

INTEGRAL
Mission Report
INT-MOC-SYS-RP-1001-TOS-OF
No. 031
Week 17
28.04.03
Routine Phase

Prepared by: M. Walker (TOS-OFI)

LIST OF CONTENTS

1	General.....	3
2	Summary of Activities.....	3
3	Satellite Status.....	3
3.1	Platform.....	3
3.1.1	AOCS.....	3
3.1.2	Power.....	4
3.1.3	Thermal.....	4
3.1.4	OBDH.....	4
3.1.5	RF.....	4
3.2	Payload.....	4
3.2.1	SPI.....	4
3.2.2	IBIS.....	4
3.2.3	JEM-X.....	4
3.2.4	OMC.....	5
3.2.5	IREM.....	5
4	Ground Facilities.....	5
4.1	Mission Operations Centre.....	5
4.2	Ground Stations & Network.....	5
4.3	Science Ground Segment.....	5
4.3.1	ISOC.....	5
4.3.2	ISDC.....	5
5	Special Events.....	6
6	Anomalies.....	6
7	Future Milestones.....	6
8	Appendix.....	7
8.1	Overview of Revolutions.....	7
8.2	Consumables.....	7
8.2.1	Detailed Fuel Book-keeping.....	7
8.3	Detailed Satellite Information.....	7
8.3.1	AOCS SUMMARY OPERATIONS REPORT 11/04/2003-18/04/2003.....	8
8.3.2	SPI Operations.....	9
8.3.3	IBIS Operations.....	11
8.3.4	JEM-X Operations.....	11
8.3.5	OMC Operations.....	11
8.3.6	IREM Operations.....	12
8.4	List of Anomalies since Launch.....	13

DISTRIBUTION LIST

Addressees	Copy	Addressees	Copy
D/TOS		ESA HQ	
G. Winters D/TOS	1	D. Southwood D/SCI	1
W. Frank TOS-O	1		
A. Smith TOS-OF	1	ESTEC	
J. F. Kaufeler TOS-G	1	J. Louet SCI-P	1
N. Bobrinsky TOS-ON	1	J. Credland SCI-P	1
R. Münch TOS-GF	1	A. Gimenez-Canete SCI-S	1
		ESTEC / PG	
M. Schmidt	1	K. Clausen	1
J. Pineiro	1	P. Jensen	1
R. Southworth	1	P. Strada	1
F. Di Marco	1	G. Sarri	1
F. Cordero	1	R. Carli	
M. Walker	1		
M. Rezazad	1	ESTEC/RSSD	
J. Houser	1	M. Kessler SCI-SD	1
P. Lippi	1	C. Winkler	1
SPACONs	1	A. Parmar	1
S. Fahmy	1	R. Much	1
I. Bayliss	1	L. Hansson	1
G. Di Girolamo	1	R. Kuulkers	1
F. Dreger	1	Nicola Rando	1
G. Gienger	1		
S. Pallaschke	1	ISDC	
W. Hell	1	T. Courvoisier	1
K. Capelle	1	R. Walter	1
M. Butkovic	1	N. Mowlavi	1
D. Heinzer	1	ISDC Shift Team	1
A. Pena	1	D. Texier	1
Shift - Coord	1		
Scheduling Office	1	ALENIA	
T. Beck	1	C. Cassi	1
B. Smeds		F. Ravera	1
S. Scaglioni	1		
J. Wardill	1	PI / Instrument Teams	
		C. Larigauderie – SPI	1
		G. La Rosa – IBIS	1
		S. Brandt – JEM X	1
		E. De Miguel - OMC	1
		W. Hajdas – IREM	1
		JPL / Goldstone	
		D. Holmes	1
		T. Horton	1
		Redu	
		J. Mac Lauchlan	1

1 General

The Flight Control Team at MOC has compiled this report considering a couple of inputs provided by the Flight Dynamics Team.

It addresses the activities from 19.04.03 until 25.04.03 (both dates inclusive) and covers the revolutions 63 & 64.

2 Summary of Activities

The operations were performed according to the planning inputs from ISOC combined with some manual commanding of the instruments by MOC.

The targets of revolution 63 were a GPS and a raster dithering of the source XT 1741-322 (RA 17:45:1.72; DEC -32:13:37.5). Revolution 64 was devoted to GCDE observations.

Note: Some further information concerning the activities is provided in the Appendix.

3 Satellite Status

3.1 Platform

The performance of the platform was good. No unexpected behaviour / malfunction was identified.

3.1.1 AOCS

During this period, the AOCS operations were executed from the timeline.

