Mrk 501 - XRT observations

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Log of observations:

Campaign from March 20th, May 26th 2008.
Observations every ~3 days, 1 to 2 ks each
19 observations for a total exposure time of 26 ks

Analysis:

Data processed using the xrtpipeline with standard input parameters:

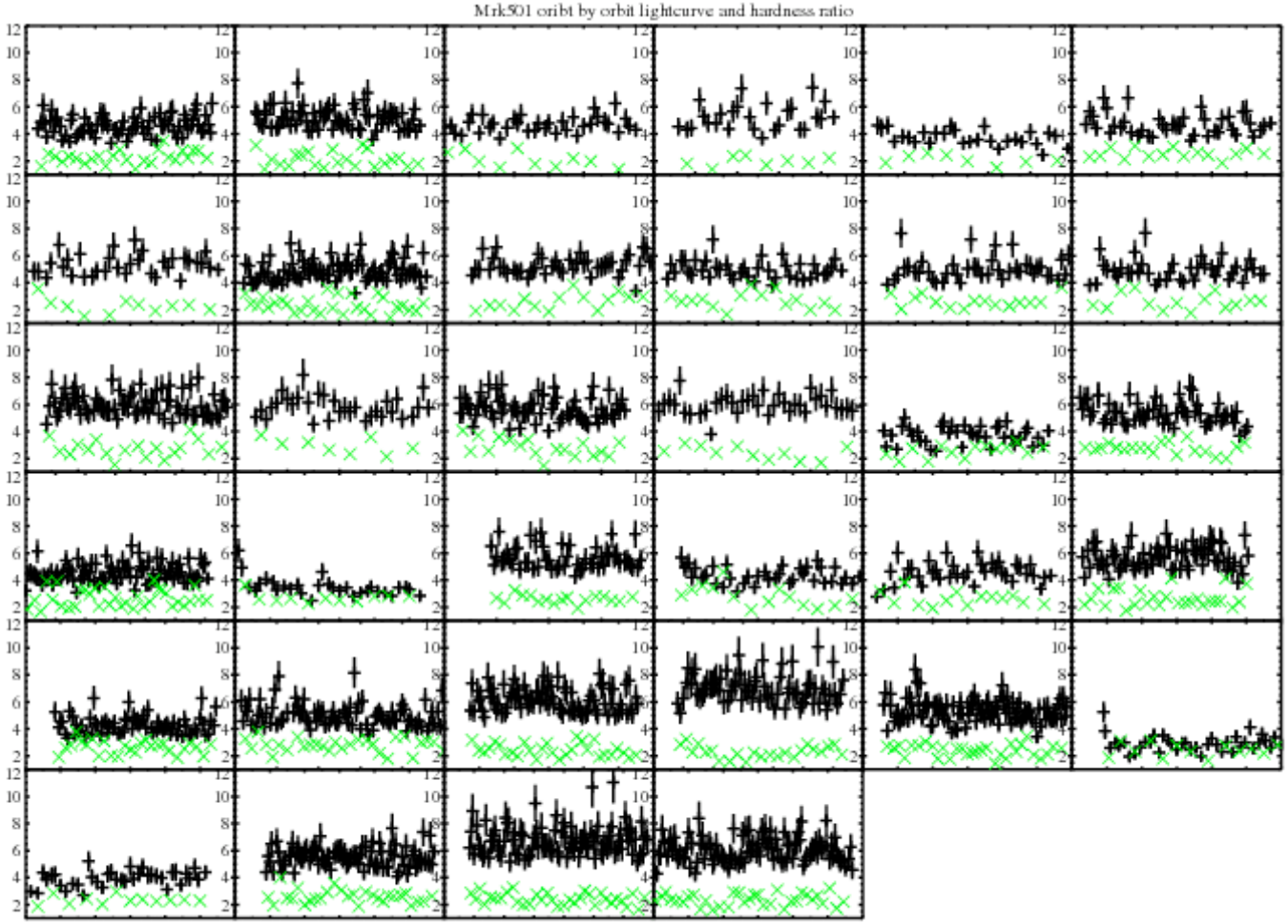
- standard grades 0-2 (WT mode) selection to select good X-ray events
- pile-up not an issue in WT mode at the Mrk 501 count rates
- CCD hot columns accounted for with the use of exposure maps from each orbit of observation
- PSF correction applied in the ARF file

