

# **TOST: Handoff 006TI (T5)**

Segment Boundary 2005-106T06:25 – 2005-107T21:25  
Titan C/A=2005-106T19:14:25, Altitude=951 km  
Epoch = GMB\_E006\_Titan5

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## T5 Science Objectives

INMS - T5 is the first low altitude pass in tour on which INMS is the prime instrument. It is important for determining the minor neutral and ion densities. T5 is also a critical first step in sampling the global composition of the thermosphere and ionosphere, and the thermal structure as a function of local time and latitude under varying magnetospheric input conditions.

ISS - T5 provides a second good look (after T4) of the sub-Saturn hemisphere, including the first high-resolution (<250 m/pixel) coverage by ISS over the sub-Saturn region. This will be our first good look at the quasi-circular ~1000 km diameter feature, perhaps associated with an impact structure. We continue global monitoring and surface mapping coverage, WAC photometry of haze properties, and a WAC movie of clouds in ridealong with UVIS. Also, 18 hrs before C/A, there is an E/PO photo-op of Saturn rise/set over Dione.

UVIS - EUVFUV spectral image of Titan that is part of a series to map Titan's atomic emissions, acetylene distribution and haze properties.

## T5 Science Objectives

**CAPS** - The T5 (006TI) encounter is the first 950 km altitude flyby with prime or otherwise excellent pointing  $\pm 25$  minutes. This will allow CAPS to sound the polar (74 deg) ionosphere to altitudes well below the ionospheric peak, and to study the plasma environment around and the Titan/magnetosphere interaction. The high latitude of closest approach means Cassini will be flying through the Alfvén currents which couple Titan to the magnetosphere. Finally, CAPS will continue to take high resolution data, with prime pointing, outbound to 120 Titan radii, observing the distant signatures of the Titan interaction, such as pickup ions escaping Titan's atmosphere (Galileo saw evidence of such ions from Io out to dozens of body radii.)

Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments
106T06:25	106T06:55	SP Turn to waypoint	ISS_NAC to Titan, +X to NEP	ORS_RWAF	S_N_ER_3	
106T06:55	106T07:10	Deadtime for OD Uncertainty		ORS_RWAF	S_N_ER_3	
-11:55	-08:30	CIRS_006TI_FIRNADCMP002_PRIME	CIRS_FP1 to Titan, +X to NEP	ORS_RWAF	S_N_ER_3	
-08:30	-08:00	ISS_006TI_PHOTOMWAC001_PRIME	ISS_NAC to Titan, +X to 262.8/64.6	ORS_RWAF	S_N_ER_3	
-08:00	-03:00	UVIS_006TI_EUVFUV001_PRIME	UVIS_EUV to Titan, +X to North_Pole_Dir	ORS_RWAF	S_N_ER_3	
-03:00	-01:00	ISS_006TI_HIGHRESNA001_PRIME	ISS_NAC to Titan, +X to 262.8/64.6	ORS_RWAF	S_N_ER_3	
-01:00	-00:39	RWA to RCS Transition		ORS_RCS	S_N_ER_3	
-00:39	-00:27	SP turn to WP	NEG_Y to Saturn (6.42,0,0 deg. offset), +Z to Sun	ORS_RCS	S_N_ER_3	
-00:37		Begin Custom Period		ORS_RCS		
-00:37	-00:19	CAPS_006TI_TITANPTG001_PRIME	NEG_Y to Saturn (6.42,0,0 deg. offset), +Z to Sun	ORS_RCS	S_N_ER_3 / S_N_ER_2	Start at Waypoint Attitude Custom handoff to INMS S_N_ER_2 for RPWS ± 30 min.
-00:19	+00:12	INMS_006TI_T5RMPNT002_PRIME	NEG_X to Titan (60,0,0 deg. offset), +Z to Sun	ORS_RCS	S_N_E_2	Custom handoff from and to CAPS
+00:12	+16:27	CAPS_006TI_TITANPTG002_PRIME	NEG_Y to Saturn (6.42,0,0 deg. offset), +Z to Sun	ORS_RCS / ORS_RWAF	S_N_ER_2 / S_N_ER_3	End at waypoint attitude Custom handoff from INMS S_N_ER_2 for RPWS ± 30 min.
+00:37	+01:00	RCS to RWA Transition		ORS_RWAF		
	+16:27	End Custom Period		ORS_RWAF		
107T11:34	107T11:49	Deadtime for OD Uncertainty		ORS_RWAF	S_N_ER_3	
107T11:49	107T12:31	SP Turn to Earth for downlink		ORS_RWAF	S_N_ER_3	2-part turned required
107T12:31	107T21:25	Madrid 70-m downlink	XBAND to Earth, Rolling	DFPW Normal	S_N_ER_3	

