



CENTRO DE ASTROBIOLOGÍA  
ASOCIADO AL NASA ASTROBIOLOGY INSTITUTE



**CSIC**



# OMC Status

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INTEGRAL Users Group Meeting

*ESTEC, June 16-17, 2011*



# OMC status and operations

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- OMC Status
  - CCD surviving well, but dark current and hot pixels increasing slowly
  - Flatfield stabilized
  - Sensitivity stable
- No operational anomalies
- Currently working on
  - Saturation filtering
  - Major update of Input Catalogue
  - Compilation of output catalogue (first release after the summer)

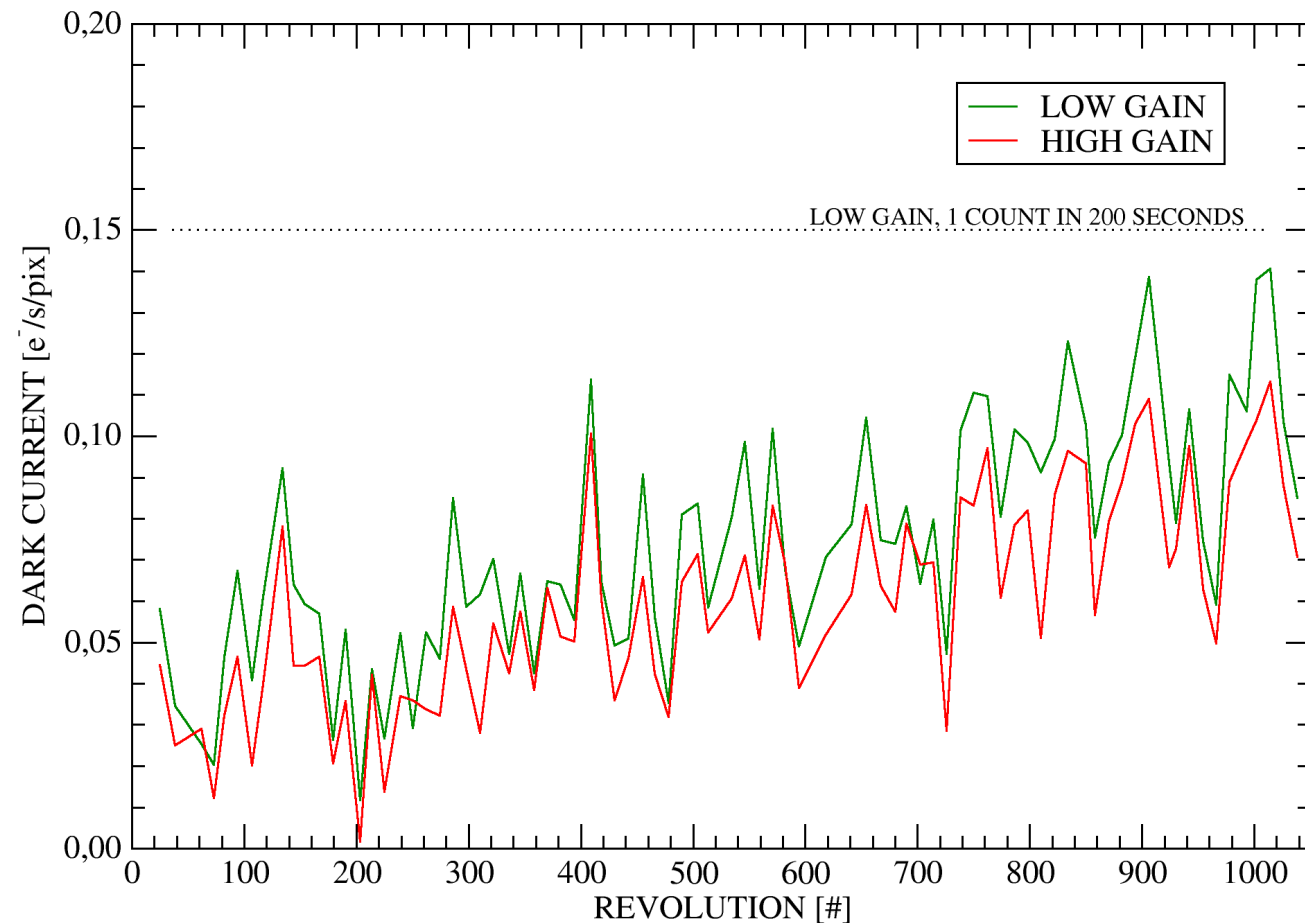


# CCD status



## DARK CURRENT

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



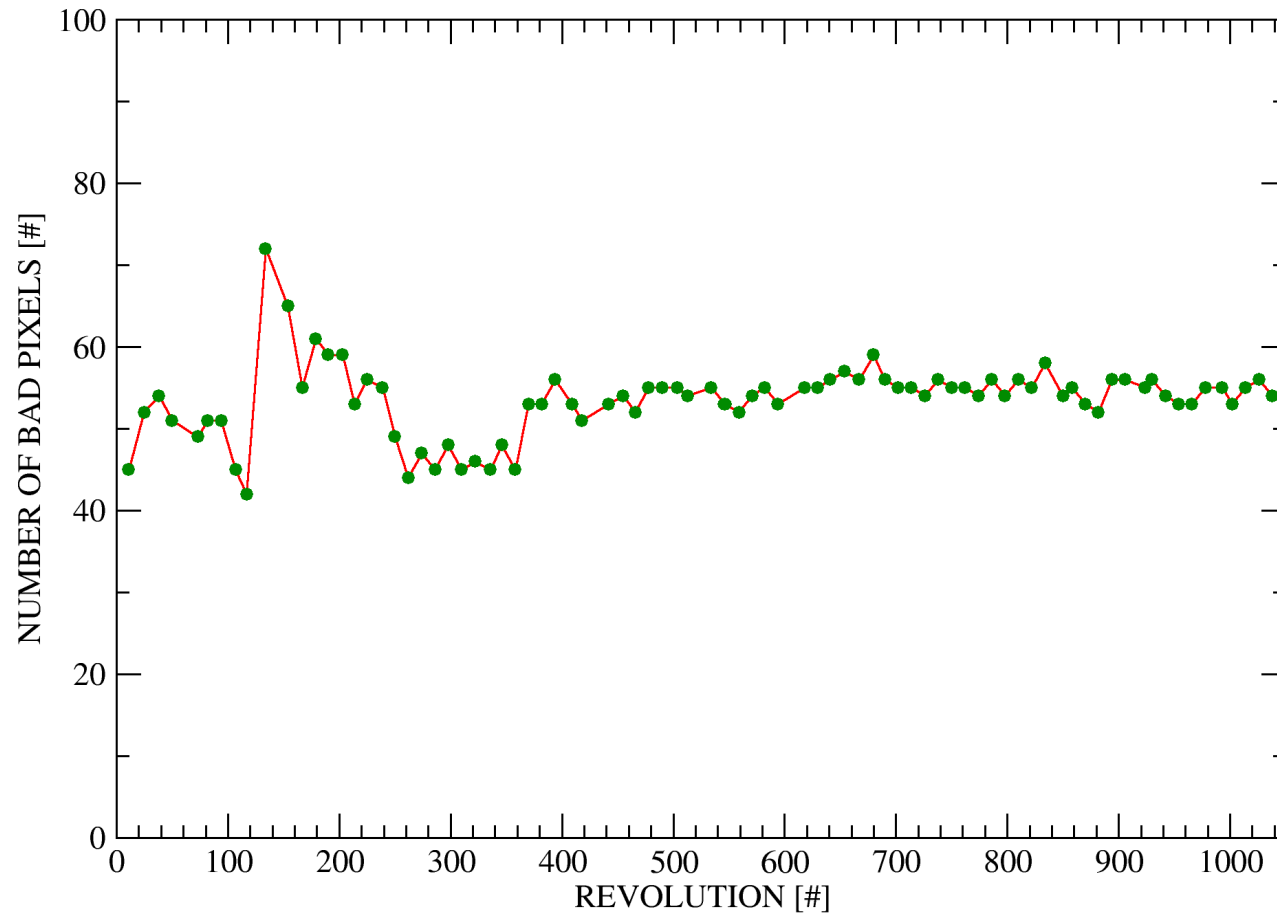


# CCD status



## BAD PIXELS

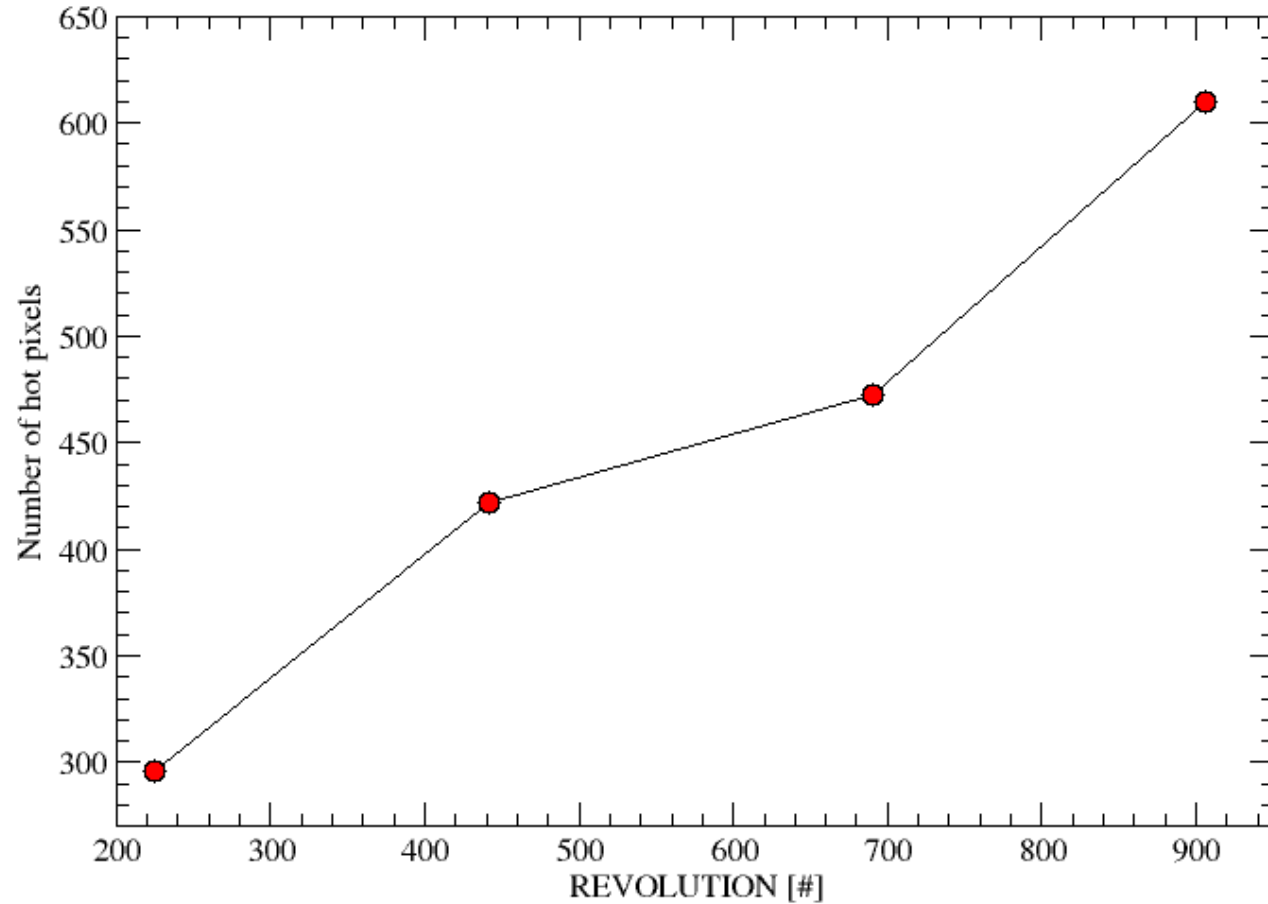
- The number of dark pixels remains very stable.





