TOST: Aftermarket Package
049TI (T35)

Segment Boundary 2007-242T17:34:00 – 2007-244T16:20:00

Titan C/A= 2007-243T06:32:34, Altitude = 3326 km

Epoch = GMB_E049_Titan35

April 11, 2007

Kim Steadman

Douglas Equils, Candy Hansen, Trina Ray, and Jo Pitesky

049TI (T35)

- Science to be accomplished during this flyby:
  - ISS will observe the landing site at high resolution and take images to provide regional-scale stereo coverage with images from earlier flybys (T28 and T31).
  - VIMS will attempt to understand the nature of Titan's North polar region and detect possible time-variable phenomena.

049TI (T35) Timeline
C/A= 243T06:32:34

Start Time	End Time	Prime Activity	Op Mode	TLM Mode	Comments
242T17:34	242T18:04	SP Turn to way point	DFPW Norm	S_N_ER_3	-Y to Titan, -X to SUN
242T18:04	242T18:19	OD Uncertainty Dead Time	DFPW Norm	S_N_ER_3	
-12:15	-10:00	CIRS FP1	DFPW Norm	S_N_ER_3	Template N (modified)
-10:00	-9:00	ISS Photometry	DFPW Norm	S_N_ER_3	Template N
-9:00	-5:00	CIRS (mid IR limb map / limb comp)	DFPW Norm	S_N_ER_3	Template R
-5:00	-2:00	CIRS (FP_1 slow scans)	DFPW Norm	S_N_ER_3	Template T
-2:00		Begin Custom Period			
-2:00	-1:00	CIRS	DFPW Norm	S_N_ER_3	Leave off at UVIS RA/DEC - Sigma Sag (RA=283.84., DEC=-26.295)
-1:00	-00:37	UVIS Occ	DFPW Norm	S_N_ER_3	Occ at -0:45
-00:37	-00:14	VIMS turn to other limb (for occ)	DFPW Norm	S_N_ER_3	
-00:14	0:00	VIMS Occ	DFPW Norm	S_N_ER_3	Alpha Sco (RA=247.375, DEC=-26.44)
0:00	+2:00	ISS	DFPW Norm	S_N_ER_3	ISS picks up at Alpha Sco; end at waypoint
+2:00		End Custom Period			
+2:00	+4:00	ISS - regional map	DFPW Norm	S_N_ER_3	Template J
+4:00	+5:00	CIRS	DFPW Norm	S_N_ER_3	Template J
+5:00	+9:00	ISS	DFPW Norm	S_N_ER_3	Template H
+9:00	+15:00	CIRS Stare	DFPW Norm	S_N_ER_3	Template C
+15:00	+21:00	CIRS scan	DFPW Norm	S_N_ER_3	Template A (modified)
244T03:35	244T03:50	OD Uncertainty Dead Time	DFPW Norm	S_N_ER_3	
244T03:50	244T04:20	SP Turn to D/L	DFPW Norm	S_N_ER_3	
244T04:20	244T16:20	D/L	DFPW Norm	SPB	12 Hour D/L (and still need to carry over)

