

# **TOST: Detailed Integration**

## **046TI (T32 A & B)**

Segment: 2007-164T02:54:00 – 2007-165T20:47:00

Titan C/A: 2007-164T17:47:57, Altitude = 950 km

Epoch: GMB\_E046\_Titan32

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## High-Level Science Objectives

- ISS - High-resolution (104-240 m/pixel) imaging & global-scale mapping of the bright-dark boundary. Full-disk, color mosaic (centered at 1.7 N, 219 W) at 1.4-1.6 km/pixel . This is for both T32A & T32B.
- VIMS - T32A - Probe of the structure and composition of Titan's atmosphere.  
High resolution mapping of Titan's north pole. Global mapping and temporal change, Titan's northern hemisphere.  
T32B - High resolution mapping of Titan's north pole. Global mapping and temporal change, Titan's northern hemisphere.  
Hot spot and lightning search
- CIRS - T32 is a very interesting pass over the north pole, during which CIRS will continue to search for new species in the far-IR, in the far north. CIRS will also map temperatures in the upper troposphere across the north polar region, and in the stratosphere around 1/4 of the disk. (Both A & B).  
In the INMS option for T32, CIRS also gains the chance to map the distribution of aerosols on the limb in detail.

## High-Level Science Objectives (cont')

UVIS - Observe a solar ingress occultation and (in T32A only) an egress occultation.

The ingress samples mid-southern latitudes (near 50S). Egress samples high northern latitudes (near 65 degrees) at the edge of the winter pole where photochemical products are stable against photodissociation. Solar occultations are observed with the UVIS EUV channel which measures H, H<sub>2</sub>, N, N<sub>2</sub> and some hydrocarbons from the expobase (near 1200 Km to about 600 Km altitude).

INMS - T32 Option B is the highest latitude pass on which INMS will be prime. It is the only pass that occurs close to midnight local time, on the ram side of Titan, while Titan is on the Sun lit side of Saturn. This is a magnificent opportunity for in situ science of Titan's atmosphere in this unique geometry.

## There are Two Options for T32

- T32A – ORS (Solar Occ) Option
- T32B – INMS Option

There will be 2 CIMS deliveries, 2 Timelines, 2 TOLs, 2 sets of CCRs, & 2 Data Volume Tables.

### CIMS Convention

<TEAM>\_<REV>\_<TARGET>\_<NAME>\_<INSTANCE#>\_<PRIME/RIDER>

First number in **Instance #**: ‘8’ will put your request in 32A (ORS Option)

First number in **Instance #**: ‘9’ will put your request in 32B (INMS Option)

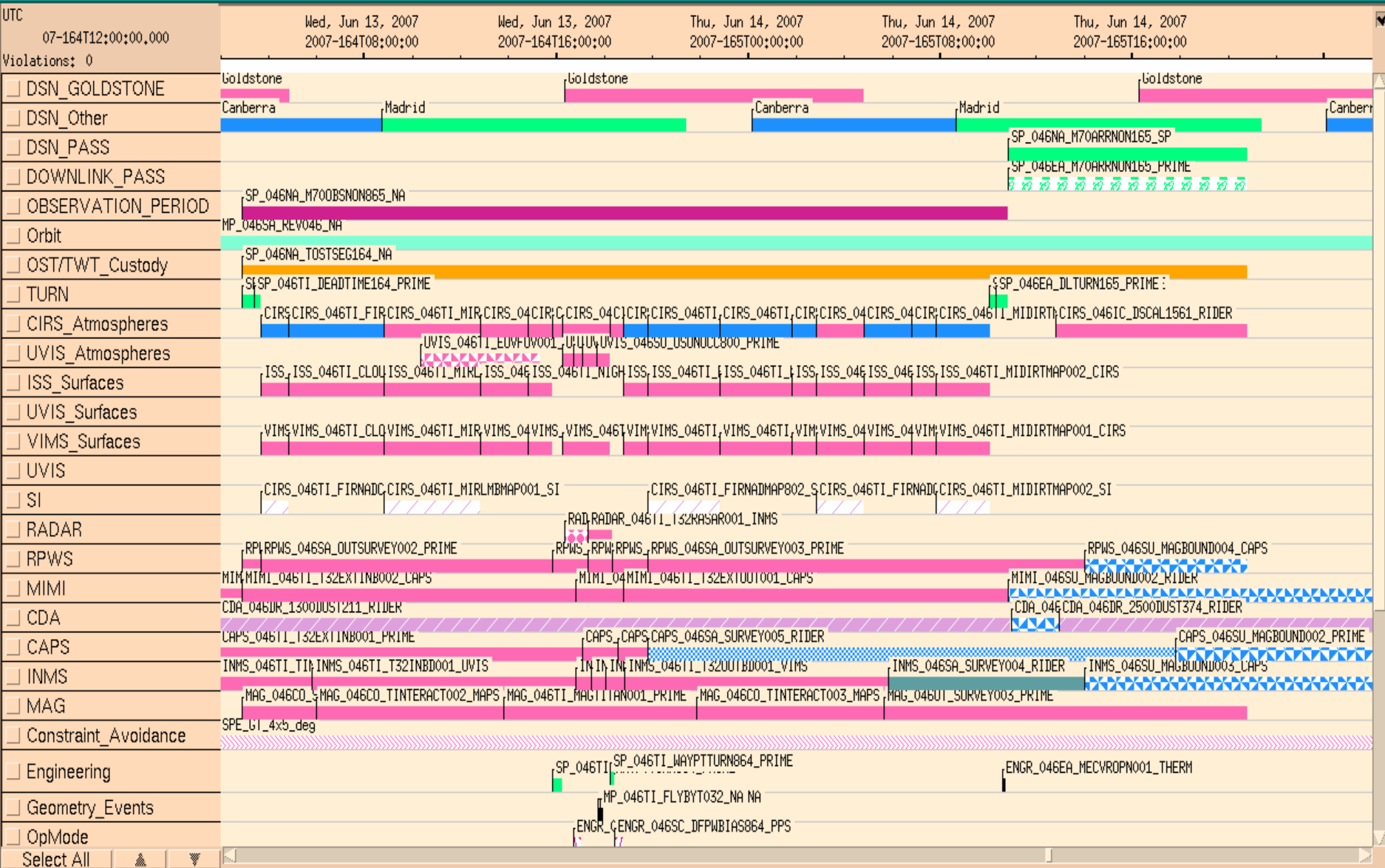
First number in **Instance #**: ‘0’ will put your request in BOTH

C/A= 2007-164T17:47:57 @ 950 km; Unilluminated Approach

Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments
164T02:54	164T03:24	SP Turn to waypoint		DFPW Norm	S_N_ER_3	-Y Titan, +XNTP
164T03:24	164T03:39	OD Dead Time		DFPW Norm	S_N_ER_3	
-14:07	-13:00	CIRS		DFPW Norm	S_N_ER_3	Template M
-13:00	-09:00	VIMS	Cloud Map	DFPW Norm	S_N_ER_3	Template O
-09:00	-05:00	CIRS	Mid-IR Limb	DFPW Norm	S_N_ER_3	Template R
-05:00	-03:00	UVIS	EUVFUV	DFPW Norm	S_N_ER_3	Template U
-03:00	-02:00	ISS		DFPW Norm	S_N_ER_3	Template U
-02:00	-01:34	SP Turn to waypoint	26 min turn	DFPW Norm	S_N_ER_3	Solar Occ to SUN, -X to RAM
-01:34	-01:07	UVIS	Solar Occ ingress	DFPW Norm	S_N_ER_3	
-01:07	-00:43	RWA to RCS Transition		ORS/RCS	S_N_ER_3	simultaneous w/ solar occ
-00:43	-00:07	UVIS	Darkside Scan	ORS/RCS		Deadband (0.5,0.5,0.5)
-00:07	+00:24	UVIS	Solar Occ egress	ORS/RCS	S_N_ER_2	SNER_2 during +/- 30 min
+00:24	+00:35	SP Turn to waypoint	11 min turn	ORS/RCS	S_N_ER_3	-Y Titan, -X SUN (SID violation during turn)
+00:35	+00:59	RCS to RWA Transition		DFPW Norm	S_N_ER_3	
+00:59	+02:00	VIMS	High Res	DFPW Norm	S_N_ER_3	
+02:00	+05:00	CIRS		DFPW Norm	S_N_ER_3	Template E
+05:00	+08:00	VIMS	Regional Map	DFPW Norm	S_N_ER_3	Template I
+08:00	+09:00	ISS	NAC & WAC	DFPW Norm	S_N_ER_3	Template I
+09:00	+11:00	CIRS	FP1	DFPW Norm	S_N_ER_3	Template D
+11:00	+13:00	ISS	Mosaic	DFPW Norm	S_N_ER_3	Template D
+13:00	+14:00	VIMS	Regional Map	DFPW Norm	S_N_ER_3	Template D
+14:00	+16:15	CIRS		DFPW Norm	S_N_ER_3	Template A (modified)
165T10:02	165T10:17	OD Dead Time		DFPW Norm	S_N_ER_3	
165T10:17	165T10:47	SP Turn for downlink		DFPW Norm	S_N_ER_3	
165T10:47	165T20:47	Madrid 70-m Array		SPB	RTE_N_SP	10 hrs
<b>D. Monr</b>			<b>5</b>			<b>12/23/03</b>