A Star Tracker 1750 processor fault occurred on DoY 111 during a ground commanded mapping. This was similar to STR failures on XMM when there was a bright object in the filed-of-view of the star tracker.

Fluctuations in the position of the guide star caused jitters in the OTF flag throughout two pointings. In both cases, the guide star was picked by the ACC after an Open-Loop slew. There was also a Roll Error at the end of an Open-Loop slew.

Four slews were missed in revolution 64 because of continuous drops in telemetry due to Radio Frequency Interference at Goldstone.

The fuel consumption over the 7-day period between 15/04/2003 to 22/04/2003 was 0.19 Kg. The remaining propellant is in the order of 178.03 Kg on the 22nd of April.

Note: Some more information concerning the AOCS operations and the fuel budget is provided in the Appendix.

3.1.2 Power

The power subsystem is working as specified. The available power is in the order of 2380 W as since the beginning of the mission, i.e. no degradation has been identified so far.

3.1.3 Thermal

The thermal control of the satellite is working well. The temperatures are currently all within the specified operational limits.

3.1.4 OBDH

The OBDH subsystem is working flawlessly. No on-board communications problem identified.

3.1.5 RF

The RF subsystem is working properly. The link margin is sufficient to ensure proper TM reception and execution of commands with the ranging channel enabled.

3.2 Payload

3.2.1 SPI

The status is nominal.

The instrument is operating in photon by photon mode with Spectra telemetry disabled. The TM bandwidth assigned to SPI was 74 pkts for all the period.

The Cryo-cooler is working nominally ensuring 85K temperature in the detector cold plate.

Note: Some more information concerning the SPI operations is provided in the Appendix.

3.2.2 IBIS

Status Nominal.

The TM bandwidth assigned to IBIS was 107 (5 pkts given to SPI from the nominal 112) pkts for the all science windows.

Note: Some more information concerning the IBIS operations is provided in the Appendix.

3.2.3 JEM-X

During the reporting period, JEM-X2 operations were performed nominally as planned in the timeline and JEM-X1 was dormant.

Near the end of revolution 64, JEM-X2 went to SAFE mode by its onboard protection when the SW trigger rate reached the HV switch OFF threshold at an altitude of 75000 km.

Note: Some more information concerning the JEM-X operations is provided in the Appendix.

3.2.4 OMC

During this period, the OMC operations were performed by the automatic timeline. Several OMC pointings were missed because of RFI problem during a Goldstone pass.

A set of OMC Flat-Field and Dark-Current calibrations were performed during revolution 62.

Note: Some more information concerning the OMC operations is provided in the Appendix.

3.2.5 IREM

The status of the unit is nominal.

4 Ground Facilities

The overall performance of the ground segment was good, well above the required 95 %. The real-time data return from the stations was well above the 95 % though there were some RF interference problems with Goldstone. Less than 2 % of the planned slews failed the nominal execution.

4.1 Mission Operations Centre

4.2 Ground Stations & Network

During this week, there were a few problems related to the ground stations:

- On DoY 109 at 10:21 there were 4 bad frames from Goldstone DSS16.
- On DoY 111 at 12:27 - 12:28 there was a drop of telemetry from Goldstone DSS-24. 20 seconds of VC-0 and 1 minute of VC-7, no operational impact. Goldstone claim that the signal from the satellite remained in lock, and that the outage was due to a communications problem between MOC and the station.
- Later on the same day there was a short data gap of 4 frames from Redu due to Reed-Solomon errors.
- On DoY 114 from 14:04 to 15:30 there were repeated bad TM frames from DSS-16, the impact was pointings 75 to 78 of revolution 64 were lost.

4.3 Science Ground Segment

4.3.1 ISOC

No ISOC Input has been provided

4.3.2 ISDC

On DoY 110 at 17:47 - 18:19, again on DoY 113 at 14:24 to 15:25, and again on DoY 114 at 09:00, the ISDS - ISDC link went down. A restart of the ISDSA and IFRD tasks was required, no operational impact.

5 Special Events

Nothing to report

6 Anomalies

The problems related to the ground segments are already mentioned in chapter 4.
The work concerning the upgrade of the interfaces to the stations is ongoing. A test of the new configuration is planned for week 18.

