

Revolution 340 Pass Summary

(DoY 10:11 Z to DoY 06:53 Z)

Target

The observations in revolution 340 began with a raster dithering observation of Her X-1 (RA 16:57:49.83; DEC +35:20:32.6) performed for ~30 hours, followed by 12 pointings of a GPS, lasting ~8.5 hours. A raster dithering observation of the field known as Field_8 (RA 01:01:15.00; DEC +32:40:34.0), one of the fields identified as not having been probed by Integral so far, was then performed for the remaining ~22.5 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
98.35%*	98.34%*	99.74%	99.78%

* IDDA Consolidator Archive full / Frames not archived. Not a G/S or NCTRS problem. Playback performed

Total Number of Slew = 76

Missed Slews = 11

Missed Pointings = 11

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**.

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Problem Areas & Not Planned Events

DoY / Time	Description
207 10:59-12:08	<ul style="list-style-type: none"> ⇒ After AOS Redu, with green links on the NCTRS, no TM Links showed on TM Desktop. / AD mode reported as initialized but on the Autostack the TC status was reported red as “No G/S” ⇒ Timeline stopped. ⇒ Last attitude of the previous revolution was still valid up to DoY 210 at 09:37 ⇒ The problem proved to be that during DB ASCII files distribution to all the machines the MISCONFIG file of sun129 was erroneously distributed as well to all the machines. ⇒ The problem was promptly fixed by SWS and a test CMD was successfully uplinked at 11:20. ⇒ A/S Restarted and T/L reloaded. ⇒ At 11:32 The Seq. EEORTM01 “Report all SPI TM” was successfully uplinked. ⇒ At 11:34 The Seq. JEDMP100 “DUMP BUFFERS + TIMES” was successfully uplinked. ⇒ At 11:38 AOS check commands successfully uplinked. ⇒ At 11:39 S/S “System” enabled on the A/S. ⇒ At 11:40 S/S “SPI” enabled on the A/S. ⇒ At 11:45 TC U4920 “INT GND LINK ON” successfully uplinked. ⇒ 11:49-11:59 uplinked ISGRI CTX table. ⇒ FDS failed to generate the TPF for the first slew of the revolution because a previous RWB was not performed. / FD reported RWB not necessary. ⇒ Mapping ⇒ Manual generation of the TPF for the slew ID #0001 and A/S updated ⇒ 12:08 S/S “AOCS” enabled on the A/S.
207 12:39-13:07	<ul style="list-style-type: none"> ⇒ GFCC asked to open a TM VC0 Link on INCTRB. ⇒ Two failed attempt to open the link prove the NCTRS to be in a not correct status. ⇒ NCTRS applications restarted. ⇒ Still not possible to open a VC0 Link ⇒ GFCC to contact Engineering Support. ⇒ (INCTRB rebooted?) TBC ⇒ At 13:07 VC0 Link in.

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207 / 13:19	TC A3085 "RC SUN STEER INI" went unverified at Completion level.
207 / 13:19	TM E3500 "P_DF_CNVT-BW L,1" OOL Alarm High. / Normal at Radiation Belt Exit.
207 / 13:28 to 208 / 08:04	TM GU6062 "V1S-BOT-COUNT-T" OOL Alarm High at 9300104.55 1/s. / Investigation proved that with the last IODB release, installed during the P.P., The same Monitoring limits assigned to G6062 were assigned to the parameter. / TBC investigation if the action was a mistake or a DB Change Request. In the mean time, on DoY 208 at 08:04 the limits were updated at run time and broadcasted to the A Chain to have the continuous alarm.
207 / 13:49	EV: CPDisTM (idda) cannot send message to the Client. SWS contacted and reported one of event.
207 14:07-14:10	Constant DC0003 was set to 1 in TM SPACON to enable the Synthetic DD0003D. DD0003D didn't work properly because an error in the DB definition (PFG = 13 instead of 14). > Consequently constant DC0003 was set to 0 to disable DD0003D.
207 23:03-23:06	TM E3840, E 3841, E3843, E3845, E3846 and E3848 "P PD CHL-RTE LN" family OOL Alarm Low and back into limits.
Starting from 207 / 23:33 Some rep. DoY 208	TM K5317 "RAD MONITOR 3" OOL Alarm High @ 68 for few seconds / some time and backs into limits.
208 02:01-03:25	⇒ TC A3189 "Start Guide Star" failed release. / Unspecified reason. ⇒ Slew ID 0015 lost. ⇒ AOCs disabled on the A/S ⇒ FDS recovery tool started. ⇒ Mapping ⇒ TPF manually generated to update the M/S to slew on pointing ID #0016 at 03:06 (Later than in the T/L I.E. Slew lost) ⇒ TPF manually generated to update the A/S to slew on pointing ID #0017. ⇒ AOCs enabled on the A/S at 03:25
208 05:53-05:56	TM T6055 "TCS TH RCS 5 -Y" OOL Alarm High and backs into limits.
208 / 06:48	Data gaps on TM VC0 from Redu
208 / 07:39	Data gaps on TM VC0 + 11 Bad Frames reception from Redu
208 / 09:45	"Global MMI" on sun129 died. > Successfully restarted.

