SOST: Delivery Package for Rev 49 Iapetus

Segment Boundary 2007-251T20:50:00 – 2007-255T21:35:00

October 24, 2003

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SOST Rev 49 Iapetus

- Science to be accomplished during this flyby:
  - This is the single targeted flyby of Iapetus during the mission.
  - ORS instruments will perform measurements to understand the composition, atmosphere and surface texture of this unique object, in addition to determining the make-up and origin of the dark material on the leading hemisphere.
  - RADAR will measure Iapetus' radar reflectivity and constrain the bulk density of the top decimeter of the surface.

Attitude Strategy

Request	Riders	Start(SCET)	Start(Epoch)	Duration	End(SCET)	Primary Pointing	Secondary Pointing	Comments
SP_049SA_WAYPTTURN251_PRIME		2007-251T21:50:00		000T00:30:00	2007-251T22:20:00	ISS_NAC to Saturn	NEG_Z to NSP	18 min turn from -Z to EA, +X to NEP; safe WP
NEW WAYPOINT		**2007-251T22:20:00**		**000T06:10:00**	**2007-252T04:30:00**	**ISS_NAC to Saturn**	**NEG_Z to NSP**	
VIMS_049SA_SATURN001_PRIME	R	2007-251T22:20:00		000T03:50:00	2007-252T02:10:00	ISS_NAC to Saturn	NEG_Z to NSP	
ISS_049SA_SATSYSFIA001_PRIME	R, V	2007-252T02:10:00		000T02:00:00	2007-252T04:10:00	ISS_NAC to Saturn	NEG_Z to NSP	S_N_ER_-5a
SP_049IA_WAYPTTURN252_PRIME	R	2007-252T04:10:00		000T00:20:00	2007-252T04:30:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	17.8 min turn; safe WP; S&ER-5A
NEW WAYPOINT		**2007-252T04:30:00**		**000T23:20:00**	**2007-253T03:50:00**	**ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)**	**POS_X to NEP**	
ISS_049IA_M33HRS001_PRIME	R, V	2007-252T04:30:00		000T00:30:00	2007-252T05:00:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	S_N_ER_-5A
RADAR_049IA_SCATTRAD003_PRIME		2007-252T05:00:00		000T04:45:00	2007-252T09:45:00	NEG_Z to Iapetus	PIC	RADAR must control primary and secondary axes to obtain correct polarization.
CIRS_049IA_FP1FAZ0P5184_PRIME	V	2007-252T09:45:00		000T02:00:00	2007-252T11:45:00	CIRS_FP1 to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	SNER-3
ISS_049IA_GLOBMAPG001_PRIME	V	2007-252T11:45:00		000T00:30:00	2007-252T12:15:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	S_N_ER_-3
SP_049EA_DLTURN252_PRIME		2007-252T12:15:00		000T00:30:00	2007-252T12:45:00	XBAND to Earth	POS_X to NEP	12 min turn
SP_049EA_G70METOTB252_PRIME	N	2007-252T12:45:00		000T09:00:00	2007-252T21:45:00	XBAND to Earth	Rolling	
SP_049IA_WAYPTTURN452_PRIME	R	2007-252T21:45:00		000T00:30:00	2007-252T22:15:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	12 min turn; S&ER-5A
ISS_049IA_LIMBTOPOG001_PRIME	R, V	2007-252T22:15:00		000T00:30:00	2007-252T22:45:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	S_N_ER_-5A
CIRS_049IA_FP1FAZ0P5191_PRIME	R, V	2007-252T22:45:00		000T01:30:00	2007-253T00:15:00	CIRS_FP1 to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	SNER-5a
RADAR_049IA_SCATTRAD004_PRIME	C	2007-253T00:15:00		000T01:50:00	2007-253T02:05:00	NEG_Z to Iapetus	PIC	RADAR must control primary and secondary axes to obtain correct polarization.