A list of the pending anomalies since Launch is presented in the Appendix. New anomalies raised during the past week are listed below:

ARid	Date Occurrence	Subject	Segment	Element	Status
INT - 002294	2003/04/15	DSS-16 missed coverage period	Ground	NASA Sta.	Pending
INT - 002295	2003/04/15	Telemetry Drops from Goldstone	Ground	NASA Sta.	Pending
INT - 002296	2003/04/16	No guide star found	Ground	FDS	Pending
INT - 002298	2003/04/20	ISDS - ISDC link outage	Ground	I/F to SGS	Pending
INT - 002299	2003/04/21	Telemetry loss from DSS-24	Ground	NASA Sta.	Pending
INT - 002297	2003/04/23	Star Tracker 1750 Processor Fault on 21/04/2003 (DoY 111)	Space	Spacecraft	Pending
INT - 002300	2003/04/23	ISDC not receiving ASF files.	Ground	IMCS	Pending
INT - 002301	2003/04/23	Telemetry loss via DSS-16 due to RFI	Ground	NCTRS	Pending
INT - 002302	2003/04/24	Telemetry loss via DSS-16 due to RFI	Ground	NASA Sta.	Pending

7 Future Milestones

There is a Packet Terminal Local Time wrap-around expected on 2003/04/29 06:00:11 (DoY 119), to within a second or so.

The IREM patch is now planned for the night between the 01st and 02nd of May.

The SVT for the increased TM data rate is planned for the first week of May.

The upgrade of the interface to the stations is planned for week 18.

8 Appendix

The appendix includes various detailed information.

8.1 Overview of Revolutions

Revolution 63

The observations in revolution 63 consisted of 18 pointings of a GPS lasting ~10 hours, followed by 30 pointings of GCDEs lasting ~15 hours, after which 46 pointings were allocated to raster dithering observation of XT 1741-322 (RA 17:45:1.72; DEC -32:13:37.5) lasting about 28 hours of the remaining observation time.

Throughout these observations, the TM allocation was 69 SPI; 97 IBIS; 0 JEM-X1; 7 JEM-X2; 1 OMC and all instruments were in their nominal science modes, except for JEM-X1, which remained in Safe mode for the entire revolution.

Revolution 64

The observations in revolution 64 consisted exclusively of 111 pointings of GCDEs lasting approximately 55 hours and 30 minutes.

Throughout the observations, the TM allocation was 69 SPI; 97 IBIS; 0 JEM-X1; 7 JEM-X2; 1 OMC and all instruments were in their nominal science modes, except for JEM-X1, which remained in Safe mode for the entire revolution.

8.2 Consumables

8.2.1 Detailed Fuel Book-keeping

2003-04-08T07:44:44.000Z	178.3371	F	Automatic TM processing.
2003-04-10T15:34:18.000Z	178.3177	F	Automatic TM processing.
2003-04-10T22:23:46.000Z	178.3018	F	Automatic TM processing.
2003-04-12T08:51:50.000Z	178.2845	F	Automatic TM processing.
2003-04-13T15:35:53.000Z	178.2584	F	Automatic TM processing.
2003-04-13T22:08:02.000Z	178.2498	F	Automatic TM processing.
2003-04-15T08:27:01.000Z	178.2199	F	Automatic TM processing.
2003-04-16T21:54:17.000Z	178.1967	F	Automatic TM processing.
2003-04-18T08:31:01.000Z	178.1780	F	Automatic TM processing.
2003-04-19T14:10:16.000Z	178.1451	F	Automatic TM processing.
2003-04-19T21:39:44.000Z	178.1259	F	Automatic TM processing.
2003-04-20T06:49:45.000Z	178.0994	F	Automatic TM processing.
2003-04-20T12:37:46.000Z	178.0688	F	Automatic TM processing.
2003-04-21T07:50:04.000Z	178.0524	F	Automatic TM processing.
2003-04-22T21:24:25.000Z	178.0303	F	Automatic TM processing.

This report was generated Wed Apr 23 08:00:08 GMT 2003

8.3 Detailed Satellite Information

This section contains some detailed information concerning the various subsystems of the satellite and instruments.

8.3.1 APCS SUMMARY OPERATIONS REPORT 19/04/2003-25/04/2003

APCS operations were executed from the Automatic Timeline.

During this period, 104 Open Loop Slews, 143 Closed Loop Slews and 7 Momentum Bias were executed. 4 slews were missed. This is around 1.6% of the total.

19/04/03 (Day of Year 109, Revolution 62-63)

Nothing to report.

20/04/03 (Day of Year 110, Revolution 63)

Nothing to report.

21/04/03 (Day of Year 111, Revolution 63)

Star Tracker 1750 processor fault: At 09:32:13 a STR 1750 processor fault occurred during a ground-commanded mapping after Close Loop Slew 00630057. The fault, which occurred at the beginning of the pointing and when the OTF was high, resulted in abortion of the mapping, switch on of the IMU and start of a new mapping commanded by the ACC. The automatic mapping completed normally and a new guide star was selected.

