



CENTRO DE ASTROBIOLOGÍA
ASOCIADO AL NASA ASTROBIOLOGY INSTITUTE



CSIC



OMC Status

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INTEGRAL Users Group Meeting

ESTEC, January 18-19, 2012



OMC status and operations



- OMC Status
 - CCD surviving well, but dark current and hot pixels increasing slowly
 - Flatfield stabilized
 - Sensitivity stable
- No operational anomalies
- Currently working on
 - Major update of Input Catalogue
 - Compilation of output catalogue (OMC variable objects)

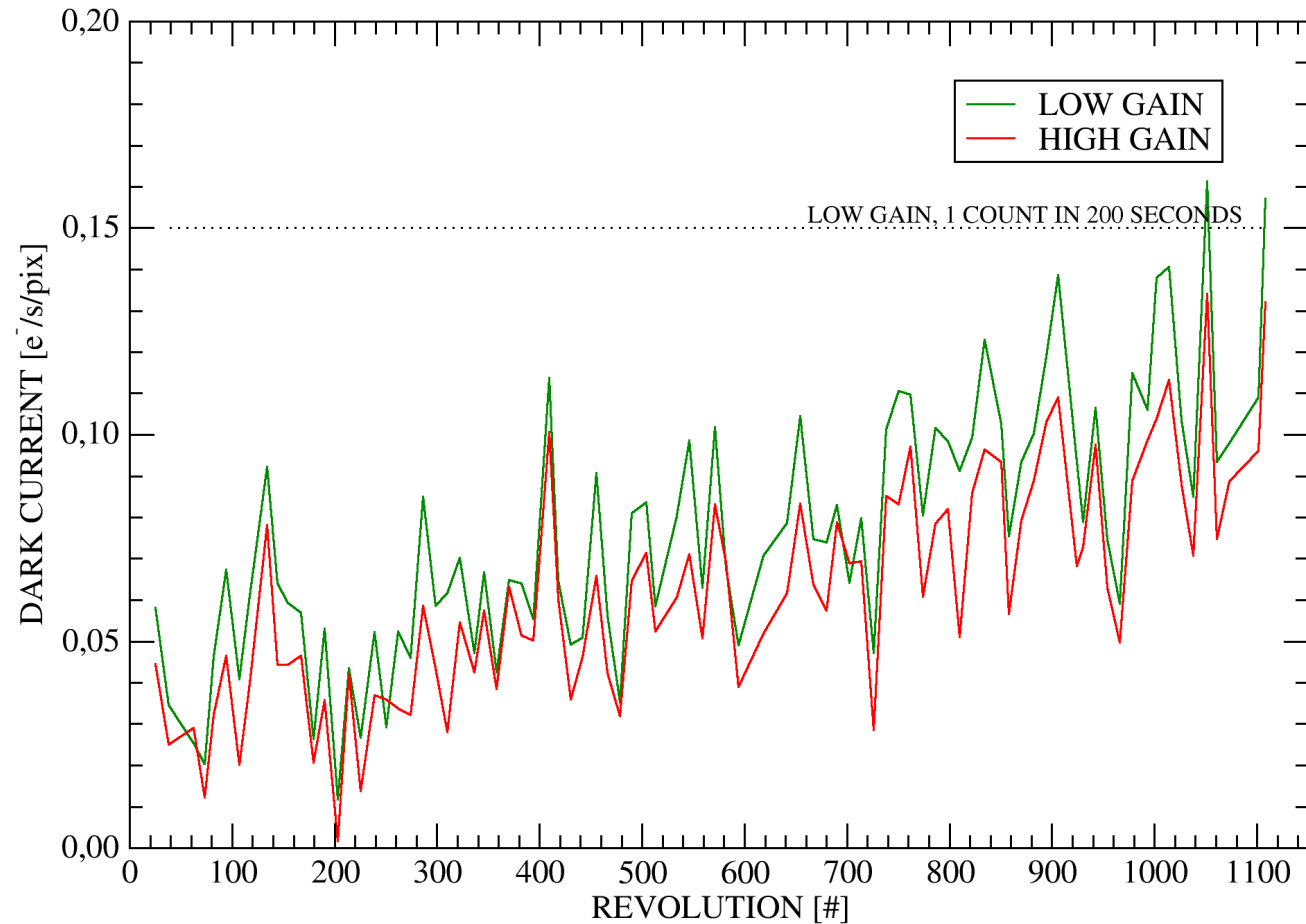


CCD status



DARK CURRENT

- The dark current increases slowly, but remains well within acceptable limits.
- No temperature correction done on the plot.

