CASSINI TOST T113 SEGMENT

Rev 222 Handoff Package

Segment Boundary 2015-270T08:33:00 – 2015-273T04:17:00

2 April 2015

Rudy Boehmer

Science Highlights

Notes & Liens

SMT Report

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_222EA_C34HEFNON270_PRIME	270 23:32	271 08:32	0	580	63	643	3322	2679	0	91	53	787	694	-93	11	0% 93
SP_222EA_G70METNON272_PRIME	272 17:17	273 02:02	93	2080	151	2324	3322	998	0	235	52	2610	2388	-223	11	0% 222
SP_222EA_C70METNON272_PRIME	273 02:02	273 04:17	222	0	0	222	3322	3100	0	512	13	747	759	11	11	2% 0

SSR PARTITION SIZE SUMMARY - SELECTED SSR CONFIGURATION: DOUBLE

	SSR A/B		
OBSERVATION PERIOD	P4 Size (Frames)	P5 Size (Frames)	P6 Size (Frames)
SP_222NA_OBSERV270_NA	188954	10	38863
SP_222NA_OBSERV271_NA	188954	10	38863

DATA VOLUME REPORT --- TRANSFER FRAME OVERHEAD NOT INCLUDED

Event	Start doy hh:mm	End doy hh:mm	CAPS (Mb)	CDA (Mb)	CIRS (Mb)	INMS (Mb)	ISS (Mb)	MAG (Mb)	MIMI (Mb)	RADAR (Mb)	RPWS (Mb)	UVIS (Mb)	VIMS (Mb)	PROBE (Mb)	ENGR (Mb)	TOTAL (Mb)
OBSERVATION_NOR	270 08:33	270 23:32	0.0	28.3	0.0	5.4	400.0	26.6	32.4	7.6	49.1	0.0	25.0	0.0	62.6	637.0
SP_222EA_C34HEFNON270_PRIME	270 23:32	271 08:32	0.0	17.0	0.0	3.2	0.0	16.0	19.4	0.0	29.5	4.9	0.0	0.0	0.0	90.1
DAILY TOTAL SCIENCE	270 08:33	271 08:32	0.0	45.2	0.0	8.6	400.0	42.7	51.8	7.6	78.6	4.9	25.0	0.0	62.6	
OBSERVATION_NOR	271 08:32	272 17:17	0.0	73.1	276.7	21.9	340.0	100.9	86.4	548.4	331.3	52.0	230.0	0.0	149.6	2210.3
SP_222EA_G70METNON272_PRIME	272 17:17	273 02:02	0.0	66.0	83.7	3.2	0.0	15.6	18.9	0.0	40.9	4.8	0.0	0.0	0.0	233.1
SP_222EA_C70METNON272_PRIME	273 02:02	273 04:17	0.0	34.0	13.5	0.8	0.0	4.0	4.9	0.0	10.5	1.2	0.0	0.0	438.1	507.0
DAILY TOTAL SCIENCE	271 08:32	273 04:17	0.0	173.1	373.9	25.8	340.0	120.5	110.2	548.4	382.8	58.1	230.0	0.0	587.7	

