

The CygX-3 IACHEC experiment: EPIC-pn results

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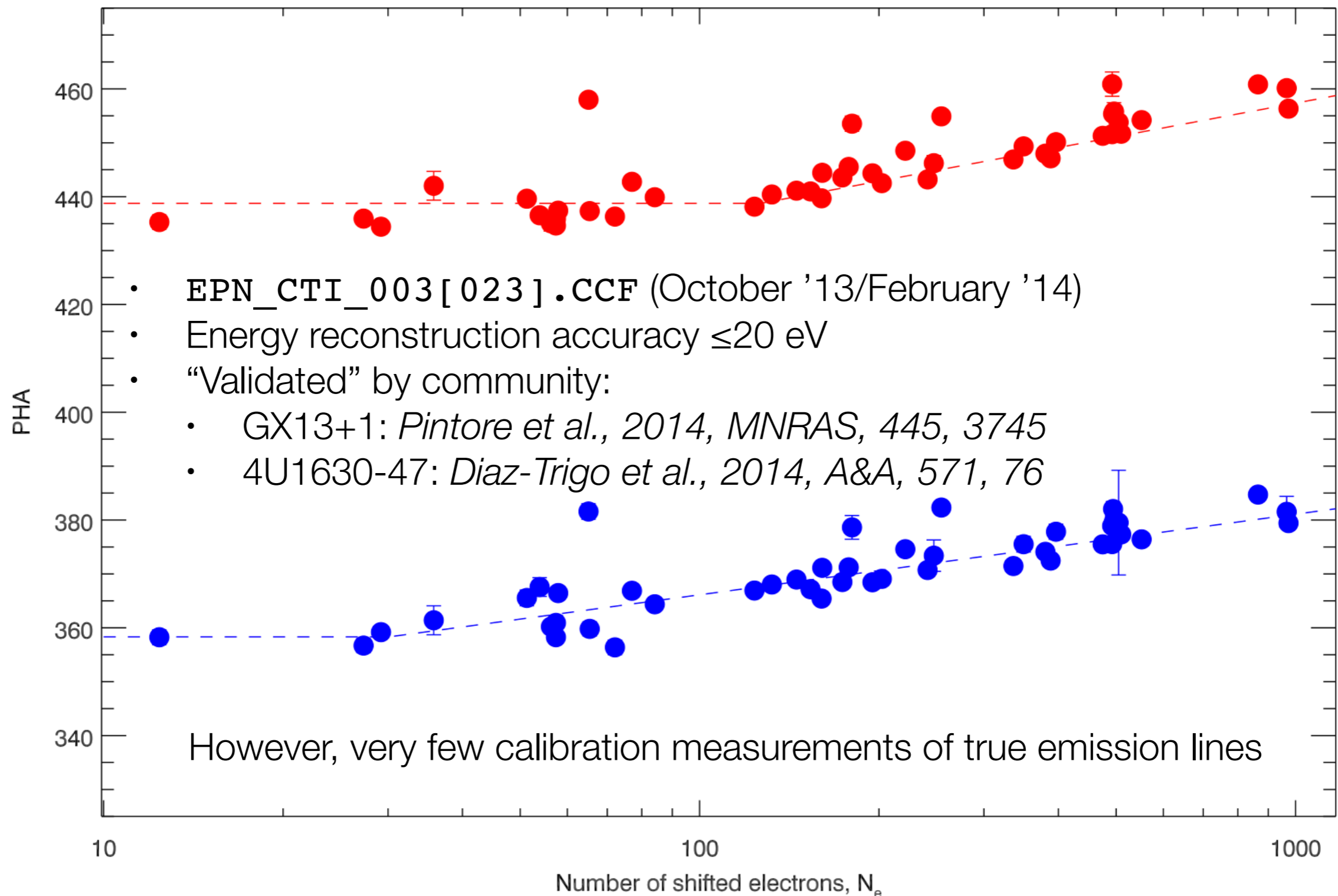
Norbert Schultz (MIT)