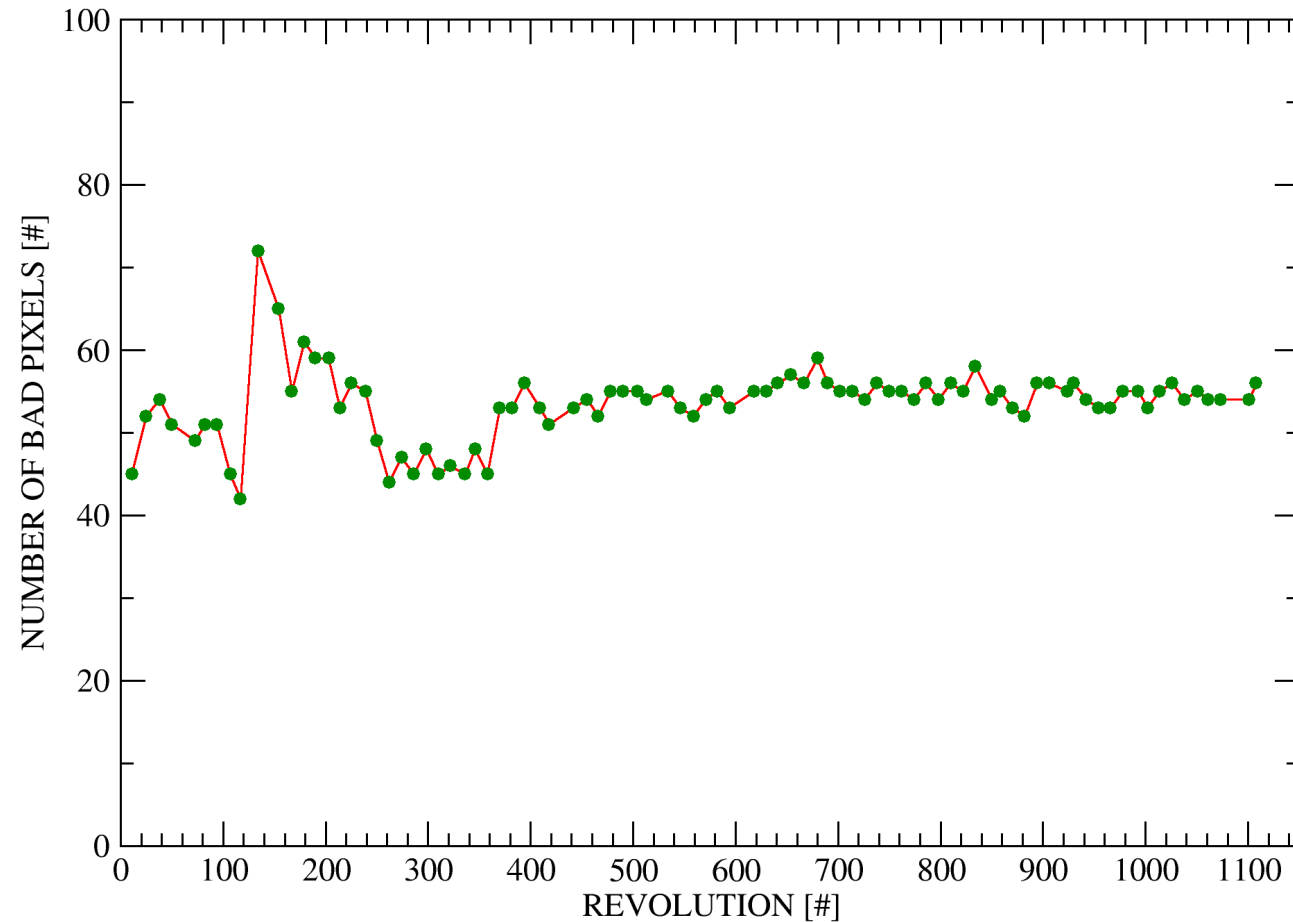




CCD status

BAD PIXELS

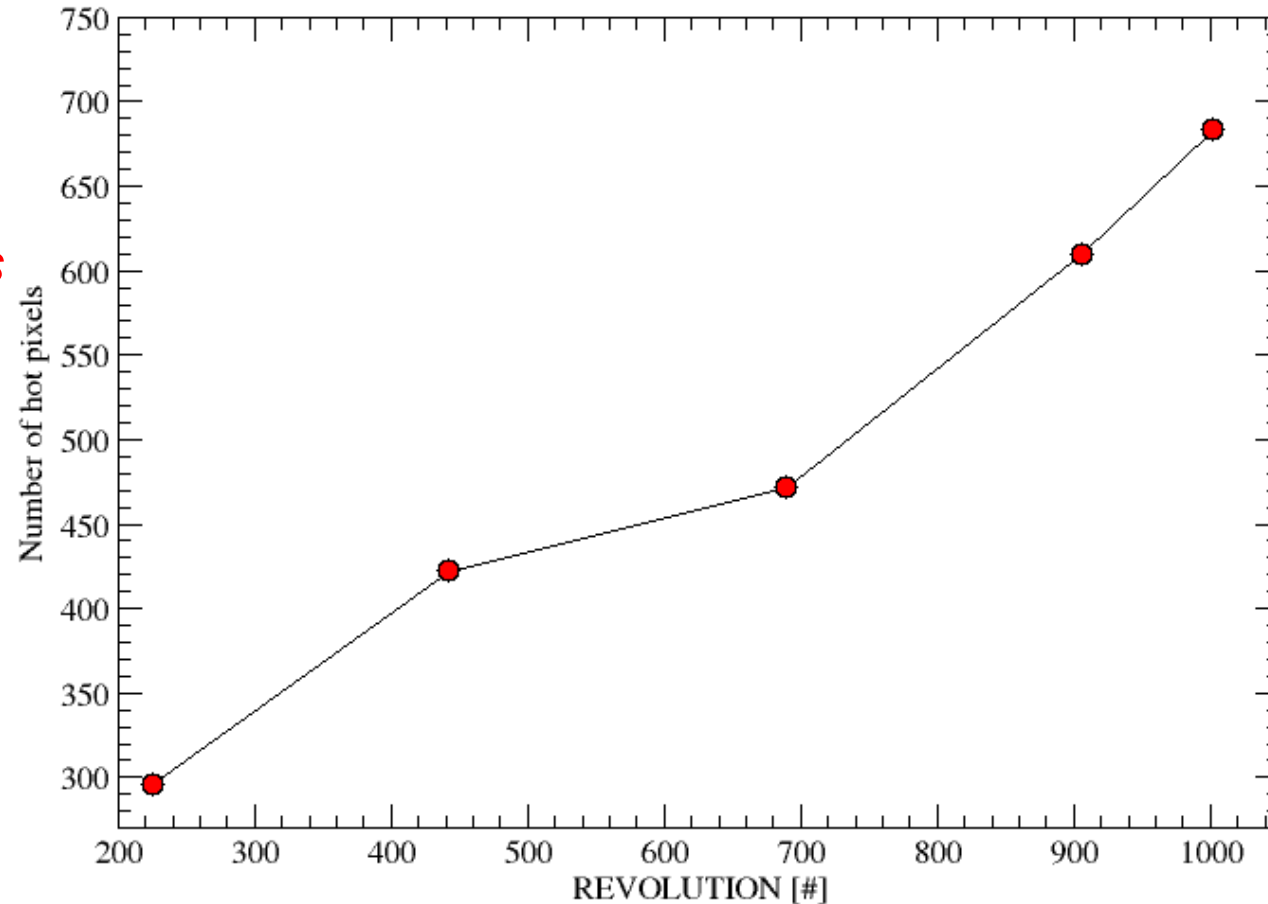
- The number of dark pixels remains very stable.





CCD status

- The number of hot pixels increases steadily.
- ✍ *the number remains sufficiently low.*
- The majority of hot pixels still have no effect on OMC science.

