

INTEGRAL
Mission Report
INT-MOC-SYS-RP-1001-TOS-OF
No. 054
Week 40
06.10.03
Routine Phase

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1 General

The Flight Control Team at MOC has compiled this report with some input provided by the Flight Dynamics Team, ISOC and ISDC.

It addresses the activities from 27.09.03 until 03.10.03 (both dates inclusive) and covers the revolutions 117 & 118.

2 Summary of Activities

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

The targets of these revolutions were the Galactic Center and the OMC Flat Field target (RA 17:12:48.00; DEC -06:24:00.0). The activities performed consisted of GCDE and staring observations. In addition OMC Flat Field and Dark Current Calibrations were performed.

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

The AOCS operations were performed from the timeline during this period. The nominal execution was affected by several ground segment problems during the week, which caused the loss of 14 slews.

The fuel consumption over the period between 25/09/2003 and 02/10/2003 was 0.148 Kg. The remaining propellant is in the order of 174.61 Kg on the 2nd of October.

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 from the arrays is in the order of **2250W**. This means that there is no noticeable degradation of the solar arrays since launch.

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 overall status of the instrument is nominal.

During the reporting period the instrument was in photon by photon mode with the spectra telemetry enabled. The allocated telemetry in the science windows was most of the time 98pkts/cycle and was reduced by a few packets when the OMC calibrations were scheduled.

The cryocooler is working well, maintaining the temperature at 85K

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

3.2.2 IBIS

The Status of the unit is Nominal. The TM bandwidth assigned to IBIS is 134 pkts/8sec.

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

3.2.3 JEM-X

The status of both JEM-X units is nominal.

During this period JEM-X2 operations were performed by the automatic Timeline, with the TM allocation of 8 packets/cycle during science operations, and JEM-X1 was dormant with a TM allocation of 1 packet/cycle.

3.2.4 OMC

The status of OMC is nominal.

During this period OMC operations were performed by the automatic Timeline, with the TM allocation to OMC of 5 packets/cycle during normal science operations. The 9th OMC Flat Field and Dark Current calibration was performed during revolution 117, with a TM allocation to OMC of 60 packets/cycle.

Several OMC pointings were missed because of an inability to execute certain planned slews due to various contingencies.

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

3.2.5 IREM

The status of the unit is Nominal.

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

4 Ground Facilities

The main problems this week, as previous weeks, concern the consolidator, and the link to the ISDC.

In addition a problem with the IFTS (Integral File Transfer System) blocked the file transfers between the FDS and the IMCS, and prevented to recover the schedule after an interruption, causing the loss of 9 pointings.

4.1 Mission Operations Centre

See problem reported above.

4.2 Ground Stations & Network

4.3 Science Ground Segment

4.3.1 ISOC

This report covers to end of week 40.

1. Planning.

Short term PSF: up to rev. 129 received from MOC

Long term PSF: up to rev. 140 (no change)

POS and POD generated: up to rev 129 and sent to MOC and ISDC

TSF: up to rev 120 received from MOC

No replanning performed. Half way through rev 123 the GCDE program is completed. Rev 129 is planned with observations that would allow to perform SPI annealing in parallel if decided to go ahead with that activity.

2. Observation status

ECS's for rev's 98, 99, 103 and 104 received from ISDC. Corresponding OCS sent to ISDC . The AO 2 technical evaluation of the AO 2 proposals is completed by ISOC staff. This is a required input to the TAC process starting next week.

3. ISOC science archive

No further update received

4. System

The system performance is very stable. New REVNO and ORBITA file received from Flight Dynamics and were imported on 29 September.

5. Problems

None

4.3.2 ISDC

On 06/10/2003, the status of ISDC observation processing is:

- Latest Standard Analysis completed on observation 0120284001 (SCO X-1) on 27/09/2003
- Latest products archived on observation 0120284001 (SCO X-1) on 29/09/2003
- Latest observation products sent to the observer: observation 01200230005 (3C 273) on 23/09/2003

5 Special Events

Nothing to report

6 Anomalies

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

On DoY 270 at 06:29, there were Reed-Solomon alarms at Redu, bad TLM frames were received at this time. At 06:30, the Timeline was restarted, but PREQ 84 had to use default values. At 07:12, the IFTS was restarted clearing a queue of TPFs . At 07:30, an automatic update from the FDS was received. At 08:10, the IMCA displays were red on the global display indicating some tasks were not running. Investigation showed that there were two task launchers running. At 08:34, the TPF for PREQ 87 was not received by the IMCS. CCC was requested to restart the IFTS. At 09:38, the automatic updates were again not received, CCC restarted the IFTS to force the transfer, the same thing happened again at 10:08. At 10:14, CCC was given clearance to shut down one of the task launchers. At 11:14, 11:45, 12:24 and 13:27, the TPFs again failed to be delivered and the IFTS had to be restarted. At 13:56, the TPFs were manually transmitted using ftp.

