



OMC Calibration and Operations status

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OMC status summary



- Optics + CCD + thermal control hardware performing excellently after >20 years of operation.
 - No CCD columns lost
 - CCD temperature range within predictions (-85 C to -70 C)
 - Optics still clear, minimal decrease of the photometric zero point (sensitivity)
 - Effects of radiation (dark current, hot pixels) still moderate



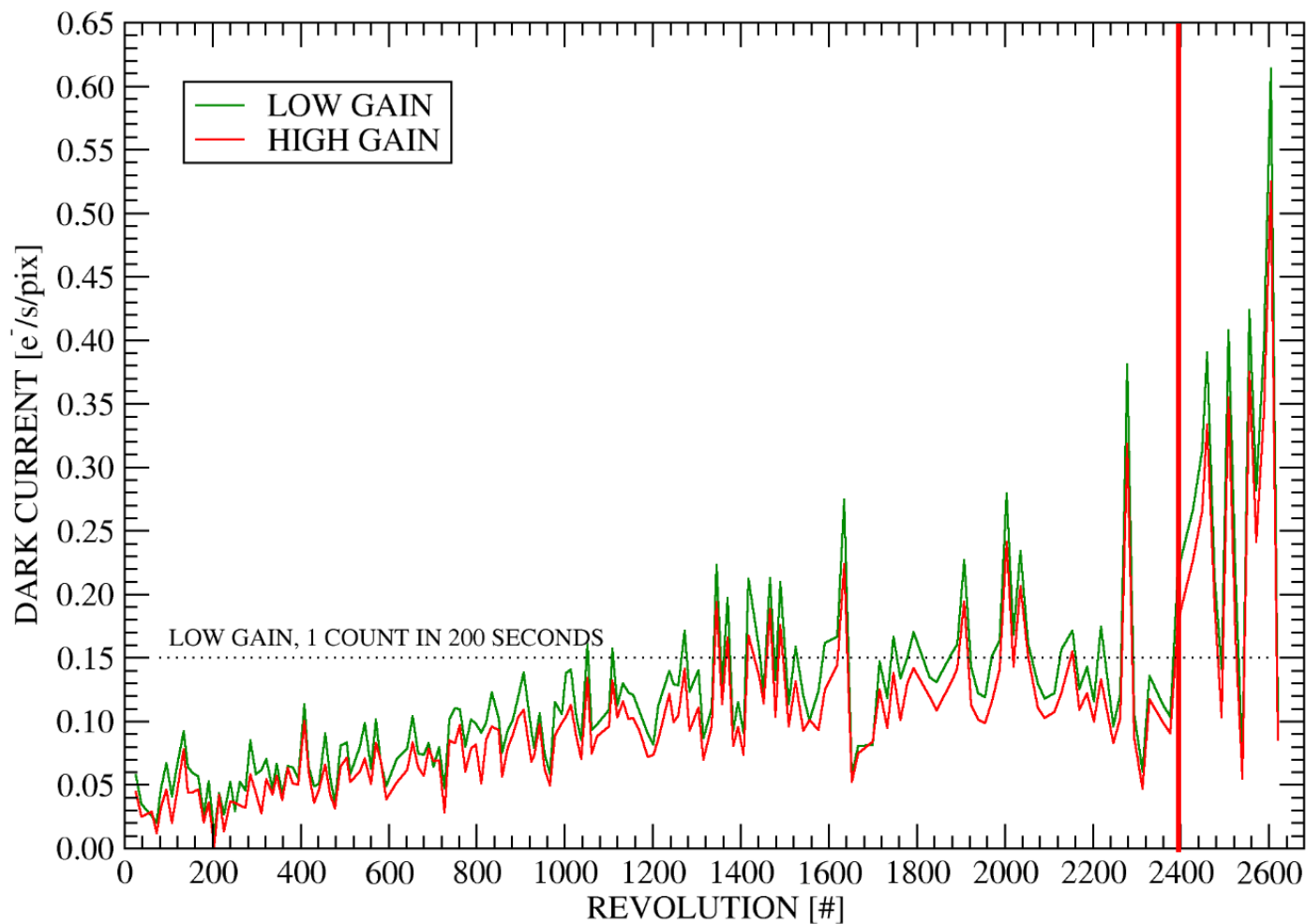
OMC PSU anomaly

- After the INTEGRAL critical anomaly on September '21 the OMC power supply didn't start again.
- It was decided to switch to the redundant converter, which has been in operations since then
 - The PSU B converter is working fine (but risk has increased!)
 - But potential impact on CCD performance (increase of dark current).



