	000T03:30:00	2006-058T16:55:19	0	30	SPASS Rider			
ISS 021TI FIRNADCMP002 CIRS	ISS Phot 1	2006-058T16:55:19	GMB E021 Titan11+000T08:30:00	000T01:00:00	2006-058T17:55:19	0	20	SPASS Rider			
MAG 021OT SURVEY011 RIDER	MAG 1976	2006-057T09:06:00		000T19:19:19	2006-058T04:25:19	600	41.506	Non-SPASS			
MAG 021TI MAGTITAN001 PRIME	MAG 1976	2006-058T04:25:19	GMB E021 Titan11-000T04:00:00	000T08:00:00	2006-058T12:25:19	1976	56.909	Non-SPASS			
MAG 021OT SURVEY017 RIDER	MAG 1976	2006-058T12:25:19	GMB E021 Titan11+000T04:00:00	000T20:25:41	2006-059T08:51:00	600	44.125	Non-SPASS			
MIMI 021CO SURVEY014 RIDER	MIMI 8000	2006-057T08:41:01		000T21:44:18	2006-058T06:25:19	900	70.185	Non-SPASS			
MIMI 021TI T11INBND001 CAPS	MIMI 8000	2006-058T06:25:19	GMB E021 Titan11-000T02:00:00	000T01:00:00	2006-058T07:25:19	2000	7.2	SPASS Rider			
MIMI 021TI T11CLOSE001 CAPS	MIMI 8000	2006-058T07:25:19	GMB E021 Titan11-000T01:00:00	000T02:00:00	2006-058T09:25:19	2000	14.4	SPASS Rider			
MIMI 021TI T11OUTBND001 CAPS	MIMI 8000	2006-058T09:25:19	GMB E021 Titan11+000T01:00:00	000T01:00:00	2006-058T10:25:19	2000	7.2	SPASS Rider			
MIMI 021CO SURVEY013 RIDER	MIMI 8000	2006-058T10:25:19	GMB E021 Titan11+000T02:00:00	000T22:30:16	2006-059T08:55:35	900	72.914	Non-SPASS			
MP 020NA SEQUENCE018 NA	MILESTONE	2006-027T04:03:00	E020_SEQUENCE_018+000T00:00:00	042T20:32:00	2006-070T00:35:00	0	0	SPASS Note			
MP 021SA REV021 NA	MILESTONE	2006-036T20:58:00		031T06:36:00	2006-068T03:34:00	0	0	Non-SPASS			
MP 021TI FLYBYT011 NA	MILESTONE	2006-058T08:25:20		000T00:00:01	2006-058T08:25:21	0	0	Non-SPASS			
RPWS 021SA INSURVEY001 PRIME	RPWS 30464	2006-057T09:06:00		000T06:34:00	2006-057T15:40:00	1310	30.969	Non-SPASS			
RPWS 021SA OUTSURVEY014 PRIME	RPWS 30464	2006-057T15:40:00		001T17:11:00	2006-059T08:51:00	1310	194.222	Non-SPASS			
RPWS 021TI TIINTRMED001 PRIME	RPWS 30464	2006-058T06:25:19	GMB E021 Titan11-000T02:00:00	000T01:30:00	2006-058T07:55:19	12499.4	67.497	Non-SPASS			
RPWS 021TI TICAD001 PRIME	RPWS 18274	2006-058T07:55:19	GMB E021 Titan11-000T00:30:00	000T01:00:00	2006-058T08:55:19	100001	360.004	Non-SPASS			
RPWS 021TI TIINTRMED002 PRIME	RPWS 30464	2006-058T08:55:19	GMB E021 Titan11+000T00:30:00	000T01:30:00	2006-058T10:25:19	12499.4	67.497	Non-SPASS			