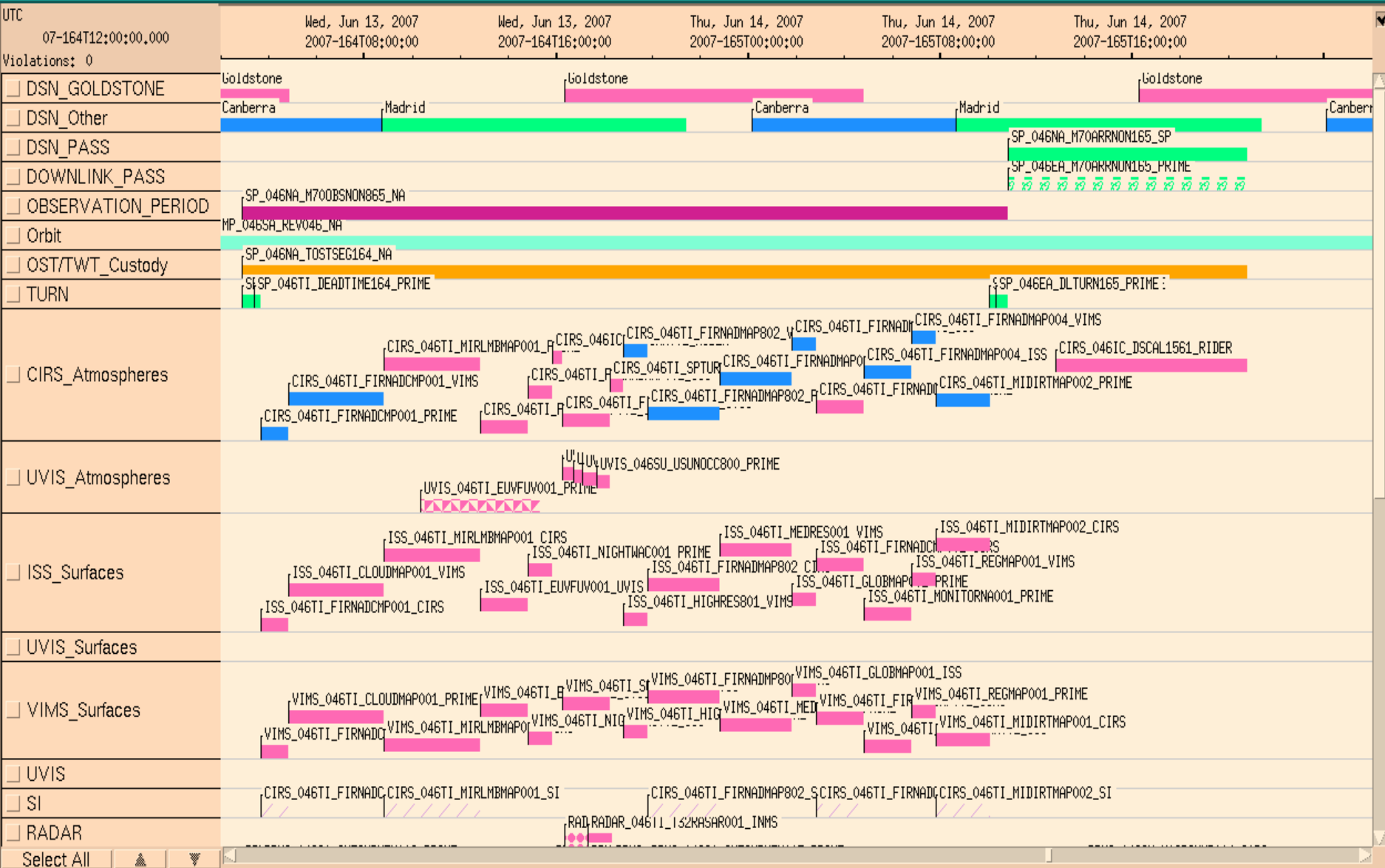
# 046TI (Titan-32A Flyby)

File Edit Activity Resource Constraints Scheduling Act Display Res Display



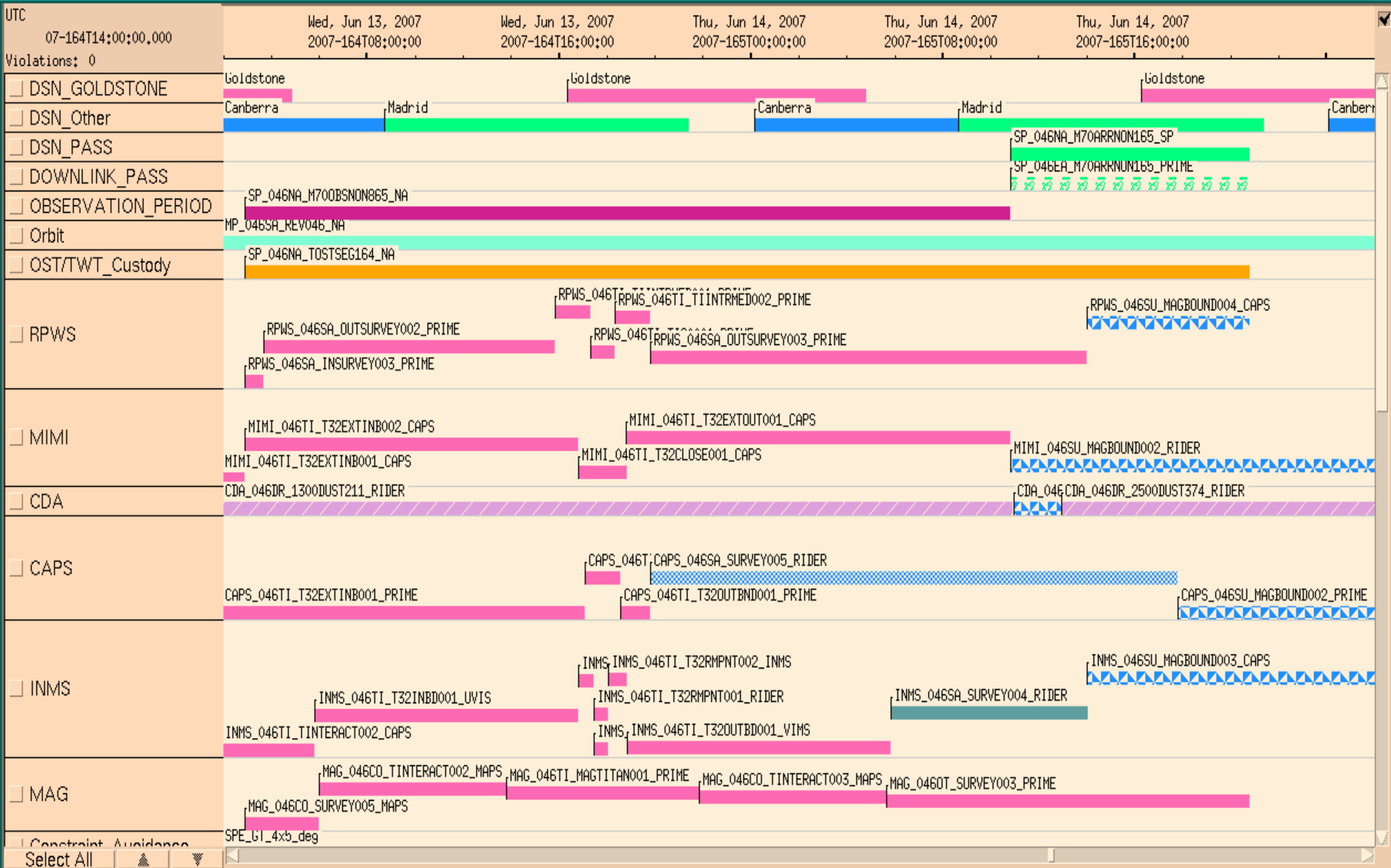
# 046TI (Titan-32A ORS)

File Edit Activity Resource Constraints Scheduling Act Display Res Display



# 046TI (Titan-32A MAPS)

File Edit Activity Resource Constraints Scheduling Act Display Res Display





Request	Start Time	Epoch Relative Start Time	Duration	EndTime	Rate	Mb	SPASS Type	Primary Pointing	Secondary Pointing	Agreement
CAPS_046SA_SURVEY005_RIDER	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T21:59:03	2007-165T17:47:00	1000	79.143	Non-SPASS			
CAPS_046SU_MAGBOUND002_PRIME	2007-165T17:47:00		005T07:31:00	2007-171T01:18:00	4000	1836.24	SPASS Rider			
CAPS_046TI_T32CLOSE001_PRIME	2007-164T17:02:57	GMB_E046_Titan32-000T00:45:00	000T01:30:00	2007-164T18:32:57	16000	86.4	SPASS Rider			
CAPS_046TI_T32EXTINB001_PRIME	2007-163T15:45:04		001T01:17:53	2007-164T17:02:57	4000	364.292	SPASS Rider			
CAPS_046TI_T32OUTBND001_PRIME	2007-164T18:32:57	GMB_E046_Titan32+000T00:45:00	000T01:15:00	2007-164T19:47:57	4000	18	SPASS Rider			
CDA_046DR_1300DUST211_RIDER	2007-163T22:21:03		001T12:32:59	2007-165T10:54:02	524	68.947	SPASS Rider			
CDA_046DR_2500DUST374_RIDER	2007-165T12:56:00		005T12:03:52	2007-171T00:59:52	149.9	71.25	Non-SPASS			
CDA_046HY_2400HYORX029_RIDER	2007-165T10:54:59		000T02:00:00	2007-165T12:54:59	524	3.773	Non-SPASS			
CIRS_046IC_DSCAL1561_RIDER	2007-165T12:47:00		000T08:00:00	2007-165T20:47:00	4000	115.2	SPASS Rider			
CIRS_046IC_SPTURN001_RIDER	2007-164T15:47:57	GMB_E046_Titan32-000T02:00:00	000T00:26:00	2007-164T16:13:57	4000	6.24	SPASS Rider			
CIRS_046TI_FIRNADCMP001_PRIME	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	4000	16.08	Prime	CIRS_FP1 to Titan	PIC	
CIRS_046TI_FIRNADCMP001_SI	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	0	1	SPASS Rider			
CIRS_046TI_FIRNADCMP001_VIMS	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	2000	28.8	SPASS Rider			
CIRS_046TI_FIRNADCMP002_PRIME	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	4000	28.8	Prime	CIRS_FP1 to Titan	PIC	
CIRS_046TI_FIRNADCMP002_SI	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	0	2	SPASS Rider			
CIRS_046TI_FIRNADMAP001_ISS	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP002_UVIS	2007-164T12:47:57	GMB_E046_Titan32-000T05:00:00	000T02:00:00	2007-164T14:47:57	2000	14.4	SPASS Rider			
CIRS_046TI_FIRNADMAP003_ISS	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP003_VIMS	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	2000	21.6	SPASS Rider			
CIRS_046TI_FIRNADMAP004_ISS	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	2000	14.4	SPASS Rider			
CIRS_046TI_FIRNADMAP004_VIMS	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP801_UVIS	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T01:58:00	2007-164T18:11:57	2000	14.16	SPASS Rider			
CIRS_046TI_FIRNADMAP802_PRIME	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T03:00:00	2007-164T22:47:57	4000	43.2	Prime	CIRS_FP1 to Titan	POS_X to Titan	
CIRS_046TI_FIRNADMAP802_SI	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T03:00:00	2007-164T22:47:57	0	3	SPASS Rider			
CIRS_046TI_FIRNADMAP802_VIMS	2007-164T18:46:57	GMB_E046_Titan32+000T00:59:00	000T01:01:00	2007-164T19:47:57	2000	7.32	SPASS Rider			
CIRS_046TI_MIDIRTMAP002_PRIME	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	2000	16.2	Prime	CIRS_FPB to Titan	POS_X to Titan	
CIRS_046TI_MIDIRTMAP002_SI	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	0	3	SPASS Rider			
CIRS_046TI_MIRLMBMAP001_PRIME	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57	4000	57.6	Prime			
CIRS_046TI_MIRLMBMAP001_SI	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57	0	4	SPASS Rider			
CIRS_046TI_SPTURN801_RIDER	2007-164T18:11:57	GMB_E046_Titan32+000T00:24:00	000T00:35:00	2007-164T18:46:57	4000	8.4	SPASS Rider			
ENGR_046EA_MECVROPN001_THERM	2007-165T10:34:00		000T00:06:10	2007-165T10:40:10	0	0	Non-SPASS			
ENGR_046SC_DFPWBIA5864_PPS	2007-164T18:22:57	GMB_E046_Titan32+000T00:35:00	000T00:22:42	2007-164T18:45:39	0	0	Prime			
ENGR_046SC_ORSRCS064_PPS	2007-164T16:40:57	GMB_E046_Titan32-000T01:07:00	000T00:20:49	2007-164T17:01:46	0	0	Prime			Deadband = (0.5, 0.5, 0.5)
INMS_046SA_SURVEY004_RIDER	2007-165T05:47:57	GMB_E046_Titan32+000T12:00:00	000T08:13:07	2007-165T14:01:04	50	1.479	Non-SPASS			
INMS_046SU_MAGBOUND003_CAPS	2007-165T14:00:00		000T14:00:00	2007-166T04:00:00	100	5.04	Non-SPASS			
INMS_046TI_T32BRMPNT001_PRIME	2007-164T17:25:57	GMB_E046_Titan32-000T00:22:00	000T00:37:00	2007-164T18:02:57	1498	3.326	Prime	NEG_X to SC_RAM	NEG_Y to Titan	
INMS_046TI_T32INBD001_UVIS	2007-164T05:46:13		000T11:01:44	2007-164T16:47:57	100	3.964	Non-SPASS			
INMS_046TI_T32OUTBD001_VIMS	2007-164T18:47:57	GMB_E046_Titan32+000T01:00:00	000T11:00:00	2007-165T05:47:57	100	3.96	Non-SPASS			
INMS_046TI_T32RMPNT001_INMS	2007-164T16:47:57	GMB_E046_Titan32-000T01:00:00	000T00:38:00	2007-164T17:25:57	1498	3.415	Non-SPASS			
INMS_046TI_T32RMPNT001_RIDER	2007-164T17:25:57	GMB_E046_Titan32-000T00:22:00	000T00:37:00	2007-164T18:02:57	1498	3.326	SPASS Rider			
INMS_046TI_T32RMPNT002_INMS	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:45:00	2007-164T18:47:57	1498	4.045	Non-SPASS			
INMS_046TI_TINTERACT002_CAPS	2007-163T18:00:00		000T11:46:13	2007-164T05:46:13	100	4.237	Non-SPASS			
ISS_046TI_CLOUDMAP001_VIMS	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	0	2	SPASS Rider			
ISS_046TI_EUVFUV001_UVIS	2007-164T12:47:57	GMB_E046_Titan32-000T05:00:00	000T02:00:00	2007-164T14:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADCMP001_CIRS	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADCMP002_CIRS	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADMAP802_CIRS	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T03:00:00	2007-164T22:47:57	0	2	SPASS Rider			
ISS_046TI_GLOBMAP001_PRIME	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	0	171	Prime			
ISS_046TI_HIGHRES801_VIMS	2007-164T18:46:57	GMB_E046_Titan32+000T00:59:00	000T01:01:00	2007-164T19:47:57	0	40	SPASS Rider			
ISS_046TI_MEDRES001_VIMS	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	0	200	SPASS Rider			
ISS_046TI_MIDIRTMAP002_CIRS	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	0	2	SPASS Rider			
ISS_046TI_MIRLMBMAP001_CIRS	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57	0	2	SPASS Rider			
ISS_046TI_MONITORNA001_PRIME	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	0	300	Prime			
ISS_046TI_NIGHTWAC001_PRIME	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57	0	20	Prime			
ISS_046TI_REGMAP001_VIMS	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	0	2	SPASS Rider			
MAG_046CO_SURVEY005_MAPS	2007-164T02:54:00		000T03:04:30	2007-164T05:58:30	600	6.642	Non-SPASS			
MAG_046CO_TINTERACT002_MAPS	2007-164T05:58:30		000T07:49:27	2007-164T13:47:57	1976	55.658	Non-SPASS			
MAG_046CO_TINTERACT003_MAPS	2007-164T21:47:57	GMB_E046_Titan32+000T04:00:00	000T07:49:28	2007-165T05:37:25	1976	55.666	Non-SPASS			
MAG_046OT_SURVEY003_PRIME	2007-165T05:37:25		000T15:09:35	2007-165T20:47:00	600	32.745	Non-SPASS			
MAG_046TI_MAGTITAN001_PRIME	2007-164T13:47:57	GMB_E046_Titan32-000T04:00:00	000T08:00:00	2007-164T21:47:57	1976	56.909	Non-SPASS			