The Fault was reported in the HK telemetry as the 1750 Fault itself and also in the form of failure of S/W checks (OOLs) in the cycle when the fault was detected. However, the change of the STR mode to Standby was not seen in the telemetry.

The guide star was a bright star of magnitude 3.15 Mi and CCD coordinates (-19751, -12892), located in the Elementary Search Window 35. According to the Mission Star Catalogue Extract, another bright star with instrumental magnitude 2.12 was also in the star tracker field-of-view at CCD coordinates (-27270, -8361), also in the ESW 35. Moreover, the last (invalid) star that was reported in slot Nr 2 during the mapping and before the fault, had CCD coordinates (-25599, -5313). This coordinate falls into ESW 34, which was also the last search window reported in the HK TM during the interrupted mapping. Apparently the fault had happened when processing the ESW 35 in the mapping spiral sequence.

This case is similar to STR failures that have been observed on XMM. Apparently, in this case the fault occurs when the STR is processing an ESW, which contains a bright object and also overlaps with the guide-star tracking window.

The operational impact of the fault was that the OTF went low after the incident and remained low for the rest of the pointing.

22/04/03 (Day of Year 112, Revolution 63-64)

Nothing to report.

23/04/03 (Day of Year 113, Revolution 64)

Roll error at the end of Open Loop Slew: At the end of open loop slew 00640036 the error in roll with respect to the SSL assumed position was 2.9 arc-minutes, which is more than the OTF threshold of 2 arc-minutes. The sequence of events was:

17:01:17.963 In the first cycle of SSL enabled after the slew end, the OTF is set to TRUE although the error was 2.9 arc-minutes. This is an ACC algorithm feature (problem), which sets the OTF to TRUE on the first cycle after enabling the SSL regardless of the error.

17:01:18.463 On the second cycle, the OTF is properly evaluated taking the error into account and the OTF goes to FALSE.

17:01:23 The error is corrected to below 2 arc-minutes and the OTF goes to TRUE. Afterwards the error was further corrected and the OTF remained TRUE. At 17.01.31 the OTF, as seen by the BCP, was set to REACHED. This roll error had no impact on observations.

Unstable pointing due to fluctuations in the position of the guide star: After Open-Loop Slew 00640045, the ACC had taken the barycentre of the images of two nearby stars with magnitudes 8.93 and 8.99, as the guide star. During the pointing, the position of this guide star fluctuated many times up to 160 CCD units in the yaw direction, which is above the OTF threshold. These yaw errors caused jitters in the OTF flag, several of which were seen at BCP level. The problem, which persisted until the start of the next slew, rendered pointing 00640045 unstable.

24/04/03 (Day of Year 114, Revolution 64)

Unstable pointing due to fluctuations in the position of the guide star: After Open-Loop Slew 00640052, the ACC had taken the barycentre of the images of two nearby stars (~ 2.2 arc-minutes apart) as the guide star. The details of these stars were:

Magnitude 9.11, CCD Coordinates (14419, 4620)

Magnitude 8.67, CCD Coordinates (14406, 4092)

The guide star was reported as:

Magnitude 8.35 and CCD Coordinates (14391, 4126).

During the pointing, the position of this guide star fluctuated many times up to 500 CCD units in the yaw direction and caused large yaw errors. These yaw errors resulted in jitters in the OTF flag, several of which were seen at BCP level. The problem, which persisted until the change of guide star for the next Trim slew, rendered pointing 00640052 unstable.

Slows missed due to RFI at ground station (Goldstone, DSS-16): During the Goldstone pass, what was reported by the station as RFI, started to cause intermittent drops in TM. At 14:18, the AOCS commanding from the timeline was disabled after TCs failed verification and release. Because of the continuation in TM drops, it was not possible to start the timeline recovery process until 15:13 when TM became stable again. This resulted in missing of slews 00640075 to 00640078. Manual slew was done to the attitude of pointing 00640078 and parameters for the next slew were updated. Slew 00640079 was performed from the timeline.

25/04/03 (Day of Year 115, Revolution 64-65)

Nothing to report.