On DoY 272 at 20:43, VC0 TLM from Redu dropped. Network reported that TMP2 (prime) dropped due to data overflow, TMP1 was however, green. At 20:46 Network closed the VC0 link and at 20:47 aborted the VC7 offline link, which caused TMP2 to turn green. At 20:48, the TLM from Redu returned. There was no impact.

On DoY 273 from 00:26 to 00:48 there was double TLM from DSS-24. At 07:16, there was a 29 second drop in TLM from Redu. At 10:21 Reed-Solomon errors from Redu were reported. At 23:40 VC7 TLM from DSS-16 dropped. There was no impact on any occasion.

On DoY 274 at 08:59, there were short breaks in the TLM, no commands were lost. At 09:15, Network report problems with the IFMs at Redu, the impact was no ranging until 11:36, when they were reconfigured. At 09:19, Reed-Solomon errors were reported from Redu.

On Doy 275 at 07:26 there was a drop in the TM. The problem is under investigation, and seems to be related to a link configuration on the NCTRS. Slew 01180042 was missed and 01180043 executed manually.

On Doy 276 at 22:49 there was a loss of TM and TC, due to a problem in the tracking of the DSS-16 antenna. No operational impact.

Arid	Date Occurrence	Subject	Segment	Status
INT - 002466	29/09/2003	Redu leased line	Ground	Pending

INT - 002467	29/09/2003	Telemetry loss from DSS-16 DR G103400	Ground	Pending
INT - 002469	29/09/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	Pending
INT - 002471	30/09/2003	Telemetry loss from REDU	Ground	Pending
INT - 002472	30/09/2003	Double telemetry rate received from DSS-24	Ground	Pending
INT - 002473	01/10/2003	Need of periodic maintenance on IFTS	Ground	Pending
INT - 002474	01/10/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	Pending
INT - 002475	02/10/2003	Loss of TC link via REDU	Ground	Pending
INT - 002476	02/10/2003	Telemetry and Telecommand link was lost to REDU	Ground	Pending
INT - 002477	06/10/2003	Telemetry loss from REDU due to NCTRS configuration	Ground	Pending
INT - 002478	06/10/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	Pending
INT - 002479	06/10/2003	Telemetry loss from DSS-16 DR G103429	Ground	Pending

7 Future Milestones

8 Appendix

The appendix includes various detailed information.

8.1 Overview of Revolutions

Revolution 117

Revolution 117 began with a GCDE observation lasting ~23 hours. This was followed by a staring observation of 4 hours at the OMC Flat Field target (RA 17:12:48.00; DEC -06:24:00.0), during which OMC Flat Field and Dark Current Calibrations were performed. GCDE observations were then resumed and continued for the remaining ~34 hours of observation time.

During the GCDE observations the TM allocation was 134 IBIS, 98 SPI, 1 JEM-X1, 8 JEM-X2, 5 OMC, while during the OMC Flat Field observation it was 90 IBIS, 87 SPI, 1 JEM-X1, 8 JEM-X2, 60 OMC.

Throughout these observations SPI, IBIS and JEM-X2 were in their nominal science modes and JEM-X1 remained in Safe mode. OMC was in FFCalibration / DCCalibration modes for the Flat Field / Dark Current Calibrations respectively and in Normal Science mode for the GCDE observations.

Revolution 118

In revolution 118, GCDE observations were performed for the entire duration of observation time (~62 hours).

Throughout these observations all instruments were in their nominal science modes, except for JEM-X1, which remained in Safe mode, and the TM allocation was 134 IBIS, 98 SPI, 1 JEM-X1, 8 JEM-X2, 5 OMC.

8.2 Consumables

8.2.1 Detailed Fuel Book-keeping

The latest entries in the history file for INTEGRAL

2003-09-11T21:27:35.000Z	174.9931	F	Automatic TM processing.
2003-09-13T10:05:22.000Z	174.9826	F	Automatic TM processing.
2003-09-14T21:14:46.000Z	174.9562	F	Automatic TM processing.
2003-09-16T09:54:10.000Z	174.9324	F	Automatic TM processing.
2003-09-17T21:04:37.000Z	174.9049	F	Automatic TM processing.
2003-09-19T09:48:09.000Z	174.8878	F	Automatic TM processing.
2003-09-20T20:59:41.000Z	174.8198	F	Automatic TM processing.
2003-09-22T09:35:13.000Z	174.8150	F	Automatic TM processing.
2003-09-23T20:44:37.000Z	174.7867	F	Automatic TM processing.
2003-09-25T09:23:37.000Z	174.7532	F	Automatic TM processing.
2003-09-26T19:53:48.000Z	174.7378	F	Automatic TM processing.
2003-09-28T09:08:48.000Z	174.7331	F	Automatic TM processing.
2003-09-29T19:37:15.000Z	174.6779	F	Automatic TM processing.
2003-10-01T08:58:47.000Z	174.6181	F	Automatic TM processing.
2003-10-02T19:36:59.000Z	174.6053	F	Automatic TM processing.