MIMI_046SU_MAGBOUND002_RIDER	2007-165T10:47:00		000T17:13:00	2007-166T04:00:00	1800	111.564	SPASS Rider			
MIMI_046TI_T32CLOSE001_CAPS	2007-164T16:47:57	GMB_E046_Titan32-000T01:00:00	000T02:00:00	2007-164T18:47:57	2000	14.4	SPASS Rider			
MIMI_046TI_T32EXTINB001_CAPS	2007-163T18:00:01		000T08:53:59	2007-164T02:54:00	2000	64.078	SPASS Rider			
MIMI_046TI_T32EXTINB002_CAPS	2007-164T02:54:01		000T13:53:00	2007-164T16:47:01	1000	49.98	SPASS Rider			
MIMI_046TI_T32EXTOUT001_CAPS	2007-164T18:47:00		000T16:00:00	2007-165T10:47:00	1200	69.12	SPASS Rider			
MP_046EA_OCCTITAN046_NA	2007-164T17:02:25		000T00:40:03	2007-164T17:42:28	0	0	Non-SPASS			
MP_046NA_SEQUENCE031_NA	2007-162T03:10:00	E046_SEQUENCE_031+000T00:00	032T21:56:00	2007-195T01:06:00	0	0	SPASS Note			
MP_046SA_REV046_NA	2007-155T01:21:04		015T23:57:14	2007-171T01:18:18	0	0	Non-SPASS			
MP_046SA_RPXASCEND046_NA	2007-164T17:43:30		000T00:00:01	2007-164T17:43:31	0	0	Non-SPASS			
MP_046SU_OCCTITAN046_NA	2007-164T17:03:04		000T00:38:30	2007-164T17:41:34	0	0	Non-SPASS			
MP_046TI_FLYBYT032_NA	2007-164T17:46:53		000T00:00:01	2007-164T17:46:54	0	0	Non-SPASS			
RADAR_046OT_WARM4SRA001_RIDER	2007-164T16:17:57	GMB_E046_Titan32-000T01:30:00	000T01:00:00	2007-164T17:17:57	255.4	0.919	SPASS Rider			
RADAR_046TI_T32RASAR001_INMS	2007-164T17:17:57	GMB_E046_Titan32-000T00:30:00	000T01:00:00	2007-164T18:17:57	72960	262.656	SPASS Rider			
RPWS_046SA_INSURVEY003_PRIME	2007-164T02:54:00		000T00:46:00	2007-164T03:40:00	1310	3.616	Non-SPASS			
RPWS_046SA_OUTSURVEY002_PRIME	2007-164T03:40:00		000T12:07:57	2007-164T15:47:57	1310	57.217	Non-SPASS			
RPWS_046SA_OUTSURVEY003_PRIME	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T18:12:03	2007-165T14:00:00	1310	85.836	Non-SPASS			
RPWS_046SU_MAGBOUND004_CAPS	2007-165T14:00:00		000T06:47:00	2007-165T20:47:00	9000	219.78	Non-SPASS			
RPWS_046TI_TICA001_PRIME	2007-164T17:17:57	GMB_E046_Titan32-000T00:30:00	000T01:00:00	2007-164T18:17:57	100001.1	360.004	Non-SPASS			
RPWS_046TI_TIINTRMED001_PRIME	2007-164T15:47:57	GMB_E046_Titan32-000T02:00:00	000T01:30:00	2007-164T17:17:57	3499.8	18.899	Non-SPASS			
RPWS_046TI_TIINTRMED002_PRIME	2007-164T18:17:57	GMB_E046_Titan32+000T00:30:00	000T01:30:00	2007-164T19:47:57	3499.8	18.899	Non-SPASS			
SP_046EA_DLTURN165_PRIME	2007-165T10:17:00		000T00:30:00	2007-165T10:47:00	0	0	Prime	XBAND to Earth	NEG_X to NEP	SP Turn to Earth
SP_046EA_M70ARRNON165_PRIME	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Prime	XBAND to Earth		
SP_046NA_M70ARR2ND165_SP	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Non-SPASS			
SP_046NA_M70ARRNON165_SP	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Non-SPASS			
SP_046NA_M70OBSNON865_NA	2007-164T02:54:00		001T07:53:00	2007-165T10:47:00	0	0	Non-SPASS			
SP_046NA_TOSTSEG164_NA	2007-164T02:54:00		001T17:53:00	2007-165T20:47:00	0	0	SPASS Note			
SP_046TI_DEADTIME164_PRIME	2007-164T03:24:00		000T00:15:00	2007-164T03:39:00	0	0	Prime	ISS_NAC to Titan	NEG_X to Sun	
SP_046TI_DEADTIME165_PRIME	2007-165T10:02:00		000T00:15:00	2007-165T10:17:00	0	0	Prime	ISS_NAC to Titan	NEG_X to Sun	
SP_046TI_WWAYPTTURN164_PRIME	2007-164T02:54:00		000T00:30:00	2007-164T03:24:00	0	0	New Waypoint	ISS_NAC to Titan	NEG_X to Sun	SP Turn to Waypoint
SP_046TI_WWAYPTTURN864_PRIME	2007-164T18:11:57	GMB_E046_Titan32+000T00:24:00	000T00:11:00	2007-164T18:22:57	0	0	New Waypoint	NEG_Y to Titan	NEG_X to Sun	
SP_046TI_WWAYPTTURN884_PRIME	2007-164T15:47:57	GMB_E046_Titan32-000T02:00:00	000T00:26:00	2007-164T16:13:57	0	0	New Waypoint	VIMS_IR_SOL to Sun	NEG_X to Titan_SC_RAM	
UVIS_046SU_USUNOCC000_PRIME	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57	32096	51.996	Prime			
UVIS_046SU_USUNOCC001_PRIME	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57	32096	51.996	Prime			
UVIS_046SU_USUNOCC002_RIDER	2007-164T16:40:57	GMB_E046_Titan32-000T01:07:00	000T00:24:00	2007-164T17:04:57	32096	46.218	SPASS Rider			
UVIS_046SU_USUNOCC800_PRIME	2007-164T17:40:57	GMB_E046_Titan32-000T00:07:00	000T00:31:00	2007-164T18:11:57	32096	59.699	Prime			
UVIS_046TI_DARKSIDE001_PRIME	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:36:00	2007-164T17:40:57	1001.4	2.163	Prime			
UVIS_046TI_EUVFUV001_PRIME	2007-164T10:17:57	GMB_E046_Titan32-000T07:30:00	000T05:00:00	2007-164T15:17:57	5032	90.576	Prime			
VIMS_046TI_CLOUDMAP001_PRIME	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	5625	81	Prime	ISS_NAC to Titan	NEG_X to Sun	
VIMS_046TI_EUVFUV001_UVIS	2007-164T12:47:57	GMB_E046_Titan32-000T05:00:00	000T02:00:00	2007-164T14:47:57	5000	36	SPASS Rider			
VIMS_046TI_FIRNADCMP001_CIRS	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	6716.4	27	SPASS Rider			
VIMS_046TI_FIRNADCMP002_CIRS	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	7500	54	SPASS Rider			
VIMS_046TI_FIRNADMP801_CIRS	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T03:00:00	2007-164T22:47:57	3333.3	36	SPASS Rider			
VIMS_046TI_GLOBMAP001_ISS	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	10000	36	SPASS Rider			
VIMS_046TI_HIGHRES801_PRIME	2007-164T18:46:57	GMB_E046_Titan32+000T00:59:00	000T01:01:00	2007-164T19:47:57	9836.1	36	Prime			
VIMS_046TI_MEDRES001_PRIME	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	10000	108	Prime			
VIMS_046TI_MIDIRMAP001_CIRS	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	4814.8	39	SPASS Rider			
VIMS_046TI_MIRLMBMAP001_CIRS	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57	5625	81	SPASS Rider			
VIMS_046TI_MONITORNA001_ISS	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	7500	54	SPASS Rider			
VIMS_046TI_NIGHTWAC001_ISS	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57	10000	36	SPASS Rider			
VIMS_046TI_REGMAP001_PRIME	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	10000	36	Prime	ISS_NAC to Titan	NEG_X to Sun	
VIMS_046TI_SOLAROC801_UVIS	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T01:58:00	2007-164T18:11:57	4661	33	SPASS Rider			