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208 / 20:29	OEM: 1792, 231 "OMC to Safe" > (High Radiations)
208 / 20:44	Execution of FCP_OMC_0041 "OMC Exit from Safe".
208 20:44-23:45	<p>⇒ At 20:44 FDS failed to generate the TPF for the slew ID #0036. / Reported error: "update slew failed to generate TPF (level1)</p> <p>⇒ FDS recovery tool started</p> <p>⇒ Mapping</p> <p>⇒ Noted that the speed error of the wheel 4 is 170 rpm.</p> <p>⇒ FDS Recovery Tool stopped because the next slew would had brought the wheel 4 speed within 79 rpm from the limit.</p> <p>⇒ At 20:52 AOCS disabled on the A/S</p> <p>⇒ FD contacted.</p> <p>⇒ Mapping</p> <p>⇒ At 21:52 Change of Guide Star + RWB were not uplinked from the A/S.</p> <p>⇒ FDS recovery tool used to generate a new RWB.</p> <p>⇒ At 22:01 CGS performed</p> <p>⇒ At 22:07 RWB performed.</p> <p>⇒ Mapping</p> <p>⇒ TPF manually generated to update the M/S to slew on pointing ID #0037 at 22:36 (Later than in the T/L I.E. Slew lost).</p> <p>⇒ Slew ID #0038 skipped.</p> <p>⇒ TPF manually generated to update the M/S to slew on pointing ID #0039 at 23:08 (Later than in the T/L I.E. Slew lost).</p> <p>⇒ TPF manually generated to update the A/S to slew on pointing ID #0040</p> <p>⇒ At 23:45 AOCS enabled on the A/S.</p>
208 / 23:31	OEM: OMC to Safe. > OMC disabled on the A/S.
209 00:16-00:24	<p>⇒ TM K5317 "RAD MONITOR 3" above IREM limit (64 because High Radiation.</p> <p>⇒ Executed FCP_JEMX1_0540. > JEM-X1 to safe mode.</p> <p>⇒ At 00:24 JEM-X1 disabled on the A/S.</p>
209 / 01:30	RW 4 Error = -180 RPM. > Notified to FD.

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209 03:08-06:26	<ul style="list-style-type: none"> ⇒ At 03:08 AOCS disabled on the A/S because the next slew would have brought the RW 4 speed below the limit (215). ⇒ Pointing ID: #0045, #0046, #0047 and #0048 missed. ⇒ TPF manually generated to update the M/S to slew on pointing ID #0049 (From P ID #0044) at 04:26 (Before than in the T/L). ⇒ FDS recovery tool used to generate a new RWB. ⇒ At 04:54 CGS performed ⇒ At 04:56 RWB performed. ⇒ TPF manually generated to update the M/S to slew on pointing ID #0049 (From P ID #0049) at 05:26. ⇒ Mapping ⇒ At 05:39 AOCS enabled in the A/S to let the TC A7283 "RESET RATE INT" to be automatically uplinked at the correct time: 05:44:49 ⇒ TPF manually generated to update the A/S to slew on pointing ID #0050. ⇒ At 05:49 AOCS disabled in the A/S. ⇒ At 06:03 RMU Calibration performed. ⇒ At 06:05 TC A7283 "RESET RATE INT" uplinked. ⇒ At 06:26 AOCS enable on the A/S.
209 03:45-03:47 03:55 11:09	<p>TM G6062 "V1S-BOT-COUNT" and G6063 "V1S-LAT-COUNT" OOL Warning High and back into limits.</p>
209 05:54-06:49	<ul style="list-style-type: none"> ⇒ IDDA reported yellow on "Global MMI" because 0% free Consolidator disk space. ⇒ Gap created from 05:54:51 to 06:49:04 ⇒ 06:49 One TM hfile (17905) moved to another disk. > 1% free Consolidator disk space. ⇒ Some other old file moved. > 3% free Consolidator disk space. ⇒ Playback performed. ⇒ Problem proves to be the "FileClean" script not working properly with the new SCOS-E. > The script will be corrected. ⇒ Consolidator archive purged of the file older than DoY 180. > ~50% free space.
209 / 08:49	<ul style="list-style-type: none"> ⇒ Seq. ES0161 "" uplinked. ⇒ Seq. ES0130 "SPI transition to Photon by Photon Mode" uplinked

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209 / 08:52	TM E3500 "P_DF_CNVT-BW_L,1" OOL Alarm High
209 / 12:34	TM G8080 "S1E-VS HBRA-RT" OOL Warning High and back into limits.
209 18:24-18:32	⇒ 18:24 lost all the links with Redu. ⇒ 18:32 all links back. ⇒ 18:34 Test CMD OK.