TOL

Request	AGPEN	Start Time	Epoch	Duration	End Time	Rate	Data Volume	SPASS Type	Primary Pointing	Secondary Pointing	Pointing Agreement
RSS 021TI THERMAL001 RSS	RSS Activity	2006-057T23:25:19	GMB E021 Titan11-000T09:00:00	000T02:00:00	2006-058T01:25:19	0	0	SPASS Rider			
RSS 021TI GRAVITY001 PRIME	RSS Activity	2006-058T01:25:19	GMB E021 Titan11-000T07:00:00	000T03:00:00	2006-058T04:25:19	0	0	SPASS Rider	XBAND to Earth	NEG X to Sun	
RSS 021TI THERMAL002 RSS	RSS Activity	2006-058T04:55:19	GMB E021 Titan11-000T03:30:00	000T02:00:00	2006-058T06:55:19	0	0	SPASS Rider			
RSS 021TI GRAVITY002 PRIME	RSS Activity	2006-058T06:55:19	GMB E021 Titan11-000T01:30:00	000T06:30:00	2006-058T13:25:19	0	0	SPASS Rider	XBAND to Earth (0.0,0.0,-65.0 deg. offset)	NEG X to Sun	RSS does *not* agree to any Primary Axis offset(s) when performing Ka-band activities, as this will degrade the experiment. The specified Primary pointing will need to be renegotiated to remove the offset.
RSS 021TI KADOWN001 RSS	RSS Activity	2006-058T20:16:00		000T12:35:00	2006-059T08:51:00	0	0	SPASS Rider			
SP 021NA G34OBSRSS058 NA	OBSERVATI	2006-057T09:06:00		000T16:49:19	2006-058T01:55:19	0	0	Non-SPASS			
SP 021NA TOSTSEG057 NA	MILESTONE	2006-057T09:06:00		001T23:45:00	2006-059T08:51:00	0	0	SPASS Note			
SP 021TI WAYPTTURN057 PRIME	MILESTONE	2006-057T09:06:00		000T00:30:00	2006-057T09:36:00	0	0	New Waypoint	ISS_NAC to Titan	NEG X to Sun	
SP 021NA DEADTIME057 PRIME	MILESTONE	2006-057T09:36:00		000T00:15:00	2006-057T09:51:00	0	0	Prime	ISS_NAC to Titan	NEG X to Sun	
SP 021NA G34BWGRSS058 SP	DSN_PASS	2006-057T22:56:00		000T12:09:00	2006-058T11:05:00	0	0	Non-SPASS			
SP 021EA DLTURN058 PRIME	MILESTONE	2006-058T01:25:19	GMB E021 Titan11-000T07:00:00	000T00:30:00	2006-058T01:55:19	0	0	Prime	XBAND to Earth	NEG X to Sun	
SP 021EA G34BWGRSS058 PRIME	DOWNLINK	2006-058T01:55:19	GMB E021 Titan11-000T06:30:00	000T02:00:00	2006-058T03:55:19	0	0	Prime	XBAND to Earth	NEG X to Sun	
SP 021TI RSSNOTE058 PRIME	NoteA1	2006-058T01:55:19	GMB E021 Titan11-000T06:30:00	000T02:00:00	2006-058T03:55:19	0	0	SPASS Note			
SP 021NA G34OBSRSS558 NA	OBSERVATI	2006-058T03:55:19	GMB E021 Titan11-000T04:30:00	000T03:30:00	2006-058T07:25:19	0	0	Non-SPASS			
SP 021TI WAYPTTURN058 PRIME	MILESTONE	2006-058T03:55:19	GMB E021 Titan11-000T04:30:00	000T00:30:00	2006-058T04:25:19	0	0	Prime	ISS_NAC to Titan	NEG X to Sun	
SP 021NA C34BWGRSS058 SP	DSN_PASS	2006-058T06:45:00		000T06:35:00	2006-058T13:20:00	0	0	Non-SPASS			
SP 021EA DLTURN558 PRIME	MILESTONE	2006-058T06:55:19	GMB E021 Titan11-000T01:30:00	000T00:30:00	2006-058T07:25:19	0	0	Prime	XBAND to Earth	NEG X to Sun	
