

1es1959+650 data from RXTE

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- 1 – Observations
- 2 – Data reduction
- 3 – Light curve and spectra

1 - Observations

8 pointings of 1.5 ks each during the period Sep20-Nov05 2008. There were no observations with RXTE in 2009.

Specific Observing pointings (dates and duration) can be found here

http://www.slac.stanford.edu/~dpaneque/MW_1es1959_2008/Obs.html

2 – Data reduction

Proportional Counter Array (PCA) *(Only PCU2 was used)*

Data reduced with the “standard” perl script REX

I use the following selection of events:

```
ELV > 10.0 && OFFSET < 0.02 && PCU2_ON == 1 && (TIME_SINCE_SAA < 0 || TIME_SINCE_SAA > 30) && ELECTRON2 < 0.1
```

Only the first layer was used to increase the signal/noise ratio

Instrument response function computed with script pcarsp

Spectra computed and fitted using Xspec 11

Channels 0-2 excluded

Channels grouped as

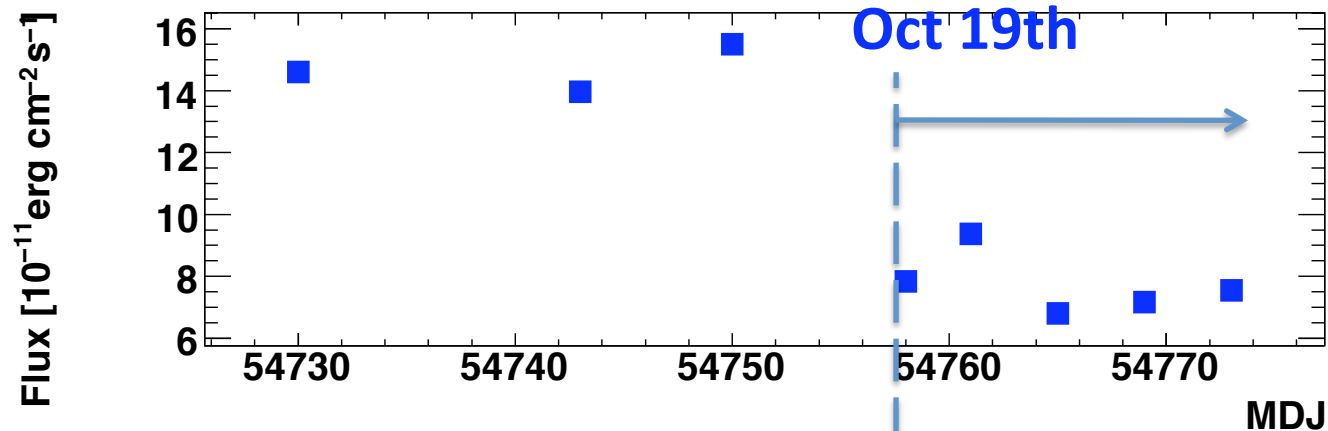
```
3 -19 1
20 22 3
23 25 3
26 30 5
31 39 9
40 79 10
```

Fit performed with power law function in range 2.5 keV-20 keV

3 – Results

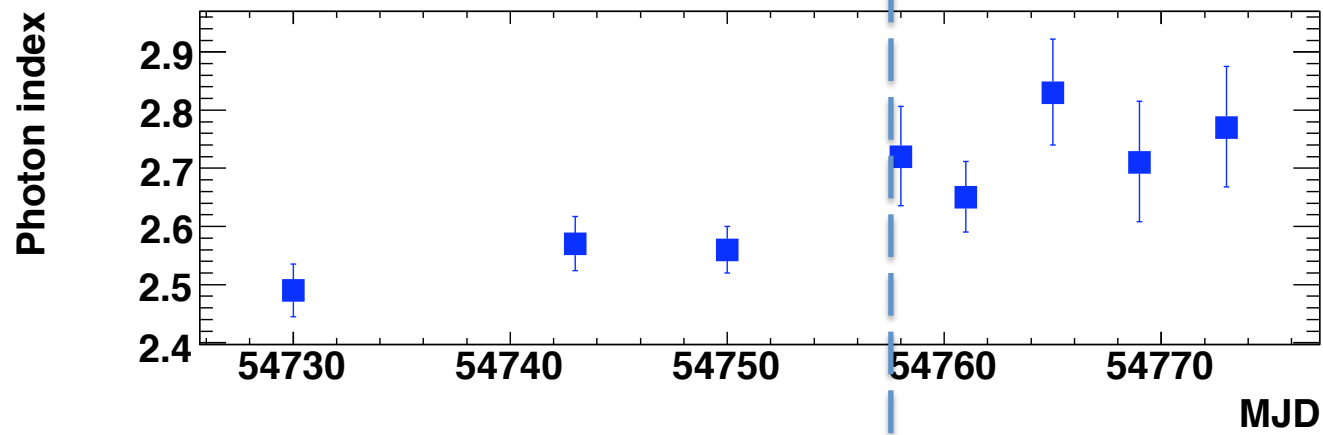
The spectrum can be fit with pure power law function