Outline

- Background
- Why CygX-3?
- Results

Background I. - the RDPHA

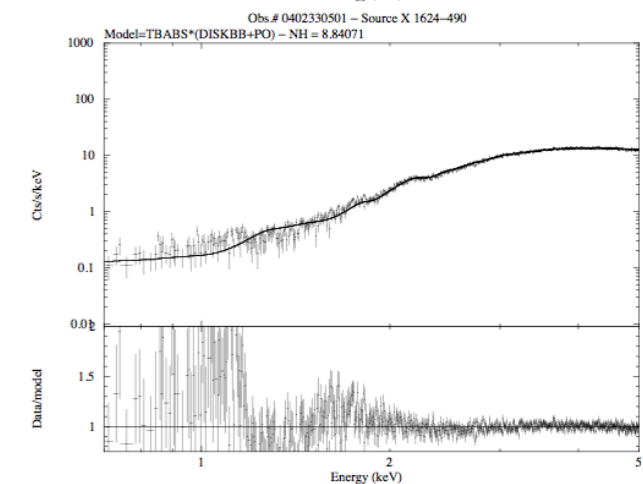
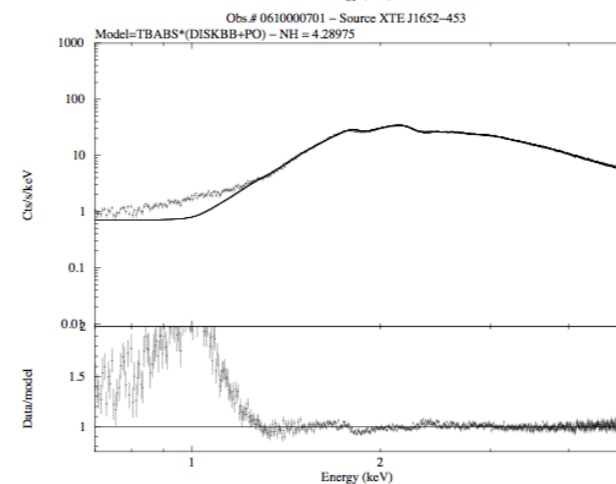
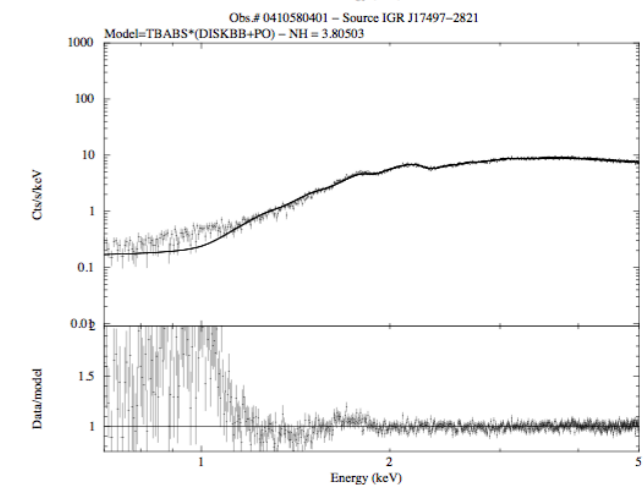
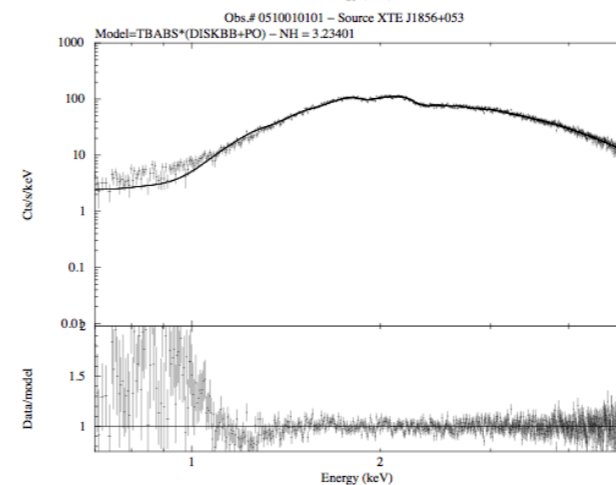
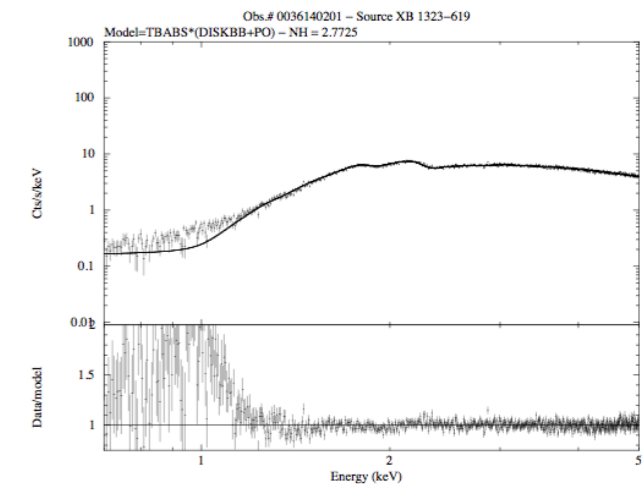
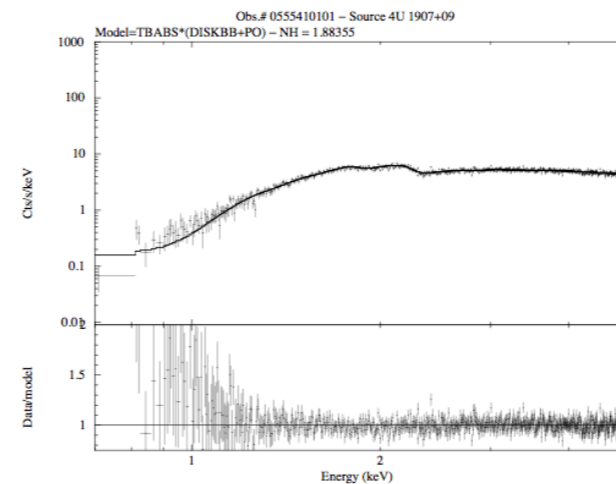
(Guainazzi, 2013, XMM-SOC-CAL-SRN-0306)