Dark current

DARK CURRENT

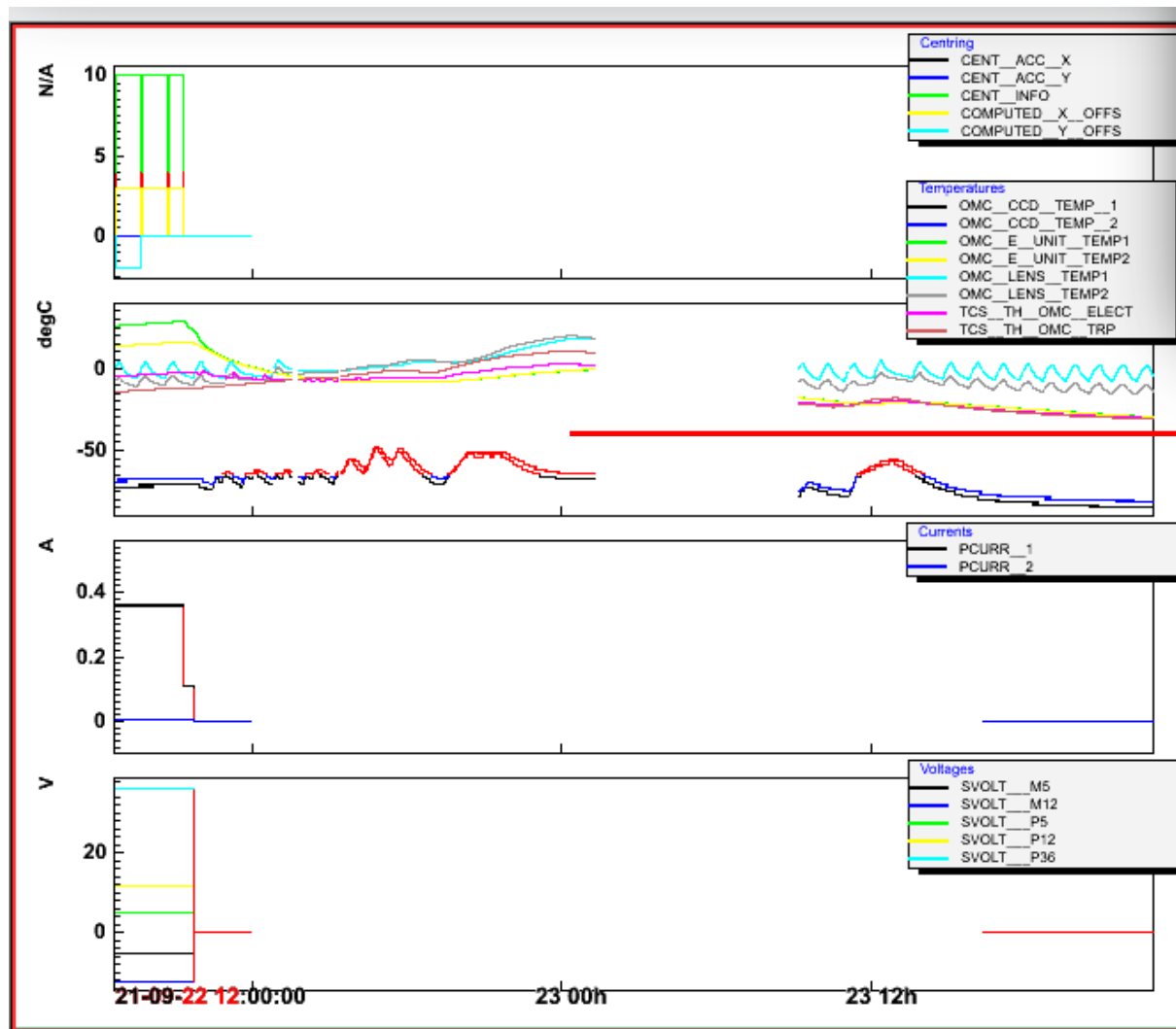


22 September 2021, rev 2414
Mission Critical Anomaly,
loss of OMC power supply converter A

Impact on scientific performance