VIMS_049IA_IAPETUS006_PRIME	C, U	2007-253T02:05:00		000T00:55:00	2007-253T03:00:00	ISS_NAC to Iapetus (0.0,-5.0,0.0 deg. offset)	POS_X to NEP	S&ER-3
ISS_049IA_GRAYNORTH001_PRIME	C, U, V	2007-253T03:00:00		000T00:30:00	2007-253T03:30:00	ISS_NAC to Iapetus	POS_X to NEP	S_N_ER_-3
SP_049EA_WAYPTTURN253_PRIME	C	2007-253T03:30:00		000T00:20:00	2007-253T03:50:00	XBAND to Earth	POS_X to NEP	12 min turn; safe WP
NEW WAYPOINT		**2007-253T03:50:00**		**000T19:00:00**	**2007-253T22:50:00**	**XBAND to Earth**	**POS_X to NEP**	
SP_049EA_M70METNON253_PRIME	R	2007-253T03:50:00		000T02:35:00	2007-253T06:25:00	XBAND to Earth	Rolling	
SP_049NA_DEADTIME253_PRIME	**R, V**	**2007-253T06:25:00**		**000T01:29:00**	**2007-253T07:54:00**	**XBAND to Earth**	**POS_X to NEP**	**S&ER-5A**
Begin Custom		**2007-253T07:54:00**		**000T00:01:00**	**2007-253T07:55:00**			
CIRS_049IA_FP1NITMAP001_PRIME	R, V	2007-253T07:54:53	GMB_E049_Iapetus-000T04:39:00	000T01:29:00	2007-253T09:23:53	ISS_NAC to Iapetus	NEG_Z to NEP	Pick up at XBAND to Earth, POS_X to NEP; hand off at ISS_NAC to Iapetus, NEG_Z to NEP; SNER-5a.
RADAR_049IA_SCATTRAD001_PRIME	C	2007-253T09:23:53	GMB_E049_Iapetus-000T03:10:00	000T01:25:00	2007-253T10:48:53	NEG_Z to Iapetus	PIC	pick up at ISS_NAC to Iapetus, NEG_Z to NEP; hand off at ISS_NAC to Iapetus, NEG_Z to NEP; RADAR must control primary and secondary axes to obtain correct polarization.
ISS_049IA_CASSREG001_PRIME	C, M, U, V	2007-253T10:48:53	GMB_E049_Iapetus-000T01:45:00	000T01:13:00	2007-253T12:01:53	ISS_NAC to Iapetus	NEG_Z to NEP	pick up at ISS_NAC to Iapetus, NEG_Z to NEP; hand off at ISS_NAC to lat/lon -60/130, NEG_Z to NEP; S_N_ER_-3.
UVIS_049IA_ICYEXO009_PRIME	C, I, M, V	2007-253T12:01:53	GMB_E049_Iapetus-000T00:32:00	000T00:37:00	2007-253T12:38:53	UVIS_FUV to 249.289/-10.567	NEG_Z to NEP	S&ER-2. Pick up from ISS at ISS NAC to -60/130, NegZ to NEP. Hand off to ISS NAC to -40/190, NegX to Sun.
ISS_049IA_TRANSECT001_PRIME	C, M, U, V	2007-253T12:38:53	GMB_E049_Iapetus+000T00:05:00	000T00:15:00	2007-253T12:53:53	ISS_NAC to Iapetus	NEG_X to Sun	pick up at ISS_NAC to lat/lon -40/190, NEG_X to Sun; hand off at ISS_NAC to Iapetus, NEG_X to Sun; S_N_ER_-3
CIRS_049IA_CIRSHIRES001_PRIME	I, M, U, V	2007-253T12:53:53	GMB_E049_Iapetus+000T00:20:00	000T00:10:00	2007-253T13:03:53	ISS_NAC to Iapetus	NEG_X to Sun	SNER-3; pick up at ISS_NAC to Iapetus NEG_X to Sun; hand off at same.
ISS_049IA_TARGFLYBY001_PRIME	C, M, U, V	2007-253T13:03:53	GMB_E049_Iapetus+000T00:30:00	000T02:30:00	2007-253T15:33:53	ISS_NAC to Iapetus	NEG_X to Sun	pick up at ISS_NAC to Iapetus NEG_X to Sun; hand off at ISS_NAC to Iapetus, NEG_X to Sun; S_N_ER_-3
CIRS_049IA_FP1DAYMAP001_PRIME	I, U, V	2007-253T15:33:53	GMB_E049_Iapetus+000T03:00:00	000T01:30:00	2007-253T17:03:53	ISS_NAC to Iapetus	NEG_X to Sun	SNER-3; pick up at ISS_NAC to Iapetus NEG_X to Sun; hand off at same.
VIMS_049IA_IAPETUS013_PRIME	C, I, U	2007-253T17:03:53	GMB_E049_Iapetus+000T04:30:00	000T00:35:00	2007-253T17:38:53	ISS_NAC to Iapetus	NEG_X to Sun	pick up at ISS_NAC to Iapetus, NEG_X to Sun, hand off at XBAND to Earth, POS_X t