Products:

Extracted long and short term ligthcurves
Spectra fitted with absorbed power law models

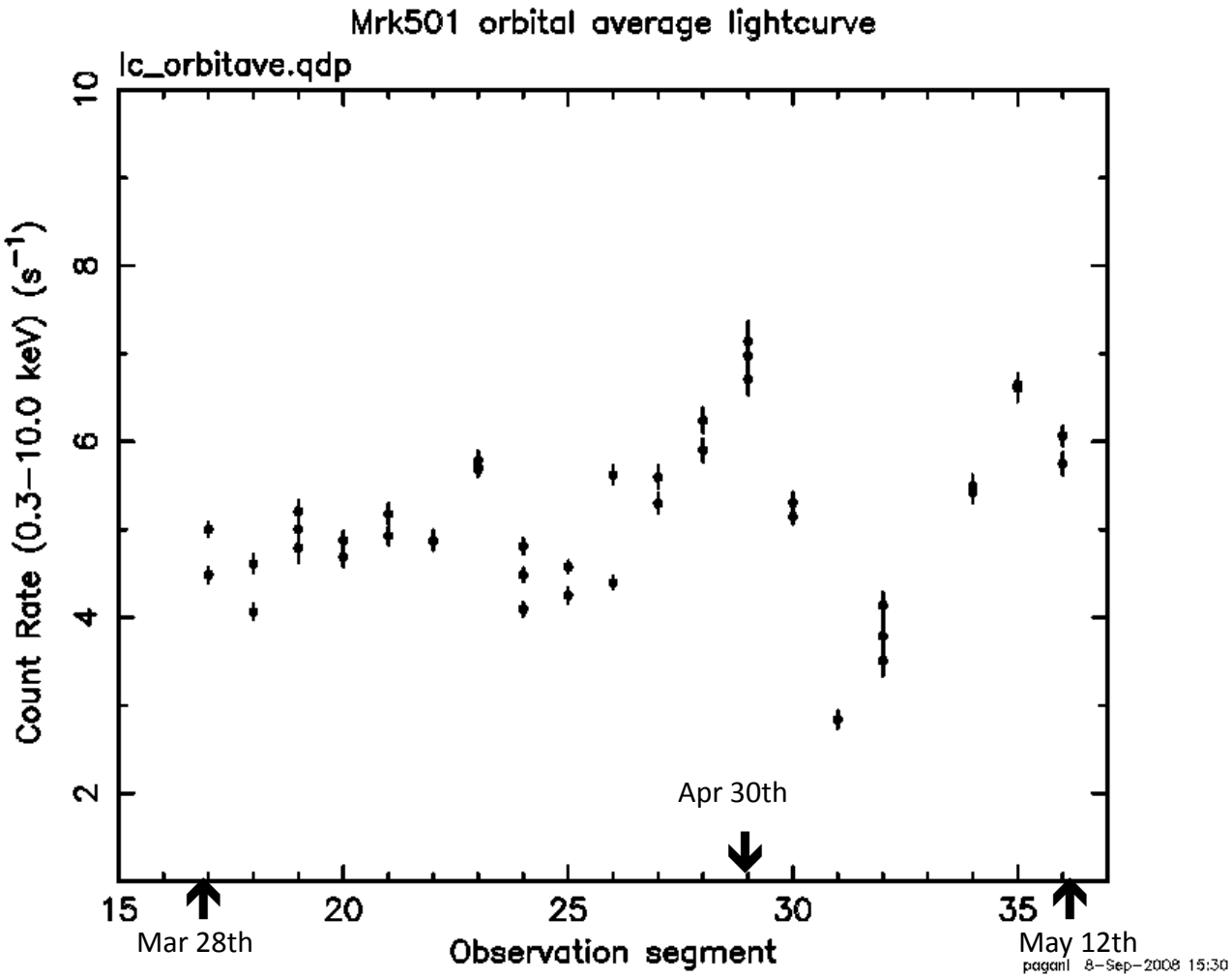
XRT 0.3-10 keV Light Curve

Detailed light curve (in counts/s) and hardness ratios (in green) from each orbit of observations