This report was generated Fri Oct 3 08:00:15 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 AOCS Operations

AOCS operations were executed from the Automatic Timeline.

During this period, 114 Open Loop Slews, 151 Closed Loop Slews and 4 Momentum Bias were executed. 14 slews were missed or executed manually. This is equivalent to a 5.3%.

27/09/03 (Day of Year 270, Revolution 116)

Slews lost due to ground segment problems (TM from Goldstone + IFTS):

Around 01:30 frequent TM drop occurred that eventually caused the uplink of slew 01160075 to fail, and the timeline to be stopped. When eventually the situation with

the TM was stable again, the File Transfer System between the FDS and the IMCS did not work, and the FD products needed for the recovery could not reach the control system. After investigation the problem was found in the IFTS, and the recovery was performed by transferring the files manually.

The total impact of this problem was that slews 01160075 to 01160082 were lost, and 01160083 was executed manually. In addition 01160084 was executed with default values.

Slew lost due to IMCS problem: During the uplink of the slew 01160095, there was an erroneous PTV failure for TC A3189 (Change of Guide Star). All the conditions were actually OK, this is a known IMCS problem. The impact of this problem was that 01160095 and 01160096 were lost, and 01160097 was executed manually.

28/09/03 (Day of Year 271, Revolution 116-117)

Nothing to report.

29/09/03 (Day of Year 272, Revolution 117)

Nothing to report.

30/09/03 (Day of Year 273, Revolution 117)

Nothing to report.

01/10/03 (Day of Year 274, Revolution 117-118)

Guide star lost during the Perigee Passage: During the LOS period the guide star was lost due to the STR SEU Filter being exceeded, at 07.35.09.225. The altitude in the orbit was around 10000 Km, and the star data: mag 6.60, coordinates (24674, 6847). The problem had no impact (new guide star found was mag. 6.40 at (5846, -3682).

02/10/03 (Day of Year 275, Revolution 118)

Slew lost due to TM drop (Redu): At 07:26 there were frequent bad frames coming from Redu, that caused the uplink of slew 01180042 to fail. The impact was that the slew 01180042 was lost, and slew 01180043 was executed manually.

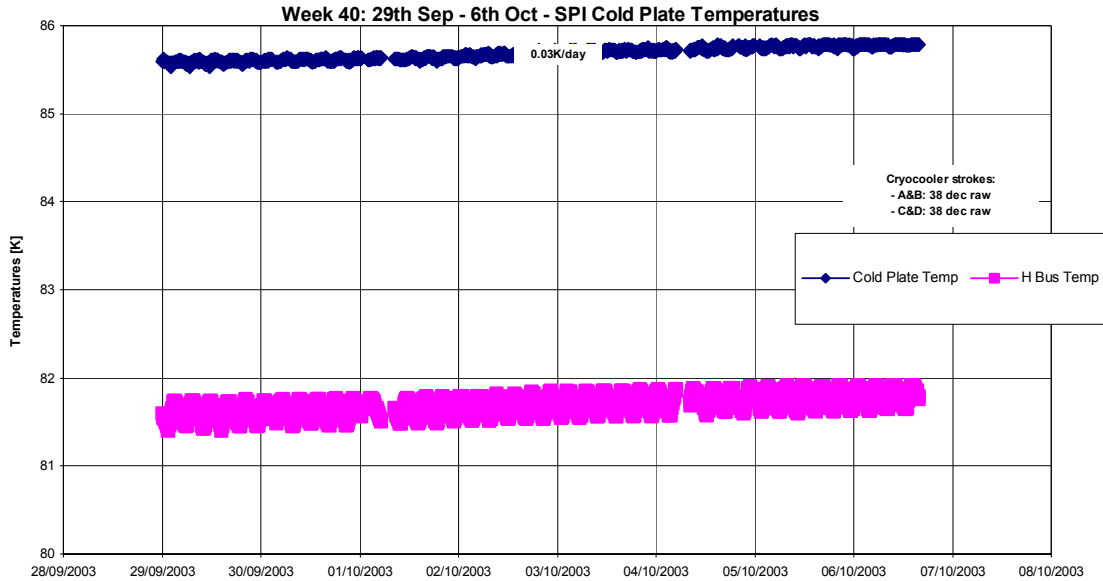
03/10/03 (Day of Year 276, Revolution 118)

Nothing to report.

8.3.2 SPI Operations

Cryocooler:

The temperature of the GeD cold box continue drifting within the expected rate, which this week was about 0.03K/day.



IASW/DPE:

During the OMC calibrations the telemetry allocation was reduced and the photon by photon buffer filled to its full capacity. When the PST telemetry was re-established to the nominal value, the DPE generated repeatedly some exception OEMs (CSSW “SPI CONSTRAINT DPE CULPR” and IASW “SW ERROR”). No action was however started as the messages were downlinked for a few seconds only. The IASW and the instrument subassemblies kept working nominally in science mode. An anomaly report will be open to record the unexpected exceptions.