Background II. - the “soft excess” problem

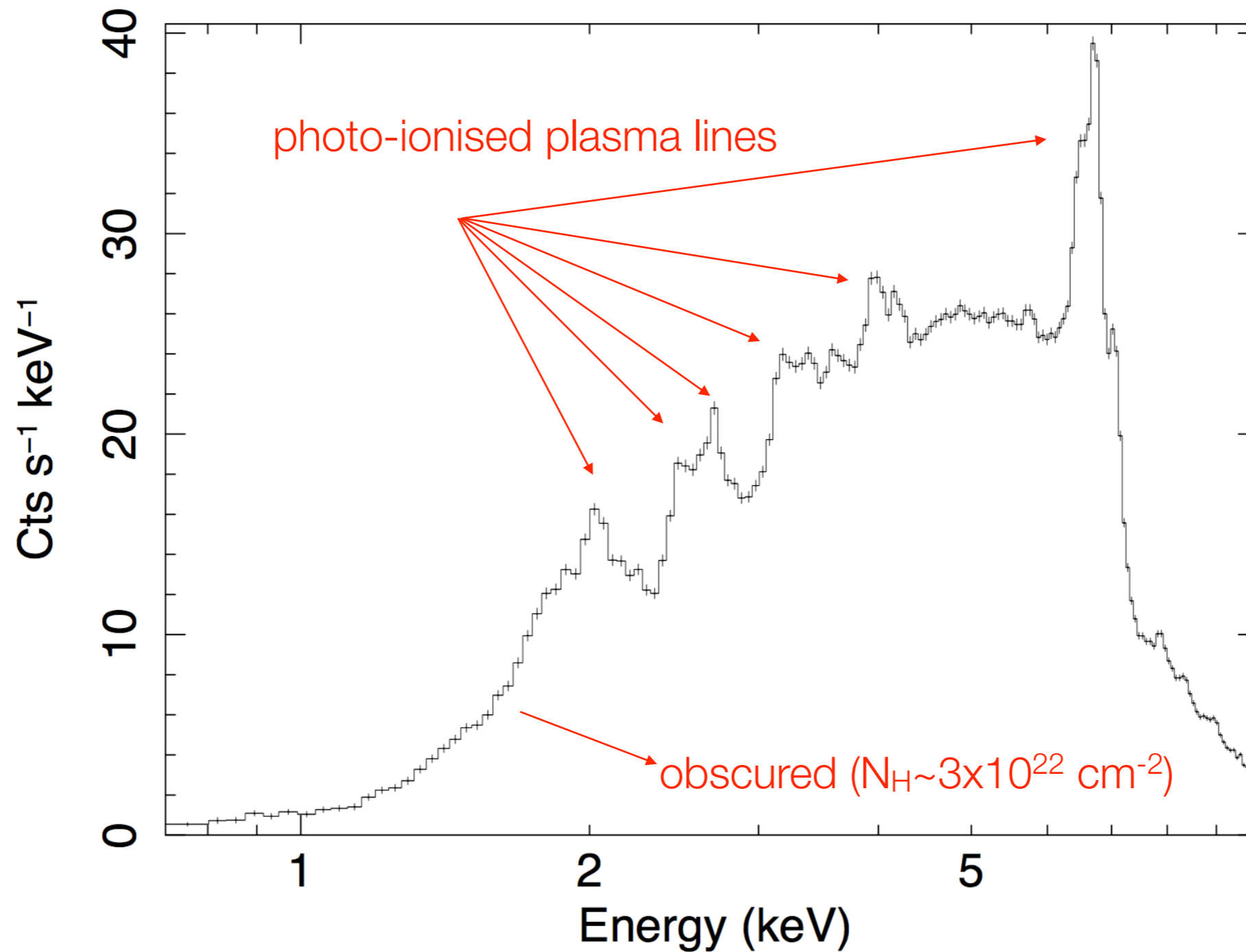
(Guinazzi et al., 2014, XMM-SOC-USR-TN-0083)