Request	Start Time	Epoch	Duration	End Time	Rate	Mb	SPASS Type	Primary Pointing	Secondary	Pointing A
CAPS_049SA_SURVEY002_RIDER	2007-242T01:48:55	GMB_E049_Rhea+000T00:3	001T02:43:39	2007-243T04:32:34	700	67.4	Non-SPASS			
CAPS_049TI_T35INBND001_PRIME	2007-243T04:32:34		000T01:00:00	2007-243T05:32:34	4000	14.4	SPASS Rider			
CAPS_049TI_T35CLOSE001_PRIME	2007-243T05:32:34	GMB_E049_Titan35-000T01:	000T02:00:00	2007-243T07:32:34	16000	115.2	SPASS Rider			
CAPS_049TI_T35OUTBND001_PRIME	2007-243T07:32:34	GMB_E049_Titan35+000T01	000T01:00:00	2007-243T08:32:34	4000	14.4	SPASS Rider			
CAPS_049SA_SURVEY003_RIDER	2007-243T08:32:34	GMB_E049_Titan35+000T02	010T04:43:06	2007-253T13:15:40	1000	881.0	Non-SPASS			
CDA_049OT_ECCSCAN002_PRIME	2007-241T23:34:00		001T02:00:00	2007-243T01:34:00	4192	392.4	Non-SPASS			
CDA_049DR_1700DUST386_RIDER	2007-243T01:34:00		014T09:50:46	2007-257T11:24:46	149.9	186.6	Non-SPASS			
CDA_049OT_DRATE003_RIDER	2007-243T01:34:00		022T19:17:00	2007-265T20:51:00	100	197.0	Non-SPASS			
CIRS_049TI_MIRLMBINT001_PRIME	2007-242T21:32:34	GMB_E049_Titan35-000T09:	000T04:00:00	2007-243T01:32:34	2000	28.8	Prime	CIRS_FP3 to Titan	PIC	
CIRS_049TI_MIRLMBINT001_SI	2007-242T21:32:34	GMB_E049_Titan35-000T09:	000T04:00:00	2007-243T01:32:34	0	4.0	SPASS Rider			
CIRS_049TI_FIRNADMAP001_PRIME	2007-243T01:32:34	GMB_E049_Titan35-000T05:	000T03:00:00	2007-243T04:32:34	2000	21.6	Prime	CIRS_FP1 to Titan	PIC	
CIRS_049TI_FIRNADMAP001_SI	2007-243T01:32:34	GMB_E049_Titan35-000T05:	000T03:00:00	2007-243T04:32:34	0	3.0	SPASS Rider			
CIRS_049TI_FIRLMBINT001_PRIME	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:00:00	2007-243T05:32:34	4000	14.4	Prime	CIRS_FP1 to Titan	PIC	
CIRS_049TI_FIRLMBINT001_SI	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:00:00	2007-243T05:32:34	0	2.0	SPASS Rider			
CIRS_049TI_VHIRESNAC001_VIMS	2007-243T06:32:34	GMB_E049_Titan35+000T00	000T02:00:00	2007-243T08:32:34	2000	14.4	SPASS Rider			
CIRS_049TI_REGMAP001_ISS	2007-243T08:32:34	GMB_E049_Titan35+000T02	000T02:00:00	2007-243T10:32:34	4000	28.8	SPASS Rider			
