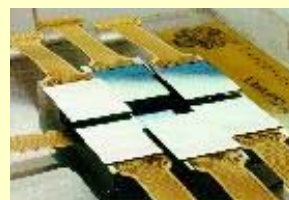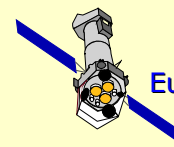# Summary status of the EPIC calibration

Marcus G. F. Kirsch

Mallorca, 03.02.2005

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European Space Astronomy Center

actions

- AI_EPIC_14_1: Additional time column with other 0 point for ODF (RD, MK, MJF)
- AI_EPIC_14_2: update frame times according to analysis presented in 1.1 (MK)
- AI_EPIC_14_3: implement time jump in a qcheck type proceeding in the long term (MK)
- AI_EPIC_14_4: KD to provide new gain values for refinement of the column dep. pn gain correction (KD)
- AI_EPIC_14_5: MS to implement KDs values into CCF
- AI_EPIC_14_6: MK to put warning on energy accuracy in for doubles with input from KD
- AI_EPIC_14_7: open new NRCO for pn LW CTI determination with N132D, request low BG time (MK)
- AI_EPIC_14_8: SS to provide RS with newest RMF parameters to be implemented in CCF (SS, RS)
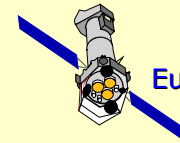
Solved topics

- New XRT3 EFF; improving gold edge

- pn SW CTI refined

- pn eFF CTI refined

- pn long term CTE refined

- pn redistribution back to ground values
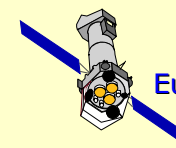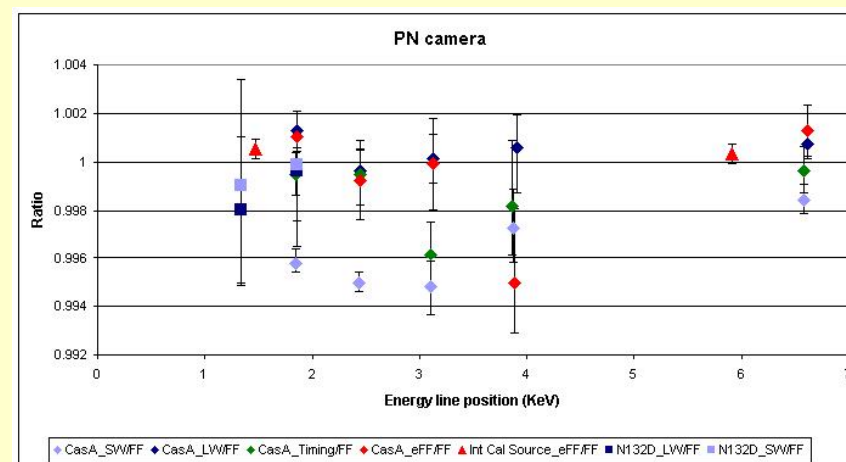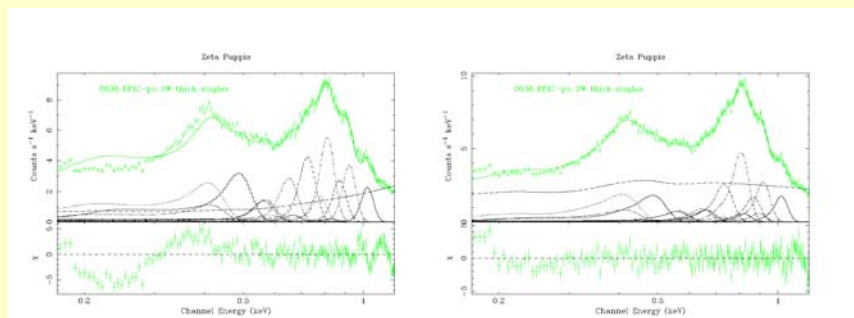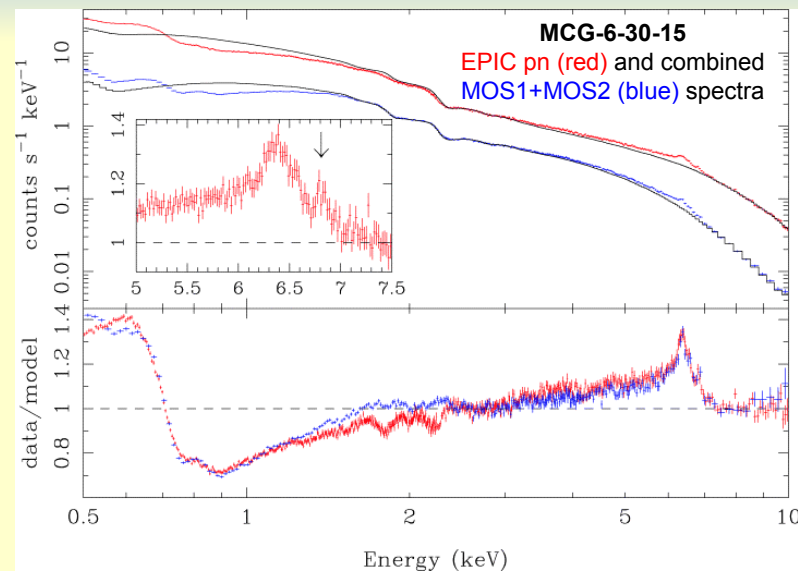
ongoing (rel. straight forward)