End Custom		**2007-253T17:39:00**		**000T00:01:00**	**2007-253T17:40:00**			
SP_049NA_DEADTIME453_PRIME		**2007-253T17:39:00**		**000T01:30:00**	**2007-253T19:09:00**	**XBAND to Earth**	**POS_X to NEP**	**S&ER-3**
SP_049EA_DLTURN253_PRIME		2007-253T19:09:00		000T00:20:00	2007-253T19:29:00	XBAND to Earth	NEG_X to NEP	17.1 min turn
SP_049EA_G70METNON253_PRIME		2007-253T19:29:00		000T03:01:00	2007-253T22:30:00	XBAND to Earth	Rolling	
SP_049IA_WAYPTTURN253_PRIME	C	2007-253T22:30:00		000T00:20:00	2007-253T22:50:00	ISS_NAC to Iapetus	POS_Z to NEP	16.7 min turn; safe WP; S&ER-3
NEW WAYPOINT		**2007-253T22:50:00**		**000T21:40:00**	**2007-254T20:30:00**	**ISS_NAC to Iapetus**	**POS_Z to NEP**	
ISS_049IA_REGMAPTRL001_PRIME	C, R, V	2007-253T22:50:00		000T00:40:00	2007-253T23:30:00	ISS_NAC to Iapetus	POS_Z to NEP	S_N_ER_-3
CIRS_049IA_FP1FAZ0P5192_PRIME	R, U	2007-253T23:30:00		000T01:40:00	2007-254T01:10:00	CIRS_FP3 to Iapetus	POS_Z to NEP	SNER-5a
ISS_049IA_REGCOLTRL001_PRIME	C, R, V	2007-254T01:10:00		000T00:50:00	2007-254T02:00:00	ISS_NAC to Iapetus	POS_Z to NEP	SNER-5a
RADAR_049IA_SCATTRAD002_PRIME	C	2007-254T02:00:00		000T02:10:00	2007-254T04:10:00	NEG_Z to Iapetus	PIC	RADAR must control primary and secondary axes to obtain correct polarization.
SP_049EA_DLTURN254_PRIME		2007-254T04:10:00		000T00:20:00	2007-254T04:30:00	XBAND to Earth	NEG_X to NEP	16.6 min turn
SP_049EA_M70ARRNON254_PRIME	C	2007-254T04:30:00		000T10:30:00	2007-254T15:00:00	XBAND to Earth	Rolling	
SP_049EA_G70ARRNON254_PRIME		2007-254T15:00:00		000T05:00:00	2007-254T20:00:00	XBAND to Earth	Rolling	
SP_049IA_WAYPTTURN254_PRIME		2007-254T20:00:00		000T00:30:00	2007-254T20:30:00	ISS_NAC to Iapetus	POS_Z to NEP	16.6 min turn; safe WP
NEW WAYPOINT		**2007-254T20:30:00**		**001T01:05:00**	**2007-255T21:35:00**	**ISS_NAC to Iapetus**	**POS_Z to NEP**	
ISS_049IA_GLOBCOLH001_PRIME	V	2007-254T20:30:00		000T01:00:00	2007-254T21:30:00	ISS_NAC to Iapetus	POS_Z to NEP	S_N_ER_-5
VIMS_049IA_IAPETUS010_PRIME	U	2007-254T21:30:00		000T01:30:00	2007-254T23:00:00	ISS_NAC to Iapetus	POS_Z to NEP	S&ER-3
CIRS_049IA_FP1FAZ0P5202_PRIME	R	2007-254T23:00:00		000T04:00:00	2007-255T03:00:00	CIRS_FP1 to Iapetus	POS_Z to NEP	SNER-5a
RADAR_049IA_SCATTRAD005_PRIME		2007-255T03:00:00		000T03:00:00	2007-255T06:00:00	NEG_Z to Iapetus	PIC	RADAR must control primary and secondary axes to obtain correct polarization.
ISS_049SA_STRMOVIEE002_PRIME	V	2007-255T06:00:00		000T04:35:00	2007-255T10:35:00	ISS_WAC to Saturn	POS_Z to NEP	S_N_ER_-3
ISS_049IA_LIMBTOPOI001_PRIME		2007-255T10:35:00		000T00:30:00	2007-255T11:05:00	ISS_NAC to Iapetus	POS_Z to NEP	S_N_ER_-3
NAV_049SK_OPNAV551_PRIME		2007-255T11:05:00		000T01:29:00	2007-255T12:34:00	ISS_NAC to Satellites	POS_Z to NEP	Starts at waypoint, ends at Earth point
NAV_049EA_DLTURN551_PRIME		2007-255T12:34:00		000T00:01:00	2007-255T12:35:00	XBAND to Earth	NEG_X to NEP	
SP_049EA_G70METNON255_PRIME	C	2007-255T12:35:00		000T09:00:00	2007-255T21:35:00	XBAND to Earth	Rolling	