ACS:

Nothing to report.

AFEE :

Nothing to report.

DFEE :

Nothing to report.

PSD :

Nothing to report.

8.3.3 IBIS Operations

DOY 2003.270 (27/09)

Reported at 01:01Z the OEM ID 183 Class 2 <<IBIS1 VETO +5V VOLTAGE OUT OF RANGE>>. The relevant TM_para G6106 reported values inside limits and therefore the problem has been disregarded, as suggested by the nominal reaction to this OEM (FDIR doc).

DOY 2003.271 (28/09)

Reported (few) during Belt passages the OEM APID 1280 ID 167 Class 2 <<IBIS1 PICsIT NOISY SEMIMODULE SIGNALLING>> due to the fact that the PICsIT detectors are ON without the VETO anti-coincidence system, as it required by PIs. The Noisy semimodule was PDM4-SM2 and PDM3-SM2.

Reported at 10:43Z and 11:07Z the OEM ID 169 Class 0 <<HK OUT OF SYNCH>> indicating a problem in the communication between PICsIT and HEPI. Because the rate of the OEM was $< 1/30$ secs, no further action has been taken, as suggested by the nominal reaction to this OEM

DOY 2003.272 (29/09)

Reported at 17:57Z the OEM ID 184 Class 2 <<IBIS1 VETO +28V VDM/CDM VOLTAGE OUT OF RANGE>>. The relevant TM_para G6107 reported values inside limits and therefore the problem has been disregarded, as suggested by the nominal reaction to this OEM.

DOY 2003.273 (30/09)

Reported at 15:24Z problem with PICsIT detector modules. The sequence of the events was:

1) at 15:24Z SCC failed for the TM_para G5068-5104-5116-5132-5152-5164-5168-5180 (semimodules FIFO error flag)

after consultation with the SOE was decided to monitor the evolution , accordingly with the suggested action in FDIR doc.

2) at 15.26Z all the PICsIT flags went back in limits.

This event, similar to past problems, is likely due to a temporary loss of synchronization between the HEPI and the PICsIT modules.

DOY 2003.274 (01/10)

Reported at 10:30Z and 10:54Z

the OEM ID 169 Class 0 <<HK OUT OF SYNCH>> indicating a problem in the link between PICsIT and HEPI. Because the rate of the OEM < 1 /30 secs, no further action has been taken, as suggested by the nominal reaction to this OEM

DOY 2003.275 (02/10)

Reported at 05:14Z

the OEM ID 180 Class 2 <<IBIS1 VETO COUNTER LATERAL EXCEEDS ALERT VALUE>>. The relevant TM_para G6063 reported values inside limits after few TM cycles and therefore the problem has been disregarded, as suggested by the nominal reaction to this OEM.

Reported at 17:57Z

the OEM ID 131 Class 2 <<IBIS1 IASW LSL TRANSFER FAIL REPORT FOR HIGH-LEVEL>> together with OEM ID 133 Class 2 <<IBIS1 IASW LSL TRANSFER FAIL REPORT FOR LOW-LEVEL>>. Monitoring the repetition of the OEMs, as suggested in the FDIR doc, no further occurrences of the OEMs above were found.

8.3.4 JEM-X Operations

Nothing to report.

8.3.5 OMC Operations

During this period, 14 of the 259 planned pointings for OMC were missed.

2003-09-27, DOY 270, Rev 116

Between 2003-09-27T01:53Z and 2003-09-27T07:20Z pointings 01160075 to 01160083

were lost:

This was due to various contingencies (TM drops from Goldstone followed by IFTS problems affecting transfer of files between Flight Dynamics system and IMCS).

The Timeline was stopped during this contingency (therefore Broadcast Packet PID remained the same as OMC PID until Timeline was recovered).

Following the loss of slew 01160075, the attitude of pointing 01160074 was maintained until 2003.270.06.19.39Z, when a manual slew was performed to achieve the attitude of pointing 01160083. During this period there were several sets of the following OEMs:

OEM ID 179 Class 0 <CENT CYCLE>

OEM ID 169 Class 0 <SHOT COMPLETE>

OEM ID 179 Class 0 <CENT CYCLE>

as OMC maintained the imaging parameters for this attitude and therefore shots were completed and new ones started.

The last shot with the parameters of pointing 01160074 was completed at 2003.270.06.42.49Z, although part of this was during the manual slew and pointing at the attitude of 01160083.

From 2003.270.06.42.49Z to 2003.270.07.05.40Z there was a series of OEM ID 179 Class 0 <CENT CYCLE>. Then from 2003.270.07.06.37Z to 2003.270.07.19.17Z there was a series of OEM ID 171, Class 0 <SCI WINDOW REJECTED>. This was due to the fact that the imaging parameters were still those of pointing 01160074, while the attitude was that of pointing 01160083.

OMC resumed normal operations at 2003.270.07.20.43Z (transition to Stand-by) when slew 01160084, along with the imaging EDs associated with pointing 01160084, were executed from the Timeline.

