
European Space Agency

**XMM-Newton and INTEGRAL weekly
Mission Operations Report**

XMM-INT-WOPS-13_41

Issue 1

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1. Weekly report

	XMM	Integral
Main activities	<ul style="list-style-type: none"> ▪ Nominal operations ▪ MCS migration ongoing ▪ 4WD implementation (PV phase) 	<ul style="list-style-type: none"> ▪ Nominal Science Operations ▪ Validate ISDC link via internet
Status and performance of S/C	<ul style="list-style-type: none"> ▪ Nominal for platform and all instruments 	<ul style="list-style-type: none"> ▪ Nominal for platform and payload
Status and performance of Ground segment	<ul style="list-style-type: none"> ▪ On DOY 282 at 23:34, during Perth support, the station staff reported that an unscheduled power outage had occurred. There was no effect on the support. 	<ul style="list-style-type: none"> ▪ Ongoing occasional RFI at all stations, some sources identified ▪ Ongoing "Error sending data to isds" (especially on B-chain – with internet link)
S/C Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ INT_SC-444: IREM Anomaly: Reset of IREM_CSCI S/W #144, 12/10/2013 ▪ INT_SC-445: OEM "IBIS1 IASW HEPI DATA INCLUDES TIME OVERRUN" shortly after execution of GESTAN02 - twice!!
G/S Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ INT-3405 PLM Operations interrupted by solar flare (OMC, JEM-X1 & 2) ▪ INT-3404 Slews lost due to 'frozen' GTP in FDS
Future activities planned	<ul style="list-style-type: none"> ▪ MCS migration: deployment for parallel testing ▪ Eclipse season 22/11-28/12 ▪ OPS Automation development 	<ul style="list-style-type: none"> ▪ Virtualised Solaris environment MCS development ▪ Validate ISDC link via internet ▪ Test of GFTS b/w MOC & ISDC ▪ Earth observation EO 3.2 kick off

2. Detailed weekly operational events

note: all times are Zulu

2.1. XMM

- 2013-10-07 15:25:00 (280): Start guide str cmd fails release for slew id 9253390009. FD are called.
 - o 2013-10-07 15:36:00 (280): man mapping + fd tool
- 2013-10-11 12:55:27 (284): TM glitch from G/S KRU, reason: unknown, duration: 2 seconds, impacts: none
 - o 2013-10-11 13:35:40 (284): TM drop from G/S KRU, reason: ESTRACK reports that the prime line to the G/S failed, therefore switching to the backup caused a brief drop in TM links. Data are now flowing through the backup line. ESTRACK put up the ISDN as a new backup while trying to restore the prime line., duration: 11 sec., impacts: none
 - o 2013-10-11 13:40:00 (284): ESTRACK reports that the communication lines to KRU are back to nominal configuration.
- 2013-10-11 14:58:33 (284): OOL P1112 LCL STA IMU1 CLOSE
 - o 2013-10-11 15:10:00 (284): Spacon required FD on-call support on site due to impossibility to run the RecoverSchedule in time for the corrective CSL 9252590005 to go. Thus was necessary to manually generate an OSL with FD support (MT).
- 2013-10-13 20:59:00 (286): TM drop from G/S KRU, reason: ESTRACK reports prime land line went down, swtched to backup automatically, duration: ~5 sec., impacts: none

2.2. INTEGRAL

- 08/10/2013 (281)
 - o 07:00:00 RW2 wheel speed is 120 rpm lower than predicted. Spacon called FD to come in and double check for safety. At 07:38:00 : FD assessed the situation with RW2 wheel speed as momentarily safe, pending further investigation. → Execution of OCR#874: unscheduled man. wheel bias
 - 10:46:00 PID #0082 lost since AOCS disabled
 - 11:08:00 CGS: 1341_0500_M.CGS-INT_SPACON uplinked, generated by FD oncall
 - 11:15:00 RWB:1341_0051_M.RWB-INT_SPACON uplinked, generated by FD oncall
 - 11:28:00 PID #0083 & #0084 lost
 - 11:39:00 OSL:1341_0501_M.SOL-INT_SPACON uplinked, generated by FD oncall
 - 11:54:00 Recovery tool started
 - 12:02:00 TPF 1341_0502_A.OSL applied on A/S to update slew #0085
 - 12:10:00 S/S: AOCS Enabled on A/S
 - o 18:40:00 S/H OOL E0392 T CR Coldplate I2, starting to toggle every 5- 10 mins
 - 19:26:00 stroke increase to 39; FCP_SP11_0074

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- 19:36:00 FCP_SPI1_2504_2 TC, E9966 E9960= 39 E9961= 39 TC, E9987 E9980= 39 E9981= 39
- 19:56:00 Constants updated on TM spacon. Note: on B-chain: stroke not updated in past (still value of 43)

- 09/10/2013 (282)
 - 07:55:00 OCR # 875: Installation of IMCS release 3.6.3 on A-chain until 11:10 (successfully completed)
 - 20:47:00 Bad frames from Redu (RFI)

- 10/10/2013 (283)
 - 10:19:00 Drop VC-0 & VC-7 & bad frames/missing packets from Redu (RFI)

- 11/10/2013 (284)
 - 04:38:00 Error sending data to isds on b-chain for 2 hours. Performed restart of ISDS + IFRD (isdsb)
 - 09:31:00 Drop VC-7 from Redu for 2 secs (comms glitch)
 - 09:34:00 Bad Frames from Redu for 2 secs (comms glitch)
 - 13:22:56 Bad Frames from Redu for ~1 min. (RFI?)

- 12/10/2013 (285)
 - 05:04:00 Performed restart of ISDS + IFRD (isdsb)
 - 14:02:00 TC: A3085 'RC SUN STEER INI' CEV unverified → IPS 1/6
 - 14:14:00 Several occurrences of "IBIS1 IASW HEPI DATA INCLUDES TIME OVERRUN"
 - 14:15:00 IBIS1 IASW HEPI RESYNCHRONISED
 - 15:38:00 IREM Crash #11 : U9913,U9912,U9910,U9909,U9904,K5315,K5316, K5317,L5315,L5316,L5317 OOL
 - 15:39:00 CRP_SYS_2570 (BCC0 error code) Disable s/s 6, 8, 11 in A/S
 - 16:01:00 Recovery of OMC; Enable s/s 11 in A/S
 - 16:15:28 During recovery of IBIS: Several occurrences of "IBIS1 IASW HEPI DATA INCLUDES TIME OVERRUN" & IBIS1 IASW HEPI RESYNCHRONIZED at 16:15:31
 - 16:15:00 Enable s/s 8 in A/S
 - 17:43:00 CCCF enabled with start time 18:16
 - 17:44:00 Enable s/s 6 in A/S
 - 18:17:00 Some commands of the CCCF sequence were showing Unverified completion
 - 18:48:00 Error sending data to isds on b-chain for 1 hr. At 19:48 performed restart of ISDS + IFRD (isdsb) - twice to solve the problem.

- 13/10/2013 (286)
 - Nothing to report but lots of "Error sending data to isds on b-chain" & "Performed restart of ISDS + IFRD (isdsb)". This continued until DOY287, 02:53Z. Note: connection on B-chain connected via internet link for testing purposes.

- 14/10/2013 (287)
 - 03:41:07 Bad Frames from Redu for 10 sec. (RFI?)

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- 06:39:00 OEM, ACC AIMU ON
 - 06:49:00 Recovery tool started
 - 06:57:00 TPF 1343_0500_A.osl applied on A/S to update slew #0074