Revolution 356 Pass Summary

(DOY 255 07:37 z to DOY 258 03:39 z)

Target

The observations in revolution 356 began with a hexagonal dithering observation of the ToO HETE J1900.1-2455 (RA 19:00:13.00; DEC -24:54:44.0) lasting ~18.5 hours, followed by a hexagonal dithering observation of the Galactic Bulge region (RA 17:45:36.00; DEC -28:55:60.0) performed for ~3.5 hours. A hexagonal dithering observation of GRS 1915+105 (RA 19:15:11.50; DEC +10:56:44.0) lasting ~29 hours was then performed, followed by a grid observation of the Scutum Arm, performed for the remaining ~9 hours of observation time.

Throughout these observations all instruments were in their nominal science modes, except for JEM-X2 for which the DFEE remained off, and the TM allocation was IBIS 129; SPI 103; JEM-X1 8; JEM-X2 1; OMC 5.

Ground Station Coverage

Real Coverage (Before Playback)

Redu VC0	Redu VC7	Goldstone VC0	Goldstone VC7
99.94%	99.94%	99.44%	99.73%

Total Number of Slew = 75

Missed Slews = 5

Missed Pointings = 5

Definitions:

- A **Slew** is **LOST** (wrt the planning) if not performed at the expected time reported in T/L.
- **A Scientific Pointing** is **LOST** if Attitude or OTF or PID (>0), are not reached at the expected time in T/L and for the entire planned duration of the pointing (PDUR).
- **NO** univocal definition can be given for **Pointing Partially LOST**/executed because depending by many factors like instrument configuration, BCPKT setting, histogram downloading, therefore this case shall not be considered/mentioned.
- **Inside Radiation Belts**, where no science is produced, if a **Slew** is **LOST** from the T/L, but performed later on with a recovery, the **Pointing** is **NOT** considered **LOST**.

Problem Areas & Not Planned Events

DOY / Time	Description
255/AOS Redu	The revolution starts with SPI, IBIS, OMC disabled on the A/S because high radiations.

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DOY / Time	Description
255 – 08:16	EV IBIS1 PICSIT NOISY SEMIMODULE
255 – 10:25	SPI commanding enabled in Timeline
255 – 12:03	EV ERROR SENDING DATA TO ISDC, TM-FLOW back @ 12:03
255 – 12:29	EV ERROR SENDING DATA TO ISDC, TM-FLOW back @ 12:34
255 – 23:52	TM E2065 OOL, back in limits @ 00:04 (DOY 256)
256 – 00:24	TM E2390 OOL, back in limits @ 00:36
256 – 07:40	IBIS commanded to SCIENCE STANDARD
256 – 07:40	OMC commanded to NORMAL
256 – 07:40	IBIS & OMC commanding enabled in Timeline
257 / 01:27	OEM: "OMC to Safe Mode" > High radiations.
257 / 01:28	OMC disabled on the A/S
257 / 02:45	TM G6046 "V1S-VDM08HV" Alarm Low at -35.7 V
257 / 02:46	OEM: "IBIS1 VETO PMTXX IS ON AND CORRESPONDING HV MONIT IS ABOUT ZERO"
257 02:57-03:54	Execution of FDIR IBIS Reaction V-HV_1: (IBIS disabled on the A/S at 03:00) 1. IBIS configured in Standby Mode. 2. VETO configured in Standby Mode. 3. VETO configured in Maintenance Mode. 4. 45' observation of the behavior. 5. VETO configured in Standby Mode. 6. VETO configured in Nominal Mode. 7. IBIS configured in Scientific Standard Mode. 8. IBIS enabled on the A/S
257 / 03:19	TM G6062 "V1S-BOT-COUNT" OOL Warning High at 50048 1/s. TM G6063 "V1S-LAT-COUNT" OOL Warning High at 50040 1/s
257 / 04:45	At the Shift H/O the incoming SPACON noticed the following: • RW2 speed error (Actual versus predicted) 80 rpm • RW4 speed error (Actual versus predicted) 80 rpm • RW3 speed error (Actual versus predicted) 60 rpm FD informed that for the actual Rev. 356 an error up to 120 rpm is still acceptable.
257 / 05:35	TM G3500 "P_DF_CNVT-BW_L,1" OOL Alarm High
257 / 06:14	21 Bad Frames received from Redu. / Reed Solomon Alarm.
257 / 07:03	Short data gap on TM VC0 from Redu.
257 / 08:53	Short data gap on TM VC0 from Redu. / Reed Solomon Alarm.

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DOY / Time	Description
257 / 16:11	Goldstone OPS chief informed that DSS16 has a problem with the down converter and will not be ready to support the INTEGRAL pass planned to begin at 21:35 Z. No backup is available because DSS24 is in maintenance with the TX out of order. For this reason it was decided to configure the S/L for the perigee pass, as reported below, before the H/O to Goldstone. Finally the Americans managed to fix the TX of DSS24 and so support was available.
257 19:32-21:26	AOCS Configuration: 1. TC A7283 "RESET RATE INT" uplinked. 2. Execution of a "Manual" RMU Calibration. 3. A7283 "RESET RATE INT" uplinked. 4. Pointing ID #0070 reached and maintained up to LOS Redu 5. AOCS disabled on the A/S at 21:26
257 19:54-20:31	RF Configuration. 1. Uplinked the Time Tagged commands to perform an antennas swap at 03:48 2. RF disabled on the A/S at 20:31
257 20:05-20:27	IBIS Configuration: 1. Execution of FCP_IBIS1_0801 > IBIS1 configured in Safe Mode. 2. IBIS disabled on the A/S at 20:27
257 / 20:42	Seq. JEDMP100 "AOS_CHK: Dump OBDH and ACC Buffers and PTs times. - RS." Uplinked from the M/S.
257 / 20:46	IREM Configuration 1. Seq. UEGROF01 "IREM GROUND LINK OFF" uplinked from the M/S.
257 / 20:48	Execution of FCP_SYS_1110 LOS Check CMDs uplinked.
257 / 21:15	AOS TM DSS24. / Telemetry available.
257 / 21:19	TC D3301 "OR TT SUM" uplinked to check the correctness of the TT CMDs.
257 / 21:52	All the S/Ss disable on the A/S.
257 / 22:10	LOS TC @ Redu.
257 / 22:17	A/S stopped.
257 / 22:31	LOS TM at Redu. / TM available from DSS24. / TM H/O to DSS24. / Links OK
257 22:40-22:42	TC "Green" at DSS24. / TC H/O to DSS24. / Test CMD OK.
258 / 00:32	EV: SPI1 Mode/State Change > SPI to Conf.
258 / 00:41	Seq. EEORTM01 "Report all SPI TM" uplinked from the M/S.
258 00:56-01:05	Several short drops on TM VC7 Link from DSS24.

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258 / 00:54	Tm JS1019 "SPT ERT1 Valid C" violating the fix check with the value "INVALID" and back OK.
Perigee Pass	• All application stopped on IDDA • IDDA MADDS-B disk partition increased • IDDA successfully restarted.

Perigee Pass	• Archive stopped on the Chain B.
	• Execution of the TCP/IP Validation test with Redu. (Chain B Used):
	  o Leased line OK
	  o ISDN not working
	• B Chain reconfigured for Operations.