Request	Start Time	Epoch	Duration	End Time	Rate	Mb	SPASS Type	Primary Pointing	Secondary Pointing	Pointing Agreement
CAPS_006SA_SURVEY005_RIDER	2005-107T11:55:49		000T09:29:11	2005-107T21:25:00	1000	34.151	Non-SPASS			
CAPS_006TI_T5CLOSE001_INMS	2005-106T18:22:25	GMB_E006_Titan5-000T00:52:00	000T01:52:00	2005-106T20:14:25	16000	107.52	SPASS Rider			
CAPS_006TI_T5EXTINB002_RIDER	2005-105T14:14:56		001T04:07:29	2005-106T18:22:25	4000	402.964	SPASS Rider			
CAPS_006TI_T5EXTOUT002_RIDER	2005-106T20:14:25	GMB_E006_Titan5+000T01:00:00	000T15:49:52	2005-107T12:04:17	4000	227.968	SPASS Rider			
CAPS_006TI_TITANPTG001_PRIME	2005-106T18:47:25	GMB_E006_Titan5-000T00:27:00	000T00:08:00	2005-106T18:55:25	0	0	Prime	NEG_Y to Saturn (6.42,0,0,0 deg. offset)	POS_Z to Sun	
CAPS_006TI_TITANPTG002_PRIME	2005-106T19:26:25	GMB_E006_Titan5+000T00:12:00	000T00:25:00	2005-106T19:51:25	0	0	Prime	NEG_Y to Saturn (6.42,0,0,0 deg. offset)	POS_Z to Sun	
CAPS_006TI_TITANPTG003_PRIME	2005-106T20:14:25	GMB_E006_Titan5+000T01:00:00	000T15:37:00	2005-107T11:51:25	0	0	Prime	NEG_Y to Saturn (6.42,0,0,0 deg. offset)	POS_Z to Sun	
CDA_006DR_1301DUST048_RIDER	2005-105T20:43:14		000T14:33:01	2005-106T11:16:15	524	27.448	Non-SPASS			
CDA_006DR_1901DUST021_RIDER	2005-106T13:18:16		007T09:26:15	2005-113T22:44:31	149.9	95.729	Non-SPASS			
CDA_006RI_1800RINGM006_RIDER	2005-106T11:17:16		000T02:00:00	2005-106T13:17:16	524	3.773	Non-SPASS			
CIRS_006IC_DSCAL1163_RIDER	2005-107T14:00:00		000T06:00:00	2005-107T20:00:00	0	0	SPASS Rider			
CIRS_006TI_FIRNADCMP002_PRIME	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T03:25:00	2005-106T10:44:25	4000	49.2	Prime	CIRS_FP1 to Titan	POS_X to NEP	
CIRS_006TI_FIRNADCMP002_SI	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T03:25:00	2005-106T10:44:25	0	2	SPASS Rider			
CIRS_006TI_FIRNADCMP003_ISS	2005-106T10:44:25	GMB_E006_Titan5-000T08:30:00	000T00:30:00	2005-106T11:14:25	4000	7.2	SPASS Rider			
CIRS_006TI_FIRNADMAP002_ISS	2005-106T16:14:25	GMB_E006_Titan5-000T03:00:00	000T02:00:00	2005-106T18:14:25	2000	14.4	SPASS Rider			
CIRS_006TI_FIRNADMAP003_UVIS	2005-106T11:14:25	GMB_E006_Titan5-000T08:00:00	000T05:00:00	2005-106T16:14:25	2400	43.2	SPASS Rider			