# T32A Data Volume

DATA VOLUME SUMMARY

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 CPACTY (Mb)	MARGIN (Mb)	(%)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGIN (Mb)	(%)	CAROV (Mb)	
SP_046EA_M70ARRNON165_PRIME	165 10:47	165 20:47	0	3349	111	3460	3568	108	3%	0	516	59	4035	3993	-42	-1%	42

XD46/47 will accept these bits

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	164 02:54	165 10:47	362.1	60.1	298.8	24.0	747.0	186.0	133.5	0.0	529.3	302.6	693.0	0.0	0.0	3336.5
OBSERVATION_SI	164 02:54	165 10:47	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
SP_046EA_M70ARRNON165_PRIME	165 10:47	165 20:47	68.4	8.2	115.2	3.0	0.0	21.6	64.8	0.0	235.0	0.0	0.0	0.0	0.0	516.2
DAILY TOTAL SCIENCE	164 02:54	165 20:47	430.5	68.4	427.0	27.0	747.0	207.6	198.3	0.0	764.3	302.6	693.0	0.0		

# T32A SPASS

Request	Riders	Start(SCET)	Start(Epoch)	Duration	End(SCET)	Primary Pointing	Secondary Pointing	Comments
TOST rev 46 Segment		2007-164T02:54:00		001T17:53:00	2007-165T20:47:00			
SP_046TI_WAYPTTURN164_PRIME	M	2007-164T02:54:00		000T00:30:00	2007-164T03:24:00	ISS_NAC to Titan	NEG_X to Sun	SP Turn to Waypoint
<b>NEW WAYPOINT</b>		<b>2007-164T03:24:00</b>		<b>000T12:49:57</b>	<b>2007-164T16:13:57</b>	ISS_NAC to Titan	NEG_X to Sun	
<b>SP_046TI_DEADTIME164_PRIME</b>	<b>M</b>	<b>2007-164T03:24:00</b>		<b>000T00:15:00</b>	<b>2007-164T03:39:00</b>	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_FIRNADCMP001_PRIME	C, I, M, V	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	CIRS_FP1 to Titan	PIC	
VIMS_046TI_CLOUDMAP001_PRIME	C, I, M	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_MIRLMBMAP001_PRIME	C, I, M, V	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57			
UVIS_046TI_EUVFUV001_PRIME	C, I, M, V	2007-164T10:17:57	GMB_E046_Titan32-000T07:30:00	000T05:00:00	2007-164T15:17:57			
ISS_046TI_NIGHTWAC001_PRIME	C, M, V	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57			
SP_046TI_WAYPTTURN884_PRIME	C, M	2007-164T15:47:57	GMB_E046_Titan32-000T02:00:00	000T00:26:00	2007-164T16:13:57	VIMS_IR_SOL to Sun	NEG_X to Titan_SC_RAM	
<b>NEW WAYPOINT</b>		<b>2007-164T16:13:57</b>		<b>000T02:09:00</b>	<b>2007-164T18:22:57</b>	VIMS_IR_SOL to Sun	NEG_X to Titan_SC_RAM	
UVIS_046SU_USUNOCC000_PRIME	C, M, R, V	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57			
UVIS_046SU_USUNOCC001_PRIME	C, M, R, V	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57			
ENGR_046SC_ORSRCS064_PPS	C, M, R, U	2007-164T16:40:57	GMB_E046_Titan32-000T01:07:00	000T00:20:49	2007-164T17:01:46			Deadband = (0.5, 0.5, 0.5)
UVIS_046TI_DARKSIDE001_PRIME	C, M, R, V	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:36:00	2007-164T17:40:57			
INMS_046TI_T32BRMPNT001_PRIME	C, M, R, V	2007-164T17:25:57	GMB_E046_Titan32-000T00:22:00	000T00:37:00	2007-164T18:02:57	NEG_X to SC_RAM	NEG_Y to Titan	
UVIS_046SU_USUNOCC800_PRIME	C, M, R, V	2007-164T17:40:57	GMB_E046_Titan32-000T00:07:00	000T00:31:00	2007-164T18:11:57			
SP_046TI_WAYPTTURN884_PRIME	C, M, R	2007-164T18:11:57	GMB_E046_Titan32+000T00:24:00	000T00:11:00	2007-164T18:22:57	NEG_Y to Titan	NEG_X to Sun	
<b>NEW WAYPOINT</b>		<b>2007-164T18:22:57</b>		<b>001T02:24:03</b>	<b>2007-165T20:47:00</b>	NEG_Y to Titan	NEG_X to Sun	
ENGR_046SC_DFPWBIAS864_PPS	C, M	2007-164T18:22:57	GMB_E046_Titan32+000T00:35:00	000T00:22:42	2007-164T18:45:39			
VIMS_046TI_HIGHRES801_PRIME	C, I, M	2007-164T18:46:57	GMB_E046_Titan32+000T00:59:00	000T01:01:00	2007-164T19:47:57			
CIRS_046TI_FIRNADMAP802_PRIME	C, I, M, V	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T03:00:00	2007-164T22:47:57	CIRS_FP1 to Titan	POS_X to Titan	
VIMS_046TI_MEDRES001_PRIME	C, I, M	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57			
ISS_046TI_GLOBMAP001_PRIME	C, M, V	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57			
CIRS_046TI_FIRNADCMP002_PRIME	C, I, M, V	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	CIRS_FP1 to Titan	PIC	
ISS_046TI_MONITORNA001_PRIME	C, M, V	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57			
VIMS_046TI_REGMAP001_PRIME	C, I, M	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_MIDIRTMAP002_PRIME	C, I, M, V	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	CIRS_FPB to Titan	POS_X to Titan	
<b>SP_046TI_DEADTIME165_PRIME</b>	<b>C, I, M, V</b>	<b>2007-165T10:02:00</b>		<b>000T00:15:00</b>	<b>2007-165T10:17:00</b>	ISS_NAC to Titan	NEG_X to Sun	
SP_046EA_DLTURN165_PRIME	M	2007-165T10:17:00		000T00:30:00	2007-165T10:47:00	XBAND to Earth	NEG_X to NEP	SP Turn to Earth
SP_046EA_M70ARRNON165_PRIME	C, M	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	XBAND to Earth		

## T32A Telemetry Modes

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SCET	TELEMETRY MODE	REQUEST
2007-164T02:54:00.000	"S_N_ER_3"	SP_046NA_M70OBSNON865_NA
2007-164T17:17:57.000	"S_N_ER_2"	SP_046NA_M70OBSNON865_NA
2007-164T18:17:57.000	"S_N_ER_3"	SP_046NA_M70OBSNON865_NA
2007-165T10:47:00.000	"RTE_N_SPB_124425"	SP_046EA_M70ARRNON165_PRIME
2007-165T11:24:00.000	"RTE_N_SPB_142200"	SP_046EA_M70ARRNON165_PRIME
2007-165T18:24:00.000	"RTE_N_SPB_124425"	SP_046EA_M70ARRNON165_PRIME
2007-165T19:24:00.000	"RTE_N_SPB_99540"	SP_046EA_M70ARRNON165_PRIME
2007-165T20:09:00.000	"RTE_N_SPB_66360"	SP_046EA_M70ARRNON165_PRIME

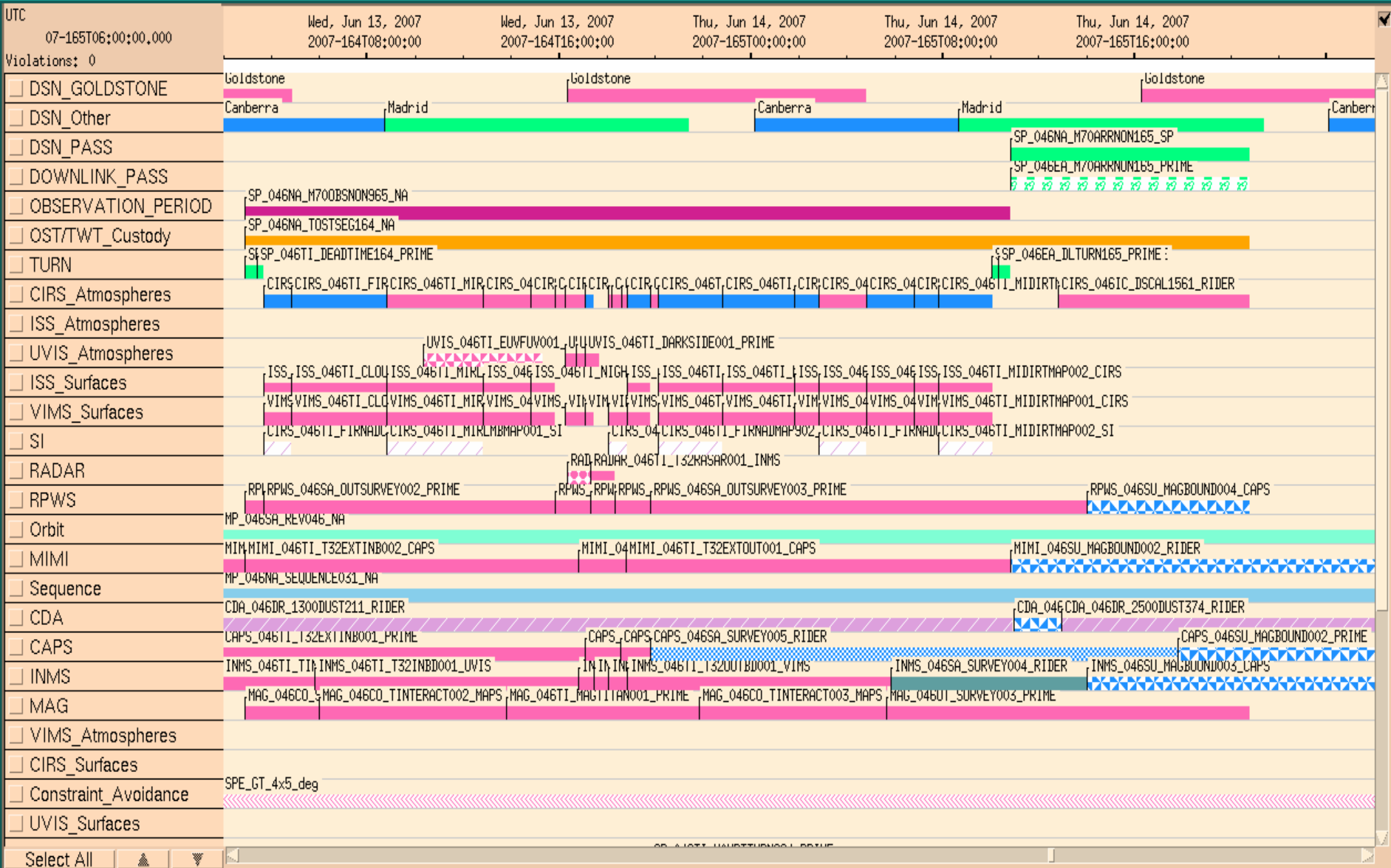
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## C/A= 2007-164T17:47:57 @ 950 km; Unilluminated Approach

Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments
164T02:54	164T03:24	SP Turn to waypoint		DFPW Nor	S_N_ER_3	_Y Titan, +X NTP
164T03:24	164T03:39	OD Uncertainty Dead Time		DFPW Nor	S_N_ER_3	
-14:07	-13:00	CIRS		DFPW Nor	S_N_ER_3	Template M
-13:00	-09:00	VIMS	Cloud Map	DFPW Nor	S_N_ER_3	Template O
-09:00	-05:00	CIRS	Mid-IR Limb	DFPW Nor	S_N_ER_3	Template R
-05:00	-03:00	UVIS	EUVFUV	DFPW Nor	S_N_ER_3	Template U
-03:00	-02:00	ISS		DFPW Nor	S_N_ER_3	Template U
-02:00	-01:34	SP Turn to waypoint	26 min turn	DFPW Nor	S_N_ER_3	Solar Occ to SUN, -X RAM
-01:34		Begin Custom Period		DFPW Nor	S_N_ER_3	
-01:34	-01:07	UVIS	Solar Occ Ingress	DFPW Nor	S_N_ER_3	
-01:07	-00:43	RWA to RCS Transition		ORS/RCS	S_N_ER_3	simultaneous w/solar occ
-00:43	-00:22	VIMS	Lightning Search	ORS/RCS	S_N_ER_3	pickup at Solar Occ SUN, +Z Limb
-00:22	-00:15	Turn (INMS)		ORS/RCS	S_N_ER_2	pickup at -Y Titan, -X RAM
-00:15	+00:15	INMS		ORS/RCS	S_N_ER_2	MAPS rider (-Y Titan secondary)
+00:15	+00:22	Turn (CIRS)	CIRS Limb attitude	ORS/RCS	S_N_ER_2	pickup at -X RAM, -Y Titan
+00:22	+00:46	RCS to RWA Transition		DFPW Nor	S_N_ER_3	
+00:46	+01:02	CIRS	Limb	DFPW Nor	S_N_ER_3	
+01:02	+02:00	VIMS		DFPW Nor	S_N_ER_3	pickup at FP1 Lat_View, +Z FOV_LIMB
+02:00		End Custom Period		DFPW Nor	S_N_ER_3	SID violation during turn (6 m)
+2:00	+02:18	SP Turn to waypoint	18 min turn	DFPW Nor	S_N_ER_3	-Y Titan, -X SUN
+02:18	+05:00	CIRS		DFPW Nor	S_N_ER_3	Template E
+05:00	+08:00	VIMS	Regional Map	DFPW Nor	S_N_ER_3	Template I
+08:00	+09:00	ISS	NAC & WAC	DFPW Nor	S_N_ER_3	Template I
+09:00	+11:00	CIRS	FP1	DFPW Nor	S_N_ER_3	Template D
+11:00	+13:00	ISS	Mosaic	DFPW Nor	S_N_ER_3	Template D
+13:00	+14:00	VIMS	Regional Map	DFPW Nor	S_N_ER_3	Template D
+14:00	+16:15	CIRS		DFPW Nor	S_N_ER_3	Template A (modified)
165T10:02	165T10:17	OD Uncertainty Dead Time		DFPW Nor	S_N_ER_3	
165T10:17	165T10:47	SP Turn for downlink		DFPW Nor	S_N_ER_3	
165T10:47	165T20:47	Goldstone 70-m Array		DFPW Nor	RTE_SPB	10 hrs

# 046TI (Titan-32B Flyby)

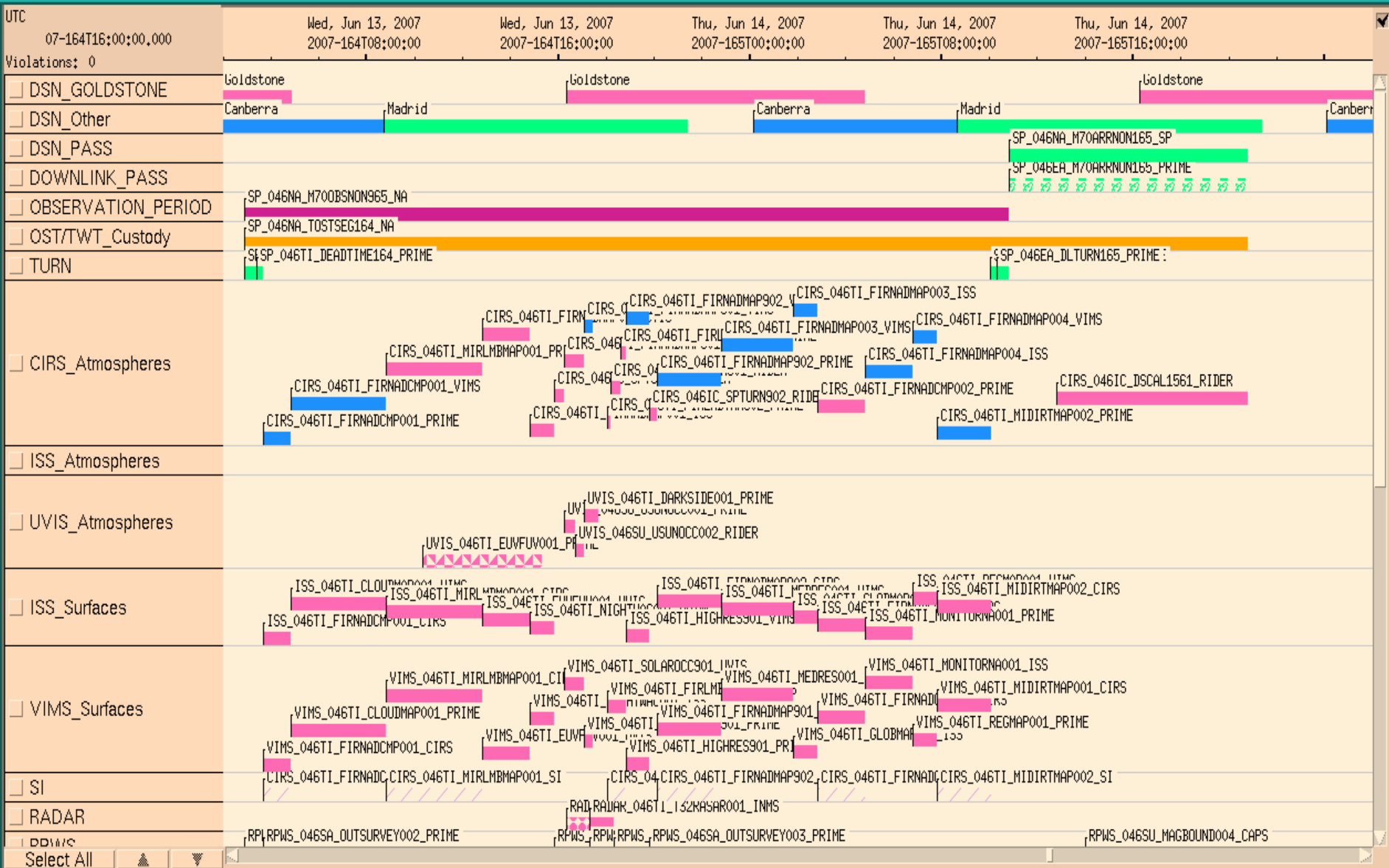
File Edit Activity Resource Constraints Scheduling Act Display Res Display