- Column dependent MOS CTI (Darren, Martin)

- PSF core with extra Gaussian (Andy)

- Astrometry residuals for Psi angle (Bruno)

- pn gain refinement for sp. Columns (Michael, Konrad)

- New MOS rmf (brings MOS up by 4 % in 400-800, still ~10 missing with regard to pn) (Steve)

- Pattern 31 to increase MOS QE (Andy)

- SCISIM evaluation (Marcus, Martin)

- pn time jump analysis and frame time refinement (Marcus)
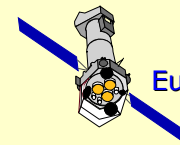
- MOS patch (time, spatial dependent)
  - Time dependent flux decrease 0.4-0.8 keV
  - Low energy excess < 0.4 keV

- MOS2 CCD5 noise

- pn gives wrong NH / to much flux for RXJ1856
  → should we start to try a eff area fudge for low energies

- Upwards redistribution for very soft (extreme UV sources GD153)

- pn line position for doubles in shift direction (PATTERN 1 & 3)

- fast mode arfs

possible proceeding

low energy

medium energy

high energy

MOS

0.5

1

3

pn
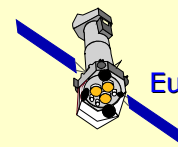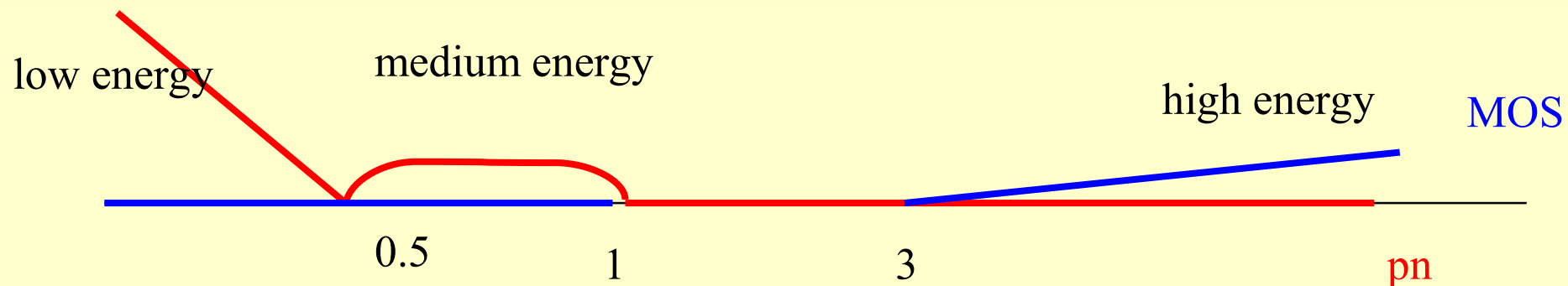
- **high energy:**
  - look at Crab data with pn
  - If PI agrees with canonical one fix MOS high energy QE

- **low energy:**
  - Adjust pn effective area to get reasonable NH values

- **medium energy:**
  - ????