SP 021EA G34BWGRSS558 PRIME	DOWNLINK	2006-058T07:25:19	GMB E021 Titan11-000T01:00:00	000T05:30:00	2006-058T12:55:19	0	0	Prime	XBAND to Earth	NEG X to Sun	
SP 021TI RSSNOTE458 PRIME	NoteA1	2006-058T07:25:19	GMB E021 Titan11-000T01:00:00	000T05:30:00	2006-058T12:55:19	0	0	SPASS Note			
SP 021NA G70OBSNON058 NA	OBSERVATI	2006-058T12:55:19	GMB E021 Titan11+000T04:30:00	000T09:25:41	2006-058T22:21:00	0	0	Non-SPASS			
SP 021TI WAYPTTURN458 PRIME	MILESTONE	2006-058T12:55:19	GMB E021 Titan11+000T04:30:00	000T00:30:00	2006-058T13:25:19	0	0	Prime	ISS_NAC to Titan	NEG X to Sun	
SP 021NA DEADTIME058 PRIME	MILESTONE	2006-058T21:35:19	GMB E021 Titan11+000T13:10:00	000T00:15:41	2006-058T21:51:00	0	0	Prime	ISS_NAC to Titan	NEG X to Sun	
SP 021EA DLTURN658 PRIME	MILESTONE	2006-058T21:51:00		000T00:30:00	2006-058T22:21:00	0	0	Prime	XBAND to Earth	POS X to NEP	
SP 021EA G70METNON058 PRIME	DOWNLINK	2006-058T22:21:00		000T10:30:00	2006-059T08:51:00	0	0	Prime	XBAND to Earth	POS X to NEP	
SP 021NA G34BWGRSS458 SP	DSN_PASS	2006-058T22:21:00		000T10:30:00	2006-059T08:51:00	0	0	Non-SPASS			
SP 021NA G70METNON058 SP	DSN_PASS	2006-058T22:21:00		000T10:30:00	2006-059T08:51:00	0	0	Non-SPASS			
UVIS 021TI MEDRES001 VIMS	UVIS 5032	2006-057T09:55:19	GMB E021 Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	1006.4	45.288	SPASS Rider			
UVIS 028TI PHOTOMETR002 VIMS	UVIS 5032	2006-057T09:55:19	GMB E021 Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	1006.4	45.288	SPASS Rider			
UVIS 021TI MONITORNA001 ISS	UVIS 5032	2006-057T22:25:19	GMB E021 Titan11-000T10:00:00	000T03:00:00	2006-058T01:25:19	5032	54.346	SPASS Rider			
UVIS 021TI MONITORNA002 ISS	UVIS 5032	2006-058T04:25:19	GMB E021 Titan11-000T04:00:00	000T02:30:00	2006-058T06:55:19	5032	45.288	SPASS Rider			
UVIS 021TI EUVFUV002 PRIME	UVIS 5032	2006-058T13:25:19	GMB E021 Titan11+000T05:00:00	000T03:30:00	2006-058T16:55:19	5032	63.403	Prime	UVIS_FUV to Titan	NEG X to Sun	6 microrad/sec slow continuous slew across Titan
UVIS 021TI FIRNADCMP002 CIRS	UVIS 5032	2006-058T16:55:19	GMB E021 Titan11+000T08:30:00	000T04:30:00	2006-058T21:25:19	1006.4	16.304	SPASS Rider			
VIMS 021TI GLOBMAP001 PRIME	VIMS 18432	2006-057T09:55:19	GMB E021 Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	8977.8	404	Prime	ISS_NAC to Titan	NEG X to Sun	Coordinate w/CIRS, prefer 4 microrad/sec slow scan
VIMS 021TI GLOBALMAP001 ISS	VIMS 18432	2006-057T22:25:19	GMB E021 Titan11-000T10:00:00	000T01:30:00	2006-057T23:55:19	55555.6	300	SPASS Rider			
VIMS 021TI GLOBALMAP002 ISS	VIMS 18432	2006-058T03:55:19	GMB E021 Titan11-000T04:30:00	000T03:00:00	2006-058T06:55:19	3703.7	40	SPASS Rider			
VIMS 021TI THERMAL001 CIRS	VIMS 18432	2006-058T16:25:19	GMB E021 Titan11+000T08:00:00	000T05:00:00	2006-058T21:25:19	4166.7	75	SPASS Rider			