Telemetry Modes

TELEMETRY MODE REPORT

SCET	TELEMETRY MODE	REQUEST
2007-251T21:50:00	S_N_ER_3	SP_049NA_G34OBSOTB252_NA
2007-252T02:10:00	S_N_ER_5A	SP_049NA_G34OBSOTB252_NA
2007-252T05:00:00	S_N_ER_8	SP_049NA_G34OBSOTB252_NA
2007-252T09:45:00	S_N_ER_3	SP_049NA_G34OBSOTB252_NA
2007-252T12:45:00	RTE_N_SPB_99540	SP_049EA_G70METOTB252_PRIME
2007-252T13:35:00	RTE_N_SPB_110600	SP_049EA_G70METOTB252_PRIME
2007-252T14:35:00	RTE_N_SPB_124425	SP_049EA_G70METOTB252_PRIME
2007-252T20:05:00	RTE_N_SPB_110600	SP_049EA_G70METOTB252_PRIME
2007-252T21:20:00	RTE_N_SPB_99540	SP_049EA_G70METOTB252_PRIME
2007-252T21:45:00	S_N_ER_5A	SP_049NA_M70OBSNON254_NA
2007-253T00:15:00	S_N_ER_8	SP_049NA_M70OBSNON254_NA
2007-253T02:05:00	S_N_ER_3	SP_049NA_M70OBSNON254_NA
2007-253T03:50:00	RTE_N_SPB_41475	SP_049EA_M70METNON253_PRIME
2007-253T04:05:00	RTE_N_SPB_47400	SP_049EA_M70METNON253_PRIME
2007-253T04:35:00	RTE_N_SPB_66360	SP_049EA_M70METNON253_PRIME
2007-253T05:05:00	RTE_N_SPB_82950	SP_049EA_M70METNON253_PRIME
2007-253T05:50:00	RTE_N_SPB_99540	SP_049EA_M70METNON253_PRIME
2007-253T06:25:45	S_N_ER_5A	SP_049NA_G70OBSNON253_NA
2007-253T09:23:53	S_N_ER_8	SP_049NA_G70OBSNON253_NA
2007-253T10:48:53	S_N_ER_3	SP_049NA_G70OBSNON253_NA
2007-253T12:01:53	S_N_ER_2	SP_049NA_G70OBSNON253_NA
2007-253T12:38:53	S_N_ER_3	SP_049NA_G70OBSNON253_NA
2007-253T19:29:00	RTE_N_SPB_124425	SP_049EA_G70METNON253_PRIME
2007-253T20:05:00	RTE_N_SPB_110600	SP_049EA_G70METNON253_PRIME
2007-253T21:05:00	RTE_N_SPB_99540	SP_049EA_G70METNON253_PRIME
2007-253T21:50:00	RTE_N_SPB_82950	SP_049EA_G70METNON253_PRIME
2007-253T22:30:00	S_N_ER_3	SP_049NA_M70OBSNON256_NA
2007-253T23:30:00	S_N_ER_5A	SP_049NA_M70OBSNON256_NA
2007-254T02:00:00	S_N_ER_8	SP_049NA_M70OBSNON256_NA
2007-254T04:30:00	RTE_N_SPB_66360	SP_049EA_M70ARRNON254_PRIME
2007-254T05:50:00	RTE_N_SPB_99540	SP_049EA_M70ARRNON254_PRIME
2007-254T08:20:00	RTE_N_SPB_124425	SP_049EA_M70ARRNON254_PRIME
2007-254T11:20:00	RTE_N_SPB_99540	SP_049EA_M70ARRNON254_PRIME
2007-254T13:50:00	RTE_N_SPB_66360	SP_049EA_M70ARRNON254_PRIME
2007-254T15:00:00	RTE_N_SPB_124425	SP_049EA_G70ARRNON254_PRIME
2007-254T20:00:00	S_N_ER_5	SP_049NA_G34OBSNON255_NA
2007-254T21:30:00	S_N_ER_3	SP_049NA_G34OBSNON255_NA
2007-254T23:00:00	S_N_ER_5A	SP_049NA_G34OBSNON255_NA