Between 2003-09-27T13:14Z and 2003-09-27T14:45Z pointings 01160095 to 01160097 were lost:

This was due to a PTV failure of one of the slew TCs.

OMC and Broadcast Packet commanding from the Timeline continued during this contingency.

The loss of slew 01160095 resulted in two occurrences of the OEM ID 131 Class 3 <REJECTED TC1>, at 2003.270.13.14.51Z and 2003.270.13.14.57Z, when the uplink of the imaging EDs scheduled during slew 01160095 was attempted from the Autostack.

The attitude of pointing 01160094 was maintained until 2003.270.14.07.43Z. During this period there were two sets of the following OEMs (at 2003.270.13.24.09Z and 2003.270.14.03.47Z):

- OEM ID 179 Class 0 <CENT CYCLE>
- OEM ID 169 Class 0 <SHOT COMPLETE>
- OEM ID 179 Class 0 <CENT CYCLE>

as OMC maintained the imaging parameters for this attitude and therefore shots were completed and new ones started.

At 2003.270.14.07.31Z, a manual recovery was performed to the attitude of pointings 01160096/01160097 (same attitude). At this time OMC transitioned to Stand-by mode, as the OTF went low and OMC PID <> BCP PID, with the occurrence of the OEM ID 232 Class 0 <TO STDBY>.

At 2003.270.14.14.02Z the imaging parameters for pointing 01160097 were uplinked from the Timeline, but OMC remained in Stand-by mode (OTF remained low as sun steering law not re-enabled) until it transitioned to Science mode at 2003.270.14.47.31Z when slew 01160098, along with the imaging EDs for pointing 01160098, were executed from the Timeline and the OTF was set.

2003-09-28, DOY 271, Rev 116 – 117

Nothing to report.

2003-09-29, DOY 272, Rev 117

Execution of OMC Flat Field and Dark Current calibrations:

From 2003-09-29T10:24:12Z to 2003-09-29T14:25:55Z OMC performed a series of Flat Field Calibrations and a Dark Current Calibration at an attitude of (RA 17:12:48.00; DEC -06:24:00.0) with a TM allocation of 60 packets/cycle.

2003-09-30, DOY 273, Rev 117

Nothing to report.

2003-10-01, DOY 274, Rev 117 - 118

Nothing to report.

2003-10-02, DOY 275, Rev 118

Between 2003-10-02T07:30Z and 2003-10-02T08:35Z pointings 01180042 and 01180043 were lost:

This was due to a TM drop.

The Timeline was stopped during this contingency (therefore Broadcast Packet PID remained the same as OMC PID until Timeline was recovered).

Following the loss of slew 01180042, the attitude of pointing 01180041 was maintained until 2003.275.07:54:27Z, when a manual slew was performed to achieve the attitude of pointing 01180043.

There were there was a set of the following OEMs at 2003.275.07.43.01Z:

OEM ID 179 Class 0 <CENT CYCLE>

OEM ID 169 Class 0 <SHOT COMPLETE>

OEM ID 179 Class 0 <CENT CYCLE>

as OMC maintained the imaging parameters for the attitude of pointing 01180041 and therefore the first shot was completed and a new one started.

The second shot was completed at 2003.275.08.24.56Z, generating the same set of OEMs, however part of this was during the manual slew and pointing at the attitude of 01180043.

From 2003.275.08.24.56Z to 2003.275.08.34.16Z there was a series of OEM ID 179 Class 0 <CENT CYCLE>. Then at 2003.275.08.35.09Z there were two occurrences of OEM ID 171, Class 0 <SCI WINDOW REJECTED>. This was due to the fact that the imaging parameters were still those of pointing 01180041, while the attitude was that of pointing 01180043.