- Systematic soft excess on obscured binaries in EPIC-pn Timing Mode
- Redistribution? Energy scale? Astrophysics (dust scattering, corona)?
- RGS simultaneous spectra inconclusive



Why CygX-3?

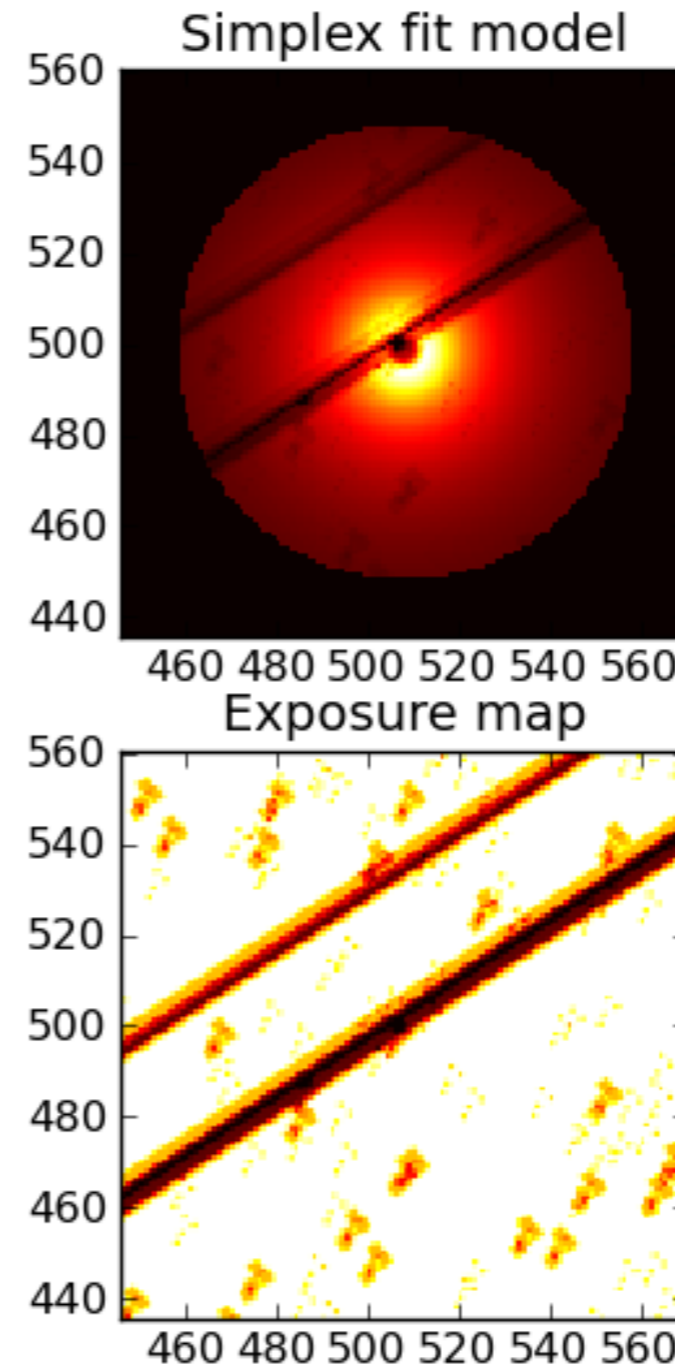
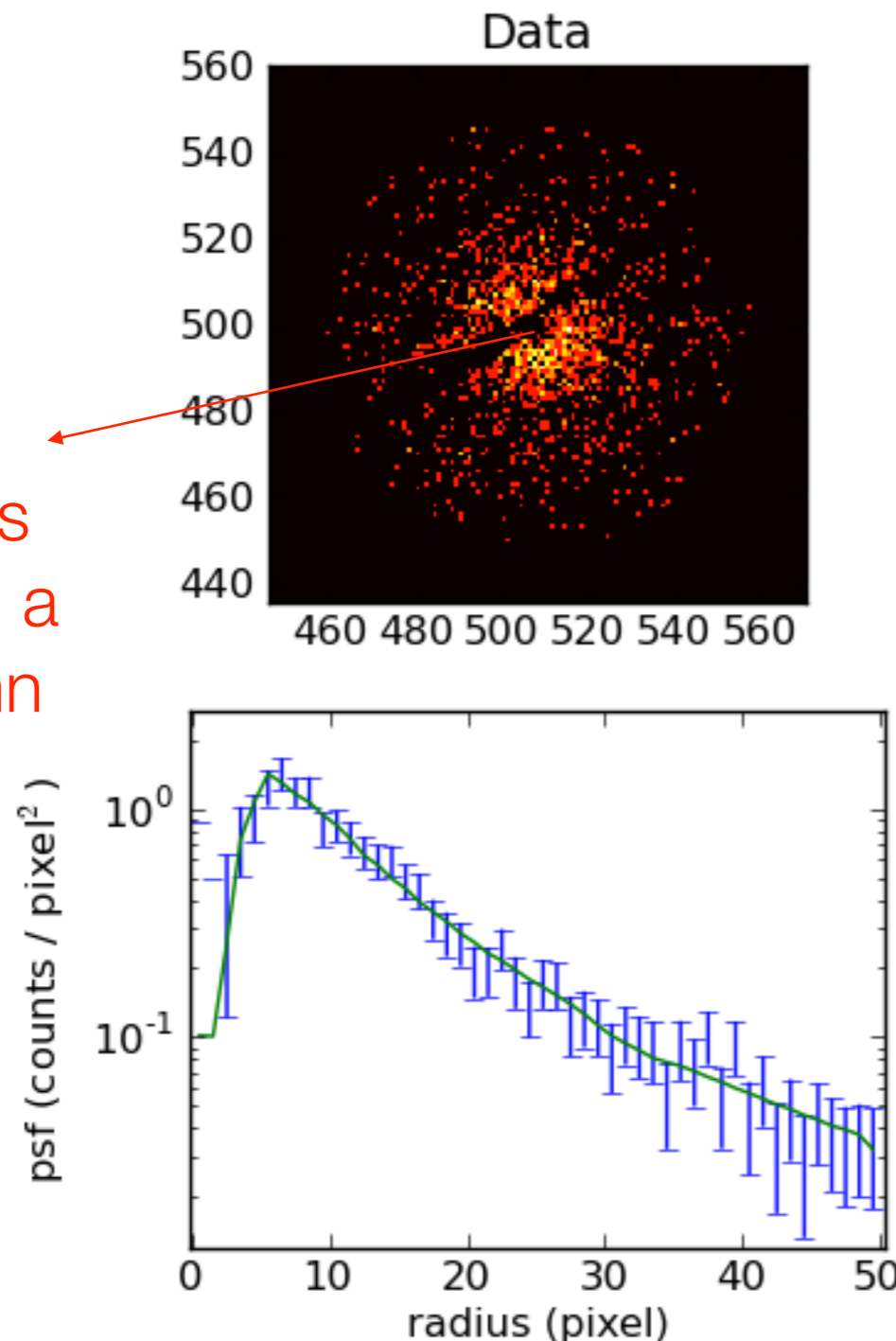
CygX-3 – EPIC-pn (Timing Mode)