T113 TOST Master Timeline

222TI_T113	1036

Start Time	End Time	Prime Activity	Obs. Detail	Op Mode	TLM Mode	Comments
2015-270T08:33:00	**2015-270T09:13:00**	SP Turn to WP	NEG_Y to Titan / NEG_X to NTP	DFPW Normal	S_N_ER_3	
2015-270T09:13:00	2015-270T13:13:00	ISS	*ISS mosaic at first, then sit and stare for CIRS and VIMS (TC1a, TC1b, TN1a, TN2c, TN2d)*	RADWU @ 12:58	S_N_ER_3, S_N_ER_5a for 15 min @ 12:58	
2015-270T13:13:00	2015-270T18:13:00	ISS	*ISS mosaic at first, then sit and stare for CIRS and VIMS (TC1a, TC1b, TN1a, TN2c, TN2d)*	RADWU	S_N_ER_3	
2015-270T18:13:00	2015-270T20:13:00	RADAR	*2 hr Radiometry Calibration*	RADWU	S_N_ER_5a	
2015-270T20:13:00	2015-270T21:22:00	ISS	*ISS mosaic at first, then sit and stare for CIRS and VIMS (TC1a, TC1b, TN1a, TN2c, TN2d)*	DFPW Normal	S_N_ER_3	
2015-270T21:22:00	**2015-270T22:02:00**	SP Turn to Earth for downlink	XBAND to Earth / NEG_X to 310.0, 43.0	DFPW Normal	S_N_ER_3	
2015-270T22:02:00	2015-270T23:32:00	Ybias window		DFPW Normal	S_N_ER_3	
2015-270T23:32:00	**2015-271T08:32:00**	Canberra 34M		DFPW Normal	RTE_N_SPB	
2015-271T08:32:00	**2015-271T09:12:00**	SP Turn to WP	NEG_Y to Titan / NEG_X to NTP	DFPW Normal	S_N_ER_3	
2015-271T09:12:00	C/A-12:10:00	OD Uncertainty Dead Time				
C/A-12:10:00	**-10:00**	**CIRS**	**C truncated (TN1c)**	DFPW Normal	S_N_ER_3	VIMS rider
-10:00	**-09:00**	**ISS**	**TN1a**	DFPW Normal	S_N_ER_3	
-09:00	**-05:00**	**CIRS**	**F (TC1b OR TN1c)**	RADWU	S_N_ER_5a for 15 min @ -09:00, then S_N_ER_3	
Begin custom period				RADWU	S_N_ER_3	
-05:00	**-02:00**	**CIRS**	**F (TC1b OR TN1c)**	RADWU	S_N_ER_3	
-02:00	**-01:00**	**VIMS**	**Z (TC2a)**	RADWU	S_N_ER_3	
-01:00	**-00:35**	**INMS**	**(TN1c, MC2a)**	RADWU	S_N_ER_8	INMS to pickup from VIMS attitude
-00:35	**-00:34**	RWA to RCS Transition		RADRCS	S_N_ER_8	
-00:34	**0**	**RADAR**	**Inbound altimetry (TN2b), SAR (TC1a, TN1a, TN1b, TN2b, TN2c)**	RADRCS	S_N_ER_8	Turn on thrusters
2015-271T21:37:13		**CLOSEST APPROACH**	**(Tc2a)**	RADRCS	S_N_ER_8	
-00:00	**+00:15**	**INMS**	**(TN1c, MC2a)**	RADRCS	S_N_ER_8	RADAR to design pointing with INMS prime
+00:15	**+00:30**	**RADAR**	**Outbound altimetry (TN2b)**	RADRCS	S_N_ER_8	
+00:30	**+00:52**	RCS to RWA Transition		RADRWA	S_N_ER_8	
+00:52	**+01:37**	**RADAR**	**Outbound HiSAR (TC1a, TN1a, TN1b, TN2c)**	RADRWA	S_N_ER_8	
+01:37	**+2:30**	**CIRS**	**(TN1c)**	DFPW Normal	S_N_ER_3	
+02:30	**+5:00**	**CIRS**	**(TC1b)**	DFPW Normal	S_N_ER_3	
+05:00	**+9:00**	**CIRS**	**(TC1b)**	DFPW Normal	S_N_ER_3	
+09:00	**+13:00**	**CIRS**	**N1 (Tc1b, TN1c aerosol)**	DFPW Normal	S_N_ER_3	
+13:00	**C/A+18:44:47**	**CIRS**	**M4 (Tc1b (TN1c on outbound))**	DFPW Normal	S_N_ER_3	
End custom period				DFPW Normal	S_N_ER_3	
C/A+18:44:47	2015-272T16:37:00	OD Uncertainty Dead Time				
2015-272T16:37:00	**2015-272T17:17:00**	SP Turn to Earth for downlink	XBAND to Earth / POS_X to 40.6, 83.5	DFPW Normal	S_N_ER_3	
2015-272T17:17:00	**2015-273T02:02:00**	Goldstone 70M		DFPW Normal	RTE_N_SPB	May not clear SSR-A
2015-273T02:02:00	**2015-273T04:17:00**	Canberra 70M		DFPW Normal	RTE_N_SPB	Dual playback for RADAR -00:18 to +00:15

