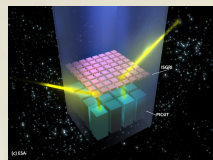


MONITORING PICsIT, THE HIGH-ENERGY LAYER OF THE IBIS IMAGER ONBOARD INTEGRAL

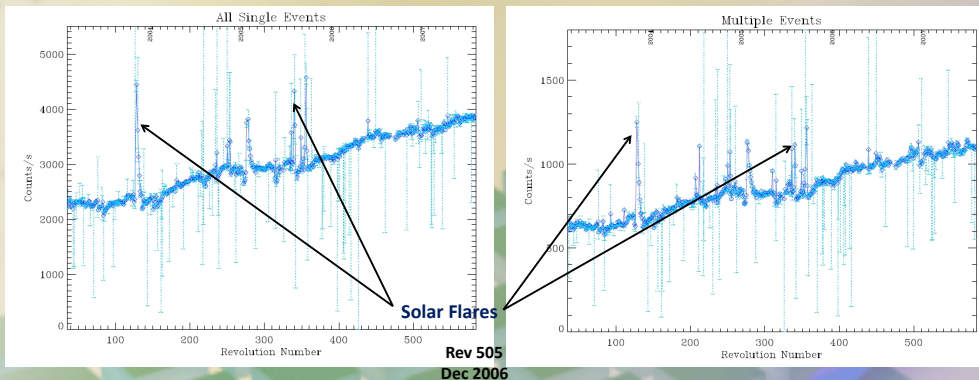
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INTRODUCTION: We present the status of PICsIT, the high-energy detector of IBIS, as derived by a continuous monitoring of the housekeeping parameters during the first 5 years of operations, from rev 36 (Jan 29, 2003) to 585 (Jul 31, 2007). Background rates for single and multiple events, temperature, gain, offset, and energy resolution as a function of orbits are shown, together with the behaviour of pixels gain vs the average temperature of the instrument. The trend of these parameters and the instrument performances are analyzed in the framework of the Solar cycles.

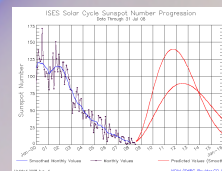
Detector Background



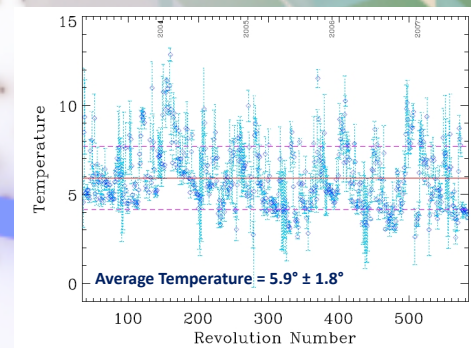
PICsIT is composed of 64 x 64 pixels of CsI, operating in the 0.2 and 10 MeV energy band. PICsIT is placed behind ISGRI and both detectors make the IBIS imager.



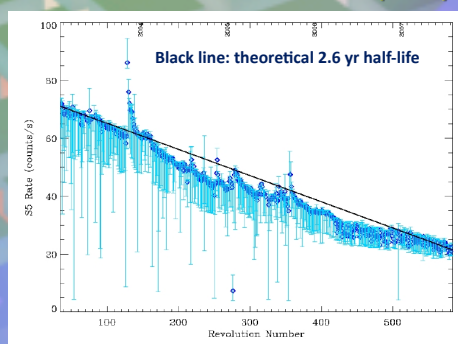
Possible anticorrelation of background rate with Solar Cycle, but it is not possible yet to confirm if the background will decrease when the Solar activity will increase again (2009?). In addition, it is not clear how much weight will have the instrument activation in keeping high the background.



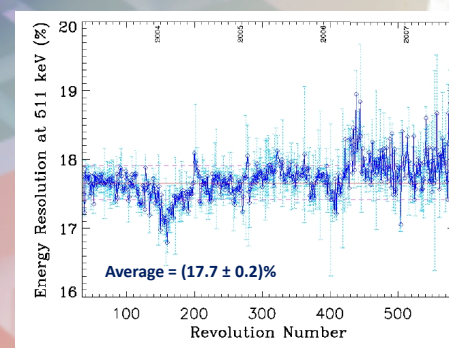
Detector Temperature



Decaying of the Onboard Calibration Source (^{22}Na)

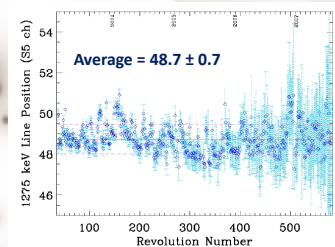
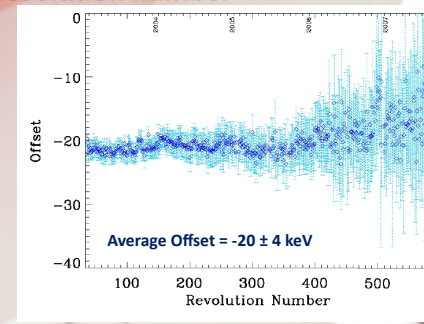
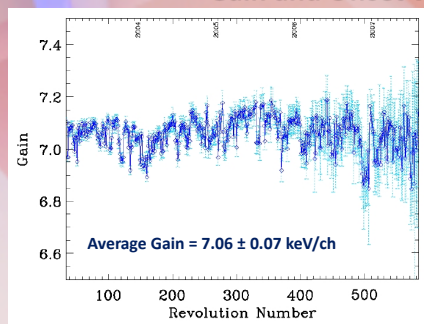
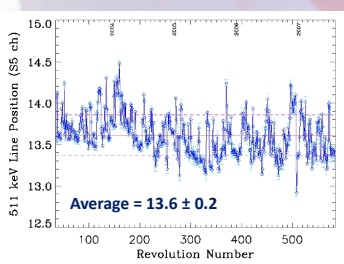


Energy Resolution

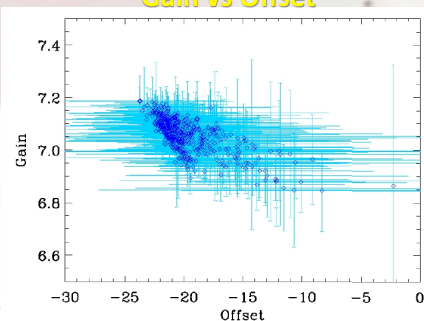


Channels where the peaks of the calibration lines (511 and 1276 keV) are located.

Gain and Offset vs Revolution number



Gain vs Offset



Gain vs Temperature