Data Volume Summary

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 (%)	
SP_021EA_G34BWGRSS058_PRIME	058 01:55	058 03:55	0	1607	57	1664	3499	1834	0	31	12	1707	201	-1506	164	3%	1506
SP_021EA_G34BWGRSS558_PRIME	058 07:25	058 12:55	1506	786	12	2305	3499	1194	0	702	32	3039	205	-2834	164	3%	2834
SP_021EA_G70METNON058_PRIME	058 22:21	059 08:51	2834	468	32	3335	3499	164	0	240	62	3637	5030	1394	1394	28%	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	057 09:06	058 01:55	60.6	31.5	157.1	4.0	320.0	36.3	54.5	0.0	79.3	145.0	704.0	0.0	0.0	1592.4
SP_021EA_G34BWGRSS058_PRIME	058 01:55	058 03:55	7.2	2.0	0.0	0.7	0.0	4.3	6.5	0.0	9.4	0.5	0.0	0.0	0.0	30.7
DAILY TOTAL SCIENCE	057 09:06	058 03:55	67.8	33.5	157.1	4.7	320.0	40.7	61.0	0.0	88.8	145.5	704.0	0.0		
OBSERVATION_NOR	058 03:55	058 07:25	24.5	1.9	36.0	1.3	531.0	22.4	15.3	0.0	61.5	45.3	40.0	0.0	0.0	779.2
SP_021EA_G34BWGRSS558_PRIME	058 07:25	058 12:55	138.6	3.0	0.0	12.0	0.0	36.6	29.7	0.0	475.9	0.0	0.0	0.0	0.0	695.9
DAILY TOTAL SCIENCE	058 03:55	058 12:55	163.1	4.9	36.0	13.3	531.0	59.1	45.0	0.0	537.4	45.3	40.0	0.0		
OBSERVATION_NOR	058 12:55	058 22:21	33.9	7.5	115.2	3.0	50.0	20.4	30.5	0.0	44.5	79.7	75.0	0.0	0.0	459.8
OBSERVATION_SI	058 12:55	058 22:21	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_021EA_G70METNON058_PRIME	058 22:21	059 08:51	37.8	5.9	86.4	1.9	0.0	22.7	34.0	0.0	49.5	0.0	0.0	0.0	0.0	238.2
DAILY TOTAL SCIENCE	058 12:55	059 08:51	71.7	13.4	205.6	4.9	50.0	43.0	64.6	0.0	94.0	79.7	75.0	0.0		

NOTE THERE IS A CAUTION IN THE .notes FILE THAT IS ACCEPTABLE.

An ENGR request for rerouting 3Mbits of data cannot be modeled by SMT at this time.

***CAUTION: Calculated zero data volume for event; ignoring
Event instance = ENGR_021SC_ROUTEREU001_CDS



Telemetry Report

TELEMETRY MODE REPORT

EPOCH RELATIVE	UTC	DURATION	TELEMETRY MODE	REQUEST
GMB_E021_Titan11-000T06:30:00	2006-057T09:06:00.000	16:49:19	S_N_ER_3	SP_021NA_G34OBSRSS058_NA
GMB_E021_Titan11-000T04:30:00	2006-058T01:55:19.000	02:00:00	RTE_N_SPB_35550	SP_021EA_G34BWGRSS058_PRIME
GMB_E021_Titan11-000T01:00:00	2006-058T03:55:19.000	03:30:00	S_N_ER_3	SP_021NA_G34OBSRSS558_NA
GMB_E021_Titan11+000T04:30:00	2006-058T07:25:19.000	05:30:00	RTE_N_SPB_14220	SP_021EA_G34BWGRSS558_PRIME
	2006-058T12:55:19.000	09:25:41	S_N_ER_3	SP_021NA_G70OBSNON058_NA
	2006-058T22:21:00.000	00:15:00	RTE_N_SPB_82950	SP_021EA_G70METNON058_PRIME
	2006-058T22:36:00.000	00:30:00	RTE_N_SPB_99540	SP_021EA_G70METNON058_PRIME
	2006-058T23:06:00.000	00:30:00	RTE_N_SPB_124425	SP_021EA_G70METNON058_PRIME
	2006-058T23:36:00.000	01:00:00	RTE_N_SPB_142200	SP_021EA_G70METNON058_PRIME
	2006-059T00:36:00.000	08:15:00	RTE_N_SPB_165900	SP_021EA_G70METNON058_PRIME

OpMode Report

ENGR_021SC_DFPW056_PPS	OpMode	2006-056T01:05:00	
ENGR_021SC_RSSKRWAF057_PPS	OpMode	2006-057T23:20:19	GMB_E021_Titan11-000T09:05:00
ENGR_021SC_DFPW058_PPS	OpMode	2006-059T08:51:00	