T113 TOST SPASS (1/2)

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
Sequence S91, length = 65 days		2015-264T02:48:00		065T03:20:00	2015-329T06:08:00			
Titan Flyby T113 Segment		2015-270T08:33:00		002T19:44:00	2015-273T04:17:00			
SP_222TI_WAYPTTURN270_PRIME		2015-270T08:33:00		000T00:40:00	2015-270T09:13:00	NEG_Y to Titan	NEG_X to NTP	
NEW WAYPOINT		**2015-270T09:13:00**		**000T12:49:00**	**2015-270T22:02:00**	**NEG_Y to Titan**	**NEG_X to NTP**	
ISS_222TI_CLOUD001_PRIME	V	2015-270T09:13:00		000T04:00:00	2015-270T13:13:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
ISS_222TI_CLOUD002_PRIME	V	2015-270T13:13:00		000T05:00:00	2015-270T18:13:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
RADAR_222TI_RADIOMCAL132_PRIME		2015-270T18:13:00		000T02:00:00	2015-270T20:13:00	NEG_Z to Titan	NEG_X to NTP	No Preference to secondary pointing
ISS_222TI_CLOUD003_PRIME	V	2015-270T20:13:00		000T01:09:00	2015-270T21:22:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
SP_222EA_DLTURN270_PRIME		2015-270T21:22:00		000T00:40:00	2015-270T22:02:00	XBAND to Earth	NEG_X to 310.0/43.0	
NEW WAYPOINT		**2015-270T22:02:00**		**000T11:10:00**	**2015-271T09:12:00**	**XBAND to Earth**	**NEG_X to 310.0/43.0**	
SP_222EA_YGAP270_PRIME	E	2015-270T22:02:00		000T01:30:00	2015-270T23:32:00	XBAND to Earth	NEG_X to 310.0/43.0	
SP_222EA_C34HEFNON270_PRIME		2015-270T23:32:00		000T09:00:00	2015-271T08:32:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 310/43.SRU.
SP_222TI_WAYPTTURN271_PRIME		2015-271T08:32:00		000T00:40:00	2015-271T09:12:00	NEG_Y to Titan	NEG_X to NTP	
NEW WAYPOINT		**2015-271T09:12:00**		**001T08:05:00**	**2015-272T17:17:00**	**NEG_Y to Titan**	**NEG_X to NTP**	
SP_222TI_DEADTIME271_PRIME		**2015-271T09:12:00**		**000T00:14:59**	**2015-271T09:26:59**	**NEG_Y to Titan**	**NEG_X to NTP**	
CIRS_222TI_FIRNADCMP001_PRIME	I, U, V	2015-271T09:27:13	GMB_E222_TITAN_T113-000T	000T02:10:00	2015-271T11:37:13	CIRS_FP1 to Titan	PIC	
ISS_222TI_MONITORNA001_PRIME	C, V	2015-271T11:37:13	GMB_E222_TITAN_T113-000T	000T01:00:00	2015-271T12:37:13	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
CIRS_222TI_MIRLMBMAP001_PRIME	V	2015-271T12:37:13	GMB_E222_TITAN_T113-000T	000T04:00:00	2015-271T16:37:13	CIRS_FPB to Titan	PIC	