# 046TI (Titan-32B ORS)

Help

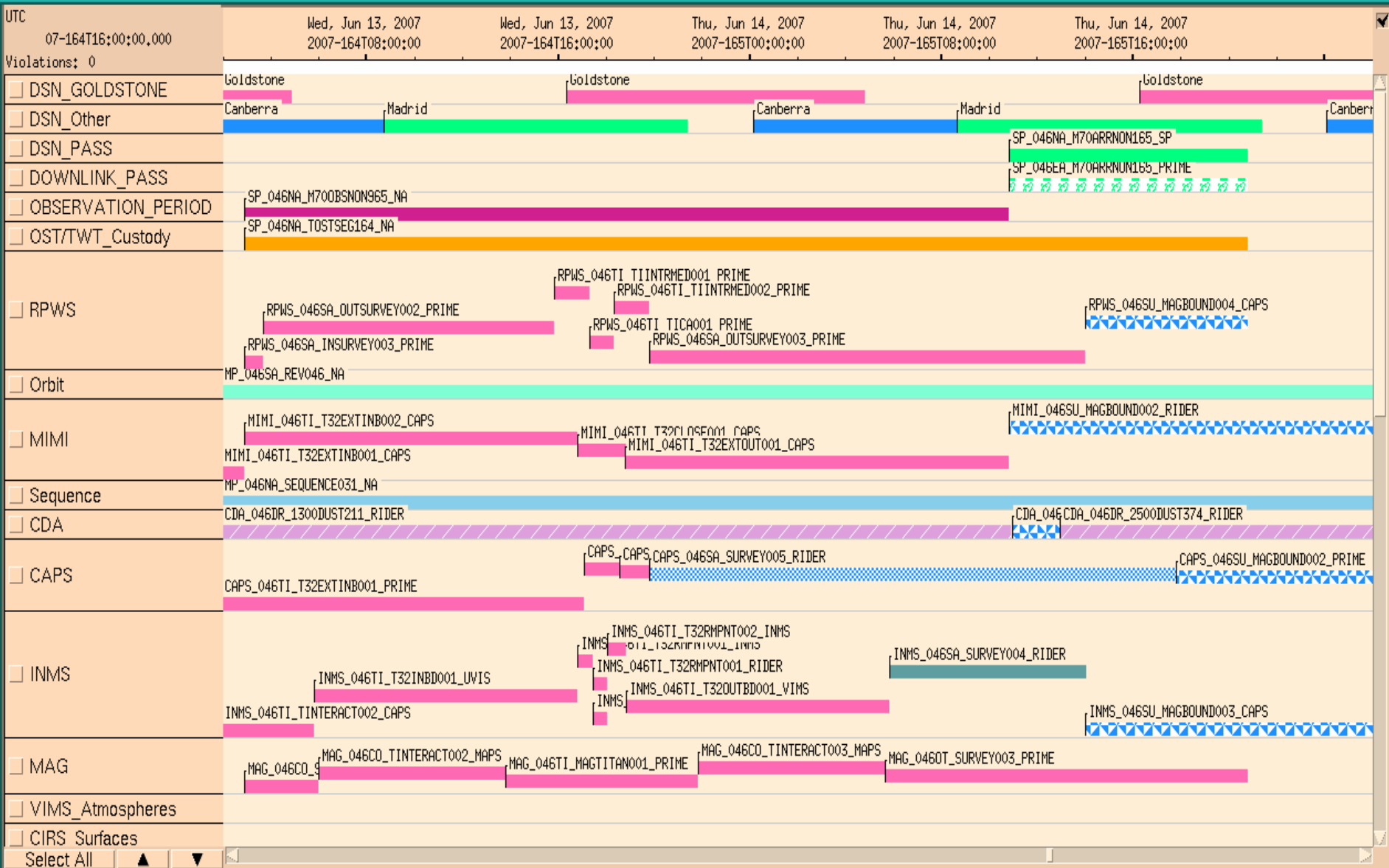
File Edit Activity Resource Constraints Scheduling Act Display Res Display





# 046TI (Titan-32B MAPS)

File Edit Activity Resource Constraints Scheduling Act Display Res Display



Request	Start Time	Epoch Relative Start Time	Duration	EndTime	Rate	Mb	SPASS Type	Primary Pointing	Secondary Pointing	Agreement
CAPS_046SA_SURVEY005_RIDER	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T21:59:03	2007-165T17:47:00	1000	79.143	Non-SPASS			
CAPS_046SU_MAGBOUND002_PRIME	2007-165T17:47:00		005T07:31:00	2007-171T01:18:00	4000	1836.24	SPASS Rider			
CAPS_046TI_T32CLOSE001_PRIME	2007-164T17:02:57	GMB_E046_Titan32+000T00:45:00	000T01:30:00	2007-164T18:32:57	16000	86.4	SPASS Rider			
CAPS_046TI_T32EXTINB001_PRIME	2007-163T15:45:04		001T01:17:53	2007-164T17:02:57	4000	364.292	SPASS Rider			
CAPS_046TI_T32OUTBND001_PRIME	2007-164T18:32:57	GMB_E046_Titan32+000T00:45:00	000T01:15:00	2007-164T19:47:57	4000	18	SPASS Rider			
CDA_046DR_1300DUST211_RIDER	2007-163T22:21:03		001T12:32:59	2007-165T10:54:02	524	68.947	SPASS Rider			
CDA_046DR_2500DUST374_RIDER	2007-165T12:56:50		005T12:03:52	2007-171T00:59:52	149.9	71.25	Non-SPASS			
CDA_046HY_2400HYORX029_RIDER	2007-165T10:54:59		000T02:00:00	2007-165T12:54:59	524	3.773	Non-SPASS			
CIRS_046IC_DSCAL1561_RIDER	2007-165T12:47:00		000T08:00:00	2007-165T20:47:00	4000	115.2	SPASS Rider			
CIRS_046IC_SPTURN001_RIDER	2007-164T15:47:57	GMB_E046_Titan32+000T02:00:00	000T00:26:00	2007-164T16:13:57	4000	6.24	SPASS Rider			
CIRS_046IC_SPTURN902_RIDER	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T00:18:00	2007-164T20:05:57	4000	4.32	SPASS Rider			
CIRS_046TI_FIRLMBINT902_SI	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:47:00	2007-164T18:49:57	0	2	SPASS Rider			
CIRS_046TI_FIRLMBINT903_PRIME	2007-164T18:33:57	GMB_E046_Titan32+000T00:46:00	000T00:16:00	2007-164T18:49:57	4000	3.84	Prime			Pick-up from RCS transition on limb CIRS_FP1 LAT_VIEW (45, 90, LHS, 125), POS_Z (same), turn to 225 km altitude for second int.
CIRS_046TI_FIRLMBTRN902_PRIME	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:07:00	2007-164T18:09:57	4000	1.68	Prime			Pick-up from INMS at -X SC_RAM_-Y TITAN. Turn to CIRS_FP1 to LAT_VIEW (45, 90, LHS, 125), POS_Z to FOV_LMB (same).
CIRS_046TI_FIRNADCMP001_PRIME	2007-164T03:40:57	GMB_E046_Titan32+000T14:07:00	000T01:07:00	2007-164T04:47:57	4000	16.08	Prime	CIRS_FP1 to Titan	PIC	
CIRS_046TI_FIRNADCMP001_SI	2007-164T03:40:57	GMB_E046_Titan32+000T14:07:00	000T01:07:00	2007-164T04:47:57	0	1	SPASS Rider			
CIRS_046TI_FIRNADCMP001_VIMS	2007-164T04:47:57	GMB_E046_Titan32+000T13:00:00	000T04:00:00	2007-164T08:47:57	2000	28.8	SPASS Rider			
CIRS_046TI_FIRNADCMP002_PRIME	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	4000	28.8	Prime	CIRS_FP1 to Titan	PIC	
CIRS_046TI_FIRNADCMP002_SI	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	0	2	SPASS Rider			
CIRS_046TI_FIRNADMAP001_ISS	2007-164T14:47:57	GMB_E046_Titan32+000T03:00:00	000T01:00:00	2007-164T15:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP002_UVIS	2007-164T12:47:57	GMB_E046_Titan32+000T05:00:00	000T02:00:00	2007-164T14:47:57	2000	14.4	SPASS Rider			
CIRS_046TI_FIRNADMAP003_ISS	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP003_VIMS	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	2000	21.6	SPASS Rider			
CIRS_046TI_FIRNADMAP004_ISS	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	2000	14.4	SPASS Rider			
CIRS_046TI_FIRNADMAP004_VIMS	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	2000	7.2	SPASS Rider			
CIRS_046TI_FIRNADMAP901_UVIS	2007-164T16:13:57	GMB_E046_Titan32+000T01:34:00	000T00:51:00	2007-164T17:04:57	4000	12.24	SPASS Rider			
CIRS_046TI_FIRNADMAP901_VIMS	2007-164T17:04:57	GMB_E046_Titan32+000T00:43:00	000T00:21:00	2007-164T17:25:57	4000	5.04	SPASS Rider			
CIRS_046TI_FIRNADMAP902_PRIME	2007-164T20:05:57	GMB_E046_Titan32+000T02:18:00	000T02:42:00	2007-164T22:47:57	4000	38.88	Prime	CIRS_FP1 to Titan	POS_X to Titan	
CIRS_046TI_FIRNADMAP902_SI	2007-164T20:05:57	GMB_E046_Titan32+000T02:18:00	000T02:42:00	2007-164T22:47:57	0	3	SPASS Rider			
CIRS_046TI_FIRNADMAP902_VIMS	2007-164T18:49:57	GMB_E046_Titan32+000T01:02:00	000T00:58:00	2007-164T19:47:57	2000	6.96	SPASS Rider			
CIRS_046TI_MIDIRMAP002_PRIME	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	2000	16.2	Prime	CIRS_FP2 to Titan	POS_X to Titan	
CIRS_046TI_MIDIRMAP002_SI	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	0	3	SPASS Rider			
CIRS_046TI_MIRLMBMAP001_PRIME	2007-164T08:47:57	GMB_E046_Titan32+000T09:00:00	000T04:00:00	2007-164T12:47:57	4000	57.6	Prime			
CIRS_046TI_MIRLMBMAP001_SI	2007-164T08:47:57	GMB_E046_Titan32+000T09:00:00	000T04:00:00	2007-164T12:47:57	0	4	SPASS Rider			
CIRS_046TI_SPTURN901_RIDER	2007-164T18:09:57	GMB_E046_Titan32+000T00:22:00	000T00:24:00	2007-164T18:33:57	4000	5.76	SPASS Rider			
ENGR_046EA_MECVROPN001_THERM	2007-165T10:34:00		000T00:06:10	2007-165T10:40:10	0	0	Non-SPASS			
ENGR_046SC_DFPWBIAS964_PPS	2007-164T18:09:57	GMB_E046_Titan32+000T00:22:00	000T00:22:42	2007-164T18:32:39	0	0	Prime			
ENGR_046SC_ORSRCS064_PPS	2007-164T16:40:57	GMB_E046_Titan32+000T01:07:00	000T00:20:49	2007-164T17:01:46	0	0	Prime			Deadband = (0.5, 0.5, 0.5)
INMS_046SA_SURVEY004_RIDER	2007-165T05:47:57	GMB_E046_Titan32+000T12:00:00	000T08:13:07	2007-165T14:01:04	50	1.479	Non-SPASS			
INMS_046SU_MAGBOUND003_CAPS	2007-165T14:00:00		000T14:00:00	2007-166T04:00:00	100	5.04	Non-SPASS			
INMS_046TI_T32BRMPNT001_PRIME	2007-164T17:25:57	GMB_E046_Titan32+000T00:22:00	000T00:37:00	2007-164T18:02:57	1498	3.326	Prime	NEG_X to SC_RAM	NEG_Y to Titan	
INMS_046TI_T32INBD001_UVIS	2007-164T05:46:13		000T11:01:44	2007-164T16:47:57	100	3.964	Non-SPASS			
INMS_046TI_T32OUTBD001_VIMS	2007-164T18:47:57	GMB_E046_Titan32+000T01:00:00	000T11:00:00	2007-165T05:47:57	100	3.96	Non-SPASS			
INMS_046TI_T32RMPNT001_INMS	2007-164T16:47:57	GMB_E046_Titan32+000T01:00:00	000T00:38:00	2007-164T17:25:57	1498	3.415	Non-SPASS			
INMS_046TI_T32RMPNT001_RIDER	2007-164T17:25:57	GMB_E046_Titan32+000T00:22:00	000T00:37:00	2007-164T18:02:57	1498	3.326	SPASS Rider			
INMS_046TI_T32RMPNT002_INMS	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:45:00	2007-164T18:47:57	1498	4.045	Non-SPASS			
INMS_046TI_TINTERACT002_CAPS	2007-163T18:00:00		000T11:46:13	2007-164T05:46:13	100	4.237	Non-SPASS			
ISS_046TI_CLOUDMAP001_VIMS	2007-164T04:47:57	GMB_E046_Titan32+000T13:00:00	000T04:00:00	2007-164T08:47:57	0	2	SPASS Rider			
ISS_046TI_EUVFUV001_UVIS	2007-164T12:47:57	GMB_E046_Titan32+000T05:00:00	000T02:00:00	2007-164T14:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADCMP001_CIRS	2007-164T03:40:57	GMB_E046_Titan32+000T14:07:00	000T01:07:00	2007-164T04:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADCMP002_CIRS	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	0	2	SPASS Rider			
ISS_046TI_FIRNADMAP902_CIRS	2007-164T20:05:57	GMB_E046_Titan32+000T02:18:00	000T02:42:00	2007-164T22:47:57	0	2	SPASS Rider			
ISS_046TI_GLOBMAP001_PRIME	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	0	171	Prime			
ISS_046TI_HIGHRES901_VIMS	2007-164T18:49:57	GMB_E046_Titan32+000T01:02:00	000T00:58:00	2007-164T19:47:57	0	64	SPASS Rider			
ISS_046TI_MEDRES001_VIMS	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	0	200	SPASS Rider			
ISS_046TI_MIDIRMAP002_CIRS	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	0	2	SPASS Rider			
ISS_046TI_MIRLMBMAP001_CIRS	2007-164T08:47:57	GMB_E046_Titan32+000T09:00:00	000T04:00:00	2007-164T12:47:57	0	2	SPASS Rider			
ISS_046TI_MONITORNA001_PRIME	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	0	300	Prime			
ISS_046TI_NIGHTWAC001_PRIME	2007-164T14:47:57	GMB_E046_Titan32+000T03:00:00	000T01:00:00	2007-164T15:47:57	0	20	Prime			
ISS_046TI_REGMAP001_VIMS	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	0	2	SPASS Rider			