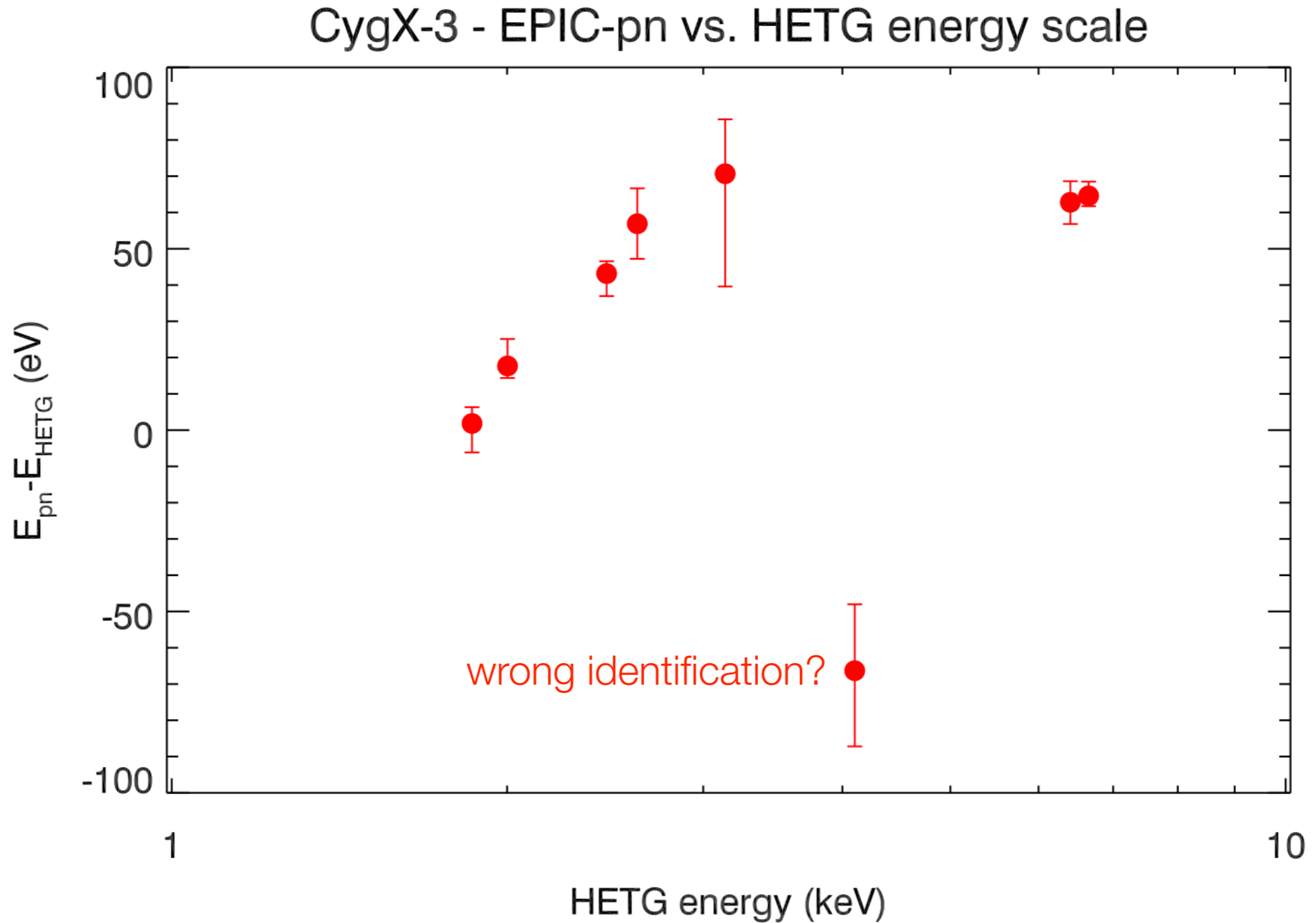
Interlude on Swift/XRT

Experiment originally conceived to test redistribution in WT mode ...