ENGR_006SC_DFPW054_PPS	2005-107T12:30:54		000T00:00:06	2005-107T12:31:00	0	0	Non-SPASS			
ENGR_006SC_ORSRCS052_PPS	2005-106T18:14:25	GMB_E006_Titan5-000T01:00:00	000T00:20:46	2005-106T18:35:11	0	0	Prime			
ENGR_006SC_ORSRWA051_PPS	2005-106T06:25:00		000T00:00:05	2005-106T06:25:05	0	0	Non-SPASS			
ENGR_006SC_ORSRWA053_PPS	2005-106T19:51:25	GMB_E006_Titan5+000T00:37:00	000T00:22:36	2005-106T20:14:01	0	0	Prime			
INMS_006SA_SURVEY005_RIDER	2005-107T07:05:57		000T14:19:03	2005-107T21:25:00	50	2.577	Non-SPASS			
INMS_006TI_T5INBD001_RIDER	2005-106T07:05:57		000T11:08:28	2005-106T18:14:25	100	3.96	Non-SPASS			
INMS_006TI_T5OUTBD001_RIDER	2005-106T20:14:25	GMB_E006_Titan5+000T01:00:00	000T11:00:00	2005-107T07:14:25	100	3.96	Non-SPASS			
INMS_006TI_T5RMPNT001_INMS	2005-106T18:14:25	GMB_E006_Titan5-000T01:00:00	000T00:41:00	2005-106T18:55:25	1498	3.685	Non-SPASS			
INMS_006TI_T5RMPNT002_INMS	2005-106T19:26:25	GMB_E006_Titan5+000T00:12:00	000T00:48:00	2005-106T20:14:25	1498	4.314	Non-SPASS			
INMS_006TI_T5RMPNT002_PRIME	2005-106T18:55:25	GMB_E006_Titan5-000T00:19:00	000T00:31:00	2005-106T19:26:25	1498	2.786	Prime	NEG_X to Titan_SC_RAM (60,0,0,0,0 deg. offset)	POS_Z to Sun	
INMS_006TI_TINTERACT002_PRIME	2005-105T18:25:00		000T12:40:57	2005-106T07:05:57	100	4.566	Non-SPASS			
ISS_006TI_EUVFUV001_UVIS	2005-106T11:14:25	GMB_E006_Titan5-000T08:00:00	000T05:00:00	2005-106T16:14:25	0	100	SPASS Rider			
ISS_006TI_FIRNADCMP002_CIRS	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T03:25:00	2005-106T10:44:25	0	300	SPASS Rider			
ISS_006TI_HIGHRESNA001_PRIME	2005-106T16:14:25	GMB_E006_Titan5-000T03:00:00	000T02:00:00	2005-106T18:14:25	0	400	Prime	ISS_NAC to Titan	POS_X to 262.8/64.6	
ISS_006TI_PHOTOMWAC001_PRIME	2005-106T10:44:25	GMB_E006_Titan5-000T08:30:00	000T00:30:00	2005-106T11:14:25	0	100	Prime	ISS_NAC to Titan	POS_X to 262.8/64.6	
MAG_006OT_SURVEY003_RIDER	2005-105T18:25:00		000T20:49:25	2005-106T15:14:25	600	44.674	Non-SPASS			
MAG_006OT_SURVEY004_RIDER	2005-106T23:14:25	GMB_E006_Titan5+000T04:00:00	001T01:45:35	2005-108T01:00:00	600	55.641	Non-SPASS			
MAG_006TI_MAGTITAN001_PRIME	2005-106T15:14:25	GMB_E006_Titan5-000T04:00:00	000T08:00:00	2005-106T23:14:25	1976	56.909	Non-SPASS			

