
European Space Agency

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

XMM-INT-WOPS-13_04

Issue 1

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Document No :XMM-INT-WOPS-13_04
Issue/Rev. No : 1
Date 01/02/2013
Page : 2

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XMM-Newton and INTEGRAL weekly Mission Operations Report

Document No :XMM-INT-WOPS-13_04
 Issue/Rev. No : 1
 Date 01/02/2013
 Page : 3

1. Weekly report

	XMM	Integral
Main activities	<ul style="list-style-type: none"> ▪ Nominal operations ▪ MCS migration ▪ LCTF test at REDU on 23./24.01.2013 	<ul style="list-style-type: none"> ▪ Nominal Science Operations ▪ SPI Annealing
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"> ▪ DOY 021 at 10:32, during Kourou support, the Spacon reported a brief drop in TM. There was a brief hit on the comms between ESOC and Kourou at this time. The STC workstation also disconnected. ▪ DOY 024 at the start of the Santiago support (17:54), the TM and TC binds to the station did not connect successfully to either Cortex. ECC requested Santiago to restart both of the Cortexes. which Santiago did a number of times, and eventually at 18:25, the TM and TC binds connected successfully. During this incident, Santiago reported no problems seen on the Cortexes. ▪ DOY 024 at 20:14 during Santiago support, TM went to drop. ECC brought up Kourou early and support was swapped to Kourou at 20:26. No further information available yet from SSC on this incident. 	<ul style="list-style-type: none"> ▪ Ongoing occasional downlink RFI at all stations, some sources identified, filter installed for testing
S/C Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ INT-3333 FDS:reported problem when generating RMU drift update ▪ INT-3334 Unexpected Loss of TM TC Connectivity to Kiruna 1
G/S Anomalies	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ None
Future activities planned	<ul style="list-style-type: none"> ▪ Maspalomas test passes ▪ RW spike filter patch to be uploaded in February 	<ul style="list-style-type: none"> ▪ Virtualised Solaris environment MCS development ▪ Set up and validation of Kiruna ▪ All earth observations in 2013 abandoned, will be replaced with 2 pre perigee EOs

XMM-Newton and INTEGRAL weekly Mission Operations Report

Document No :XMM-INT-WOPS-13_04
Issue/Rev. No : 1
Date 01/02/2013
Page : 4

2. Detailed weekly operational events

note: all times are Zulu

2.1. XMM

- 2013-01-21 10:37:00 (21): Cmd EU105 fails release due to TM drop. Cmd is reloaded onto stk via copy and paste and resent, Stk is also dispatched to finish uplink of EE2620. ok
- 2013-01-22 12:39:00 (22): Didn't receive CSL update Informed FD on call
 - o 2013-01-22 12:50:00 (22): FCP_AOC_0106 STR-A Mapping
 - o 2013-01-22 13:16:00 (22): S/C on target
- 2013-01-23 01:40:00 (23): FD error message before nest OSL: Wheel Constrain Violation at 2013-01-23T05:01:15, Constraint: LOW2, Constraint violation detected! Called FD and after some checks FD agreed to let the OSL to execute from timeline.
- 2013-01-23 08:00:00 (23): REDU: INTEGRAL & XMM LCTF TEST (all day)
- 2013-01-24 17:54:00 (024): TM links are connecting to AGO but show as being in drop. Estrack check with AGO who say that all is ok. AGO will restart the cortex to see if this solves the problem.
 - o 2013-01-24 18:04:00 (24): Tm links from AGO disconnect, Spacon tries with cortex2 but TM links still are in drop. Spacon prepares to place Instruments into safe modes.
 - o 2013-01-24 18:25:00 (24): TM now being received from cortex1 AGO
 - o 2013-01-24 19:33:00 (24): SYS: TC AD Status Terminated No commanding possible. A/S and M/S Stopped
 - o 2013-01-24 20:14:00 (24): Lost TM from AGO. NO RF LOCK. Informed ESTRACK
- 2013-01-27 03:22:00 (27): Update for slew id 9240500003 has not been sent to the MCS.
 - o 2013-01-27 03:23:00 (27): man mapping + fd tool
-

2.1 INTEGRAL

- 2013-01-21 (21)
 - o 10:09:00 Bad frames from REDU, RFI, both chains, source unknown
 - o 10:26:41 SPI annealing: switch on HV PS with HV set to 0kV. Ramp up to 2.0kV in 0.5kV steps
 - o 11:02:02 SPI annealing: make acquisition at 2kV (TC sequ. ES0130 to Photon)
 - o 12:18:00 TM: X7500 'IBIS HIST DWN LD' H/H-OOL (value= False), As X-ref CCCF enabled.
 - o 12:36:46 CMD Verifier crashed at CCCF, JEM-X1 / 2 IBIS activation affected
 - o 12:53:00 missed EDs Recovered as per X-ref. ED Uplink failure
 - o 13:03:00 SPI annealing: thermal braid at 86K, start reduction of cooler strokes for 80K target
 - o 13:50:59 SPI annealing: set HV to 2.5 kV and make acquisition
 - o 14:50:12 SPI annealing: reconfiguration to normal configuration: set 2.5kV except broken detectors, set nominal ACS configuration, go to Photon
 - o 16:43:00 Bad Frames from: REDU, duration: few sec, RFI, chain 1 only, source unknown

XMM-Newton and INTEGRAL weekly Mission Operations Report

Document No :XMM-INT-WOPS-13_04
Issue/Rev. No : 1
Date 01/02/2013
Page : 5

- 2013-01-22 (22)
 - o 04:47:00 SPI stroke decrease from 43 step by step to 37 over next 6 hours
 - o 08:11:00 Loss of both TC and TM from Kiruna - the configuration job for GOCE support at KIR-2 configured both TMTCSs rather than justTMTCS-1, so that the Integral TM and TC binds were disconnected from TMTCS-2. ECC restarted the Integral Return and Forward Sessions on TMTCS-2, so that TM and TC were recovered after about one minute. Integral support was later moved to Redu-1 to allow the Kiruna station engineer time to correct the CSMC jobs, in order to prevent a recurrence.
 - o 10:08:00 Unscheduled station handover Kiruna to Redu to investigate the previous problem
- 2013-01-23 (23)
 - o 08:00:00 REDU: INTEGRAL & XMM LCTF TEST (all day)
 - o 11:00:00 E0392 TCR COLDPLT L2 = 80.969 deg K
 - o
- 2013-01-24 (24)
 - o 08:49:00 PID #12550072 lost, FDS: TPF update failed for SlewID #12550073. Not enough stars in FOV, confirmed OK to let next OSL execute without update.
- 2013-01-27 (27)
 - o 05:37:00 TM: X7500 'IBIS HIST DWN LD' status-OOL (value= FALSE)
 - o 06:35:00 FCP_IBIS1_0312 - Download all remaining Histograms