

# Update of the XMM UHB for AO2

## Chapter 3 - XMM - a concise overview

Comments received from D. Lumb, U. Briel, S. Sembay,  
input/help needed to update/replace/fix figures:

- Fig 4: ‘The on-axis PSF of one XMM mirror (Panter)’ - in-flight PSF
- Fig 5: ‘Radial average of on-axis PSF (SciSim)’ - in-orbit point source
- Fig 10-13: ‘Effective area of mirrors, combined with EPIC response’
- Fig 14: ‘Total effective area of all mirror modules’ - is wrong!?

*Action on P. Gondoin*

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## Chapter 3.3 - European Photon Imaging Camera (EPIC)

Comments received from D. Lumb, U. Briel, S. Sembay,  
input/help needed to update/replace/fix figures: by end of February!

- Fig 15: ‘Field of view of EPIC cameras’ - should be updated:
  - put in aim points (double bore-sight)
  - show in-orbit picture, or
  - schematic view of all 3 cameras showing relative orientations
- Fig 16, 17: ‘Sketch of MOS & pn layout’
  - should be replaced by figure that can be scaled (from CAL API, CCF?)
  - indicate RGS dispersion direction

***Fig. 15-17 - action on D. Lumb***

- Fig 18: ‘MOS & pn energy resolution as function of energy (SciSim)’
  - replace with real data or use Fig.6 of Briel et al. SPIE 1998, p.48

***MOS - action on G. Griffiths, pn - action on U. Briel***

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## Chapter 3.3 - European Photon Imaging Camera (EPIC) cntd.

- Fig 19: ‘Quantum efficiency of pn and MOS (SciSim)’
  - pn wrong! *MOS - action on S. Sembay, pn - action on U. Briel*
  - show real data, or use CAL file, or Fig.5 of Strueder et al. 2001
  - also **text missing**: there should be a paragraph describing the QE as function of energy and event-type (to be written by F. Haberl & K. Dennerl ?) *action on U. Briel/K. Dennerl*
- Fig 20, 21: ‘MOS & pn effective area depending on filter’
  - update with real data? *Action on volunteer*
  - **question**: should open filter position be offered (OCR)? *No!?*
- Fig 24-26: ‘pn sensitivity limits (SciSim)’
  - plots should be based on real data
  - new figures: spectra at high/low background
  - new figure: typical time variation of the background
- Text update: Section 3.3.9 ‘EPIC’s sensitivity limits’
  - discuss low/high background, illustrate effect of soft protons

*Action to update EPIC sensitivity limits (text & figs) on S. Molendi*

EPIC Cal-Obs meeting, Paris

Matthias Ehle, XMM-Newton SOC