Begin Custom		**2015-271T16:37:13**	**GMB_E222_TITAN_T113-000T**	**000T00:00:01**	**2015-271T16:37:14**			
CIRS_222TI_FIRNADMAP001_PRIME	V	2015-271T16:37:13	GMB_E222_TITAN_T113-000T	000T03:00:00	2015-271T19:37:13	CIRS_FP1 to Titan	PIC	Pick up at NEG_Y to Titan, NEG_X to NTP; Hand off at NEG_Y to Titan, NEG_X to NTP.
VIMS_222TI_REGMAP001_PRIME	C, I, M	2015-271T19:37:13	GMB_E222_TITAN_T113-000T	000T01:00:00	2015-271T20:37:13	VIMS_IR to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_Y to Titan, NEG_X to NTP; Hand off at NEG_Y to Titan, NEG_X to Titan_SC_RAM.
INMS_222TI_TITAN113001_PRIME	M	2015-271T20:37:13	GMB_E222_TITAN_T113-000T	000T00:25:00	2015-271T21:02:13	NEG_X to Titan_SC_RAM	NEG_Y to Titan	Pick up at NEG_Y to Titan, NEG_X to Titan_SC_RAM; Hand off at NEG_X to Titan_SC_RAM, NEG_Y to Titan.
ENGR_222SC_RADRCS271_PRIME	M	2015-271T21:02:13	GMB_E222_TITAN_T113-000T	000T00:01:00	2015-271T21:03:13	NEG_X to Titan_SC_RAM	NEG_Y to Titan	Pick up at NEG_X to Titan_SC_RAM, NEG_Y to Titan; Hand off at NEG_X to Titan_SC_RAM, NEG_Y to Titan. Deadband = (0.5,0.5,2.0)
RADAR_222TI_T113INALT001_PRIME	M	2015-271T21:03:13	GMB_E222_TITAN_T113-000T	000T00:16:00	2015-271T21:19:13	NEG_Z to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_X to Titan_SC_RAM, NEG_Y to Titan; Hand off at NEG_Z to Titan, NEG_X to Titan_SC_RAM.
Begin Dual Playback Science		2015-271T21:19:13	GMB_E222_TITAN_T113-000T	000T00:00:01	2015-271T21:19:14			
RADAR_222TI_T113INSAR001_PRIME	M	2015-271T21:19:13	GMB_E222_TITAN_T113-000T	000T00:18:00	2015-271T21:37:13	NEG_Z to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_Z to Titan, NEG_X to Titan_SC_RAM; Hand off at NEG_X to Titan_SC_RAM, NEG_Z to Titan. INMS ride along.
222TI (t) T113 TITAN Inboun...		2015-271T21:37:13		000T00:00:01	2015-271T21:37:14			
RADAR_222TI_T113RASAR001_PRIME	M	2015-271T21:37:13	GMB_E222_TITAN_T113+000T	000T00:15:00	2015-271T21:52:13	NEG_X to Titan_SC_RAM	NEG_Z to Titan	Pick up at NEG_X to Titan_SC_RAM, NEG_Z to Titan; Hand off at NEG_Z to Titan, NEG_X to Titan_SC_RAM. Ride-along at c/a.
End Dual Playback Science		2015-271T21:52:13	GMB_E222_TITAN_T113+000T	000T00:00:01	2015-271T21:52:14			