CIRS_049TI_FIRNADMAP004_PRIME	2007-243T10:32:34	GMB_E049_Titan35+000T04	000T01:00:00	2007-243T11:32:34	2000	7.2	Prime	CIRS_FP1 to Titan	PIC	
CIRS_049TI_FIRNADMAP004_SI	2007-243T10:32:34	GMB_E049_Titan35+000T04	000T01:00:00	2007-243T11:32:34	0	1.0	SPASS Rider			
CIRS_049TI_GLOBMAP001_ISS	2007-243T11:32:34	GMB_E049_Titan35+000T05	000T03:36:00	2007-243T15:08:34	2000	25.9	SPASS Rider			
CIRS_049TI_PHOTOMWAC002_ISS	2007-243T15:08:34	GMB_E049_Titan35+000T08	000T00:24:00	2007-243T15:32:34	2000	2.9	SPASS Rider			
CIRS_049TI_FIRNADCMP002_PRIME	2007-243T15:32:34	GMB_E049_Titan35+000T09	000T06:00:00	2007-243T21:32:34	4000	86.4	Prime	CIRS_FP1 to Titan	PIC	
CIRS_049TI_FIRNADCMP002_SI	2007-243T15:32:34	GMB_E049_Titan35+000T09	000T06:00:00	2007-243T21:32:34	0	6.0	SPASS Rider			
CIRS_049TI_MIDIRTMAP002_PRIME	2007-243T21:32:34	GMB_E049_Titan35+000T15	000T06:00:00	2007-244T03:32:34	2000	43.2	Prime	CIRS_FPB to Titan	POS_X to North_Pole	
CIRS_049TI_MIDIRTMAP002_SI	2007-243T21:32:34	GMB_E049_Titan35+000T15	000T06:00:00	2007-244T03:32:34	0	6.0	SPASS Rider			
CIRS_049IC_DSCAL1600_RIDER	2007-244T05:20:00		000T06:00:00	2007-244T11:20:00	4000	86.4	SPASS Rider			
ENGR_049SC_ROUTEREU001_CDS	2007-243T05:02:34	GMB_E049_Titan35-000T01:	000T03:00:00	2007-243T08:02:34	227	2.5	Non-SPASS			
INMS_049SA_SURVEY003_RIDER	2007-241T23:36:48		000T18:55:46	2007-242T18:32:34	50	3.4	Non-SPASS			
INMS_049TI_T35INBD001_VIMS	2007-242T18:32:34	GMB_E049_Titan35-000T12:	000T11:00:00	2007-243T05:32:34	100	4.0	Non-SPASS			
INMS_049TI_T35CLOSE001_ISS	2007-243T05:32:34	GMB_E049_Titan35-000T01:	000T02:00:00	2007-243T07:32:34	1498	10.8	Non-SPASS			
INMS_049TI_T35OUTBD001_CIRS	2007-243T07:32:34	GMB_E049_Titan35+000T01	000T11:00:00	2007-243T18:32:34	100	4.0	Non-SPASS			
INMS_049SA_SURVEY004_RIDER	2007-243T18:32:34	GMB_E049_Titan35+000T12	000T11:57:07	2007-244T06:29:41	50	2.2	Non-SPASS			
INMS_049SA_SURVEY005_RIDER	2007-244T06:32:00		001T08:03:00	2007-245T14:35:00	50	5.8	Non-SPASS			

