
European Space Agency

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

XMM-INT-WOPS-11_38

Issue 1

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HSO-OAX

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1. Weekly report

	XMM	Integral
Main activities	<ul style="list-style-type: none"> ▪ Nominal operations ▪ 4WD phase 1 ▪ Analysis of effects on G/S availability due to upcoming launches ▪ Analysis on collision avoidance during the passage of GEO in December 	<ul style="list-style-type: none"> ▪ Nominal Science Operations
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 ▪ Increased fuel consumption since January under investigation ▪
Status and performance of Ground segment	<ul style="list-style-type: none"> ▪ Nominal ▪ On DOY 263 at 02:15, during Kourou support, TM went to drop due to a comms hit. ▪ On DOY 264 at 12:56, during the station handover from Perth to Dongara, TM from Perth went to drop when Perth went 3-way after Dongara started uplink. ▪ On DOY 264 at 16:07, during Dongara support, TM went to drop due to a hit on New Norcia comms. ▪ On DOY 264 at 16:33, during Dongara support, TM went to drop due to a hit on New Norcia comms. 	<ul style="list-style-type: none"> ▪ Ongoing occasional RFI at Redu, source unknown ▪ Ongoing occasional error sending data to ISDS
S/C Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ None
G/S Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ INT-3132: MCS - OMCH task crashed at AOS ▪ INT_SC-344: OMC to SAFE / update reaction to OEM 231
Future activities planned	<ul style="list-style-type: none"> ▪ Investigations of use of Solaris 10 with thin clients for the mission control system ▪ Battery reconditioning 	<ul style="list-style-type: none"> ▪ Review of PLM Radiation Guidelines ▪ E3.5 Testing ▪ Database Update on 27/9/2011

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2. Detailed weekly operational events

note: all times are Zulu

2.1. XMM

- 2011-09-20 02:15:00 (263): TM glitch / drop, impacts: KRU few secs, no impact. Hit on line
- 2011-09-20 16:14:00 (263): Missing Transfer Frames from KRU during transponder H/O in the period when both transmitter were on
- 2011-09-20 22:54:00 (263): Finished Reschedule Unsuccessfully.
- First Command to be shifted is less than 5mins away. (although there was a twenty minute gap). TDS Operator invalid arguments.
- 2011-09-21 12:56:00 (264): TM dropped out from PER, waited a bit and then connected to DON for TM Network say that this was do to the switching between stations
- 2011-09-21 12:59:00 (264): AD Service established, D3831 Link Test CMD successful DON had trouble bring up the carrier
- 2011-09-21 13:37:00 (264): Alarm on X2KLTB - Disk space at hard threshold Informed
- 2011-09-21 16:07:00 (264): Brief drop in TM from DON Computer report 3s hit on prime line from NNO
- 2011-09-21 16:33:00 (264): Brief drop on VC-0 from DON
- 2011-09-23 14:52:00 (266): SYS: x2klta "red" on MCCM due to discrepancyFound.csh
- 2011-09-24 04:36:00 (267): OOL A5112 Background level, OSL has finished
 - o 2011-09-24 04:39:02 (267): AUTO_IMU_ON
 - o 2011-09-24 04:57:00 (267): CRP_AOC_4061 LCL IMU1 OOL, CRP_AOC_4013 Loss of guide star
- 2011-09-24 16:02:00 (267): Loaded T/L for Rev 2160 version 01 --> TL has wrong content (37 commands, ED: TE0114) informed onCall-SOE (J. M.)
- 2011-09-24 17:10:00 (267): TL 2160 ver. 01 regenerated by onCall-SOE (J. M.)
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2.1 INTEGRAL

- 2011-09-19 (262)
 - o 16:24:00 OMCH task crashed on IMCB after AOS → restarted
 - o 16:52:00 Stored OEM: "ACC STR THR EX" (14:52), OEM: "ACC AIMU ON" (14:52), OEM: "ACC AIMU OFF" (15:02) → recovery: manual CGS
 - o 17:20:23 OEM: "IBIS1 PICSIT NOISY SEMIMODULE ..."
 - o 20:51:00 G/S: Drop VC-7 from G/S Redu for a few seconds (RFI)
- 2011-09-20 (263)
 - o 02:29:00 G/S: Drop VC-0 & VC-7 from G/S Redu for a few seconds (RFI)
 - o 16:32:00 G/S: Bad Frames from Redu (RFI)
- 2011-09-21 (264)
 - o 07:04:00 G/S: Data gap on VC-7 and bad frames from G/S Redu (RFI)
 - o 08:08:00 SYS: Shutdown IDDA due to maintenance

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- 11:11:00 G/S: Bad Frames from Redu on VC-7 Due to antenna Swap
- 13:00:00 IDDA restarted
- 17:29:00 SYS: Error sending data to ISDS Link went to CONNECTED for 30s instead of flow
- 2011-09-22 (265)
 - 08:43:00 G/S: Data gap on VC-7 from G/S: Redu. Reason: antenna swap
 - 08:44:00 G/S: Bad Frame from: Redu (DU 1)
 - 16:11:00 Multi crashed on IMCA at AOS → restarted; crash of A/S & M/S on sun122 and M/S on sun121
- 2011-09-23(266)
 - 01:06:00 OEM: "ACC YAW ERROR OOL" every few seconds
 - 03:30:00 SYS: Error sending data to ISDS (ISDSA) → restart of ISDS + IFRD
 - 08:46:52 G/S: Frame out of seq. / missing source packets from G/S Redu (RFI)
 - 08:47:17 A2561 RC search/track unverified; since no problems with coordinates of star1 & 2, no action required
 - 16:24:00 Radiation spike → OMC to safe (TM: U9919 'INT PROT COUNT' with value = 17); OMC from Safe at 17:06
 - 17:26:00 G/S: Data gaps on VC-0 & VC-7 and bad frames from G/S: Redu
 - 19:29:00 Lost connection to TM CPD for 20s
 - 21:41:00 OOL SL: A5055, A5288, A5562, A5586, A5610, A5634, A5658, A5682 (all RW3 speeds) → wait for next RWB at 22:09
 - 22:05:00 Radiation spike → OMC to SAFE (OEMs: CCD STATUS, LED STATUS, TO SAFE)
 - 23:34:00 Sequences MEIM-A1 and MEIMB101/201/301 failed
- 2011-09-24 (267)
 - 00:03:00 FCP_OMC_0041 - OMC from Safe
 - 04:14:00 G/S: Bad Frames from: Redu (RFI)
 - 04:46:00 G/S: Drop VC-0 & VC-7 from G/S Redu (RFI)
 - 11:03:00 SYS: Error sending data to ISDS for one second
 - 13:20:00 G/S: Data gaps on VC-0 & VC-7 and bad frames from G/S Redu (RFI)
 - 15:19:00 SYS: Error sending data to ISDS for 1 minute
 - 23:05:00 PID #77 lost, OEM: "ACC AIMU ON", recovery tool started, manual CSL slew from PID #76 to #77 (23:30), S/S AOCS enabled (23:45)
- 2011-09-25 (268)
 - 18:44:00 TC: A3085 'RC SUN STEER INI' CEV "unverified" (IPS 1/6)
 - 20:00:00 EV: TC: L0021 'SW READ INT' CEV "uncertain failed(N)"; no action
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