DSN reports

ap_downlink report text - **fine** [the no downlink over Canberra is incorrect, but that's known bug in the check]

ap_downlink CASSINI DOWNLINK/DSN COVERAGE SUMMARY for tmp3.apf generated on 2005-Sep-20 21:20:24
(+ = pass overlaps with previous pass; * = conflicts with DSN weekly 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
G34BWGRSS058	058T01:55-03:55	058T03:04-05:04	02:00	35	25	057T22:56-11:05	058T00:05-12:15	12:10	90/15	TKG & RS	N748
G34BWGRSS558	058T07:25-12:55	058T08:34-14:04	05:30	14	25	057T22:56-11:05	058T00:05-12:15	12:10	90/15	TKG & RS	N748
C34BWGRSS058	(no downlink)				34	058T06:45-13:20	058T07:50-14:30	06:40	90/15	TKG & RS	N750
G70METNON058	058T22:21-08:51	058T23:30-10:00	10:30	82,99,124,142,165	25	058T22:21-08:51	058T23:30-10:00	10:30	90/15	TP RSS	N748
				^-- and also -->	14*	058T22:21-08:51	058T23:30-10:00	10:30	60/15	TP	N003

ap_downlink report nav - **fine**

ap_CASSINI NAVIGATION SUMMARY for tmp3.apf generated on 2005-Sep-20 21:20:34
(+ = 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	DOP	RNG	
G34BWGRSS058	058T01:55-03:55	02:00	25	058T00:05-12:15	00:15-10:46	01:55-03:55	03:04-05:04	02:00	Y?	YES	
G34BWGRSS558	058T07:25-12:55	05:30	25	058T00:05-12:15	00:15-10:46	07:25-11:55	08:34-12:15	03:40	Y?	YES	
G70METNON058	058T22:21-08:51	10:30	25	058T23:30-10:00	23:40-09:55	00:49-08:51	01:58-10:00	08:02	Y?	YES	
			14*	058T23:30-10:00	23:40-09:55	00:49-08:51	01:58-10:00	08:02	YES	YES	

ap_downlink report check - **fine** [the Canberra but accounts for the G34BWGRSS558 note below also]

CASSINI constraint check for tmp3.apf generated on 2005-Sep-20 21:20:46

Warning: SP_021EA_G34BWGRSS558_PRIME does not have full DSN coverage
Warning: SP_021NA_G70METNON058_SP overlaps end of DSS-14 weekly maintenance by 1.5 hours; move later to resolve
Warning: 70m usage for sequence exceeds project commitment of <= 35%; is at 100%