Request	Start Time	Epoch	Duration	End Time	Rate	Mb	SPASS Type	Primary Pointing	Secondary	Pointing Ag
ISS_049TI_MIRLMBINT001_CIRS	2007-242T21:32:34	GMB_E049_Titan35-000T09:	000T04:00:00	2007-243T01:32:34	0	3.0	SPASS Rider			
ISS_049TI_FIRNADMAP001_CIRS	2007-243T01:32:34	GMB_E049_Titan35-000T05:	000T03:00:00	2007-243T04:32:34	0	3.0	SPASS Rider			
ISS_049TI_FIRLMBINT001_CIRS	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:00:00	2007-243T05:32:34	0	3.0	SPASS Rider			
ISS_049TI_VHIRESNAC001_VIMS	2007-243T06:32:34	GMB_E049_Titan35+000T00	000T00:30:00	2007-243T07:02:34	0	101.0	SPASS Rider			
ISS_049TI_HIRESNAC001_VIMS	2007-243T07:02:34	GMB_E049_Titan35+000T00	000T01:30:00	2007-243T08:32:34	0	306.0	SPASS Rider			
ISS_049TI_REGMAP001_PRIME	2007-243T08:32:34	GMB_E049_Titan35+000T02	000T02:00:00	2007-243T10:32:34	0	400.0	Prime	ISS_NAC to Titan	NEG_X to Sun	
ISS_049TI_FIRNADMAP004_CIRS	2007-243T10:32:34	GMB_E049_Titan35+000T04	000T01:00:00	2007-243T11:32:34	0	3.0	SPASS Rider			
ISS_049TI_GLOBMAP001_PRIME	2007-243T11:32:34	GMB_E049_Titan35+000T05	000T03:36:00	2007-243T15:08:34	0	162.0	Prime	ISS_NAC to Titan	NEG_X to Sun	
ISS_049TI_PHOTOMWAC002_PRIME	2007-243T15:08:34	GMB_E049_Titan35+000T08	000T00:24:00	2007-243T15:32:34	0	30.0	Prime	ISS_NAC to Titan	NEG_X to Sun	
ISS_049TI_FIRNADCMP002_CIRS	2007-243T15:32:34	GMB_E049_Titan35+000T09	000T06:00:00	2007-243T21:32:34	0	3.0	SPASS Rider			
ISS_049TI_MIDIRTMAP002_CIRS	2007-243T21:32:34	GMB_E049_Titan35+000T15	000T06:00:00	2007-244T03:32:34	0	3.0	SPASS Rider			
MAG_049OT_SURVEY002_PRIME	2007-242T13:25:00		000T13:07:34	2007-243T02:32:34	600	28.4	Non-SPASS			
MAG_049TI_MAGTITAN001_PRIME	2007-243T02:32:34	GMB_E049_Titan35-000T04:	000T08:00:00	2007-243T10:32:34	1976	56.9	Non-SPASS			
MAG_049OT_SURVEY004_PRIME	2007-243T10:32:34	GMB_E049_Titan35+000T04	001T05:48:26	2007-244T16:21:00	600	64.4	Non-SPASS			
MIMI_049CO_SURVEY005_RIDER	2007-242T13:25:01		000T15:07:33	2007-243T04:32:34	900	49.0	Non-SPASS			
MIMI_049TI_T35INBND001_CAPS	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:00:00	2007-243T05:32:34	2000	7.2	SPASS Rider			
MIMI_049TI_T35CLOSE001_CAPS	2007-243T05:32:34	GMB_E049_Titan35-000T01:	000T02:00:00	2007-243T07:32:34	2000	14.4	SPASS Rider			
MIMI_049TI_T35OUTBND001_CAPS	2007-243T07:32:34	GMB_E049_Titan35+000T01	000T01:00:00	2007-243T08:32:34	2000	7.2	SPASS Rider			
MIMI_049SA_MAGDYN004_RIDER	2007-243T08:32:34	GMB_E049_Titan35+000T02	000T21:57:35	2007-244T06:30:09	1200	94.9	SPASS Rider			
MIMI_049CO_SURVEY006_RIDER	2007-244T06:32:01		009T05:07:16	2007-253T11:39:17	900	716.4	Non-SPASS			
MP_046NA_DSS63DOWN002_NA	2007-163T00:00:00		096T23:59:59	2007-259T23:59:59	0	0.0	Non-SPASS			
MP_046NA_DSS63DOWN003_NA	2007-163T00:00:00		097T00:00:00	2007-260T00:00:00	0	0.0	Non-SPASS			
MP_049SA_REV049_NA	2007-221T16:47:36		000T00:00:01	2007-221T16:47:37	0	0.0	Non-SPASS			
MP_049NA_SEQUENCE033_NA	2007-223T23:20:00	E049_SEQUENCE_033+000	041T21:31:00	2007-265T20:51:00	0	0.0	SPASS Note			
MP_049NA_DSS45DOWN003_NA	2007-239T00:00:00		035T23:59:59	2007-274T23:59:59	0	0.0	Non-SPASS			
MP_049TI_FLYBYT035_NA	2007-243T06:32:34		000T00:00:01	2007-243T06:32:35	0	0.0	Non-SPASS			
RPWS_049SA_OUTSURVEY004_PRIM	2007-242T17:15:00		001T23:05:00	2007-244T16:20:00	1310	222.0	Non-SPASS			
RPWS_049TI_TIINTRMED001_PRIME	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:30:00	2007-243T06:02:34	12499.4	67.5	Non-SPASS			
RPWS_049TI_TICA004_PRIME	2007-243T06:02:34	GMB_E049_Titan35-000T00:	000T01:00:00	2007-243T07:02:34	61000.7	219.6	Non-SPASS			
RPWS_049TI_TIINTRMED002_PRIME	2007-243T07:02:34	GMB_E049_Titan35+000T00	000T01:30:00	2007-243T08:32:34	12499.4	67.5	Non-SPASS			
RSS_049EA_SCE4024_RSS	2007-244T02:15:00		000T14:05:00	2007-244T16:20:00	0	0.0	SPASS Rider			