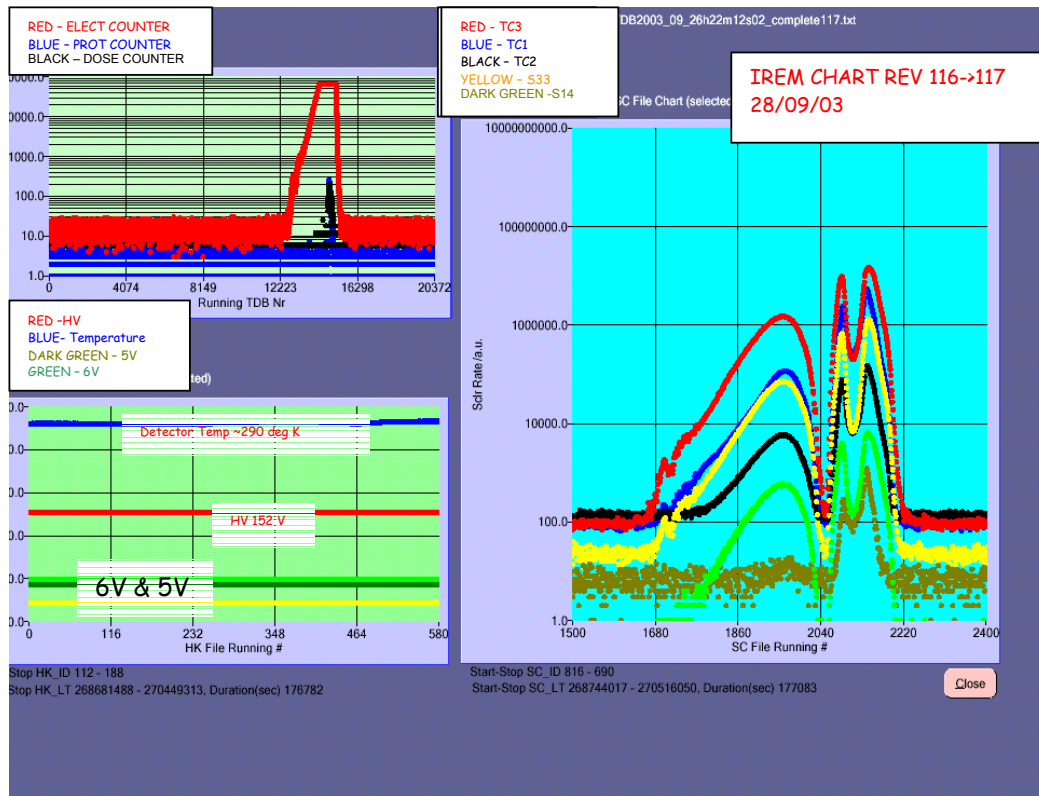
OMC resumed normal operations 2003.275.08.35.31Z (transition to Stand-by) when slew 01180044, along with the imaging EDs associated with pointing 01180044, were executed from the Timeline.

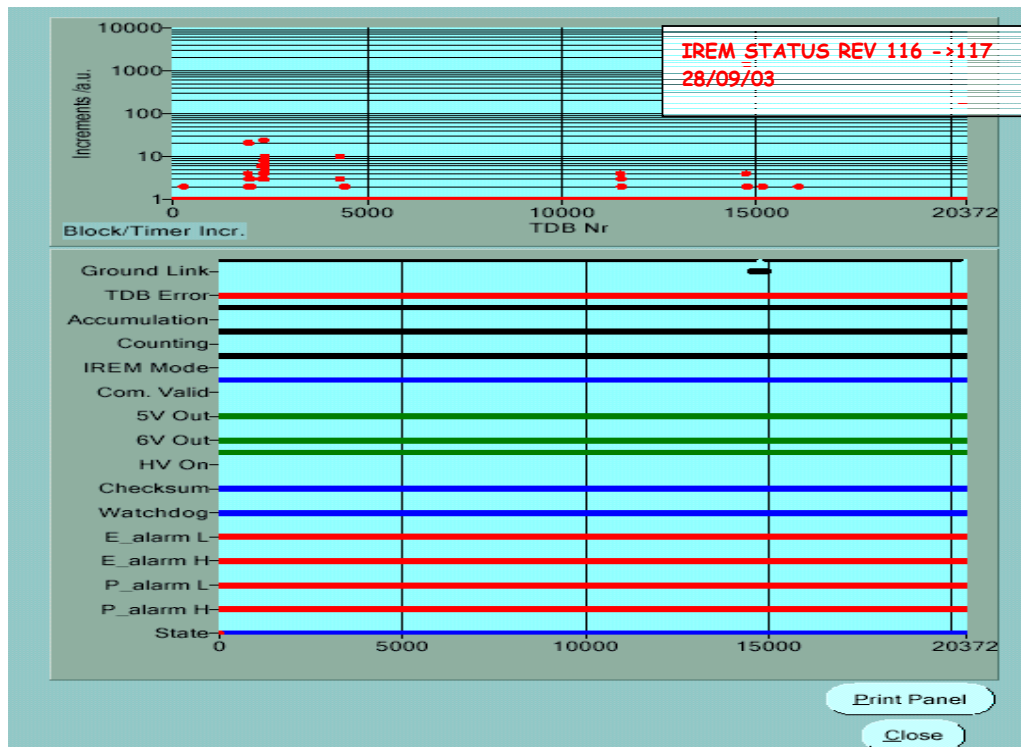
2003-10-03, DOY 276, Rev 118

Nothing to report.

8.3.6 IREM Operations

Hereafter are reported the plots of the IREM count rates and statuses for the Belts passage in rev 116->117, as recorded by the IREM ECOE (during the passage 117->118 the IREM ECOE was disconnected).





Doc. Title : INTEGRAL Mission Report # 54
 Doc. Ref. : INT-MOC-SYS-RP-1001-TOS-OF
 Date : 06/10/03

Issue :1
 Rev. : 0
 Page : 18

8.4 List of Anomalies since Launch

The following tables presents the list of all identified anomalies for the Space and Ground segments, 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.