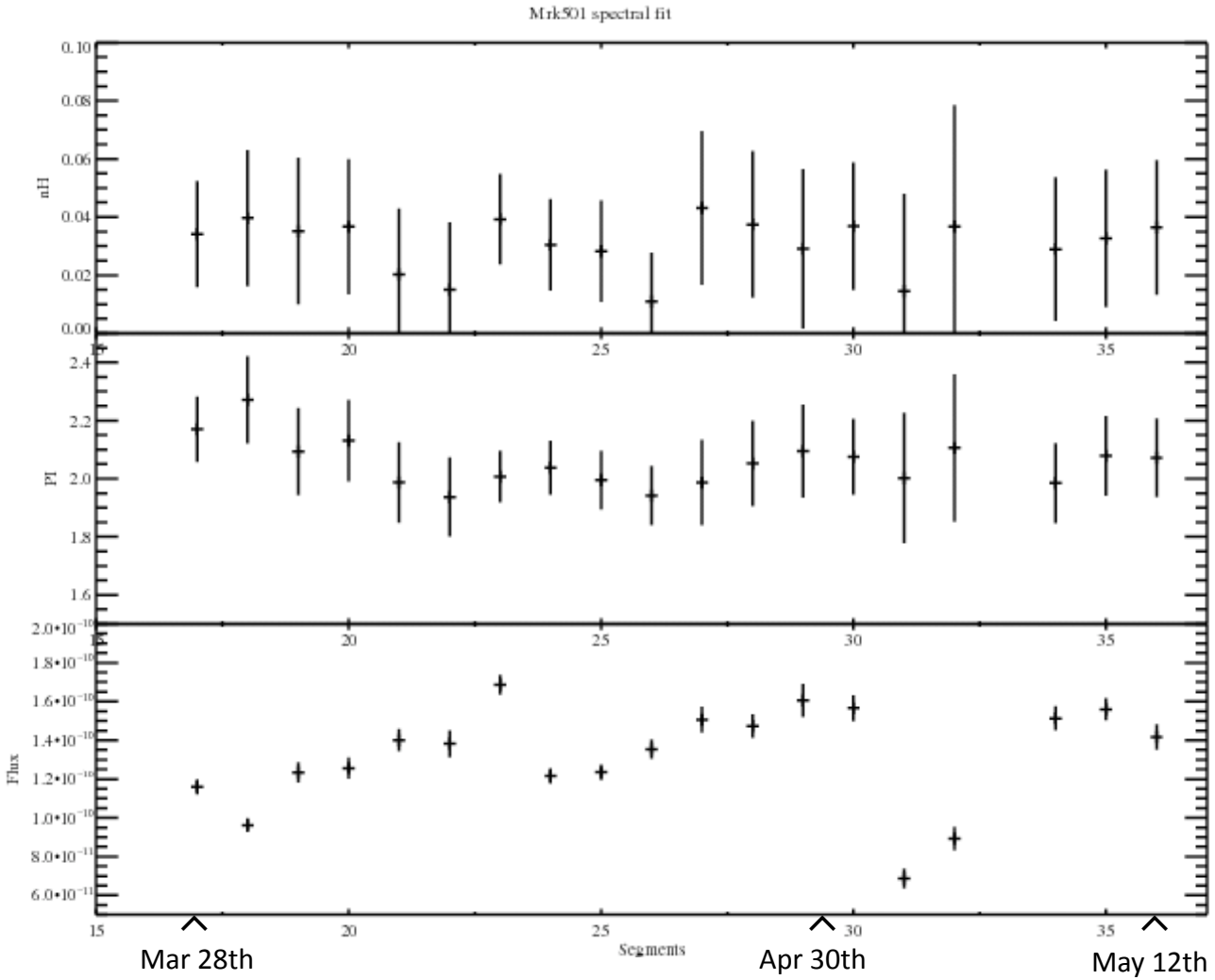
XRT 0.3-10 keV Light Curve – Orbital average

XRT light curve - orbital average (in counts/sec)



