

IBIS/ISGRI STATUS

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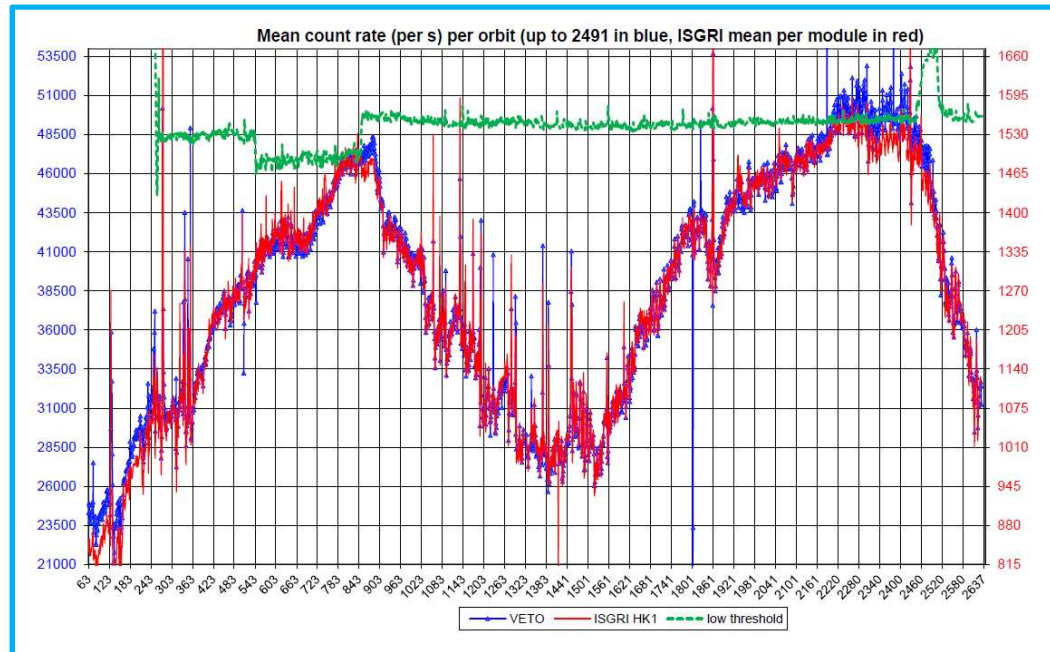
CEA/DRF/IRFU/DAP & APC

IUG#27 10/05/2023

ISGRI OPERATION

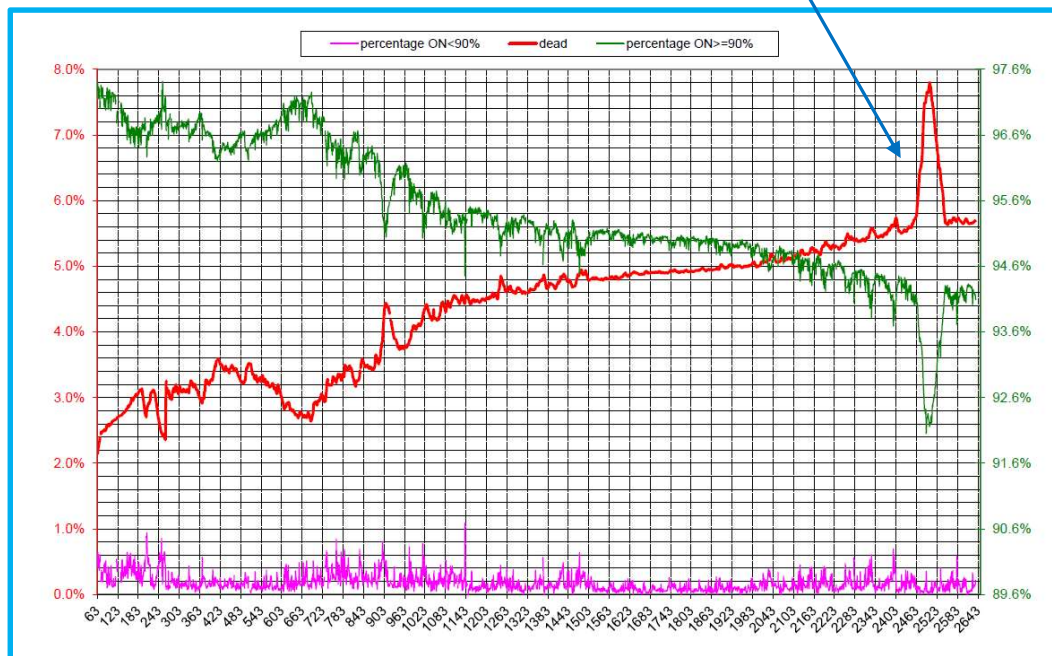
ISGRI/Veto Background (2003/04/19 to 2023/04/18 : exactly 20 years of data !)

As solar activity is minimum, ISGRI raw count rate increases. Also, perigee decreases and IBIS spend more time in the radiation belt, so we had to switch-on IBIS later.



IBIS switch on (1/2)

IBIS switch-on too early \Rightarrow strong effect on dead pixels number
 \Rightarrow now recovered.