MAG_046CO_SURVEY005_MAPS	2007-164T02:54:00		000T03:04:30	2007-164T05:58:30	600	6 642	Non-SPASS			
MAG_046CO_TINTERACT002_MAPS	2007-164T05:58:30		000T07:49:27	2007-164T13:47:57	1976	55 658	Non-SPASS			
MAG_046CO_TINTERACT003_MAPS	2007-164T21:47:57	GMB_E046_Titan32+000T04:00:00	000T07:49:28	2007-165T05:37:25	1976	55 66	Non-SPASS			
MAG_046OT_SURVEY003_PRIME	2007-165T05:37:25		000T15:09:35	2007-165T20:47:00	600	32 745	Non-SPASS			
MAG_046TI_MAGTITAN001_PRIME	2007-164T13:47:57	GMB_E046_Titan32-000T04:00:00	000T08:00:00	2007-164T21:47:57	1976	56 909	Non-SPASS			
MIMI_046SU_MAGBOUND002_RIDER	2007-165T10:47:00		000T17:13:00	2007-166T04:00:00	1800	111 564	SPASS Rider			
MIMI_046TI_T32CLOSE001_CAPS	2007-164T16:47:57	GMB_E046_Titan32-000T01:00:00	000T02:00:00	2007-164T18:47:57	2000	14 4	SPASS Rider			
MIMI_046TI_T32EXTINB001_CAPS	2007-163T18:00:01		000T08:53:59	2007-164T02:54:00	2000	64 078	SPASS Rider			
MIMI_046TI_T32EXTINB002_CAPS	2007-164T02:54:01		000T13:53:00	2007-164T16:47:01	1000	49 98	SPASS Rider			
MIMI_046TI_T32EXTOUT001_CAPS	2007-164T18:47:00		000T16:00:00	2007-165T10:47:00	1200	69 12	SPASS Rider			
MP_046EA_OCCTITAN046_NA	2007-164T17:02:25		000T00:40:03	2007-164T17:42:28	0	0	Non-SPASS			
MP_046NA_SEQUENCE031_NA	2007-162T03:10:00	E046_SEQUENCE_031+000T00:00:00	032T21:56:00	2007-195T01:06:00	0	0	SPASS Note			
MP_046SA_REV046_NA	2007-155T01:21:04		015T23:57:14	2007-171T01:18:18	0	0	Non-SPASS			
MP_046SA_RPXASCEND046_NA	2007-164T17:43:30		000T00:00:01	2007-164T17:43:31	0	0	Non-SPASS			
MP_046SU_OCCTITAN046_NA	2007-164T17:03:04		000T00:38:30	2007-164T17:41:34	0	0	Non-SPASS			
MP_046TI_FLYBYT032_NA	2007-164T17:46:53		000T00:00:01	2007-164T17:46:54	0	0	Non-SPASS			
RADAR_046OT_WARM4SRA001_RIDER	2007-164T16:17:57	GMB_E046_Titan32-000T01:30:00	000T01:00:00	2007-164T17:17:57	255 4	0 919	SPASS Rider			
RADAR_046TI_T32RASAR001_INIMS	2007-164T17:17:57	GMB_E046_Titan32-000T00:30:00	000T01:00:00	2007-164T18:17:57	72960	262 656	SPASS Rider			
RPWS_046SA_INSURVEY003_PRIME	2007-164T02:54:00		000T00:46:00	2007-164T03:40:00	1310	3 616	Non-SPASS			
RPWS_046SA_OUTSURVEY002_PRIME	2007-164T03:40:00		000T12:07:57	2007-164T15:47:57	1310	57 217	Non-SPASS			
RPWS_046SA_OUTSURVEY003_PRIME	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T18:12:03	2007-165T14:00:00	1310	85 836	Non-SPASS			
RPWS_046SU_MAGBOUND004_CAPS	2007-165T14:00:00		000T06:47:00	2007-165T20:47:00	9000	219 78	Non-SPASS			
RPWS_046TI_TICAO01_PRIME	2007-164T17:17:57	GMB_E046_Titan32-000T00:30:00	000T01:00:00	2007-164T18:17:57	100001 1	360 004	Non-SPASS			
RPWS_046TI_TIINTRMED001_PRIME	2007-164T15:47:57	GMB_E046_Titan32-000T02:00:00	000T01:30:00	2007-164T17:17:57	3499 8	18 899	Non-SPASS			
RPWS_046TI_TIINTRMED002_PRIME	2007-164T18:17:57	GMB_E046_Titan32+000T00:30:00	000T01:30:00	2007-164T19:47:57	3499 8	18 899	Non-SPASS			
SP_046EA_DLTURN165_PRIME	2007-165T10:17:00		000T00:30:00	2007-165T10:47:00	0	0	Prime	XBAND to Earth	NEG_X to NEP	SP Turn to Earth
SP_046EA_M70ARRNON165_PRIME	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Prime	XBAND to Earth		
SP_046NA_BEGCUSTOM964_NA	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:00:01	2007-164T16:13:58	0	0	SPASS Note	VIMS_IR_SOL to Sun	NEG_X to Titan_SC_RAM	
SP_046NA_ENDCUSTOM964_NA	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T00:00:01	2007-164T19:47:58	0	0	SPASS Note	NEG_Y to Titan	NEG_X to Sun	
SP_046NA_M70ARR2ND165_SP	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Non-SPASS			
SP_046NA_M70ARRNON165_SP	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	0	0	Non-SPASS			
SP_046NA_M70OBSNON965_NA	2007-164T02:54:00		001T07:53:00	2007-165T10:47:00	0	0	Non-SPASS			
SP_046NA_TOSTSEG164_NA	2007-164T02:54:00		001T17:53:00	2007-165T20:47:00	0	0	SPASS Note			
SP_046TI_DEADTIME164_PRIME	2007-164T03:24:00		000T00:15:00	2007-164T03:39:00	0	0	Prime	ISS_NAC to Titan	NEG_X to Sun	
SP_046TI_DEADTIME165_PRIME	2007-165T10:02:00		000T00:15:00	2007-165T10:17:00	0	0	Prime	ISS_NAC to Titan	NEG_X to Sun	
SP_046TI_WAYPTTURN164_PRIME	2007-164T02:54:00		000T00:30:00	2007-164T03:24:00	0	0	New Waypoint	ISS_NAC to Titan	NEG_X to Sun	SP Turn to Waypoint
SP_046TI_WAYPTTURN964_PRIME	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T00:18:00	2007-164T20:05:57	0	0	New Waypoint	NEG_Y to Titan	NEG_X to Sun	
UVIS_046SU_USUNOCC001_PRIME	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57	32096	51 996	Prime			
UVIS_046SU_USUNOCC002_RIDER	2007-164T16:40:57	GMB_E046_Titan32-000T01:07:00	000T00:24:00	2007-164T17:04:57	32096	46 218	SPASS Rider			
UVIS_046TI_DARKSIDE001_PRIME	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:36:00	2007-164T17:40:57	1001 4	2 163	Prime			
UVIS_046TI_EUVFUV001_PRIME	2007-164T10:17:57	GMB_E046_Titan32-000T00:30:00	000T05:00:00	2007-164T15:17:57	5032	90 576	Prime			
VIMS_046TI_CLOUDMAP001_PRIME	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	5625	81	Prime	ISS_NAC to Titan	NEG_X to Sun	
VIMS_046TI_EUVFUV001_UVIS	2007-164T12:47:57	GMB_E046_Titan32-000T05:00:00	000T02:00:00	2007-164T14:47:57	5000	36	SPASS Rider			
VIMS_046TI_FIRLMBINT901_CIRS	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:47:00	2007-164T18:49:57	6383	18	SPASS Rider			
VIMS_046TI_FIRNADCM001_CIRS	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	6716 4	27	SPASS Rider			
VIMS_046TI_FIRNADCM002_CIRS	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	7500	54	SPASS Rider			
VIMS_046TI_FIRNADMAP901_CIRS	2007-164T20:05:57	GMB_E046_Titan32+000T02:18:00	000T02:42:00	2007-164T22:47:57	3703 7	36	SPASS Rider			
VIMS_046TI_GLOBMAP001_ISS	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57	10000	36	SPASS Rider			
VIMS_046TI_HIGHRES901_PRIME	2007-164T18:49:57	GMB_E046_Titan32+000T01:02:00	000T00:58:00	2007-164T19:47:57	10344 8	36	Prime			
VIMS_046TI_HIRESNITE901_PRIME	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:21:00	2007-164T17:25:57	7142 9	9	Prime			
VIMS_046TI_MEDRES001_PRIME	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57	10000	108	Prime			
VIMS_046TI_MIDIRTMAP001_CIRS	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	4814 8	39	SPASS Rider			
VIMS_046TI_MIRLMBMAP001_CIRS	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57	5625	81	SPASS Rider			
VIMS_046TI_MONITORNAA001_ISS	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57	7500	54	SPASS Rider			
VIMS_046TI_NIGHTWAC001_ISS	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57	10000	36	SPASS Rider			
VIMS_046TI_REGMAP001_PRIME	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	10000	36	Prime	ISS_NAC to Titan	NEG_X to Sun	
VIMS_046TI_SOLAROCC901_UVIS	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:51:00	2007-164T17:04:57	8823 5	27	SPASS Rider			