8.3.2 SPI Operations

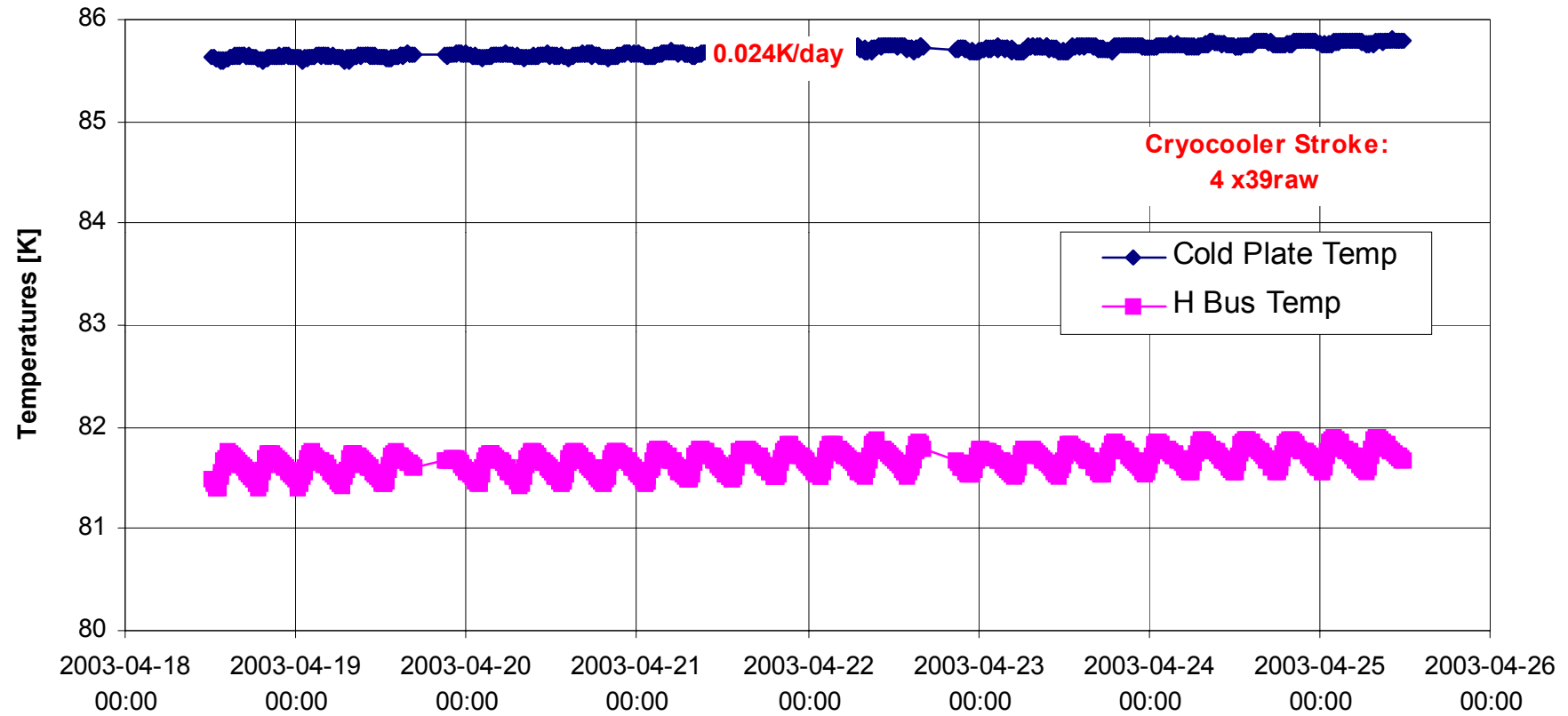
No special events occurred in the last week.

The drift of the cold plate temperature still continues at about 0.024K/day, approaching the upper warning limit (85.9K). See attached plot.

It is foreseen to change the cryo-cooler stroke by increasing of 1bit on the 4 compressors in the course of next week.

The instrument still unexploits 3 out 74 allocated TM packets due to an on-board anomaly.

18-25 April 2003 - SPI Cold Plate Temperatures



8.3.2.1 IBIS Operations

On DoY 2003. 109 ISOC requested the execution of the INT-OR-0062 to set the IBIS configuration during the OMC FFC (Flat Field Calibration). The TM allocation for IBIS has been, during the calibration, set to 27 pkts/cycle. The first part of the OR has been performed at 10.50Z: this was setting the special configuration for the duration of the OMC calibration. After Rad Belt Entry at 14:54 (20 minutes after Crit Alt Asc) the original configuration (for TM 107 pkts) has been set up again, executing the second part of the OR.

On DoY 2003. 110 and 113 the TM paras G7028, G7025 and 7027 reported OOL. These parameters are related to the quality of the data production and accordingly with the P/L contingencies doc ISDC has been informed.