still negligible



OMC PSU anomaly

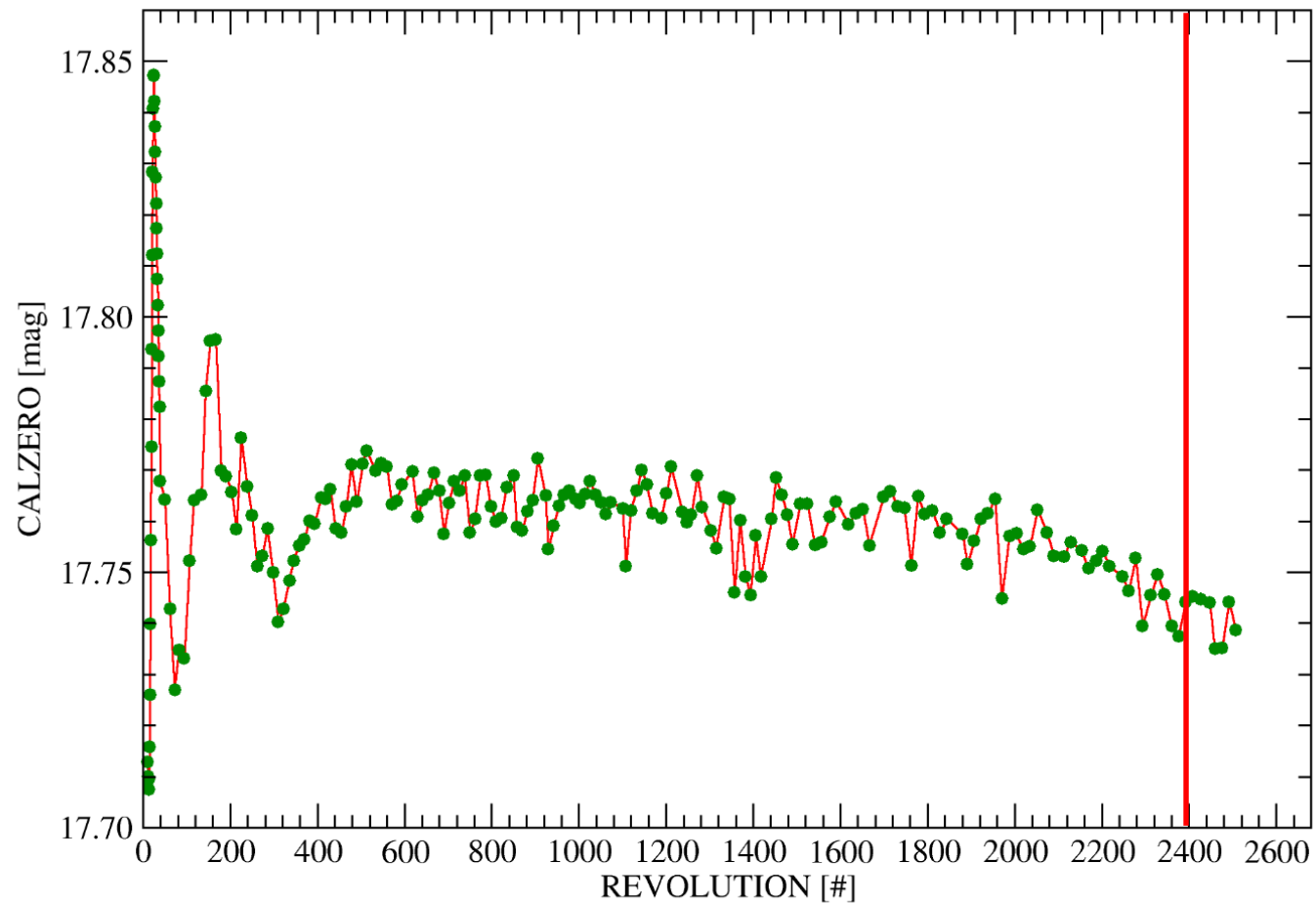


Pretty chaotic CCD temperature evolution during ESAM



Photometric sensitivity

CALIBRATION ZERO POINT