MIMI_006CO_SURVEY004_RIDER	2005-107T11:55:50		000T09:29:10	2005-107T21:25:00	900	30.735	Non-SPASS			
MIMI_006TI_T5CLOSE001_INMS	2005-106T18:14:25	GMB_E006_Titan5-000T01:00:00	000T02:00:00	2005-106T20:14:25	1600	11.52	SPASS Rider			
MIMI_006TI_T5EXTINB001_CIRS	2005-105T18:25:00		000T23:49:25	2005-106T18:14:25	1600	136.411	SPASS Rider			
MIMI_006TI_T5EXTOUT001_CAPS	2005-106T20:14:25	GMB_E006_Titan5+000T01:00:00	000T15:49:52	2005-107T12:04:17	1600	91.187	SPASS Rider			
MP_006EA_OCCTITAN006_NA	2005-106T19:05:43		000T00:07:26	2005-106T19:13:09	0	0	Non-SPASS			
MP_006NA_SEQUENCE010_NA	2005-099T05:15:00	E006_SEQUENCE_010+000T00:00:00	034T21:35:00	2005-134T02:50:00	0	0	SPASS Note			
MP_006SA_REV006_NA	2005-096T23:23:44		016T23:46:22	2005-113T23:10:06	0	0	Non-SPASS			
MP_006SA_RPXDESCEN006_NA	2005-106T19:51:25		000T00:00:01	2005-106T19:51:26	0	0	Non-SPASS			
MP_006SU_OCCTITAN006_NA	2005-106T19:06:17		000T00:08:28	2005-106T19:14:45	0	0	Non-SPASS			
MP_006TI_FLYBYT005_NA	2005-106T19:05:57		000T00:00:01	2005-106T19:05:58	0	0	Non-SPASS			
MP_00CNA_DSS85DOWN001_NA	2005-031T00:00:00		154T00:00:00	2005-185T00:00:00	0	0	Non-SPASS			
RPWS_006SA_OUTSURVEY003_PRIME	2005-107T12:14:56		000T09:10:04	2005-107T21:25:00	1310	43.236	Non-SPASS			
RPWS_006TI_TICA001_PRIME	2005-106T18:45:25	GMB_E006_Titan5-000T00:29:00	000T00:58:00	2005-106T19:43:25	60921.9	212.008	Non-SPASS			
RPWS_006TI_TIINTRMED001_PRIME	2005-106T17:14:25	GMB_E006_Titan5-000T02:00:00	000T01:31:00	2005-106T18:45:25	3500	19.11	Non-SPASS			
RPWS_006TI_TIINTRMED002_PRIME	2005-106T19:43:25	GMB_E006_Titan5+000T00:29:00	000T01:31:00	2005-106T21:14:25	3500	19.11	Non-SPASS			
RPWS_006TI_TINTERACT002_INMS	2005-106T21:14:25	GMB_E006_Titan5+000T02:00:00	000T14:49:52	2005-107T12:04:17	3500	186.872	Non-SPASS			
RPWS_006TI_TINTERACT003_INMS	2005-105T18:25:00		000T22:49:25	2005-106T17:14:25	3500	285.8	Non-SPASS			
SP_006EA_DLTRN107_PRIME	2005-107T11:59:00		000T00:32:00	2005-107T12:31:00	0	0	Prime	XBAND to Earth	POS_X to NEP	
SP_006EA_M70ARRNON107_PRIME	2005-107T12:31:00		000T08:54:00	2005-107T21:25:00	0	0	Prime	XBAND to Earth	Rolling	