On DoY 2003. 111 and 112 the TM paras G7028 and 7027 reported OOL. These parameters are related to the quality of the data production and accordingly with the P/L contingencies doc ISDC has been informed.

On DoY 2003, 113 at 19.52Z, 21:10Z and 21:38Z and then on DoY 114 at 00:10Z, 01:02Z and 10:50Z and again on DoY 115 at 04:13Z, 06:52Z and 10:54Z the OEM ID 179 Class 2 <<IBIS1 VETO COUNTER BOTTOM EXCEEDS ALERT VALUE>> was reported. The relevant TM_para G6062 reported values inside limits after few TM cycles and therefore the problem has been disregarded, as suggested by the nominal reaction to this OEM.

On DoY 2003, 113 at 21.14Z and 23:19Z and then on DoY 114 at 00:11Z, 04:38Z and 22.15-22.29-22.33Z and again on DoY 115 at 00:18Z and 04:10Z the OEM ID 180 Class 2 <<IBIS1 VETO COUNTER LATERAL EXCEEDS ALERT VALUE>> was reported. The relevant TM_para G6063 reported a value inside limits and therefore the problem has been disregarded, as suggested by the nominal reaction to this OEM.

On DoY 2003. 115 at 02.15Z the OEM ID 183 Class 2 <<IBIS1 VETO +5V VECU VOLTAGE OUT OF RANGE>> was reported. The relevant TM_para G6106 reported a value inside limits and the occurrence of the OEM was < 1 OEM/30 sec therefore no action has been taken, as suggested by the nominal reaction to this OEM.

8.3.3 JEM-X Operations

25-Apr-2003, DOY 115, Revolution 64

- **JEM-X2 transition to SAFE mode**

At 11:53:15, JEM-X2 went to SAFE mode after the SW Trigger Rate reached the HV switch OFF threshold of 20000. This happened at an altitude of 75000 km. The JEM-X2 SAFE TC was planned to be executed at 12:43:00. Therefore, no attempt was made to reactivate the unit.

8.3.4 OMC Operations

During this period, 4 out of the 226 originally planned OMC pointings were missed.

19-Apr-2003, DOY 109, Revolution 62

- **OMC FF and DC Calibrations**

From 2003-04-19 11:12 to 2003-04-19 13:35 OMC performed a series of Flat-Field Calibrations. For this activity, OMC was given a TM bandwidth of 90 pkts/cycle (89 Sci + 1 HK). This was the first time in the mission when OMC had this rather high number of PST windows allocated to it.

According to the OMC PI, 1 out of each 89 science packets were missing. This is exactly one science packet per telemetry cycle. This loss of packets was not seen during the previous OMC calibrations when 40 PST windows were allocated to OMC. The OMC team has also made a test on the EGSE with 90 PST windows and with the same PST as was used for the FF calibration operations. No loss of packets were observed in this test.

The problem is currently being investigated both by MOC and the OMC team.

24-Apr-2003, DOY 114, Revolution 64

- **Slews missed due to RFI at ground station (Goldstone, DSS-16)**

During the Goldstone pass, what was reported by the station as RFI, started to cause intermittent drops in TM. At 14:18, the AOCS commanding from the timeline was disabled after TCs failed verification and release. Because of the continuation in TM drops, it was not possible to start the timeline recovery process until 15:13 when TM became stable again. This resulted in missing of slews/pointings 00640075 to 00640078. Manual slew was done to the attitude of pointing 00640078 and parameters for the next slew were updated. Slew 00640079 was performed from the timeline and OMC operations resumed from pointing 00640076.

8.3.5 IREM Operations

The status of the unit is nominal.

8.4 List of Anomalies since Launch

The following table presents the list of all identified anomalies that have been registered since Launch and that are still pending. Though these Anomaly Reports still have a pending status most of the problems have been analysed and solutions or at least workarounds are already in place.