Telemetry Modes, cont'd

TELEMETRY MODE REPORT

SCET	TELEMETRY MODE	REQUEST
2007-255T03:00:00	S_N_ER_8	SP_049NA_G34OBSNON255_NA
2007-255T06:00:00	S_N_ER_3	SP_049NA_G34OBSNON255_NA
2007-255T11:05:00	S_N_ER_5	SP_049NA_G34OBSNON255_NA
2007-255T12:35:00	RTE_N_SPB_99540	SP_049EA_G70METNON255_PRIME
2007-255T13:21:00	RTE_N_SPB_110600	SP_049EA_G70METNON255_PRIME
2007-255T14:21:00	RTE_N_SPB_124425	SP_049EA_G70METNON255_PRIME
2007-255T20:06:00	RTE_N_SPB_110600	SP_049EA_G70METNON255_PRIME
2007-255T21:06:00	RTE_N_SPB_99540	SP_049EA_G70METNON255_PRIME

Op Modes

Request	Start Time	Epoch Relative Start Time
ENGR_049SC_DFPW251_PPS	2007-251T21:50:00	
ENGR_049SC_RADWU252_PPS	2007-252T02:00:00	
ENGR_049SC_RADRWA252_PPS	2007-252T05:00:00	
ENGR_049SC_DFPW252_PPS	2007-252T09:44:23	
ENGR_049SC_DFPWTCM252_PPS	2007-252T12:44:02	
ENGR_049SC_RADWU253_PPS	2007-252T21:45:00	
ENGR_049SC_RADRWA253_PPS	2007-253T00:15:00	
ENGR_049SC_DFPW253_PPS	2007-253T02:04:23	
ENGR_049SC_RADWU453_PPS	2007-253T06:23:53	
ENGR_049SC_RADRWA453_PPS	2007-253T09:23:53	GMB_E049_Iapetus-000T03:10:00
ENGR_049SC_DFPW453_PPS	2007-253T10:48:16	GMB_E049_Iapetus-000T01:45:37
ENGR_049SC_RADWU254_PPS	2007-253T23:00:00	
ENGR_049SC_RADRWA254_PPS	2007-254T02:00:00	
ENGR_049SC_DFPW254_PPS	2007-254T04:09:23	
ENGR_049SC_RADWU255_PPS	2007-255T00:00:00	
ENGR_049SC_RADRWA255_PPS	2007-255T03:00:00	
ENGR_049SC_DFPW255_PPS	2007-255T05:59:23	