T113 TOST SPASS (2/2)

Request	Riders	Start (SCET)	Start (Epoch)	Duration	End (SCET)	Primary	Secondary	Comments
RADAR_222TI_T113OTALT001_PRIME	M	2015-271T21:52:13	GMB_E222_TITAN_T113+000	000T00:15:00	2015-271T22:07:13	NEG_Z to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_Z to Titan, NEG_X to Titan_SC_RAM; Hand off at NEG_Z to Titan, POS_Y to NTP.
ENGR_222SC_RADRWBIAS271_PPS	M	2015-271T22:07:13	GMB_E222_TITAN_T113+000	000T00:22:00	2015-271T22:29:13	NEG_Z to Titan	POS_Y to NTP	Pick up at NEG_Z to Titan, POS_Y to NTP; Hand off at NEG_Z to Titan, POS_Y to NTP. Deadband=(2, 2, 20)
RADAR_222TI_T113OHSAR001_PRIME	M	2015-271T22:29:13	GMB_E222_TITAN_T113+000	000T00:45:00	2015-271T23:14:13	NEG_Z to Titan	POS_Y to NTP	Pick up at NEG_Z to Titan, POS_Y to NTP; Hand off at NEG_Y to Titan, NEG_X to 91.0/50.0.
CIRS_222TI_FIRLMBINT002_PRIME	M, V	2015-271T23:14:13	GMB_E222_TITAN_T113+000	000T00:53:00	2015-272T00:07:13	CIRS_FP1 to Titan	PIC	Pick up at NEG_Y to Titan, NEG_X to 91.0/50.0; Hand off at CIRS_FP1 to Titan, PIC.
CIRS_222TI_FIRNADMAP002_PRIME	V	2015-272T00:07:13	GMB_E222_TITAN_T113+000	000T02:30:00	2015-272T02:37:13	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, PIC; Hand off at CIRS_FPB to Titan, PIC.
CIRS_222TI_MIRLMBINT002_PRIME	I, V	2015-272T02:37:13	GMB_E222_TITAN_T113+000	000T04:00:00	2015-272T06:37:13	CIRS_FPB to Titan	PIC	Pick up at CIRS_FPB to Titan, PIC; Hand off at CIRS_FP1 to Titan, PIC.
CIRS_222TI_FIRNADCMP002_PRIME	I, U, V	2015-272T06:37:13	GMB_E222_TITAN_T113+000	000T04:00:00	2015-272T10:37:13	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, PIC; Hand off at CIRS_FPB to Titan, PIC.
CIRS_222TI_MIDIRTMAP002_PRIME	I, U, V	2015-272T10:37:13	GMB_E222_TITAN_T113+000	000T05:44:46	2015-272T16:21:59	CIRS_FPB to Titan	PIC	Pick up at CIRS_FPB to Titan, PIC; Hand off at NEG_Y to Titan, NEG_X to NTP.
End Custom		**2015-272T16:21:59**	**GMB_E222_TITAN_T113+000**	**000T00:00:01**	**2015-272T16:22:00**			
SP_222TI_DEADTIME272_PRIME		**2015-272T16:21:59**	**GMB_E222_TITAN_T113+000**	**000T00:15:01**	**2015-272T16:37:00**	**NEG_Y to Titan**	**NEG_X to NTP**	
SP_222EA_DLTURN272_PRIME		2015-272T16:37:00		000T00:40:00	2015-272T17:17:00	XBAND to Earth	POS_X to 40.6/83.5	
NEW WAYPOINT		**2015-272T17:17:00**		**000T11:00:00**	**2015-273T04:17:00**	**XBAND to Earth**	**POS_X to 40.6/83.5**	
SP_222EA_G70METNON272_PRIME	C, E, M	2015-272T17:17:00		000T08:45:00	2015-273T02:02:00	XBAND to Earth	Rolling/SRU	CAPS.POS_X to 40.6/83.5 (NSP) or NEP.SRU.
Pointer Reset in preparatio...		2015-273T02:02:00		000T00:00:01	2015-273T02:02:01			
SP_222EA_C70METNON272_PRIME	C	2015-273T02:02:00		000T02:15:00	2015-273T04:17:00	XBAND to Earth	POS_X to 40.6/83.5	CAPS.POS_X to 40.6/83.5 (NSP) or NEP.SRU.

T113 TOST Science Highlights (1/2)

DOY 270 (Sept 27) – ISS will monitor Titan to track clouds and the evolution thereof as northern summer approaches. VIMS will ride along to observe the evolution of the South Polar vortex, to map the tropical regions of Shangri-La, and to monitor the formation of clouds at high northern latitudes. Downlink will occur over Canberra 34M HEF.