Request	Start Time	Epoch	Duration	End Time	Rate	Mb	SPASS Type	Primary Pointing	Secondary	Pointing Agreement
SP_049NA_G70METOPN242_SP	2007-242T12:14:00		000T08:35:00	2007-242T20:49:00	0	0.0	Non-SPASS			
SP_049EA_G70METOPN242_PRIME	2007-242T12:34:00		000T08:15:00	2007-242T20:49:00	0	0.0	Prime	XBAND to Earth	Rolling	
SP_049NA_G34BWGRSS242_SP	2007-242T13:45:00		000T03:49:00	2007-242T17:34:00	0	0.0	Non-SPASS			
SP_049NA_TOSTSEG242_NA	2007-242T17:34:00		001T22:46:00	2007-244T16:20:00	0	0.0	SPASS Note			
SP_049NA_M34OBSNON243_NA	2007-242T20:49:00		001T07:31:00	2007-244T04:20:00	0	0.0	Non-SPASS			
SP_049TI_WAYPTTURN242_PRIME	2007-242T20:49:00		000T00:30:00	2007-242T21:19:00	0	0.0	New Waypoin	NEG_Y to Titan	NEG_X to	SP Turn to Waypoint
SP_049TI_DEADTIME242_PRIME	2007-242T21:19:00		000T00:13:34	2007-242T21:32:34	0	0.0	Prime	NEG_Y to Titan	NEG_X to Sun	
SP_049NA_BEGCUSTOM243_NA	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T00:00:01	2007-243T04:32:35	0	0.0	SPASS Note			
SP_049NA_ENDCUSTOM243_NA	2007-243T08:32:34	GMB_E049_Titan35+000T02	000T00:00:01	2007-243T08:32:35	0	0.0	SPASS Note			
SP_049TI_DEADTIME244_PRIME	2007-244T03:32:34	GMB_E049_Titan35+000T21	000T00:17:26	2007-244T03:50:00	0	0.0	Prime	NEG_Y to Titan	NEG_X to Sun	
SP_049EA_DLTURN244_PRIME	2007-244T03:50:00		000T00:30:00	2007-244T04:20:00	0	0.0	Prime	XBAND to Earth	POS_X to	SP Turn to Earth
SP_049EA_M34BWGRSS244_PRIME	2007-244T04:20:00		000T07:30:00	2007-244T11:50:00	0	0.0	Prime	XBAND to Earth	POS_X to NEP	
SP_049NA_M34BWGRSS244_SP	2007-244T04:20:00		000T12:00:00	2007-244T16:20:00	0	0.0	Non-SPASS			
SP_049EA_G70METNON244_PRIME	2007-244T11:50:00		000T04:30:00	2007-244T16:20:00	0	0.0	Prime	XBAND to Earth	POS_X to NEP	
SP_049NA_G70METNON244_SP	2007-244T11:50:00		000T04:30:00	2007-244T16:20:00	0	0.0	Non-SPASS			
UVIS_049ST_SIGSGR002_PRIME	2007-243T05:32:34	GMB_E049_Titan35-000T01:	000T00:23:00	2007-243T05:55:34	32096	44.3	Prime	UVIS_FUV to 283.8	NEG_X to	Other teams will do th
UVIS_049SW_IPHSURVEY025_RIDER	2007-244T02:20:00		000T14:00:00	2007-244T16:20:00	76	3.8	Non-SPASS			
VIMS_049TI_MIDIRLIMB001_CIRS	2007-242T21:32:34	GMB_E049_Titan35-000T09:	000T04:00:00	2007-243T01:32:34	3055.6	44.0	SPASS Rider			
VIMS_049TI_CIRSFP1002_CIRS	2007-243T01:32:34	GMB_E049_Titan35-000T05:	000T03:00:00	2007-243T04:32:34	5000	54.0	SPASS Rider			
VIMS_049TI_HIGHRES001_CIRS	2007-243T04:32:34	GMB_E049_Titan35-000T02:	000T01:00:00	2007-243T05:32:34	10000	36.0	SPASS Rider			
VIMS_049TI_SIGMASAG001_UVIS	2007-243T05:32:34	GMB_E049_Titan35-000T01:	000T00:23:00	2007-243T05:55:34	26087	36.0	SPASS Rider			
VIMS_049TI_STAROCC001_PRIME	2007-243T05:55:34	GMB_E049_Titan35-000T00:	000T00:37:00	2007-243T06:32:34	11261.3	25.0	Prime	VIMS_IR to 247.352	NEG_X to	Pick up at UVIS_FUV
VIMS_049TI_HIRES001_ISS	2007-243T06:32:34	GMB_E049_Titan35-000T00:	000T02:00:00	2007-243T08:32:34	11111.1	80.0	SPASS Rider			
VIMS_049TI_VHIRESNAC001_PRIME	2007-243T06:32:34	GMB_E049_Titan35+000T00	000T00:30:00	2007-243T07:02:34	51666.7	93.0	Prime	VIMS_IR to Titan	NEG_X to Sun	
VIMS_049TI_HIRESNAC001_PRIME	2007-243T07:02:34	GMB_E049_Titan35+000T00	000T01:30:00	2007-243T08:32:34	19074.1	103.0	Prime	VIMS_IR to Titan	NEG_X to Sun	
VIMS_049TI_REGMAP001_ISS	2007-243T08:32:34	GMB_E049_Titan35+000T02	000T02:00:00	2007-243T10:32:34	5555.6	40.0	SPASS Rider			
VIMS_049TI_MEDRES001_CIRS	2007-243T10:32:34	GMB_E049_Titan35+000T04	000T01:00:00	2007-243T11:32:34	8333.3	30.0	SPASS Rider			
VIMS_049TI_GLOBMAP001_ISS	2007-243T11:32:34	GMB_E049_Titan35+000T05	000T04:00:00	2007-243T15:32:34	2083.3	30.0	SPASS Rider			
VIMS_049TI_CIRSSTARE001_CIRS	2007-243T15:32:34	GMB_E049_Titan35+000T09	000T05:00:00	2007-243T20:32:34	1277.8	23.0	SPASS Rider			