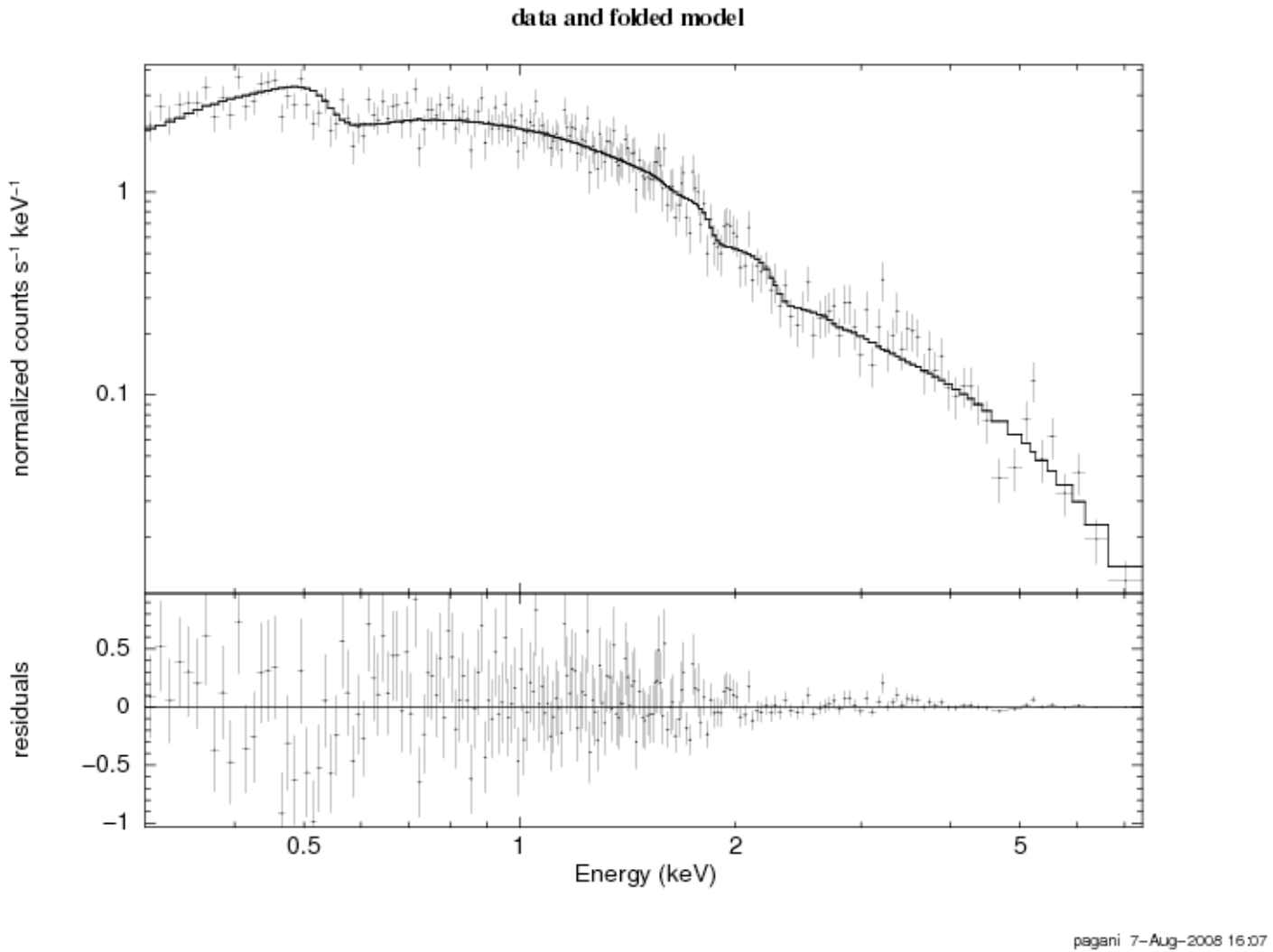
XRT 0.3-10 keV Spectra

Spectra fitted with absorbed power law models, best fit parameters and observed flux plotted below



XRT 0.3-10 keV Spectra

Spectral fit of each observation



Conclusions:

- Light curve: no dramatic long or short term variability observed
- Spectra well fitted by absorbed power law models