# CCD status

- The number of hot pixels increases steadily.  
→ *the number remains sufficiently low.*

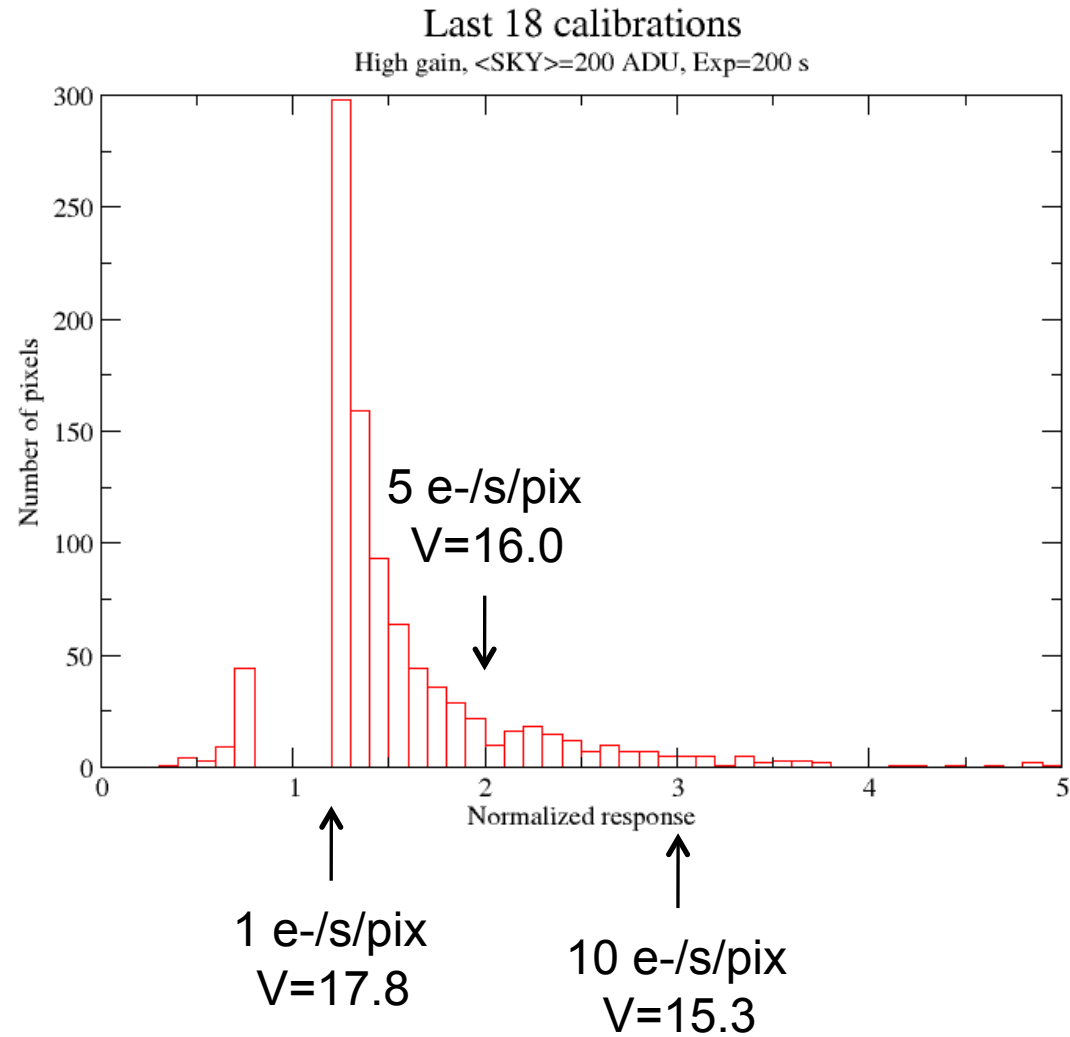




# CCD status



- The majority of hot pixels still have no effect on OMC science.