049TI T35 Attitude Strategy

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
Sequence S033, length = 42 ...		2007-223T23:20:00	E049_SEQUENCE_033+000T	041T21:31:00	2007-265T20:51:00			
SP_049EA_G70METOPN242_PRIME		2007-242T12:34:00		000T08:15:00	2007-242T20:49:00	XBAND to Earth	Rolling	
TOST rev 49 Segment		2007-242T17:34:00		001T22:46:00	2007-244T16:20:00			
SP_049TI_WAYPTTURN242_PRIME		2007-242T20:49:00		000T00:30:00	2007-242T21:19:00	NEG_Y to Titan	NEG_X to Sun	SP Turn to Waypoint
NEW WAYPOINT		**2007-242T21:19:00**		**001T19:01:00**	**2007-244T16:20:00**	**NEG_Y to Titan**	**NEG_X to Sun**	
SP_049TI_DEADTIME242_PRIME		**2007-242T21:19:00**		**000T00:13:34**	**2007-242T21:32:34**	**NEG_Y to Titan**	**NEG_X to Sun**	
CIRS_049TI_MIRLMBINT001_PRIME	C, I, V	2007-242T21:32:34	GMB_E049_Titan35-000T09:0	000T04:00:00	2007-243T01:32:34	CIRS_FP3 to Titan	PIC	
CIRS_049TI_FIRNADMAP001_PRIME	C, I, V	2007-243T01:32:34	GMB_E049_Titan35-000T05:0	000T03:00:00	2007-243T04:32:34	CIRS_FP1 to Titan	PIC	
Begin Custom Period		**2007-243T04:32:34**	**GMB_E049_Titan35-000T02:**	**000T00:00:01**	**2007-243T04:32:35**			
CIRS_049TI_FIRLMBINT001_PRIME	C, I, M, V	2007-243T04:32:34	GMB_E049_Titan35-000T02:0	000T01:00:00	2007-243T05:32:34	CIRS_FP1 to Titan	PIC	Pick up at NEG_Y to Titan, NEG_X to Sun; Hand off at UVIS_FUV to 283.816/-26.296, NEG_X to Sun.
UVIS_049ST_SIGSGR002_PRIME	M, V	2007-243T05:32:34	GMB_E049_Titan35-000T01:0	000T00:23:00	2007-243T05:55:34	UVIS_FUV to 283.816/-26.296	NEG_X to Sun	Pick up at UVIS_FUV to 283.816/-26.296, NEG_X to Sun; Hand off at UVIS_FUV to 283.816/-26.296, NEG_X to Sun. Other teams will do the turns. Secondary axis determined by other team
VIMS_049TI_STAROCC001_PRIME	M	2007-243T05:55:34	GMB_E049_Titan35-000T00:3	000T00:37:00	2007-243T06:32:34	VIMS_IR to 247.352/-26.432	NEG_X to Sun	Pick up at UVIS_FUV to 283.816/-26.296, NEG_X to Sun; Hand off at VIMS_IR to 247.375/-26.44, NEG_X to Sun. Pick up at UVIS_FUV to 283.816/-26.296, NEG_X to Sun; Hand off at VIMS_IR to sta
VIMS_049TI_VHIRESNAC001_PRIME	C, I, M, V	2007-243T06:32:34	GMB_E049_Titan35+000T00:(	000T00:30:00	2007-243T07:02:34	VIMS_IR to Titan	NEG_X to Sun	Pick up at VIMS_IR to 247.375/-26.44, NEG_X to Sun; Hand off at VIMS_IR to Titan, NEG_X to Sun.
VIMS_049TI_HIRESNAC001_PRIME	C, I, M, V	2007-243T07:02:34	GMB_E049_Titan35+000T00::	000T01:30:00	2007-243T08:32:34	VIMS_IR to Titan	NEG_X to Sun	Pick up at VIMS_IR to Titan, NEG_X to Sun; Hand off at NEG_Y to Titan, NEG_X to Sun.
End Custom Period		**2007-243T08:32:34**	**GMB_E049_Titan35+000T02:**	**000T00:00:01**	**2007-243T08:32:35**			
ISS_049TI_REGMAP001_PRIME	C, M, V	2007-243T08:32:34	GMB_E049_Titan35+000T02:(	000T02:00:00	2007-243T10:32:34	ISS_NAC to Titan	NEG_X to Sun	
CIRS_049TI_FIRNADMAP004_PRIME	C, I, M, V	2007-243T10:32:34	GMB_E049_Titan35+000T04:(	000T01:00:00	2007-243T11:32:34	CIRS_FP1 to Titan	PIC	
ISS_049TI_GLOBMAP001_PRIME	C, M, V	2007-243T11:32:34	GMB_E049_Titan35+000T05:(	000T03:36:00	2007-243T15:08:34	ISS_NAC to Titan	NEG_X to Sun	
ISS_049TI_PHOTOMWAC002_PRIME	C, M, V	2007-243T15:08:34	GMB_E049_Titan35+000T08::	000T00:24:00	2007-243T15:32:34	ISS_NAC to Titan	NEG_X to Sun	
CIRS_049TI_FIRNADCMP002_PRIME	C, I, M, V	2007-243T15:32:34	GMB_E049_Titan35+000T09:(	000T06:00:00	2007-243T21:32:34	CIRS_FP1 to Titan	PIC	
CIRS_049TI_MIDIRTMAP002_PRIME	C, I, M, R	2007-243T21:32:34	GMB_E049_Titan35+000T15:(	000T06:00:00	2007-244T03:32:34	CIRS_FPB to Titan	POS_X to North_Pole_Dir	
SP_049TI_DEADTIME244_PRIME	**M, R**	**2007-244T03:32:34**	**GMB_E049_Titan35+000T21:**	**000T00:17:26**	**2007-244T03:50:00**	**NEG_Y to Titan**	**NEG_X to Sun**	
SP_049EA_DLTURN244_PRIME	M, R	2007-244T03:50:00		000T00:30:00	2007-244T04:20:00	XBAND to Earth	POS_X to NEP	SP Turn to Earth
SP_049EA_M34BWGRSS244_PRIME	C, M, R	2007-244T04:20:00		000T07:30:00	2007-244T11:50:00	XBAND to Earth	POS_X to NEP	
SP_049EA_G70METNON244_PRIME	R	2007-244T11:50:00		000T04:30:00	2007-244T16:20:00	XBAND to Earth	POS_X to NEP	