SP_006NA_BEGCUSTOM106_NA	2005-106T18:47:25	GMB_E006_Titan5-000T00:27:00	000T00:00:01	2005-106T18:47:26	0	0	SPASS Note			
SP_006NA_DEADTIME106_PRIME	2005-106T06:55:00		000T00:15:25	2005-106T07:10:25	0	0	Prime	ISS_NAC to Titan	POS_X to NEP	1-sigma ephemeris uncert. = +/- 6 min.
SP_006NA_DEADTIME107_PRIME	2005-107T11:52:25	GMB_E006_Titan5+000T16:38:00	000T00:06:35	2005-107T11:59:00	0	0	Prime	NEG_Y to Saturn (6.42,0,0,0,0 deg. offset)	POS_Z to Sun	1-sigma ephemeris uncert. = +/- 6 min.
SP_006NA_ENDCUSTOM107_NA	2005-107T11:51:25	GMB_E006_Titan5+000T16:37:00	000T00:00:01	2005-107T11:51:26	0	0	SPASS Note			
SP_006NA_M70ARR2ND107_SP	2005-107T12:31:00		000T08:54:00	2005-107T21:25:00	0	0	Non-SPASS			
SP_006NA_M70ARRNON107_SP	2005-107T12:31:00		000T08:54:00	2005-107T21:25:00	0	0	Non-SPASS			
SP_006NA_M70OBSNON107_NA	2005-106T06:25:00		001T06:06:00	2005-107T12:31:00	0	0	Non-SPASS			
SP_006NA_TOSTSEG105_NA	2005-106T06:25:00		001T15:00:00	2005-107T21:25:00	0	0	SPASS Note			
SP_006SA_WAYPTTURN106_PRIME	2005-106T18:35:25	GMB_E006_Titan5-000T00:39:00	000T00:12:00	2005-106T18:47:25	0	0	New Waypoint	NEG_Y to Saturn (6.42,0,0,0,0 deg. offset)	POS_Z to Sun	SP Turn to Waypoint for CAPS and INMS
SP_006TI_WAYPTTURN106_PRIME	2005-106T06:25:00		000T00:30:00	2005-106T06:55:00	0	0	New Waypoint	ISS_NAC to Titan	POS_X to NEP	SP Turn to Waypoint
UVIS_006SW_IPHSURVEY004_RIDER	2005-106T18:44:25	GMB_E006_Titan5-000T00:30:00	001T02:30:00	2005-107T21:14:25	76	7.249	Non-SPASS			
UVIS_006TI_EUVFUV001_PRIME	2005-106T11:14:25	GMB_E006_Titan5-000T08:00:00	000T05:00:00	2005-106T16:14:25	5032	90.576	Prime	UVIS_EUV to Titan	POS_X to North_Pole_Dir	
UVIS_006TI_FIRNADCMP002_CIRS	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T03:25:00	2005-106T10:44:25	1006.4	12.379	SPASS Rider			
UVIS_006TI_HIGHRESNA001_ISS	2005-106T16:14:25	GMB_E006_Titan5-000T03:00:00	000T02:00:00	2005-106T18:14:25	5032	36.23	SPASS Rider			
VIMS_006TI_COMP001_CIRS	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T08:25:00	2005-106T15:44:25	9901	300	SPASS Rider			
VIMS_006TI_HIRES001_ISS	2005-106T15:44:25	GMB_E006_Titan5-000T03:30:00	000T02:00:00	2005-106T17:44:25	45416.7	327	SPASS Rider			