Space Segment:

Arid	Date Occurrence	Subject	Segment	Element	Status
INT_SC – 53	05/06/2003	IBIS anomaly: Histogram production stopped due to the combination of PDUR setting with IASW observation duration calculation during long staring	Space	IBIS	Pending
INT_SC – 55	25/06/2003	SPI: Spikes in GeD count rates after HV switch on following 1st annealing	Space	SPI	Pending
INT_SC – 60	31/07/2003	OMC (OMCAS) IASW Crashed	Space	OMC	Pending
INT_SC – 61	07/08/2003	SPI -ACS anomaly on FEE 57	Space	SPI	Pending
INT_SC – 63	01/09/2003	SPI DPE SW exceptions during spectra compression	Space	SPI	Pending
INT_SC – 64	01/09/2003	IREM anomaly: SEU # 7	Space	IREM	Pending
INT_SC – 66	09/09/2003	IBIS: Histogram production stopped.	Space	IBIS	Pending
INT_SC – 67	12/09/2003	SPA ACS FEE out-of-limits on secondary power supply	Space	SPI	Pending

Ground Segment:

ARid	Date Occurrence	Subject	Segment	Element	Status
INT - 002010	22/10/2002	Time correlation not applied correctly to time parameters in TM type 8 reports.	Ground	IMCS	Pending
INT - 002094	19/11/2002	TDRS does not work with supercommutated parameters	Ground	IMCS	Pending
INT - 002145	15/12/2002	Commands failing PTV for no reason	Ground	IMCS	Pending

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ARid	Date Occurrence	Subject	Segment	Element	Status
INT - 002212	29/01/2003	TDRS Interval-by-Interval TM Retrieval Problem	Ground	IMCS	Pending
INT - 002213	29/01/2003	SCOS 2000 Interval-by-Interval TM Retrieval Problem	Ground	IMCS	Pending
INT - 002234	24/02/2003	S2K unable to access READ ONLY disk in IDDA.	Ground	IMCS	Pending
INT - 002259	21/03/2003	TDRS: Retrieval log is Meaningless.	Ground	IMCS	Pending
INT - 002260	21/03/2003	Monitoring task Printout, sample time	Ground	IMCS	Pending
INT - 002262	21/03/2003	TDRS: FEN Retrievals containing status parameters always fail.	Ground	IMCS	Pending
INT - 002309	06/05/2003	Command release delayed	Ground	ESA Sta.	Pending
INT - 002311	06/05/2003	Drop in TM on MADDS-ISDSA link	Ground	ESA Sta.	Pending
INT - 002312	06/05/2003	Static PTV in "No Go" State for command A3189	Ground	IMCS	Pending
INT - 002314	12/05/2003	Wrong file displayed for Timeline Summary File	Ground	IMCS	Pending
INT - 002323	19/05/2003	Telemetry Drops from GoldStone (DR 109346)	Ground	NASA Sta.	Pending
INT - 002324	19/05/2003	Command A3084 not verified	Ground	IMCS	Pending
INT - 002328	27/05/2003	TDRS queries for some SPI parameters fail before DOY 2003.034	Ground	IMCS	Pending
INT - 002330	27/05/2003	NCTRS CPU goes to 85% for a problem related with tracking data	Ground	NCTRS	Pending
INT - 002331	27/05/2003	Monitoring Task ASCII Printout, not in ASCII format	Ground	IMCS	Pending
INT - 002334	30/05/2003	Bad telemetry from Goldstone - DSS-16	Ground	NASA Sta.	Pending
INT - 002336	02/06/2003	VC-0 telemetry not being received from Goldstone	Ground	NASA Sta.	Pending
INT - 002338	03/06/2003	Error sending data to consolidator (VC-7)	Ground	IMCS	Pending
INT - 002342	05/06/2003	Telemetry Drops from GoldStone DR: AR109393	Ground	NASA Sta.	Pending
INT - 002350	12/06/2003	Telemetry Drop from GoldStone DR: G102867	Ground	NASA Sta.	Pending
INT - 002358	22/06/2003	Error sending data to ISDC	Ground	IMCS	Pending
INT - 002368	25/06/2003	IFTS Transfer on IMCS-A Failed	Ground	IMCS	Pending
INT - 002370	01/07/2003	Static PTV conditions handled incorrectly.	Ground	IMCS	Pending
INT - 002391	18/07/2003	TC problems following the TMP swap on DOY 197	Ground	ESA Sta.	Pending