# T32B Data Volume

DATA VOLUME SUMMARY

DOWNLINK PASS NAME	OBSERVATION_PERIOD		DOWNLINK_PASS														
	Start doy hh:mm	End doy hh:mm	P4					P5		RECORDED			PLAYBACK				
			START (Mb)	SCI (Mb)	HK+E (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGIN (%)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGIN (%)	CAROV (Mb)		
SP_046EA_M70ARRNON165_PRIME	165 10:47	165 20:47	0	3290	111	3401	3568	167	5%	0	516	59	3976	3993	17	0%	0

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	164 02:54	165 10:47	362.1	60.1	304.4	24.0	771.0	186.0	133.5	0.0	529.3	191.0	714.0	0.0	0.0	3275.4
OBSERVATION_SI	164 02:54	165 10:47	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0
SP_046EA_M70ARRNON165_PRIME	165 10:47	165 20:47	68.4	8.2	115.2	3.0	0.0	21.6	64.8	0.0	235.0	0.0	0.0	0.0	0.0	516.2
DAILY TOTAL SCIENCE	164 02:54	165 20:47	430.5	68.4	434.6	27.0	771.0	207.6	198.3	0.0	764.3	191.0	714.0	0.0	0.0	

# T32B SPASS

Request	Riders	Start(SCET)	Start(Epoch)	Duration	End(SCET)	Primary Pointing	Secondary Pointing	Comments
TOST rev 46 Segment		2007-164T02:54:00		001T17:53:00	2007-165T20:47:00			
SP_046TI_WAYPTTURN164_PRIME	M	2007-164T02:54:00		000T00:30:00	2007-164T03:24:00	ISS_NAC to Titan	NEG_X to Sun	SP Turn to Waypoint
<b>NEW WAYPOINT</b>		<b>2007-164T03:24:00</b>		<b>000T16:41:57</b>	<b>2007-164T20:05:57</b>	<b>ISS_NAC to Titan</b>	<b>NEG_X to Sun</b>	
SP_046TI_DEADTIME164_PRIME	M	2007-164T03:24:00		000T00:15:00	2007-164T03:39:00	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_FIRNADCM001_PRIME	C, I, M, V	2007-164T03:40:57	GMB_E046_Titan32-000T14:07:00	000T01:07:00	2007-164T04:47:57	CIRS_FP1 to Titan	PIC	
VIMS_046TI_CLOUDMAP001_PRIME	C, I, M	2007-164T04:47:57	GMB_E046_Titan32-000T13:00:00	000T04:00:00	2007-164T08:47:57	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_MIRLMBMAP001_PRIME	C, I, M, V	2007-164T08:47:57	GMB_E046_Titan32-000T09:00:00	000T04:00:00	2007-164T12:47:57			
UVIS_046TI_EUVFUV001_PRIME	C, I, M, V	2007-164T10:17:57	GMB_E046_Titan32-000T07:30:00	000T05:00:00	2007-164T15:17:57			
ISS_046TI_NIGHTWAC001_PRIME	C, M, V	2007-164T14:47:57	GMB_E046_Titan32-000T03:00:00	000T01:00:00	2007-164T15:47:57			
<b>Begin Custom Period</b>		<b>2007-164T16:13:57</b>	<b>GMB_E046_Titan32-000T01:34:00</b>	<b>000T00:00:01</b>	<b>2007-164T16:13:58</b>	<b>VIMS_IR_SOL to Sun</b>	<b>NEG_X to Titan_SC_RAM</b>	
UVIS_046SU_USUNOCC001_PRIME	C, M, R, V	2007-164T16:13:57	GMB_E046_Titan32-000T01:34:00	000T00:27:00	2007-164T16:40:57			Pick up at unknown, unknown; Hand off at unknown, unknown.
ENGR_046SC_ORSRCS064_PPS	C, M, R, U	2007-164T16:40:57	GMB_E046_Titan32-000T01:07:00	000T00:20:49	2007-164T17:01:46			Pick up at unknown, unknown; Hand off at unknown, unknown. Deadband = (0.5, 0.5, 0.5)
UVIS_046TI_DARKSIDE001_PRIME	C, M, R	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:36:00	2007-164T17:40:57			Pick up at unknown, unknown; Hand off at unknown, unknown.
VIMS_046TI_HIRESNITE901_PRIME	C, M, R	2007-164T17:04:57	GMB_E046_Titan32-000T00:43:00	000T00:21:00	2007-164T17:25:57			Pick up at unknown, unknown; Hand off at unknown, unknown.
INMS_046TI_T32BRMPNT001_PRIME	M, R	2007-164T17:25:57	GMB_E046_Titan32-000T00:22:00	000T00:37:00	2007-164T18:02:57	NEG_X to SC_RAM	NEG_Y to Titan	Pick up at unknown, unknown; Hand off at unknown, unknown.
CIRS_046TI_FIRLMBTRN902_PRIME	C, M, R, V	2007-164T18:02:57	GMB_E046_Titan32+000T00:15:00	000T00:07:00	2007-164T18:09:57			Pick up at unknown, unknown; Hand off at unknown, unknown. Pick-up from INMS at -X SC_RAM, -Y TITAN. Turn to CIRS_FP1 to LAT_VIEW (45, 90, LHS, 125), POS_Z to FOV_LMB (same).
ENGR_046SC_DFPWBIAS964_PPS	C, M, R, V	2007-164T18:09:57	GMB_E046_Titan32+000T00:22:00	000T00:22:42	2007-164T18:32:39			Pick up at unknown, unknown; Hand off at unknown, unknown.
CIRS_046TI_FIRLMBINT903_PRIME	C, M, V	2007-164T18:33:57	GMB_E046_Titan32+000T00:46:00	000T00:16:00	2007-164T18:49:57			Pick up at unknown, unknown; Hand off at unknown, unknown. Pick-up from RCS transition on limb CIRS_FP1 LAT_VIEW (45, 90, LHS, 125), POS_Z (same), turn to 225 km altitude for second int.
VIMS_046TI_HIGHRES901_PRIME	C, I, M	2007-164T18:49:57	GMB_E046_Titan32+000T01:02:00	000T00:58:00	2007-164T19:47:57			Pick up at unknown, unknown; Hand off at unknown, unknown.
<b>End Custom Period</b>		<b>2007-164T19:47:57</b>	<b>GMB_E046_Titan32+000T02:00:00</b>	<b>000T00:00:01</b>	<b>2007-164T19:47:58</b>	<b>NEG_Y to Titan</b>	<b>NEG_X to Sun</b>	
SP_046TI_WAYPTTURN964_PRIME	C, M	2007-164T19:47:57	GMB_E046_Titan32+000T02:00:00	000T00:18:00	2007-164T20:05:57	NEG_Y to Titan	NEG_X to Sun	
<b>NEW WAYPOINT</b>		<b>2007-164T20:05:57</b>		<b>001T00:41:03</b>	<b>2007-165T20:47:00</b>	<b>NEG_Y to Titan</b>	<b>NEG_X to Sun</b>	
CIRS_046TI_FIRNADMAP902_PRIME	C, I, M, V	2007-164T20:05:57	GMB_E046_Titan32+000T02:18:00	000T02:42:00	2007-164T22:47:57	CIRS_FP1 to Titan	POS_X to Titan	
VIMS_046TI_MEDRES001_PRIME	C, I, M	2007-164T22:47:57	GMB_E046_Titan32+000T05:00:00	000T03:00:00	2007-165T01:47:57			
ISS_046TI_GLOBMAP001_PRIME	C, M, V	2007-165T01:47:57	GMB_E046_Titan32+000T08:00:00	000T01:00:00	2007-165T02:47:57			
CIRS_046TI_FIRNADCM002_PRIME	C, I, M, V	2007-165T02:47:57	GMB_E046_Titan32+000T09:00:00	000T02:00:00	2007-165T04:47:57	CIRS_FP1 to Titan	PIC	
ISS_046TI_MONITORNA001_PRIME	C, M, V	2007-165T04:47:57	GMB_E046_Titan32+000T11:00:00	000T02:00:00	2007-165T06:47:57			
VIMS_046TI_REGMAP001_PRIME	C, I, M	2007-165T06:47:57	GMB_E046_Titan32+000T13:00:00	000T01:00:00	2007-165T07:47:57	ISS_NAC to Titan	NEG_X to Sun	
CIRS_046TI_MIDIRMAP002_PRIME	C, I, M, V	2007-165T07:47:57	GMB_E046_Titan32+000T14:00:00	000T02:15:00	2007-165T10:02:57	CIRS_FPB to Titan	POS_X to Titan	
SP_046TI_DEADTIME165_PRIME	C, I, M, V	2007-165T10:02:00		000T00:15:00	2007-165T10:17:00	ISS_NAC to Titan	NEG_X to Sun	
SP_046EA_DLTURN185_PRIME	M	2007-165T10:17:00		000T00:30:00	2007-165T10:47:00	XBAND to Earth	NEG_X to NEP	SP Turn to Earth
SP_046EA_M70ARRNON185_PRIME	C, M	2007-165T10:47:00		000T10:00:00	2007-165T20:47:00	XBAND to Earth		

# T32B Telemetry Mode Report

SCET	TELEMETRY MODE	REQUEST
2007-164T02:54:00.000	"S_N_ER_3"	SP_046NA_M70OBSNON965_NA
2007-164T17:25:57.000	"S_N_ER_2"	SP_046NA_M70OBSNON965_NA
2007-164T18:09:57.000	"S_N_ER_3"	SP_046NA_M70OBSNON965_NA
2007-165T10:47:00.000	"RTE_N_SPB_124425"	SP_046EA_M70ARRNON165_PRIME
2007-165T11:24:00.000	"RTE_N_SPB_142200"	SP_046EA_M70ARRNON165_PRIME
2007-165T18:24:00.000	"RTE_N_SPB_124425"	SP_046EA_M70ARRNON165_PRIME
2007-165T19:24:00.000	"RTE_N_SPB_99540"	SP_046EA_M70ARRNON165_PRIME
2007-165T20:09:00.000	"RTE_N_SPB_66360"	SP_046EA_M70ARRNON165_PRIME

## Open Issues

### Timeline(s)

- Need to SID for ~25 min near C/A
  
- Will carryover excess bits into XD 46/47

**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"/> 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 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 T32 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?	Yes	
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)