Data Volume

DATA VOLUME SUMMARY

			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)	MARGIN (Mb)	MARGIN (%)	OPNAV (Mb)	SCI (Mb)	ENGR (Mb)	TOTAL (Mb)	CPACTY (Mb)	MARGIN (Mb)	MARGIN (%)	CAROVR (Mb)
SP_049EA_G70METOTB252_PRIME	252 12:45	252 21:45	0	1270	52	1322	3569	2247	63%	0	132	53	1507	3205	1698	53%	0
SP_049EA_M70METNON253_PRIME	253 03:50	253 06:25	0	630	21	652	3569	2917	82%	0	38	15	705	545	-160	-29%	160
SP_049EA_G70METNON253_PRIME	253 19:29	253 22:30	160	3142	45	3347	3569	221	6%	0	44	18	3410	920	-2489	-270%	2489
SP_049EA_M70ARRNON254_PRIME	254 04:30	254 15:00	2489	977	21	3487	3566	79	2%	0	219	62	3767	3141	-626	-20%	626
SP_049EA_G70ARRNON254_PRIME	254 15:00	254 20:00	626	0	0	626	3566	2940	82%	0	75	29	730	1884	1153	61%	0
SP_049EA_G70METNON255_PRIME	255 12:35	255 21:35	0	1306	58	1363	3497	2133	61%	35	219	53	1670	3216	1546	48%	0

Data Volume, cont'd

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	251 21:50	252 12:45	53.7	8.0	28.8	2.7	235.0	32.2	48.3	544.3	70.3	0.0	246.5	0.0	0.0	1269.9
SP_049EA_G70METOTB252_PRIME	252 12:45	252 21:45	32.4	4.9	0.0	1.6	0.0	19.4	29.2	0.0	42.4	2.5	0.0	0.0	0.0	132.4
DAILY TOTAL SCIENCE	251 21:50	252 21:45	86.1	12.9	28.8	4.3	235.0	51.7	77.5	544.3	112.8	2.5	246.5	0.0		
OBSERVATION_NOR	252 21:45	253 03:50	21.9	3.3	44.4	1.1	140.0	13.1	19.7	225.4	28.7	4.5	128.2	0.0	0.0	630.4
SP_049EA_M70METNON253_PRIME	253 03:50	253 06:25	9.3	1.4	0.0	0.5	0.0	5.6	8.4	0.0	12.2	0.5	0.0	0.0	0.0	37.9
DAILY TOTAL SCIENCE	252 21:45	253 06:25	31.2	4.7	44.4	1.6	140.0	18.7	28.1	225.4	40.9	5.0	128.2	0.0		
OBSERVATION_NOR	253 06:25	253 19:29	155.0	8.9	119.8	2.3	1291.5	48.0	48.8	241.1	363.1	609.0	254.6	0.0	0.0	3142.2
SP_049EA_G70METNON253_PRIME	253 19:29	253 22:30	10.9	1.6	0.0	0.5	0.0	6.5	9.8	0.0	14.2	0.8	0.0	0.0	0.0	44.4
DAILY TOTAL SCIENCE	253 06:25	253 22:30	165.9	10.6	119.8	2.9	1291.5	54.5	58.5	241.1	377.3	609.8	254.6	0.0		
OBSERVATION_NOR	253 22:30	254 04:30	21.6	3.2	50.4	1.1	372.0	13.0	19.4	261.4	28.3	163.7	42.6	0.0	0.0	976.7
SP_049EA_M70ARRNON254_PRIME	254 04:30	254 15:00	37.8	5.7	62.4	1.9	0.0	22.7	34.0	0.0	49.5	4.8	0.0	0.0	0.0	218.8
SP_049EA_G70ARRNON254_PRIME	254 15:00	254 20:00	18.0	2.7	0.0	0.9	0.0	10.8	16.2	0.0	23.6	2.7	0.0	0.0	0.0	74.9
DAILY TOTAL SCIENCE	253 22:30	254 20:00	77.4	11.6	112.8	3.9	372.0	46.4	69.7	261.4	101.4	171.2	42.6	0.0		
OBSERVATION_NOR	254 20:00	255 12:35	59.7	8.9	57.6	3.0	420.8	35.8	53.7	356.9	78.2	86.7	144.3	0.0	0.0	1305.7
OBSERVATION_OPN	254 20:00	255 12:35	0.0	0.0	0.0	0.0	34.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.8
SP_049EA_G70METNON255_PRIME	255 12:35	255 21:35	32.4	4.9	86.4	1.6	0.0	19.4	29.2	0.0	42.4	2.5	0.0	0.0	0.0	218.8
DAILY TOTAL SCIENCE	254 20:00	255 21:35	92.1	13.8	144.0	4.6	420.8	55.3	82.9	356.9	120.7	89.1	144.3	0.0		