SPASS

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
Sequence S018, length = 42 ...		2006-027T04:03:00	E020_SEQUENCE_018+000T00:00:00	042T20:32:00	2006-070T00:35:00			
TOST rev 21 Segment		2006-057T09:06:00		001T23:45:00	2006-059T08:51:00			
SP_021TI_WAYPTTURN057_PRIME		2006-057T09:06:00		000T00:30:00	2006-057T09:36:00	ISS_NAC to Titan	NEG_X to Sun	
NEW WAYPOINT		2006-057T09:36:00		001T23:15:00	2006-059T08:51:00	ISS_NAC to Titan	NEG_X to Sun	
SP_021NA_DEADTIME057_PRIME		2006-057T09:36:00		000T00:15:00	2006-057T09:51:00	ISS_NAC to Titan	NEG_X to Sun	
VIMS_021TI_GLOBMAP001_PRIME	C, I, U	2006-057T09:55:19	GMB_E021_Titan11-000T22:30:00	000T12:30:00	2006-057T22:25:19	ISS_NAC to Titan	NEG_X to Sun	
ISS_021TI_GLOBMAPNA001_PRIME	C, R, U, V	2006-057T22:25:19	GMB_E021_Titan11-000T10:00:00	000T03:00:00	2006-058T01:25:19	ISS_NAC to Titan	NEG_X to Sun	
SP_021EA_DLTURNS48_PRIME	R	2006-058T01:25:19	GMB_E021_Titan11-000T07:00:00	000T00:30:00	2006-058T01:55:19	XBAND to Earth	NEG_X to Sun	
Inbound RSS Titan Gravity		2006-058T01:55:19	GMB_E021_Titan11-000T06:30:00	000T02:00:00	2006-058T03:55:19			This is an inbound RSS Titan gravity pass. It is a PRIME observation during which a D/L is performed, hence it is marked as a SPASS Note.
SP_021EA_G34BWGRSS058_PRIME	R	2006-058T01:55:19	GMB_E021_Titan11-000T06:30:00	000T02:00:00	2006-058T03:55:19	XBAND to Earth	NEG_X to Sun	
SP_021TI_WAYPTTURN058_PRIME	V, R	2006-058T03:55:19	GMB_E021_Titan11-000T04:30:00	000T00:30:00	2006-058T04:25:19	ISS_NAC to Titan	NEG_X to Sun	
ISS_021TI_REGMAPNA001_PRIME	C, M, R, U,	2006-058T04:25:19	GMB_E021_Titan11-000T04:00:00	000T02:00:00	2006-058T06:25:19	ISS_NAC to Titan	NEG_X to Sun	
ISS_021TI_HIGHRESNA001_PRIME	C, M, R, U,	2006-058T06:25:19	GMB_E021_Titan11-000T02:00:00	000T00:30:00	2006-058T06:55:19	ISS_NAC to Titan	NEG_X to Sun	
SP_021EA_DLTURNS58_PRIME	M, R	2006-058T06:55:19	GMB_E021_Titan11-000T01:30:00	000T00:30:00	2006-058T07:25:19	XBAND to Earth	NEG_X to Sun	
Near C/A-Outbound RSS Titan...		2006-058T07:25:19	GMB_E021_Titan11-000T01:00:00	000T05:30:00	2006-058T12:55:19			This is an RSS Titan gravity pass near C/A. It is a PRIME observation during which a D/L is performed, hence it is marked as a SPASS Rider.
SP_021EA_G34BWGRSS558_PRIME	M, R	2006-058T07:25:19	GMB_E021_Titan11-000T01:00:00	000T05:30:00	2006-058T12:55:19	XBAND to Earth	NEG_X to Sun	
SP_021TI_WAYPTTURN458_PRIME	R	2006-058T12:55:19	GMB_E021_Titan11+000T04:30:00	000T00:30:00	2006-058T13:25:19	ISS_NAC to Titan	NEG_X to Sun	
UVIS_021TI_EUVFUV002_PRIME	C, I, V	2006-058T13:25:19	GMB_E021_Titan11+000T05:00:00	000T03:30:00	2006-058T16:55:19	UVIS FUV to Titan	NEG_X to Sun	
CIRS_021TI_FIRNADCMP002_PRIME	C, I, R, U, \	2006-058T16:55:19	GMB_E021_Titan11+000T08:30:00	000T04:30:00	2006-058T21:25:19	CIRS FP1 to Titan	PIC	
SP_021NA_DEADTIME058_PRIME	R	2006-058T21:35:19	GMB_E021_Titan11+000T13:10:00	000T00:15:41	2006-058T21:51:00	ISS_NAC to Titan	NEG_X to Sun	
SP_021EA_DLTURNS058_PRIME	R	2006-058T21:51:00		000T00:30:00	2006-058T22:21:00	XBAND to Earth	POS_X to NEP	
SP_021EA_G70METNON058_PRIME	C, R	2006-058T22:21:00		000T10:30:00	2006-059T08:51:00	XBAND to Earth	POS_X to NEP	



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. B. All initial downlink attitudes have been checked as waypoints.	C		
2. All turns to and from waypoints checked for violations and margins. <input type="checkbox"/> CAPS <input type="checkbox"/> CDA <input type="checkbox"/> CIRS <input type="checkbox"/> INMS <input type="checkbox"/> ISS <input type="checkbox"/> MIMI <input type="checkbox"/> MAG <input type="checkbox"/> NAV <input type="checkbox"/> RADAR <input type="checkbox"/> RPWS <input type="checkbox"/> RSS <input type="checkbox"/> UVIS <input type="checkbox"/> VIM S Each Prime Instrument agrees to accept a reduction in observation time during implementation if problems arise.	C		
3. Custom handoffs limited to: A. ±3 hours from targeted Icy Satellite flyby B. ±3 hours from targeted Titan Flyby 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.	C	K. Klaasen's margin for flyby T11 is 15 min. according to memo dated .	
6. Waypoints changes are ≤3 per day 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?	No	
2. During Pre-Integration: Was 30 min. used for 90° RWA turns and/or 10 min. for RCS turns?	Yes	

(DOUBLE-CLICK TO MAKE CHANGES)



Liens and Open Items

- ENGR request [3Mbits] cannot be modeled in SMT
- 161 Mbits to give away