DOY 271 (Sept 28) – Inbound to Titan, CIRS increases temporal mapping coverage of Titan's stratospheric temperatures to monitor seasonal change. ISS will ride along with CIRS inbound to image Titan's surface and atmosphere over Xanadu. ISS will also acquire a regional-scale mosaic of Shangri-La and the Xanadu/Shangri-La boundary, which will be ISS' first good view of this region since T12 (March 2006). VIMS will then acquire a mosaic of 4 images that covers the transition from the dune fields to Xanadu with a footprint resolution better than 20 km/pixel – coverage of the Tui region in particular will allow study of variations at the surface.

INMS follows, and T113 is one of only two dawn side passes (with T5) in which INMS will sample Titan's neutral atmosphere and ionosphere. On inbound, INMS will be using a new mode at high altitudes specifically designed to observe ions outflowing from Titan. At the lowest altitudes around closest approach, INMS will be riding along with RADAR on inbound, allowing good neutral measurements, and will be prime on outbound, allowing useful observations of both ions and neutrals. RADAR will be SAR-imaging Eastern Xanadu, and obtaining stereo (with T13) of the Xanadu mountains.

T113 has MAPS science objectives as well. With a SLT similar to T5, MAG will try to characterize a possible magnetic field induced by Saturn's magnetic field impinging on the nightside. RPWS will measure thermal plasmas in Titan's ionosphere and surrounding environment, search for lightning in Titan's atmosphere, and investigate the interaction of Titan with Saturn's magnetosphere.

T113 TOST Science Highlights (2/2)

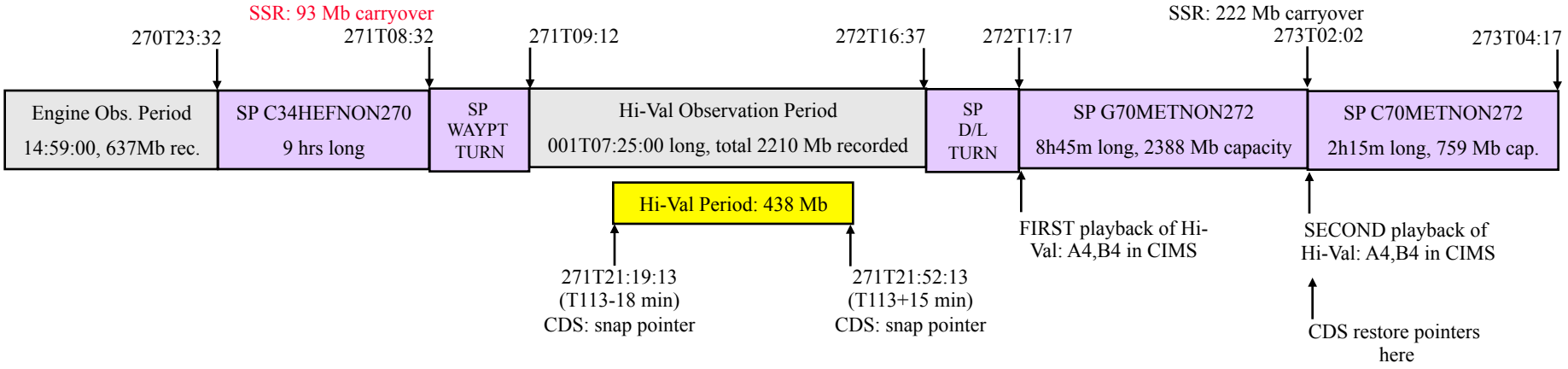
DOY 272 (Sept 29) – CIRS is prime on the outbound, and will continue to monitor seasonal change in the stratosphere. ISS and VIMS will ride along: ISS will image Titan's surface and atmosphere over Senkyo on the nightside while VIMS will image the Northern Pole area. Playback of the data will occur over the Goldstone 70M downlink.