049TI (T35) Telemetry Modes

TELEMETRY MODE REPORT

EPOCH RELATIVE	UTC	DURATION	TELEMETRY MODE	REQUEST
	2007-242T12:34:00.000	00:31:00	RTE_N_SPB_82950	SP_049EA_G70METOPN242_PRIME
	2007-242T13:05:00.000	00:15:00	RTE_N_SPB_99540	SP_049EA_G70METOPN242_PRIME
	2007-242T13:20:00.000	01:00:00	RTE_N_SPB_110600	SP_049EA_G70METOPN242_PRIME
	2007-242T14:20:00.000	06:29:00	RTE_N_SPB_124425	SP_049EA_G70METOPN242_PRIME
	2007-242T20:49:00.000	001T07:31:00	S_N_ER_3	SP_049NA_M34OBSNON243_NA
	2007-244T04:20:00.000	01:15:00	RTE_N_SPB_14220	SP_049EA_M34BWGRSS244_PRIME
	2007-244T05:35:00.000	03:30:00	RTE_N_SPB_22120	SP_049EA_M34BWGRSS244_PRIME
	2007-244T09:05:00.000	02:30:00	RTE_N_SPB_27650	SP_049EA_M34BWGRSS244_PRIME
	2007-244T11:35:00.000	00:15:00	RTE_N_SPB_22120	SP_049EA_M34BWGRSS244_PRIME
	2007-244T11:50:00.000	00:30:00	RTE_N_SPB_47400	SP_049EA_G70METNON244_PRIME
	2007-244T12:20:00.000	00:30:00	RTE_N_SPB_82950	SP_049EA_G70METNON244_PRIME
	2007-244T12:50:00.000	00:30:00	RTE_N_SPB_99540	SP_049EA_G70METNON244_PRIME
	2007-244T13:20:00.000	01:00:00	RTE_N_SPB_110600	SP_049EA_G70METNON244_PRIME
	2007-244T14:20:00.000	02:00:00	RTE_N_SPB_124425	SP_049EA_G70METNON244_PRIME