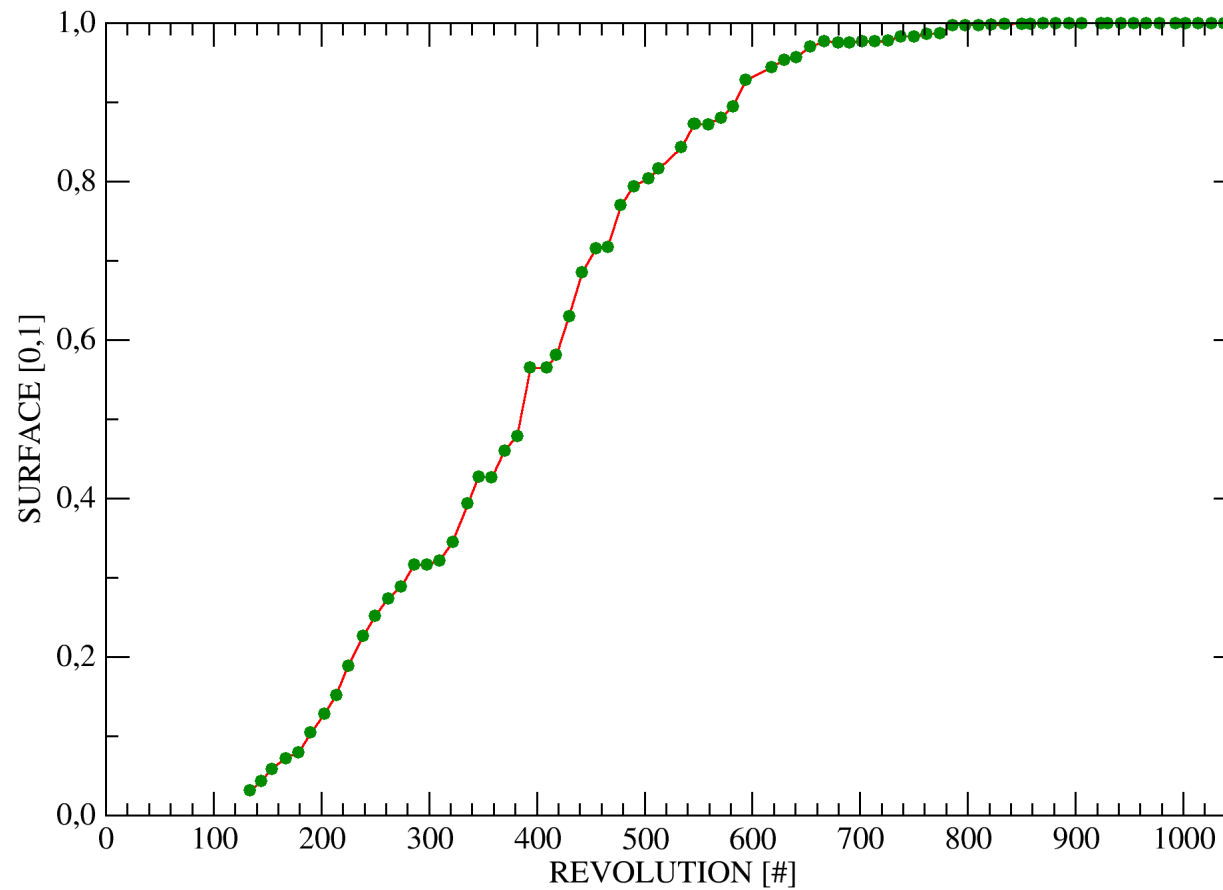




# OMC status: FF calibration

- The flatfield has completely stabilized since revolution 800.