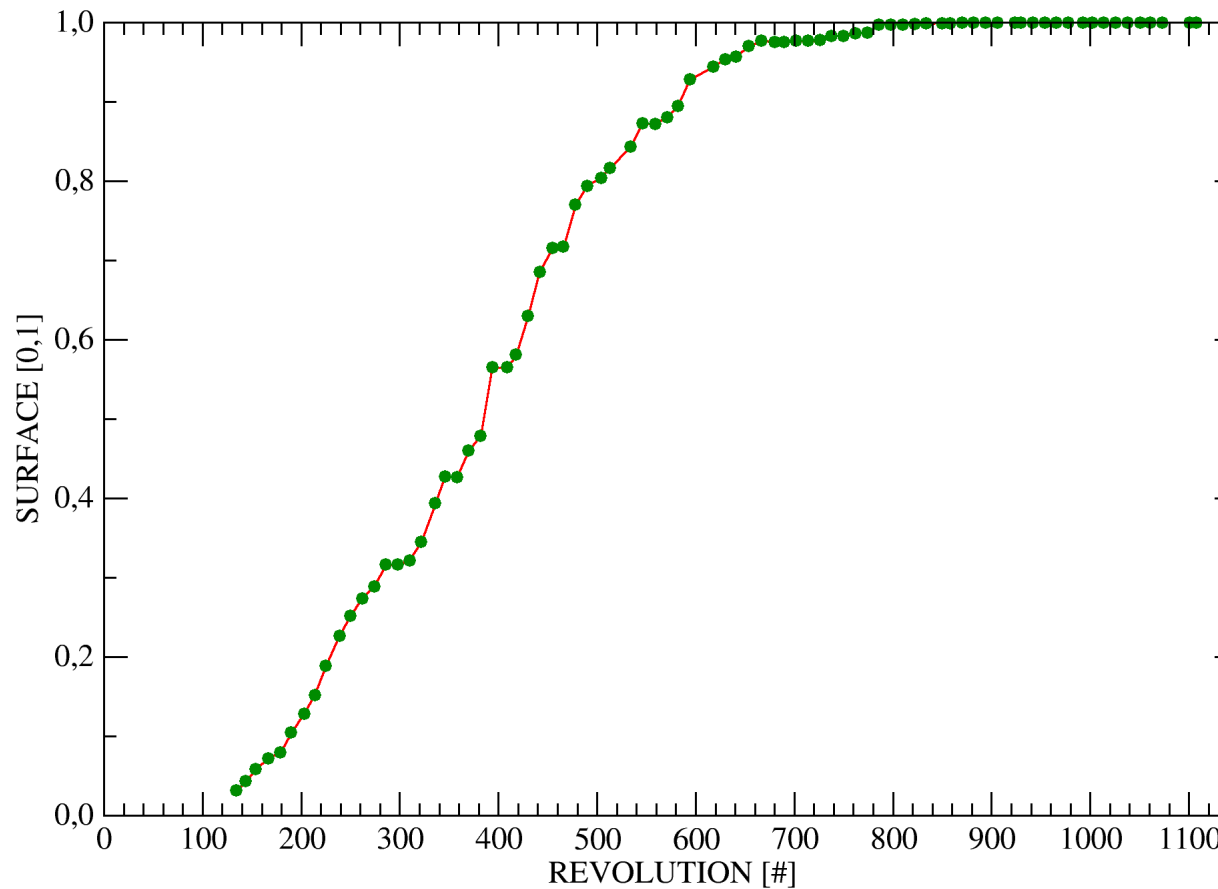




OMC status: FF calibration

- The flatfield has completely stabilized since revolution 800.

