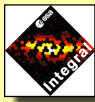
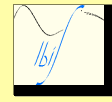


IBIS operations

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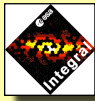


IBIS operations Status of the Instrument



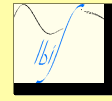
- The overall status of the unit is **Nominal (no red units)**
- **Actually Anomalies** involve mainly the **VETO s/s**
- **Open Issues** mainly on **Redundant Unit (IBIS2) and its ODB**

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IBIS operations

Open Actions



Co/08-03: Provide information necessary to have the Command and TM Data Base up to date for the redundant unit

Data Base for the redundant unit was updated but not verified: a deep check of ODB is needed.
This requires a cooperation between IBIS team and MOC.

pending → pending

TWG/04: Check if PICSIT PPM during slews could be stopped

The solution is to reduce the PICSIT events rate by setting an appropriate energy window.
In PPM we can set a lower and upper energy threshold, this allows to reduce the throughput between HEPI and DPE.

We should optimise the thresholds in order to have still some PICSIT PPM event (13+11 pkts/c)
impact:

- to update, in the ODB, TC para G8829 and G8830 to a new default value
- to check all procedures or EDs that use the TC G836 (set HEPI register type II)

Still waiting inputs from Bologna

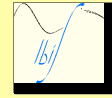
pending → pending

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IBIS operations

new Open Issues



Flight Control Procedures (MOC + IBIS team):

- Procedures to switch from IBIS1 to IBIS2 are ready (OB):
extensive verification (MOC with IBIS team) of IBIS2 procedure still TBD
(requested by OB at the beginning of 2007)

- Procedures for routine ops (i.e. EDs in TL) with IDPE2 still to be written by MOC.

open

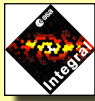
Contingency Recovery Procedures (MOC):

- IBIS recovery from ESAM to be update: the CRP suggests restarting PDM.
This step is most of the times not required. It is missing the GESTAN02 execution that the IBIS SOE will remember to perform but maybe not an XMM SOE or Spacon.

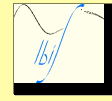
- PICSIT Latch-Up recovery procedure: TBW a specific CRP for this problem to avoid confusion
with existing (not specific) FCPs.

open

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IBIS operations Anomalies



INT_SC-130: VETO TC rejected during the execution of VETO patch 3.2

Similarity with others TC rejection SC86, SC102 that were closed thinking that inserting a delay between GECLEX02 and GEVESP01 could work. Nevertheless the anomaly is still happening.

No results from investigation. **Work around and guideline in place.** Can be closed.

pending → closed

INT_SC-183: VETO CDM1 HV breakdown

see SC198, SC207.

pending → pending

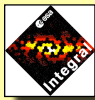
INT_SC-184: PICSIT PDM8 Latch-up Mode

Similarity with SC156 (PDM6 Latch-up). Latch-up is always possible. Nothing can be done.

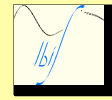
Can be closed..

open → closed

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IBIS operations Anomalies



INT_SC-185: VETO counters reported reduced count-rates

Similarity with SC92, 150 and 153.

Some analysis are still in progress in Warsaw. Confirmed as "pending" ..

pending → pending

INT_SC-198: VETO VDM05, VDM06 and VDM07 simultaneous HV breakdown

INT_SC-207: VETO VDM09 and VDM13 simultaneous HV breakdown

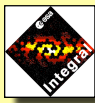
Similarity with SC126,129,136,138,144,145,183. Most of them are closed, but..

Now, the news is that these Anomalies come more frequently and involve more than one VDM simultaneously.

The only we can do is to track this behaviour.

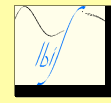
open → open

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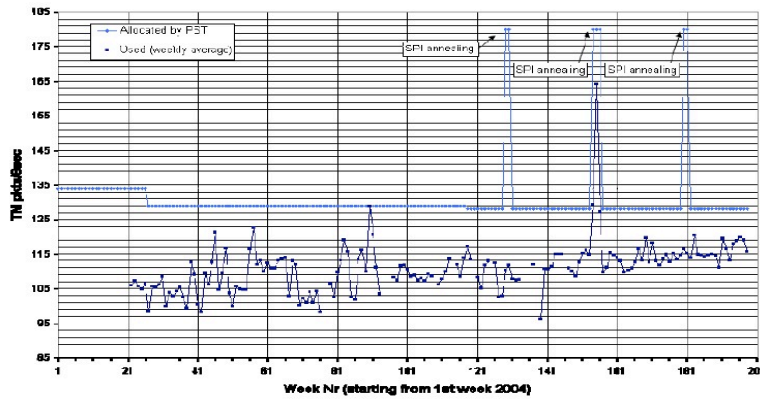
IBIS operations

IBIS TM utilization



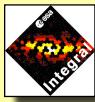
The IBIS TM utilization trend (due to BKG) is increasing roughly 3.5 pkts/ year.

IBIS TM Bandwidth Occupation in Science Mode



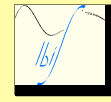
Considering that we are going to the Solar Max, i.e. is expected a reduction of background for the next 5 years of mission extension, the margin (13 pkts) seems limited but still acceptable. Problem likely will appear, if confirmed the actual rate, at end of 2010 →

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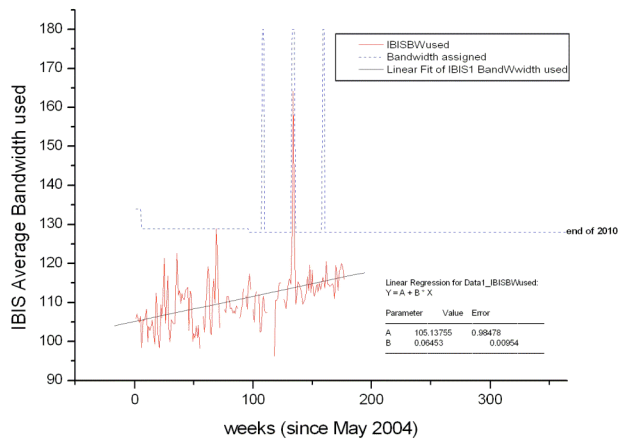


IBIS operations

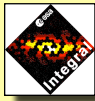
IBIS TM utilization



IBIS TM Bandwidth utilization forecast

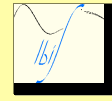


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IBIS operations

Safe Configuration for the Instrument



IN PRINCIPLE: it doesn't exist a SAFE CONFIGURATION for IBIS

the instrument cannot be left unattended when it is switched-on..
a voltage, a current....can exceed OOL in every moment

even if you switch it OFF.... the temperatures start to go too low and this is not good
and the reconfiguration takes long time

so
the best approach is to configure the instrument in the ~safest configuration

by using MOC procedure FCP_IBIS1_0801 (IBIS1 transition to Safe Mode)

in this condition :

- IASW in STD-BY Mode
- VETO in STD-BY with HVs OFF (HV's can be source of problems.. see VDMs..)
- ISGRI in STD-BY with biases are OFF
- PICsIT in Nominal with Biases ON (OK from thermal point of view)
- VETO/ISGRI/PICsIT Electronic Boxes ON (OK from thermal point of view)

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