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ARid	Date Occurrence	Subject	Segment	Element	Status
INT - 002392	18/07/2003	Broadcast Packet Eclipse Entry/Exit Times Incorrect	Ground	FDS	Pending
INT - 002408	31/07/2003	Late TC Link from DSS-16	Ground	NASA Sta.	Pending
INT - 002410	31/07/2003	Strange Disconnection Messages.	Ground	NCTRS	Pending
INT - 002413	01/08/2003	CMD failure caused slew to be missed.	Ground	FDS	Pending
INT - 002415	06/08/2003	TC Fails release - Spurious PTV Failure.	Ground	IMCS	Pending
INT - 002416	06/08/2003	TC fails release	Ground	IMCS	Pending
INT - 002417	06/08/2003	TCP Crash at DSS-16	Ground	NASA Sta.	Pending
INT - 002418	06/08/2003	Possible Hardware fault on INTRB	Ground	NCTRS	Pending
INT - 002419	06/08/2003	Drop in VC7	Ground	NASA Sta.	Pending
INT - 002422	18/08/2003	IMCS OOL display frozen	Ground	IMCS	Pending
INT - 002423	18/08/2003	Drop in VC-7 from DSS-16	Ground	NASA Sta.	Pending
INT - 002424	18/08/2003	NCTRS-A restart	Ground	NCTRS	Pending
INT - 002426	18/08/2003	TM drop due to non-scheduled line switch at JPL - DR:101291	Ground	NASA Sta.	Pending
INT - 002427	18/08/2003	Autostack crashed on SUN-122	Ground	IMCS	Pending
INT - 002429	21/08/2003	Telemetry loss to IMCS	Ground	NCTRS	Pending
INT - 002430	25/08/2003	Unexpected behaviour of the Command Verifier of IMCS-A	Ground	IMCS	Pending
INT - 002431	27/08/2003	Telemetry loss from DSS-16 DR G103256 and G103258	Ground	NASA Sta.	Pending
INT - 002432	29/08/2003	Late AOS from DSS-16 DR: G103276	Ground	NASA Sta.	Pending
INT - 002433	02/09/2003	Restart of PSRV task causes Consolidator and ISDS problems	Ground	IMCS	Pending
INT - 002434	05/09/2003	FOPGEN database tables column width inconsistency	Ground	FOPGEN	Pending
INT - 002435	07/09/2003	Sudden disappearance of the AutoStack task during commanding	Ground	IMCS	Pending
INT - 002439	10/09/2003	IPKT cannot receive message from service NCTRS	Ground	IMCS	Pending
INT - 002440	10/09/2003	TMDSMAIN on IDDA losing connection to NCTRSA	Ground	IMCS	Pending
INT - 002441	10/09/2003	Unable to deliver DSS16 TLM to IMCA	Ground	NCTRS	Pending

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INT - 002442	10/09/2003	FD tool crashes when attempting to update slew parameters	Ground	FDS	Pending
INT - 002446	10/09/2003	Loss of telemetry from DSS-24 DR: G103302	Ground	NASA Sta.	Pending
INT - 002447	10/09/2003	Loss of telemetry from DSS-24 DR: G103320, and G103322	Ground	NASA Sta.	Pending
INT - 002448	11/09/2003	TDRS unuseable.	Ground	COMMS	Pending
INT - 002449	15/09/2003	Early carrier from DSS-16 DR:G10338	Ground	NASA Sta.	Pending
INT - 002450	17/09/2003	Timeline generation does not fail if Raw parameter value in APF is out of range	Ground	IMCS	Pending
INT - 002451	22/09/2003	Free swap apce alarm on NCTRS-A	Ground	NCTRS	Pending
INT - 002455	22/09/2003	Telemetry loss from DSS-16 DR N101419	Ground	NASA Sta.	Pending
INT - 002458	22/09/2003	ASTACK misses TC and releases others earlier than planned.	Ground	IMCS	Pending
INT - 002460	22/09/2003	Telemetry loss via REDU due to servo failure	Ground	ESA Sta.	Pending
INT - 002463	22/09/2003	Double telemetry rate received from DSS-24 DR: G-10332	Ground	IMCS	Pending
INT - 002464	24/09/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	ESA Sta.	Pending
INT - 002465	24/09/2003	Telemetry Delivery to ISDC	Ground	IMCS	Pending
INT - 002466	29/09/2003	Redu leased line	Ground	ESA Sta.	Pending
INT - 002467	29/09/2003	Telemetry loss from DSS-16 DR G103400	Ground	NASA Sta.	Pending
INT - 002469	29/09/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	ESA Sta.	Pending
INT - 002471	30/09/2003	Telemetry loss from REDU	Ground	ESA Sta.	Pending
INT - 002472	30/09/2003	Double telemetry rate received from DSS-24	Ground	NASA Sta.	Pending
INT - 002473	01/10/2003	Need of periodic maintenance on IFTS	Ground	IMCS	Pending
INT - 002474	01/10/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	ESA Sta.	Pending
INT - 002475	02/10/2003	Loss of TC link via REDU	Ground	ESA Sta.	Pending
INT - 002476	02/10/2003	Telemetry and Telecommand link was lost to REDU	Ground	COMMS	Pending
INT - 002477	06/10/2003	Telemetry loss from REDU due to NCTRS configuration	Ground	NCTRS	Pending

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INT - 002478	06/10/2003	Telemetry loss from REDU due to Reed Solomon Alarms	Ground	ESA Sta.	Pending
INT - 002479	06/10/2003	Telemetry loss from DSS-16 DR G103429	Ground	NASA Sta.	Pending