CCD SURFACE COVERED BY SPOTS



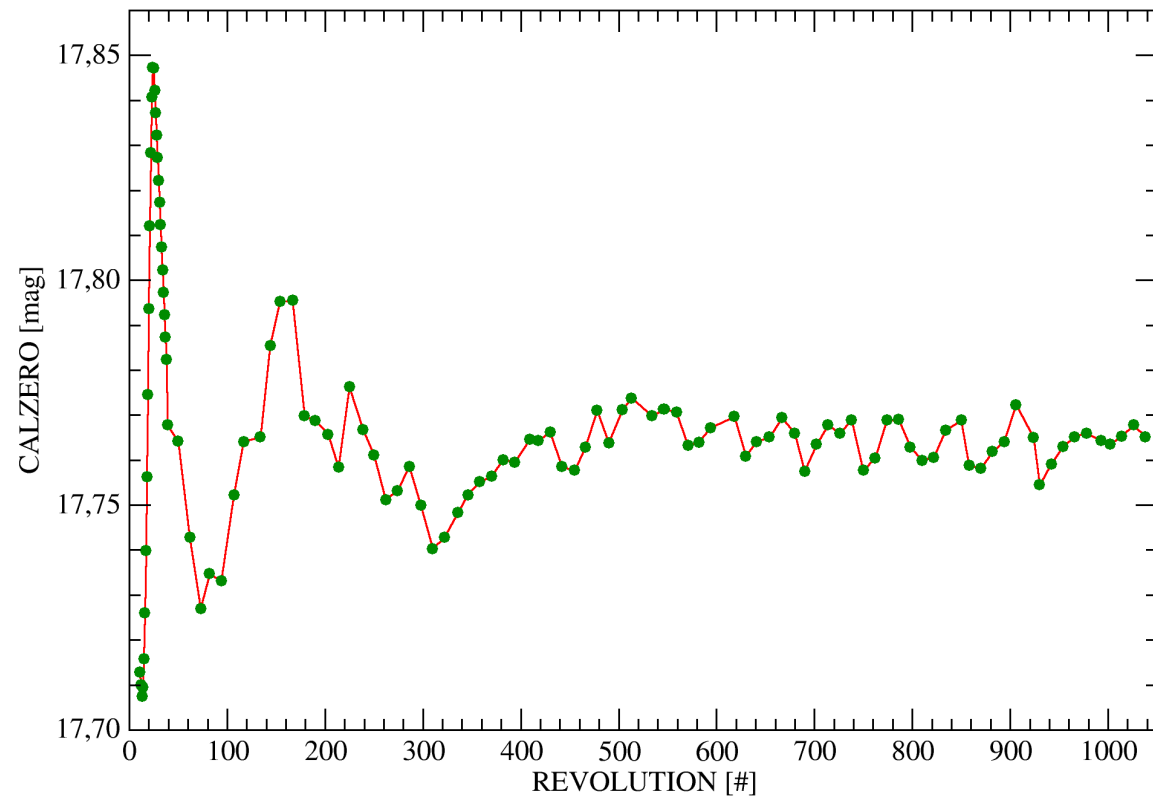


# OMC photometric calibration



- 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





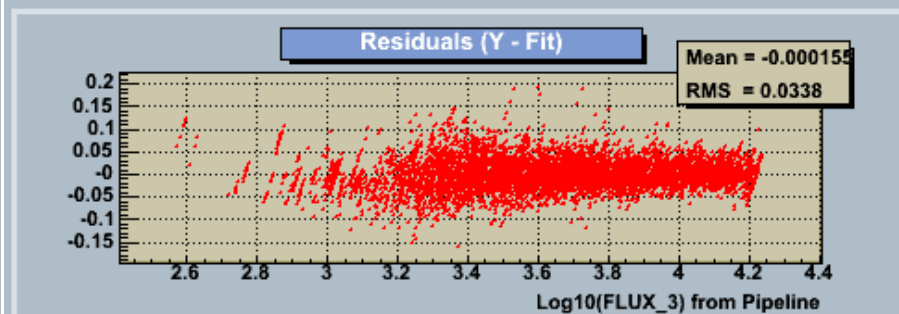
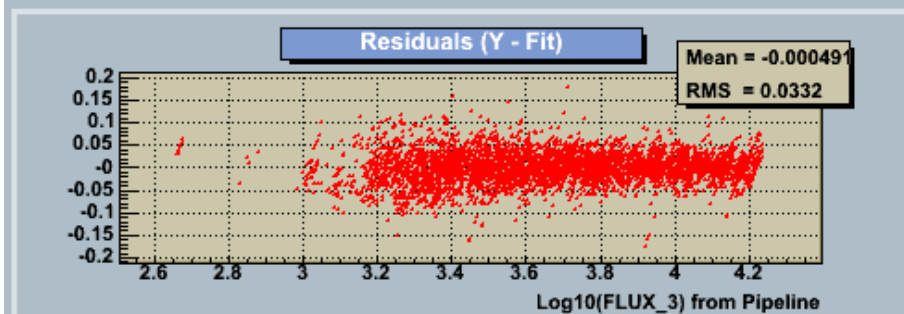
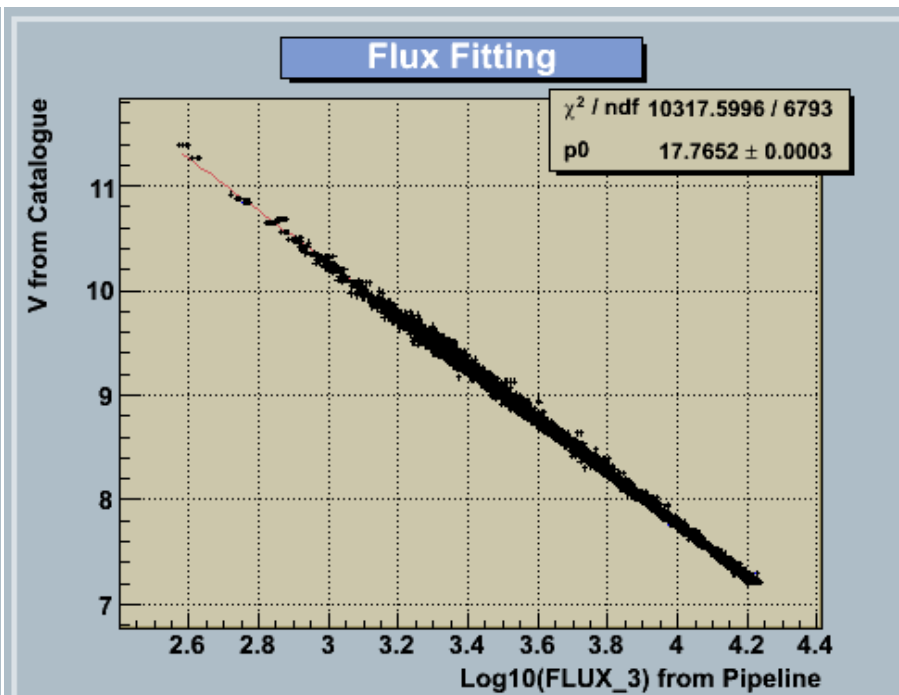
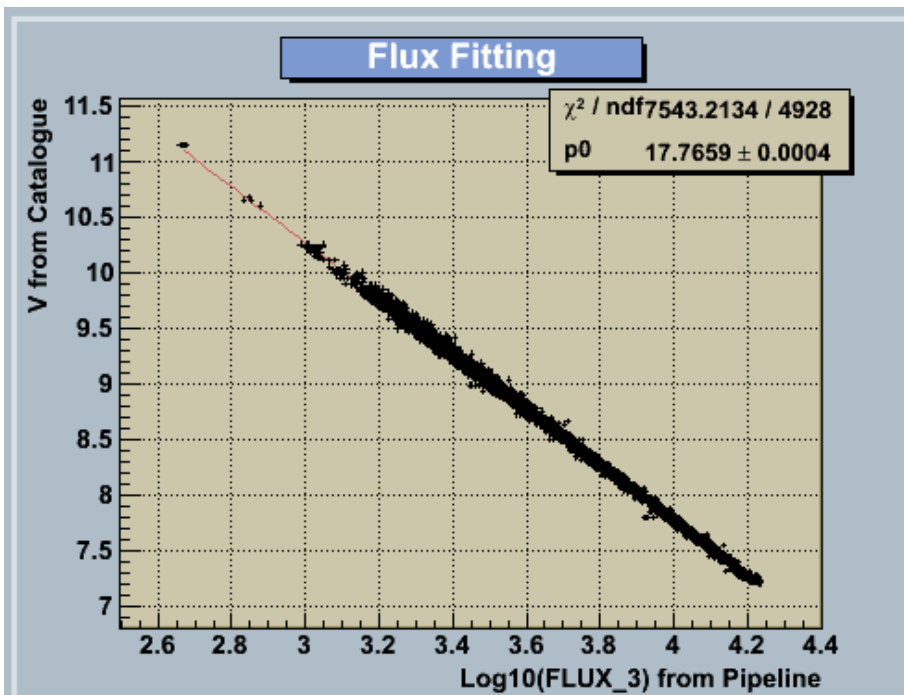


# OMC photometric calibration



2008

2011



4929 entries

Wed Jun 25 19:16:06 2008

6794 entries

Mon Jun 6 18:51:35 2011



# OMC Database statistics



## Last 6 years

- Number of accesses: 30.170  
*Accesses from LAEFF-INTA and Google/Yahoo/MicrosoftSearch robots excluded.*
- Different accessing hosts: 790
- Total number of online lightcurve pre-views: 14.793
- Total number of downloaded lightcurves: 15.377
  - *As VOTable* 4.795

## Last 12 months

- Number of accesses: 4.664
- Different accessing hosts: 310
- Total number of online lightcurve pre-views: 1.191
- Total number of downloaded lightcurves: 3.273
  - *As VOTable* 1.100



# OMC Database statistics

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- We are aware of
  - ~30 science papers in refereed journals using OMC data.
  - ~60 science contributions (proceedings, bulletins,...) in ADS.

*Mostly on binaries and AGN/blazars*