ARid	Date Occurrence	Subject	Segment	Element	Status
INT - 002003	2002/10/19	Command failure from TCE2 at Redu1.	Ground	ESA Sta.	Pending
INT - 002010	2002/10/22	Time correlation not applied correctly to time parameters in TM type 8 reports.	Ground	IMCS	Pending
INT - 002024	2002/10/28	OEM: SPI1 Fixed print overflow	Space	SPI	Pending
INT - 002055	2002/11/09	IBIS VETO anomalous count rates.	Space	IBIS	Pending
INT - 002061	2002/11/12	TM Desktop performance collapses when de-selecting super-commutated processing.	Ground	IMCS	Pending
INT - 002066	2002/11/13	Data routing to ISDS	Ground	I/F to SGS	Pending
INT - 002082	2002/11/13	TM packet production lower than allocation.	Space	SPI	Pending
INT - 002070	2002/11/14	TDRS: data Retrievals cancelled	Ground	IMCS	Pending
INT - 002079	2002/11/14	Timing Problem with Tele-commands	Ground	ESA Sta.	Pending
INT - 002083	2002/11/16	SPI DPE Crash	Space	SPI	Pending
INT - 002092	2002/11/19	Load-Dump comparison uses also non-released load commands	Ground	IMCS	Pending
INT - 002094	2002/11/19	TDRS does not work with super-commutated parameters	Ground	IMCS	Pending
INT - 002121	2002/11/26	ISGRI count-rates increase up to 8000 counts/sec in one module	Space	IBIS	Pending
INT - 002122	2002/12/02	IBIS VDM4 HV broke down	Space	IBIS	Pending
INT - 002142	2002/12/11	TDRS Time Interval Setting	Ground	IMCS	Pending
INT - 002145	2002/12/15	Commands failing PTV for no reason	Ground	IMCS	Pending
INT - 002169	2003/01/03	IREM S/W local resets due to SEU (twice)	Space	IREM	Pending
INT - 002194	2003/01/16	Wrong handling of the OTF after Open Loop Slew	Space	Spacecraft	Pending
INT - 002199	2003/01/17	Incorrect handling of CLCW wrap-around in CLTU mode	Ground	ESA Sta.	Pending
INT - 002197	2003/01/20	Lost Tele-commanding via REDU	Ground	IMCS	Pending

INT - 002202	2003/01/22	NCTRS log file writing takes all the CPU making the application fail.	Ground	NCTRS	Pending
INT - 002208	2003/01/27	Autostack: Commands that fail release do not apply any further interlock.	Ground	IMCS	Pending
INT - 002212	2003/01/29	TDRS Interval-by-Interval TM Retrieval Problem	Ground	IMCS	Pending
INT - 002213	2003/01/29	SCOS 2000 Interval-by-Interval TM Retrieval Problem	Ground	IMCS	Pending
INT - 002214	2003/01/29	Drop in telemetry from REDU	Ground	ESA Sta.	Pending
INT - 002217	2003/02/06	TC link drop	Ground	NASA Sta.	Pending
INT - 002219	2003/02/10	IBIS: PICsIT PDMs counters SET to 0 (twice) during nominal operation	Space	IBIS	Pending
INT - 002220	2003/02/10	Wrong Scrolling Display definitions on IMCS following Import	Ground	IMCS	Pending
INT - 002221	2003/02/10	IBIS: SCI sub-mode table loaded only if forcing the sub-mode	Space	IBIS	Pending
INT - 002228	2003/02/21	STR 1750 Processor Fault in the presence of Saturn in the FoV	Space	Spacecraft	Pending
INT - 002233	2003/02/24	Time Calibration not Coherent among Ground Stations	Ground		Pending
INT - 002234	2003/02/24	S2K unable to access READ ONLY disk in IDDA.	Ground	IMCS	Pending
INT - 002235	2003/02/25	Too narrow window for RMU cal in PSF of rev 49	Ground	I/F to SGS	Pending
INT - 002240	2003/02/27	Update of slew failed on FDS	Ground	FDS	Pending
INT - 002242	2003/03/02	TM &TC Drop on DSS 16	Ground	NASA Sta.	Pending
INT - 002243	2003/03/04	CDS Failed to Lock at Redu - H/O Postponed	Ground	ESA Sta.	Pending
INT - 002246	2003/03/05	Loss of Telemetry from DSS16	Ground	NASA Sta.	Pending
INT - 002245	2003/03/06	TDRS: Retrieval of packet 60602 or contained parameters does not work	Ground	IMCS	Pending
INT - 002252	2003/03/10	CDS out of Lock at Redu - TM&TC Loss	Ground	ESA Sta.	Pending
INT - 002253	2003/03/10	RX1 and RX2 Locked at the same time	Ground	NASA Sta.	Pending
INT - 002255	2003/03/10	Late AOS at DSS-24	Ground	NASA Sta.	Pending
INT - 002256	2003/03/14	Late AOS at DSS-16	Ground	NASA Sta.	Pending
INT - 002257	2003/03/17	Late AOS at DSS-24	Ground	NASA Sta.	Pending
INT - 002258	2003/03/20	IBIS: stop downloading HIST during GCDE	Space	IBIS	Pending
INT - 002259	2003/03/21	TDRS: Retrieval log is Meaningless.	Ground	IMCS	Pending
INT - 002260	2003/03/21	Monitoring task Printout, sample time	Ground	IMCS	Pending
INT - 002262	2003/03/21	TDRS: FEN Retrievals containing status parameters always fail.	Ground	IMCS	Pending
INT - 002264	2003/03/23	Loss of bit-lock + TLM problems on DSS-16	Ground	NASA Sta.	Pending