# T5 SPASS

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
Sequence S010, length = 35 ...		2005-099T05:15:00	E006_SEQUENCE_010+000T00:00:00	034T21:35:00	2005-134T02:50:00			
TOST rev 6 Segment		2005-106T06:25:00		001T15:00:00	2005-107T21:25:00			
SP_006TI_WAYPTTURN106_PRIME	M	2005-106T06:25:00		000T00:30:00	2005-106T06:55:00	ISS_NAC to Titan	POS_X to NEP	SP Turn to Waypoint
<b>NEW WAYPOINT</b>		<b>2005-106T06:55:00</b>		<b>000T11:52:25</b>	<b>2005-106T18:47:25</b>	<b>ISS_NAC to Titan</b>	<b>POS_X to NEP</b>	
SP_006NA_DEADTIME106_PRIME	M	2005-106T06:55:00		000T00:15:25	2005-106T07:10:25	ISS_NAC to Titan	POS_X to NEP	1-sigma ephemeris uncert. = +/- 6 min.
CIRS_006TI_FIRNADCMP002_PRIME	C, I, M, U, V	2005-106T07:19:25	GMB_E006_Titan5-000T11:55:00	000T03:25:00	2005-106T10:44:25	CIRS_FP1 to Titan	POS_X to NEP	
ISS_006TI_PHOTOMWAC001_PRIME	C, M, V	2005-106T10:44:25	GMB_E006_Titan5-000T08:30:00	000T00:30:00	2005-106T11:14:25	ISS_NAC to Titan	POS_X to 282.8/84.6	
UVIS_006TI_EUVFUV001_PRIME	C, I, M, V	2005-106T11:14:25	GMB_E006_Titan5-000T08:00:00	000T05:00:00	2005-106T16:14:25	UVIS_EUV to Titan	POS_X to North_Pole_Dir	
ISS_006TI_HIGHRESNA001_PRIME	C, M, U, V	2005-106T16:14:25	GMB_E006_Titan5-000T03:00:00	000T02:00:00	2005-106T18:14:25	ISS_NAC to Titan	POS_X to 282.8/84.6	
ENGR_006SC_ORSRCS052_PPS	M	2005-106T18:14:25	GMB_E006_Titan5-000T01:00:00	000T00:20:46	2005-106T18:35:11			
SP_006SA_WAYPTTURN106_PRIME	M	2005-106T18:35:25	GMB_E006_Titan5-000T00:39:00	000T00:12:00	2005-106T18:47:25	NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)	POS_Z to Sun	SP Turn to Waypoint for CAPS and INMS
<b>NEW WAYPOINT</b>		<b>2005-106T18:47:25</b>		<b>001T02:37:35</b>	<b>2005-107T21:25:00</b>	<b>NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)</b>	<b>POS_Z to Sun</b>	
<b>Begin Custom</b>		<b>2005-106T18:47:25</b>	<b>GMB_E006_Titan5-000T00:27:00</b>	<b>000T00:00:01</b>	<b>2005-106T18:47:26</b>			
CAPS_006TI_TITANPTG001_PRIME	M	2005-106T18:47:25	GMB_E006_Titan5-000T00:27:00	000T00:08:00	2005-106T18:55:25	NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)	POS_Z to Sun	Pick up at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun; Hand off at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun.
INMS_006TI_T5RMPNT002_PRIME	M	2005-106T18:55:25	GMB_E006_Titan5-000T00:19:00	000T00:31:00	2005-106T19:26:25	NEG_X to Titan_SC_RAM (60.0,0.0,0.0 deg. offset)	POS_Z to Sun	Pick up at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun; Hand off at NEG_X to Titan_SC_RAM (60.0,0.0,0.0 deg. offset), POS_Z to Sun.
CAPS_006TI_TITANPTG002_PRIME	M	2005-106T19:26:25	GMB_E006_Titan5+000T00:12:00	000T00:25:00	2005-106T19:51:25	NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)	POS_Z to Sun	Pick up at NEG_X to Titan_SC_RAM (60.0,0.0,0.0 deg. offset), POS_Z to Sun; Hand off at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun.
ENGR_006SC_ORSRWA053_PPS	M	2005-106T19:51:25	GMB_E006_Titan5+000T00:37:00	000T00:22:36	2005-106T20:14:01			Pick up at unknown, unknown; Hand off at unknown, unknown.
CAPS_006TI_TITANPTG003_PRIME	M	2005-106T20:14:25	GMB_E006_Titan5+000T01:00:00	000T15:37:00	2005-107T11:51:25	NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)	POS_Z to Sun	Pick up at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun; Hand off at NEG_Y to Saturn (6.42,0.0,0.0 deg. offset), POS_Z to Sun.
<b>End Custom</b>		<b>2005-107T11:51:25</b>	<b>GMB_E006_Titan5+000T16:37:00</b>	<b>000T00:00:01</b>	<b>2005-107T11:51:26</b>			
SP_006NA_DEADTIME107_PRIME	M	2005-107T11:52:25	GMB_E006_Titan5+000T16:38:00	000T00:06:35	2005-107T11:59:00	NEG_Y to Saturn (6.42,0.0,0.0 deg. offset)	POS_Z to Sun	1-sigma ephemeris uncert. = +/- 6 min.
SP_006EA_DLTURN107_PRIME	M	2005-107T11:59:00		000T00:32:00	2005-107T12:31:00	XBAND to Earth	POS_X to NEP	
SP_006EA_M70ARRNON107_PRIME	C	2005-107T12:31:00		000T08:54:00	2005-107T21:25:00	XBAND to Earth	Rolling	