DSN Requests

CASSINI DOWNLINK/DSN COVERAGE SUMMARY for 049TI_T35_2007-04-10_v2.xml on 2007-Apr-10 12:34:14

(+ = 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
G70METOPN242	242T12:34-20:49	242T13:59-22:14	08:15	82,99,110,124	14*	242T12:14-20:49	242T13:35-22:15	08:40	60/15	TP OPN N003
				^-- and also -->	25	242T13:45-17:34	242T15:10-19:00	03:50	90/15	TP RS SC N748
M34BWGRSS244	244T04:20-11:50	244T05:45-13:15	07:30	14,22,27,22	55	244T04:20-16:20	244T05:45-17:45	12:00	90/15	RSS Ka-b N750
+G70METNON244	244T11:50-16:20	244T13:15-17:45	04:30	47,82,99,110,124	14	244T11:50-16:20	244T13:15-17:45	04:30	60/15	TP N003

049TI (T35) 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)	(%)	CAROVR (Mb)
SP_049EA_G70METOPN242_PRIME	242 12:34	242 20:49	0	0	0	0	3569	3569	0	0	49	49	3009	2960	2961	60%	0
SP_049EA_M34BWGRSS244_PRIME	244 04:20	244 11:50	0	3080	110	3190	3569	379	0	204	44	3437	475	-2963	0	0%	2962
SP_049EA_G70METNON244_PRIME	244 11:50	244 16:20	2962	0	0	2962	3569	607	0	68	27	3057	1423	-1635	0	0%	1634

049TI (T35) Data Volume

SSR PARTITION SIZE SUMMARY - SELECTED SSR CONFIGURATION: DOUBLE

OBSERVATION PERIOD	SSR A/B P4 Size (Frames)	SSR A/B P5 Size (Frames)	SSR A/B P6 Size (Frames)
SP_049NA_M34OBSNON243_NA	202975	209	25596

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)
SP_049EA_G70METOPN242_PRIME	242 12:34	242 20:49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OBSERVATION_NOR	242 20:49	244 04:20	234.7	95.8	273.6	19.6	1017.0	107.7	139.3	0.0	503.2	44.8	594.0	0.0	2.5	3032.3
OBSERVATION_SI	242 20:49	244 04:20	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0
SP_049EA_M34BWGRSS244_PRIME	244 04:20	244 11:50	27.0	6.7	86.4	1.3	0.0	16.2	26.5	0.0	35.4	2.1	0.0	0.0	0.0	201.7
SP_049EA_G70METNON244_PRIME	244 11:50	244 16:20	16.2	4.0	0.0	0.8	0.0	9.7	14.6	0.0	21.2	1.2	0.0	0.0	0.0	67.8
DAILY TOTAL SCIENCE	242 20:49	244 16:20	277.9	106.6	382.0	21.8	1017.0	133.6	180.4	0.0	559.8	48.1	594.0	0.0		

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.	C		
3. Custom handoffs limited to:			
A. ±3 hours from targeted Icy Satellite flyby	N/A		
B. ±3 hours from targeted Titan Flyby	V	custom periods away from C/A are needed because the Sun is so close to Titan	
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 T335 is 15 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?	Yes	
2. During Pre-Integration: Was 30 min. used for 90º RWA turns and/or 10 min. for RCS turns?	Yes	

(DOUBLE-CLICK TO MAKE CHANGES)