Flux_2-10keV



Decrease in flux by factor of ~2 for observations after Oct19th

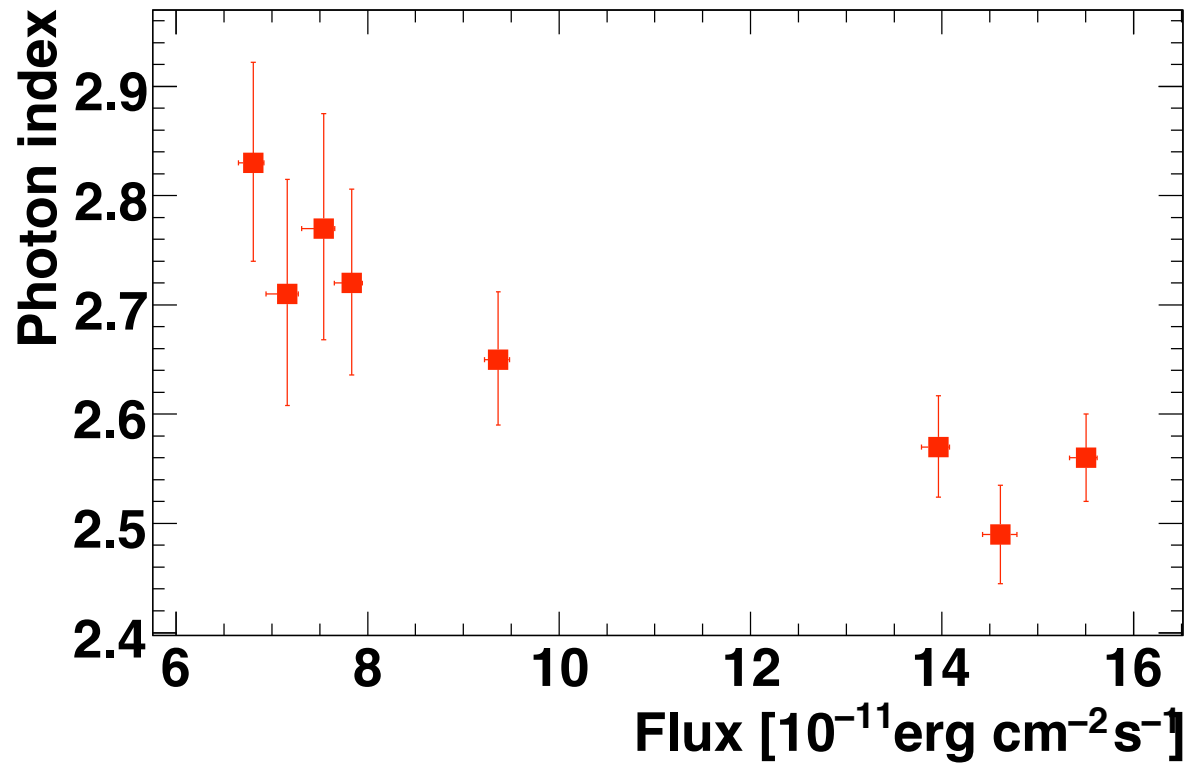
PhotonIndex



The source became somewhat softer (~10%) after Oct19th

3 – Results

PhotonIndex_vs_Flux_2–10keV



The source becomes harder when brighter