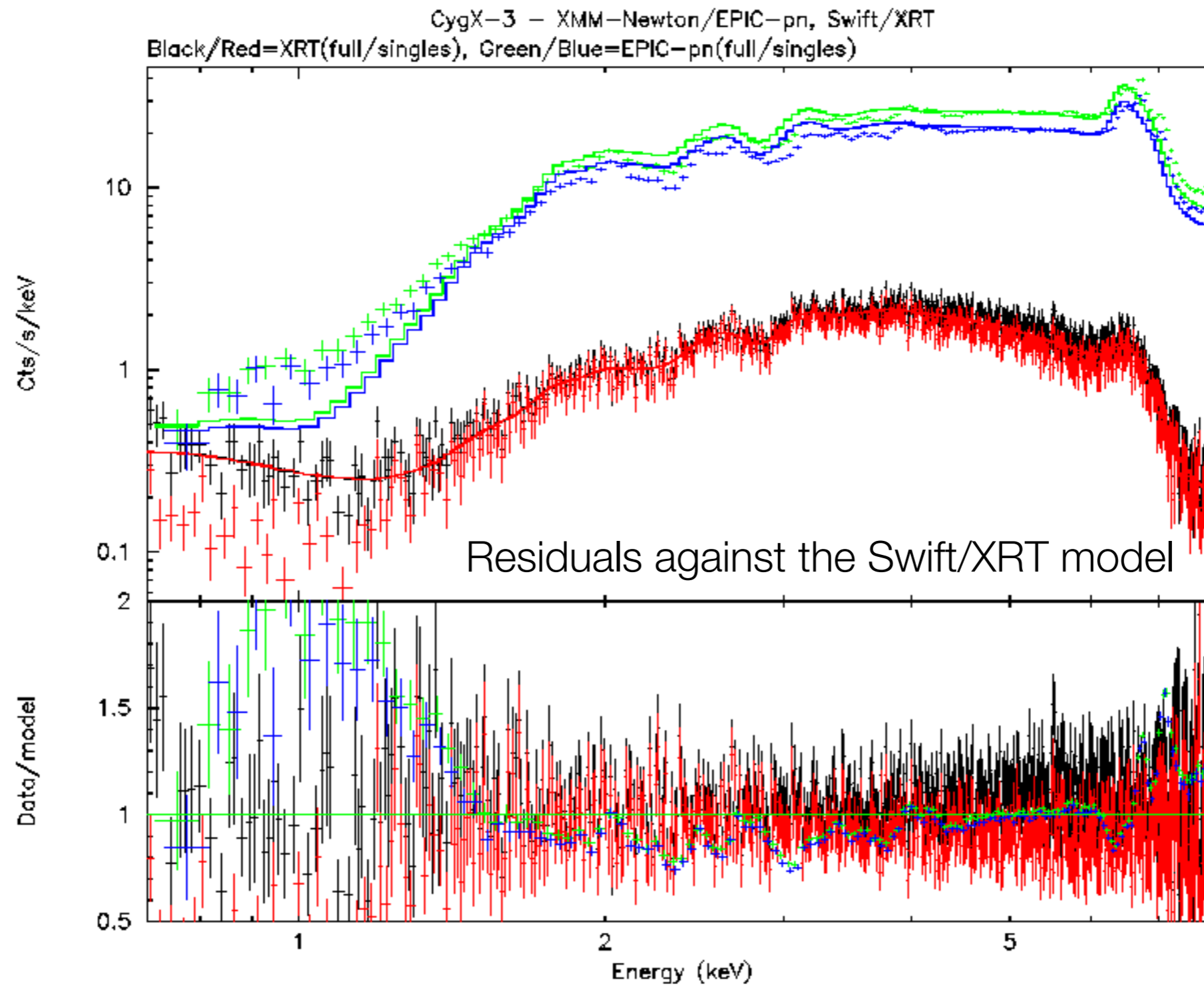
... but the source was placed on a bad column



Results I. - Energy scale



Results II. - soft excess



Summary

More calibration work for the EPIC-pn instrument team



the experiment has been a smashing success!