European Space Agency

XMM-Newton and INTEGRAL weekly Mission Operations Report

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Issue 1

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1. Weekly report

	XMM	**Integral**
Main activities	▪ Nominal operations ▪ PER replacement validation ▪ Eclipse season until 10th December	▪ Nominal Science Operations ▪ Eclipse Season
Status and performance of S/C	▪ Nominal for platform and all instruments	▪ Nominal for platform and payload
Status and performance of Ground segment	▪ Nominal apart from some issues with Maspalomas station	▪ On-going occasional RFI at all stations, some sources identified.
S/C Anomalies	▪ XMM_SC-101: LCL 8.1A trip OFF (Tank 3 heater) → SEU	▪ INT_SC-500 IREM Anomaly: Reset of IREM_CSCI S/W #160, 30/10/2015 ▪
G/S Anomalies	▪ None	▪ INT-3576 PLM Operations interrupted following a mini solar flare (OMC & IBIS) ▪ INT-3577 MCS G/S Configuration Files Incomplete
Future activities planned	▪ GFTS release delayed ▪ YAT readiness in November	▪ Automation of some repetitive tasks. ▪ Investigation of RWL Low Speed operations to save propellant.

2. Detailed weekly operational events

note: all times are Zulu

2.1. XMM

- 2015-10-27 08:16:50 (300): Eclipse 6/28
- 2015-10-29 08:10:00 (302): Eclipse 7/28
- 2015-10-29 13:24:00 (302): OOL P1127 "HLCL 8.1A STAT" SCC FAIL Value= OPEN , OOL since 08.30Z, CRP_EPS_0205 SPDU HLCL OFF FAILURE Step 1, Informed EPS SOE, P1127 = CLOSE

2.2. INTEGRAL

2015-10-26 (299)
03:50:00 CRP_JEM2_5011 JEMX2 DFEE recovery after eclipse anomaly

2015-10-27 (300)
04:43:00 Data gaps on VC-0 & VC-7 from G/S: KIR RFI, source unknown

2015-10-28 (301)
01:17:00 Data gaps on VC-0 & VC-7 from G/S: KIR RFI, source unknown
02:12:17 Multiple ACC Pitch and Yaw OEMs, update of next slew failed. PID #16030067 lost.
02:30:00 FDS: TPF 1603_0500_A.OSL applied on A/S to update slew 16030068
02:50:14 ACC Pitch and Yaw OEMs continue after OSL, TPF update failed for Slew 16030069
02:50:15 PID #16030068 lost
02:59:00 FDS: No TPF generated for slew #16030069. FD on call notified
03:17:36 OSL #16030069 failed, PID #16030069 lost
03:52:52 OSL #16030070 failed, PID #16030070 lost
04:04:00 Manual slew 1603_0501_M.OSL from PID #16030068 to #16030071
04:42:00 FDS: TPF 1603_0502_A.OSL applied on A/S to update slew 16030072
09:00:00 Data gaps on VC-0 & VC-7 from G/S: KIR RFI, source unknown
17:55:00 During Perigee gap GSTR was lost, 1604_0500_M.CGS Uplinked

2015-10-29 (302)
03:19:00 Solar Flare, first seen on SPI
03:33:00 Solar Flare seen by IBIS
04:52:00 OMC to SAFE (IREM)
05:27:00 IBIS to standby manually as per X-Ref
09:51:00 FDS: TPF update failed for SlewID #16040026.
09:59:00 Recovery schedule tool failed (ATT verification failed).
10:13:00 Manual slew from PID #16040025 to #16040026, PID # 16040025 lost
10:22:00 OSL # 16040026 missed from timeline
10:26:00 FDS: TPF 1604_0502_A.OSL applied on A/S to update slew PID # 16040027
14:30:00 Start IBIS Recovery from Solar Flare.
18:03:00 Start OMC Recovery from Solar Flare

2015-10-30 (303)
20:55:00 IREM Crash, CRP_SYS_2570
21:31:00 FCP_OMC_0041 OMC EXIT FROM SAFE
21:48:00 FCP_IBIS1_0803 IBIS1 EXIT FROM SAFE MODE

2015-10-31 (304)
10:01:00 TM Drop VC-0 & 7 from KIR, 8 mins, station misconfiguration, some EDs missed
11:28:00 Cant connect VC0 to NCTRSB. TMTCS crashed during the night cannot be restarted.
11:59:00 Manually uplinked the failed AOCS timer EDs:
17:45:00 OEM: "ACC PITCH ERROR OOL" - several per minute, PID # 16050011 lost

20:58:00 G/S: Drop VC-7 from G/S:KIR, duration: few sec, reason: unknown

2015-11-01 (305)
01:09:00 Data gaps on VC-0 & VC-7 from G/S: KIR RFI, source unknown
22:37:00 Data gaps on VC-0 & VC-7 from G/S: KIR RFI, source FORMOSAT