# Data Volume 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)	MARGN (Mb)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGN (Mb)	NET_MARGN (Mb)	(%)	CAROVR (Mb)
SP_006EA_M70ARRNON107_PRIME	107 12:31	107 21:25	0	3224	103	3326	3498	171	0	132	52	3511	4410	899	899	20%	0

OK!

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	106 06:25	107 12:31	509.8	25.5	114.0	20.0	900.0	104.6	172.7	0.0	574.7	144.0	627.0	0.0	0.0	3192.4
OBSERVATION_SI	106 06:25	107 12:31	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
SP_006EA_M70ARRNON107_PRIME	107 12:31	107 21:25	32.0	4.8	0.0	1.6	0.0	19.2	28.8	0.0	42.0	2.4	0.0	0.0	0.0	130.9
DAILY TOTAL SCIENCE	106 06:25	107 21:25	541.8	30.3	116.0	21.6	900.0	123.9	201.5	0.0	616.7	146.4	627.0	0.0		



## Telemetry Rates

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SCET	TELEMETRY MODE	REQUEST
2005-106T06:25:00.000	S_N_ER_3	SP_006NA_M70OBSNON107_NA
2005-106T18:35:57.000	S_N_ER_2	SP_006NA_M70OBSNON107_NA
2005-106T19:35:57.000	S_N_ER_3	SP_006NA_M70OBSNON107_NA
2005-107T12:31:00.000	RTE_N_SPB_142200	SP_006EA_M70ARRNON107_PRIME
2005-107T12:59:00.000	RTE_N_SPB_165900	SP_006EA_M70ARRNON107_PRIME
2005-107T20:29:00.000	RTE_N_SPB_142200	SP_006EA_M70ARRNON107_PRIME

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# DSN Report

CASSINI DOWNLINK/DSN COVERAGE SUMMARY for T5\_040916.apf generated on 2004-Sep-17 09:10:57

(+ = 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	RADIO_CONFIG R UD D UD MAR				
M70ARRNON107	107T12:31-21:25	107T13:47-22:41	08:54	142,165,142	54	107T12:31-21:25	107T13:45-22:45	09:00	60/15	-	-X	-	--	--0
				^-- and also -->	63	107T12:31-21:25	107T13:45-22:45	09:00	60/15	R	XX	-	--	--0

# NAV Report

CASSINI NAVIGATION SUMMARY for 006TI\_T5\_2004-09-28.apf generated on 2004-Sep-28 10:16:29

(+ = 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?
-(missing)--	-----	-----		gap in doppler data of 34 hours				-----	NO	NO
M70ARRNON107	107T12:31-21:25	08:54		63	107T13:45-22:45	13:55-22:14	15:11-21:25	16:27-22:41	06:14	YES YES

## T5 Open Issues

There are 9 SPLAT items that are still open. They are all left over from S10 SOP Implementation and all require edits to SASFs. Timing has changed slightly from implementation and request names were not always consistent between CIMS and SASFs.