COMPTON SOFTWARE

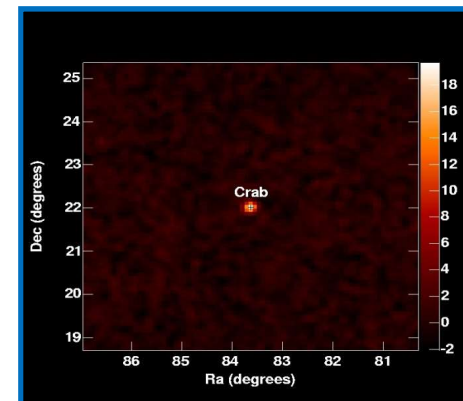
ISGRI/Compton mode data analysis

- **ISGRI calibrations :**

- Action 23-4 (PL): Write a brief explanation of new calibration approach for IBIS to go on the OSA web-page : DONE (17/02/22 email).
- Action 21-14 (PL): To begin writing ISGRI calibration report and report at IUG #24 : NOT YET BEGUN.
- Paper on radiation effects on CdTe properties (Lebrun et al., 2023) nearly finished. To be submitted to NIM-A.

- **Compton Imaging :**

- ic_Mosalma developed with OSA 11.1.
- Several bugs found during calibration with Crab.
- Delivery to ISDC stopped. Tests on going with the help of our new PHD student ...

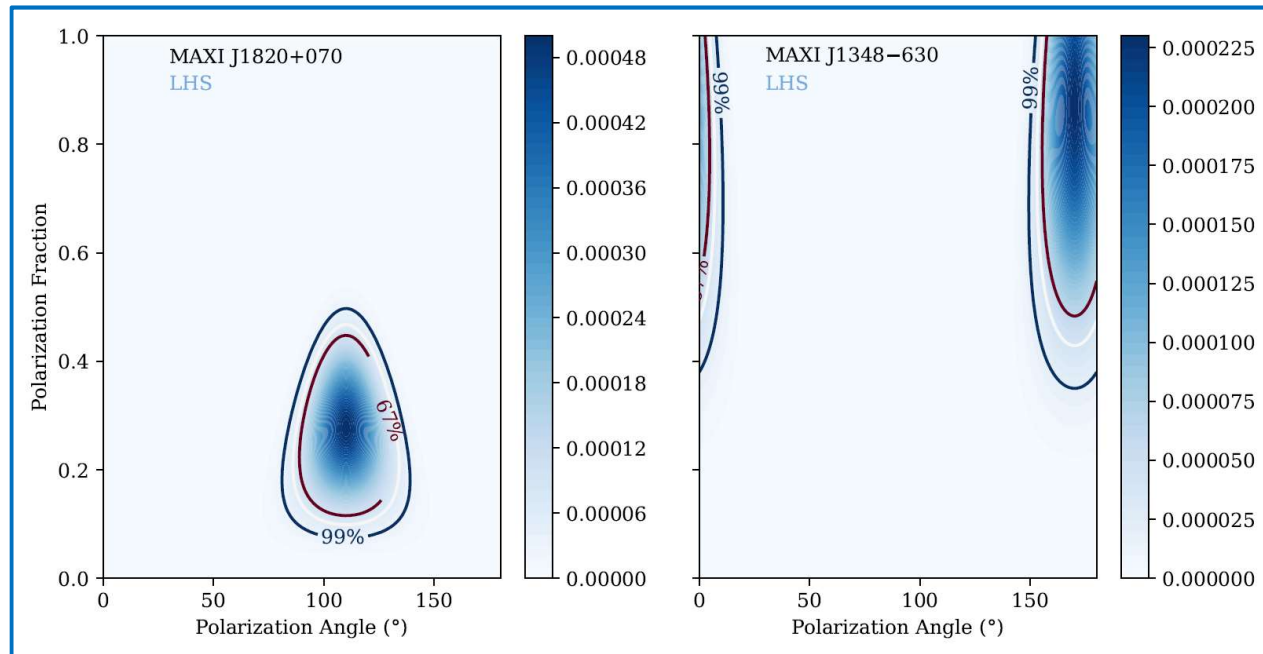


SCIENCE

Multi-messengers, polarization, compact objects

- On-going multi-messenger activity at Paris/Saclay
 - Participation to the future MM team shift.
 - Study of GRB/magnetars (Götz, D.)
 - Participation to the maintenance of IBAS (Götz, D.)
- Several polarization studies are on-going :
 - Cygnus X-1, MAXI sources (Cangémi, F., Laurent P. & Rodriguez, J.)
 - Tristan Bouchet PHD thesis (and link with SVOM).
 - Polarization study of GRB221009A (out of FOV).
- GRS1915+105 (Rodriguez, J.), Black hole X-ray binaries in outburst (Rodriguez, J.), combined INTEGRAL-XMM follow-up of GW alerts (Götz, D.)

Study of MAXI sources with Compton mode data



Polarization of MAXI sources (Cangemi et al., 2023, A&A, 669, A65)

Preparation of SVOM/INTEGRAL common calibration



SVOM instruments are actually being mounted in China. TVT, Vibrations, and EMC tests will follow in the next months. Launch foreseen for end 2023/ beginning 2024 (<https://www.svom.eu>).

SVOM calibration plan is prepared, joint calibration with INTEGRAL is foreseen on a target by target basis. Discussion on going ...

“The world just got less joyful with Christian gone...”



February 2020 : Gemini telescope

Christian Gouiffès : † February, 26th 2023

September 2019 : OHP