AVERAGE DATA RATE REPORT (calculated over observation periods and downlink passes)

Event	Start doy hh:mm	End doy hh:mm	CAPS (bps)	CDA (bps)	INMS (bps)	MAG (bps)	MIMI (bps)	RPWS (bps)	UVIS (bps)
SP_049NA_G34OBSOTB252_NA	251 21:50	252 12:45	1000.0	149.9	50.0	600.0	900.0	1310.0	0.0
SP_049EA_G70METOTB252_PRIME	252 12:45	252 21:45	1000.0	149.9	50.0	600.0	900.0	1310.0	76.0
SP_049NA_M70OBSNON254_NA	252 21:45	253 03:50	1000.0	149.9	50.0	600.0	900.0	1310.0	206.8
SP_049EA_M70METNON253_PRIME	253 03:50	253 06:25	1000.0	149.9	50.0	600.0	900.0	1310.0	49.0
SP_049NA_G70OBSNON253_NA	253 06:25	253 19:29	3295.9	190.0	50.0	1021.2	1037.7	7719.5	12946.9
SP_049EA_G70METNON253_PRIME	253 19:29	253 22:30	1000.0	149.9	50.0	600.0	900.0	1310.0	76.0
SP_049NA_M70OBSNON256_NA	253 22:30	254 04:30	1000.0	149.9	50.0	600.0	900.0	1310.0	7578.2
SP_049EA_M70ARRNON254_PRIME	254 04:30	254 15:00	1000.0	149.9	50.0	600.0	900.0	1310.0	126.6
SP_049EA_G70ARRNON254_PRIME	254 15:00	254 20:00	1000.0	149.9	50.0	600.0	900.0	1310.0	152.0
SP_049NA_G34OBSNON255_NA	254 20:00	255 12:35	1000.0	149.9	50.0	600.0	900.0	1310.0	1451.6
SP_049EA_G70METNON255_PRIME	255 12:35	255 21:35	1000.0	149.9	50.0	600.0	900.0	1310.0	76.0

DSN Requests

CASSINI DSN COVERAGE SUMMARY for rev49_IA_031001.apf generated on 2003-Oct-02 08:00:37
(+ = pass overlaps with previous pass; * = in conflict with DSN weekly maintenance)

C	ANT	ID	BOT_TO_EOT ERT	DUR hh:mm	XMT_AT ERT	2WAY_PERIOD ERT	DUR hh:mm	DL_PERIOD ERT	DL_PERIOD SCET	DUR hh:mm	NOT	CALS min	RADIO_CONFG UD D UD MAR	DATA_RATES kbps
G	70MET	14	252T14:10-23:10	09:00	252T14:20	17:10-23:10	06:00	252T14:10-23:10	252T12:45-21:45	09:00	OTB	15/15	XX - -- --0	99,110,124,110,99
M	70MET	63	253T05:15-07:50	02:35	253T05:25	07:50-07:50	00:00	253T05:15-07:50	253T03:50-06:25	02:35	---	15/15	XX - -- --0	41,47,66,82,99
G	70MET	14	*253T20:50-23:55	03:05	253T21:00	23:50-23:55	00:05	253T20:54-23:55	253T19:29-22:30	03:01	---	15/15	XX - -- --0	124,110,99,82
M	70ARR	63	254T05:55-16:25	10:30	254T06:05	08:55-16:25	07:30	254T05:55-16:25	254T04:30-15:00	10:30	---	15/15	XX - -- --0	66,99,124,99,66
+G	70ARR	14	254T12:55-21:25	08:30	254T13:05	16:25-21:25	05:00	254T16:25-21:25	254T15:00-20:00	05:00	---	15/15	XX - -- --0	124
G	70MET	14	255T13:55-23:00	09:05	255T14:05	16:53-22:59	06:06	255T13:59-22:59	255T12:35-21:35	09:00	---	15/15	XX - -- --0	99,110,124,110,99

Open Issues

- Pointing designs around C/A may change slightly from what is currently in the SPASS
- Maintenance on DSS-14 DOY 253 - we will request that this be waived.

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	C	+/- 4 hrs	
B. ±3 hours from targeted Titan Flyby	N/A		
C. OpNavs preceding/following a downlink	C		
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 049IA is 90 min 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)