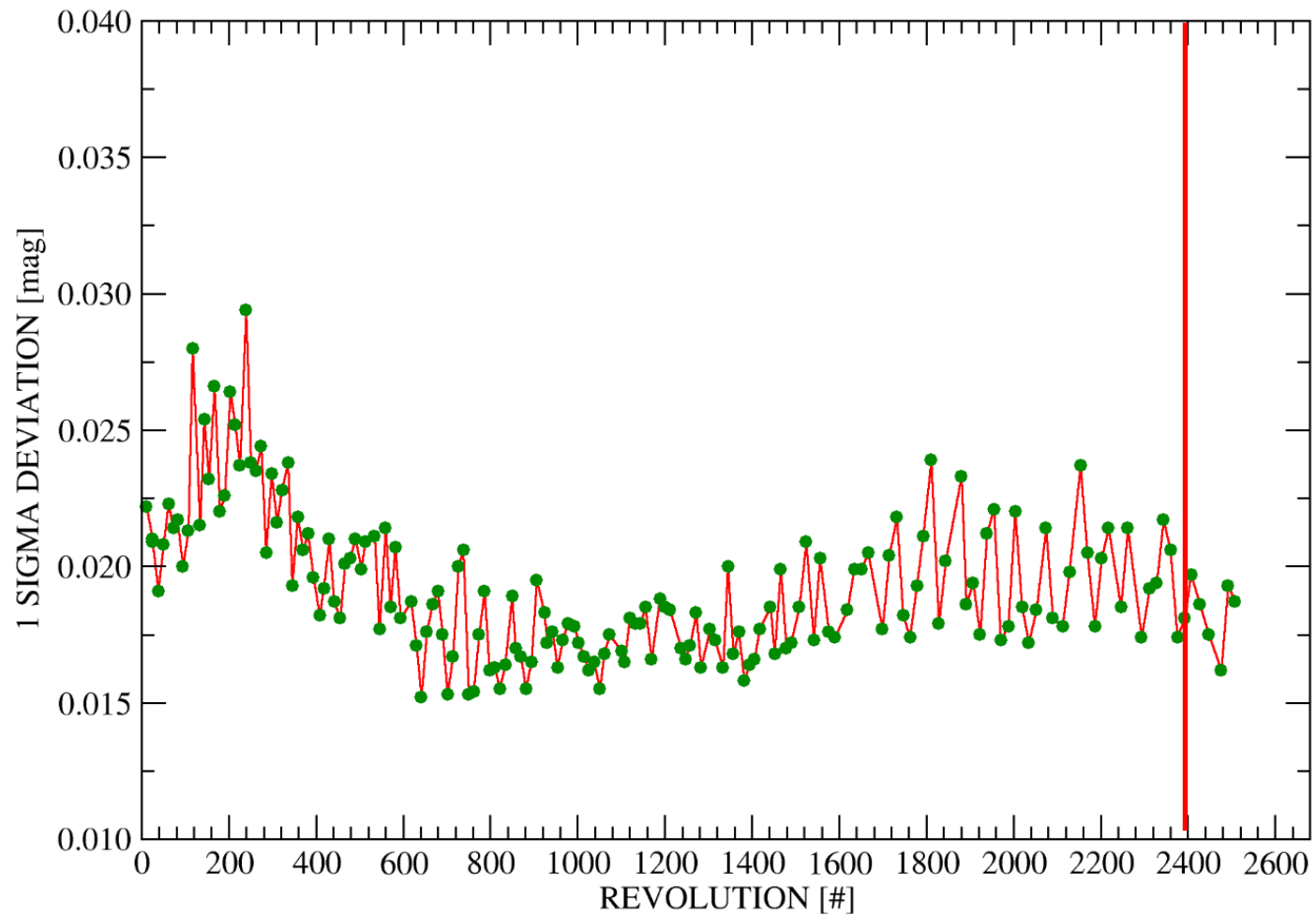




Photometric accuracy

PHOTOMETRIC STARS STANDARD DEVIATION

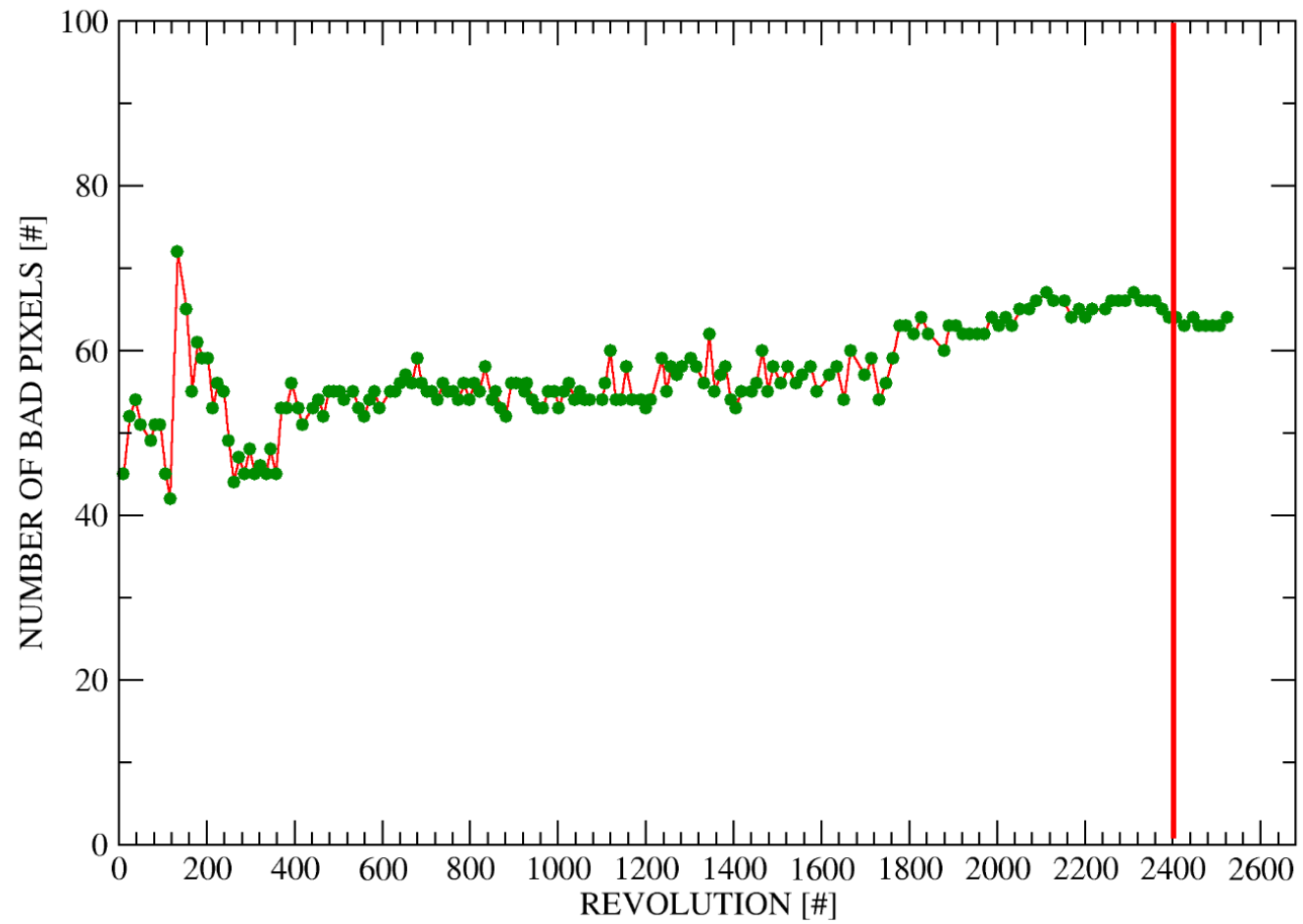
APERTURE 3x3 PIXELS





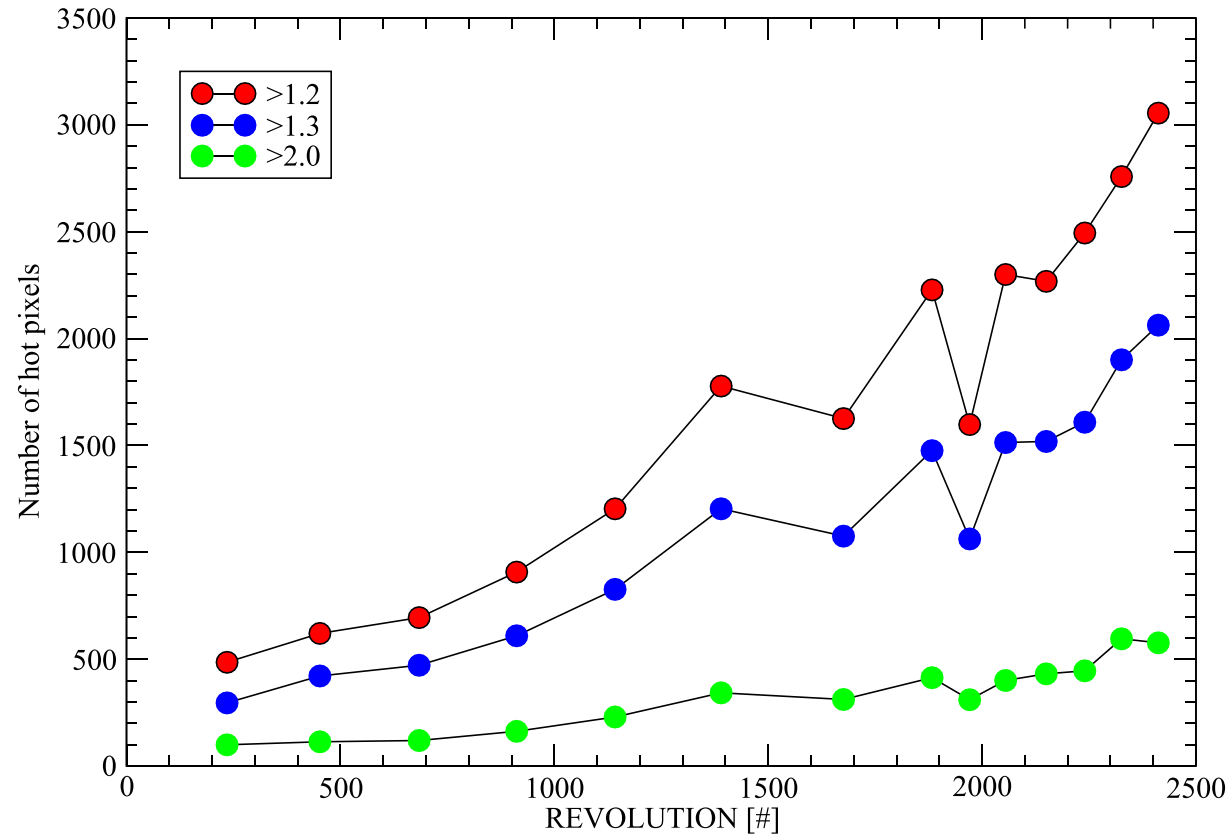
Bad pixels

BAD PIXELS





Hot pixels





OMC operations: future support



- OMC operations continue to be funded by the Spanish agency.
- The compromise is to fund at least up to $T_{\text{end}} + \sim 2$ years, to guarantee the final processing and archival of data.
- INTA will provide further support via the Spanish Virtual Observatory archive system at CAB/INTA afterwards.