DOY 273 (Sept 30) – Playback will continue over the Goldstone 70M, followed by a dual playback pass on the Canberra 70M.

T113 Dual Playback (RADAR)

Flyby	BEGHIVAL	ENDHIVAL	P4 Dual Playback Data Volume	SSR empty before hi-val observation period? (if not verify any carryover on A fits with Hi-Val data)	SSR-A empty after first playback?	PPL set to A4,B4 for first AND second playbacks?	SSRs empty after second playback? (if not does any Hi-Val data carry over?)
T113	T113-18 min	T113+15 min	438 Mb	No	No	Yes	Yes

Playbacks contiguous:



Reminder - ALL instruments' data is played back twice during P4 dual playback periods

Notes (1/2)

- Pointing:
  - CIRS and VIMS temperature violations:
    - INMS Inbound at C/A-01:00:00 – C/A-00:35:00, PDT design:
      - CIRS temperature rise dT = 4.8 deg K (no VIMS heating)
    - RADAR/INMS C/A on RCS (C/A-00:34:00 – C/A+00:15:00), AACS analysis:
      - CIRS temperature rises to max of 84.66 deg K at 2015-271T22:03:08 (dT = 10.06 deg K).
      - VIMS temperature rises to max of 64.70 deg K at 2015-271T22:01:04 (dT = 3.3 deg K).
    - Per CAPS T113 Reallocation at PSG: CIRS and VIMS agreed to accept consumables with dT of 14.4 deg K and 6.9 deg K, respectively.
  - POS_X to SUN angle decreases to minimum angle of 38.36 degrees (threshold is 83 degrees). CMT management required.
  - Star ID Suspend needed from 2015-271T21:41:03 for 13m56s.

- Data Volume:
  - No carryover to next segment
  - SSRs empty at end of segment (see Dual Playback chart)
  - Unusual priority playback tables due to dual playback, as well as carryover from Titan engine period
  - SMT Warnings (first 2 are OK and expected, last 2 are false-positives):
    - RADAR_222OT_WU4RADCAL132_RIDER: Found an activity whose data are NOT recorded in this telemetry mode "S_N_ER_3" commanded at 2015-270T13:13:00.000. Volume of 8.667648 Mb not given data policing space.
    - RADAR_222TI_T113WRMUP001_RIDER: Found an activity whose data are NOT recorded in this telemetry mode "S_N_ER_3" commanded at 2015-271T12:52:13.000. Volume of 13.2313 Mb not given data policing space.
    - CIRS_222TI_REGMAP001_VIMS: Found an activity whose data are NOT recorded in this telemetry mode "S_N_ER_8" commanded at 2015-271T20:37:13.000. Volume of 2.828892e-10 Mb not given data policing space.
    - ISS_222TI_REGMAP001_VIMS: Found an activity whose data are NOT recorded in this telemetry mode "S_N_ER_8" commanded at 2015-271T20:37:13.000. Volume of 9.822543e-10 Mb not given data policing space.

Notes (2/2)

- DSN:
  - Dual Playback C70 has nominal 20 minute handover from preceding G70 downlink.
- Resource checker:
  - ISS_222TI_CLOUD001_PRIME: Telemetry mode transition – to S_N_ER_5A for 15m to see RADAR Warmup. OK with ISS.
- Opmodes:
  - No issues
- Hydrazine:
  - KPT Estimate: 345.22 g (per L. Andrade analysis)
  - FSDS Estimate: 305.98 g
  - Deadband (per RADAR): 0.5. 0.5, 2.0 mrad
- Special Activities:
  - CMT Management for POS_X to Sun violation

Liens

Sequence Liens (should all be SPLAT items):

- Dual Playback for T113
  - SPLAT item initiated

- CIRS/VIMS heating violations
  - SPLAT item initiated for INMS & RADAR heating not to exceed CIRS accepted heating