CCD SURFACE COVERED BY SPOTS

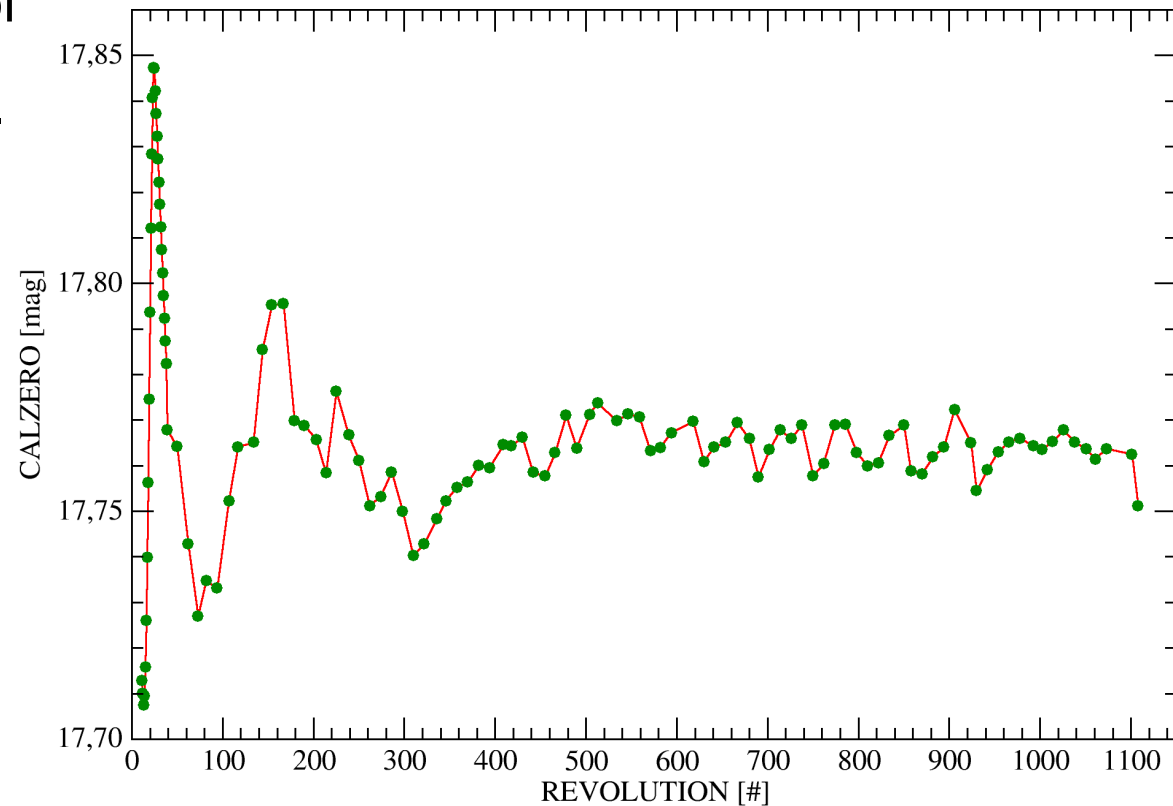




OMC photometric calibration

- The zero point of the calibration (a measure of the overall sensitivity) has become very stable.
 - The lenses are not getting darker with radiation.
 - The overall transparency of the CCD coating remains invariable.

CALIBRATION ZERO POINT





Earth Observation

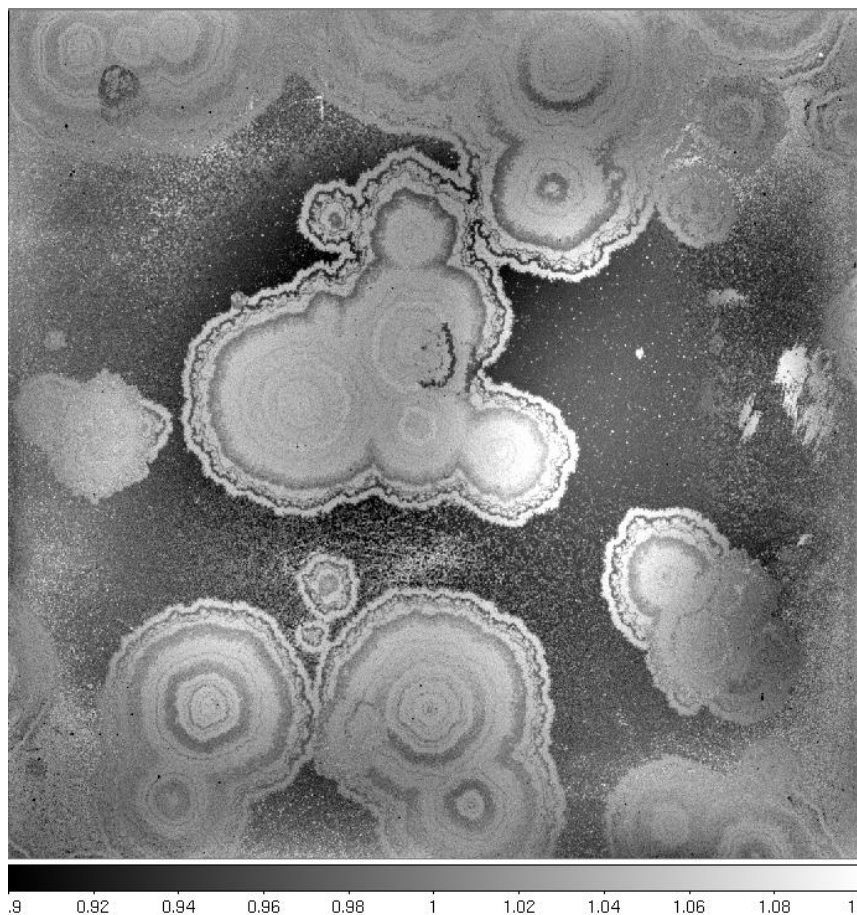


- Scattered light from the Earth to derive a final Flatfield matrix. This will improve our calibration at small detector scales.
- ISOC to prepare OMC TCs to get a number of full field OMC images before/after the occultation.
- OMC team to define the acquisition schedule as a function of start and end of the Earth limb.
- Procedure very similar to past Earth Observation in revolutions 401, 404, 405 and 406.
- Minimum TM rate: 5 pkts. If a high bandwidth is available, a larger number of images will be acquired.



Improvement of Flatfield matrix

- Before Earth Observation



- After Earth Observation