INT - 002265	2003/03/24	Loss of TC & TM Link	Ground	ESA Sta.	Pending
INT - 002267	2003/03/25	Drop in link from ISDS to ISDC	Ground	I/F to SGS	Pending
INT - 002268	2003/03/25	No bit lock via DSS-16	Ground	NASA Sta.	Pending
INT - 002269	2003/03/25	Telemetry lost from DSS-16	Ground	NASA Sta.	Pending
INT - 002270	2003/03/26	Late uplink via DSS-16	Ground	NASA Sta.	Pending
INT - 002271	2003/03/26	Drops in telemetry from DSS-16	Ground	NASA Sta.	Pending
INT - 002272	2003/03/26	TC link via DSS-16 lost	Ground	NASA Sta.	Pending
INT - 002273	2003/03/27	Drop in VC7 via REDU	Ground	ESA Sta.	Pending
INT - 002274	2003/03/28	IFTS MCS instance not working	Ground	IMCS	Pending
INT - 002275	2003/03/28	Constraint Error Exception in the OMCAS on DOY081	Space	OMC	Pending
INT - 002276	2003/03/28	Crash of OMCAS on DOY083	Space	OMC	Pending
INT - 002277	2003/03/28	Telemetry lost from DSS-16. DR N100888	Ground	NASA Sta.	Pending
INT - 002278	2003/03/28	FEC failure in REDU	Ground	ESA Sta.	Pending
INT - 002279	2003/03/29	Telemetry lost from DSS-16. DR N109197	Ground	NASA Sta.	Pending
INT - 002280	2003/03/30	Telemetry lost from REDU	Ground	ESA Sta.	Pending
INT - 002281	2003/03/31	TC outage via REDU	Ground	ESA Sta.	Pending
INT - 002282	2003/03/31	Bad data being received from DSS-16	Ground	NASA Sta.	Pending
INT - 002283	2003/04/01	ISDS-A and IDDA services stopped	Ground	IMCS	Pending
INT - 002284	2003/04/01	Reed Solomon alarms from REDU	Ground	ESA Sta.	Pending
INT - 002285	2003/04/02	Redu Antenna Uplink switch goes off bus	Ground	ESA Sta.	Pending
INT - 002286	2003/04/02	Reboot of ESOC Firewall	Ground	I/F to SGS	Pending
INT - 002288	2003/04/03	TM/TC lost via REDU	Ground	ESA Sta.	Pending
INT - 002289	2003/04/03	Delayed handover to DSS-16	Ground	NASA Sta.	Pending
INT - 002290	2003/04/03	Bad frames and TLM drop from DSS-16. Possible RFI	Ground	NASA Sta.	Pending
INT - 002291	2003/04/08	Archiving lost on A chain	Ground	IMCS	Pending
INT - 002292	2003/04/09	Telemetry Drops from Goldstone (DR 6102621)	Ground	NASA Sta.	Pending
INT - 002293	2003/04/13	Science data CDs produced with no TM inside.	Ground	IMCS	Pending
INT - 002294	2003/04/15	DSS-16 missed coverage period	Ground	NASA Sta.	Pending
INT - 002295	2003/04/15	Telemetry Drops from Goldstone	Ground	NASA Sta.	Pending
INT - 002296	2003/04/16	No guide star found	Ground	FDS	Pending

Doc. Title: INTEGRAL Mission Report # 31
Doc. Ref.: INT-MOC-SYS-RP-1001-TOS-OF
Date : 28/04/03

Issue : 1
Rev. : 0
Page : 16

INT - 002298	2003/04/20	ISDS - ISDC link outage	Ground	I/F to SGS	Pending
INT - 002299	2003/04/21	Telemetry loss from DSS-24	Ground	NASA Sta.	Pending
INT - 002297	2003/04/23	Star Tracker 1750 Processor Fault on 21/04/2003 (DoY 111)	Space	Spacecraft	Pending
INT - 002300	2003/04/23	ISDC not receiving ASF files.	Ground	IMCS	Pending
INT - 002301	2003/04/23	Telemetry loss via DSS-16 due to RFI	Ground	NCTRS	Pending
INT - 002302	2003/04/24	Telemetry loss via DSS-16 due to RFI	Ground	NASA Sta.	Pending