

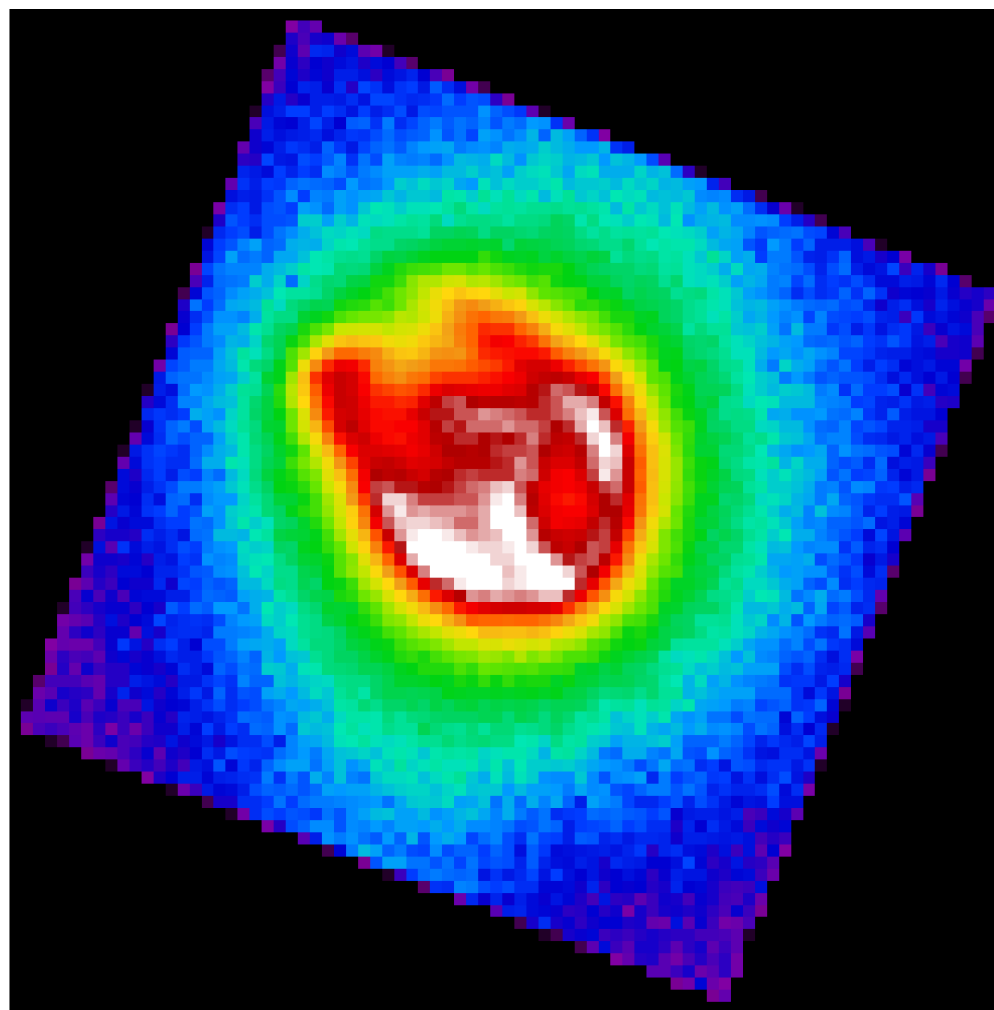
# Variability of some XMM calibration sources

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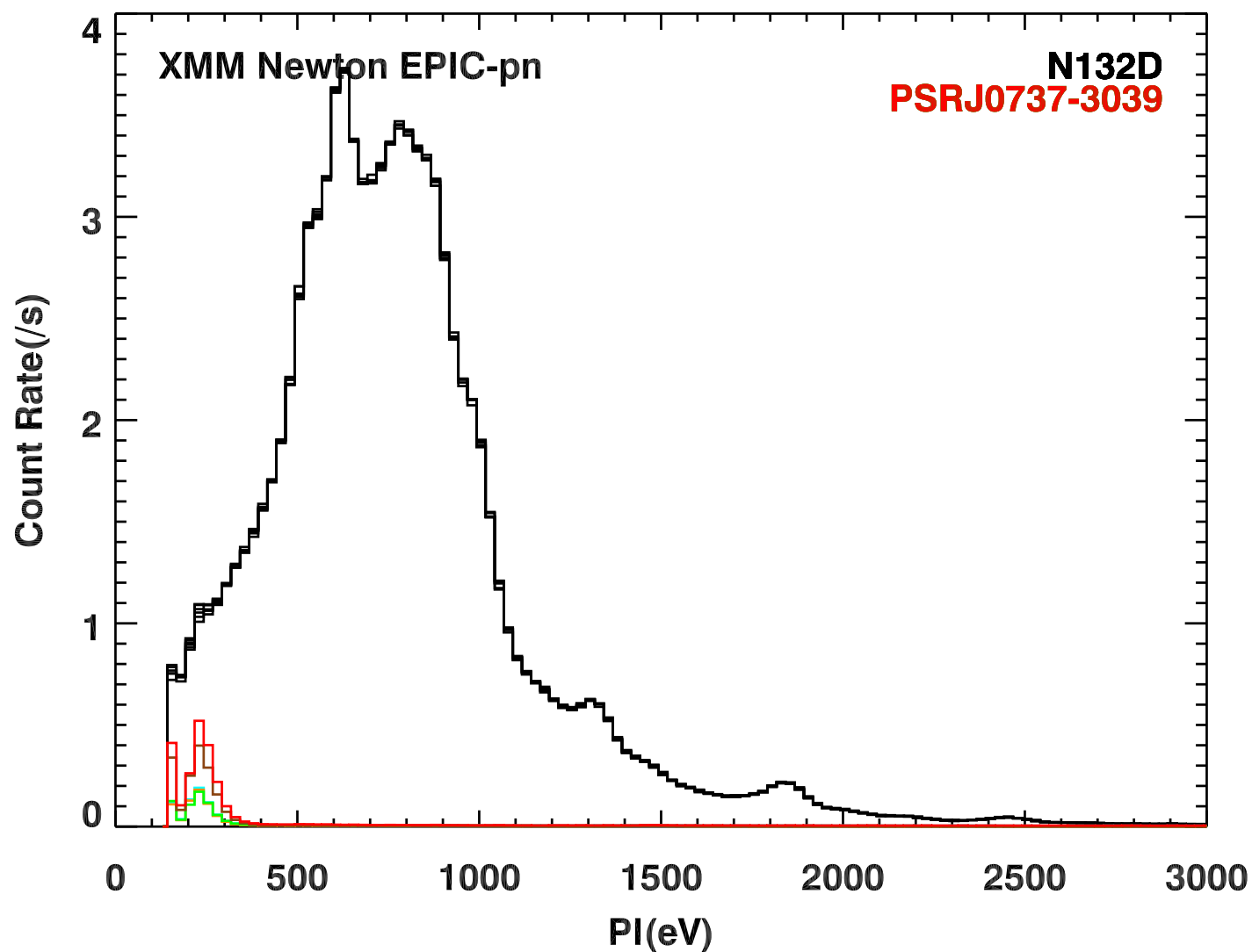
**2013 March 25-28**

# N132D in the EPIC-pn small window $\times 5(+1)$



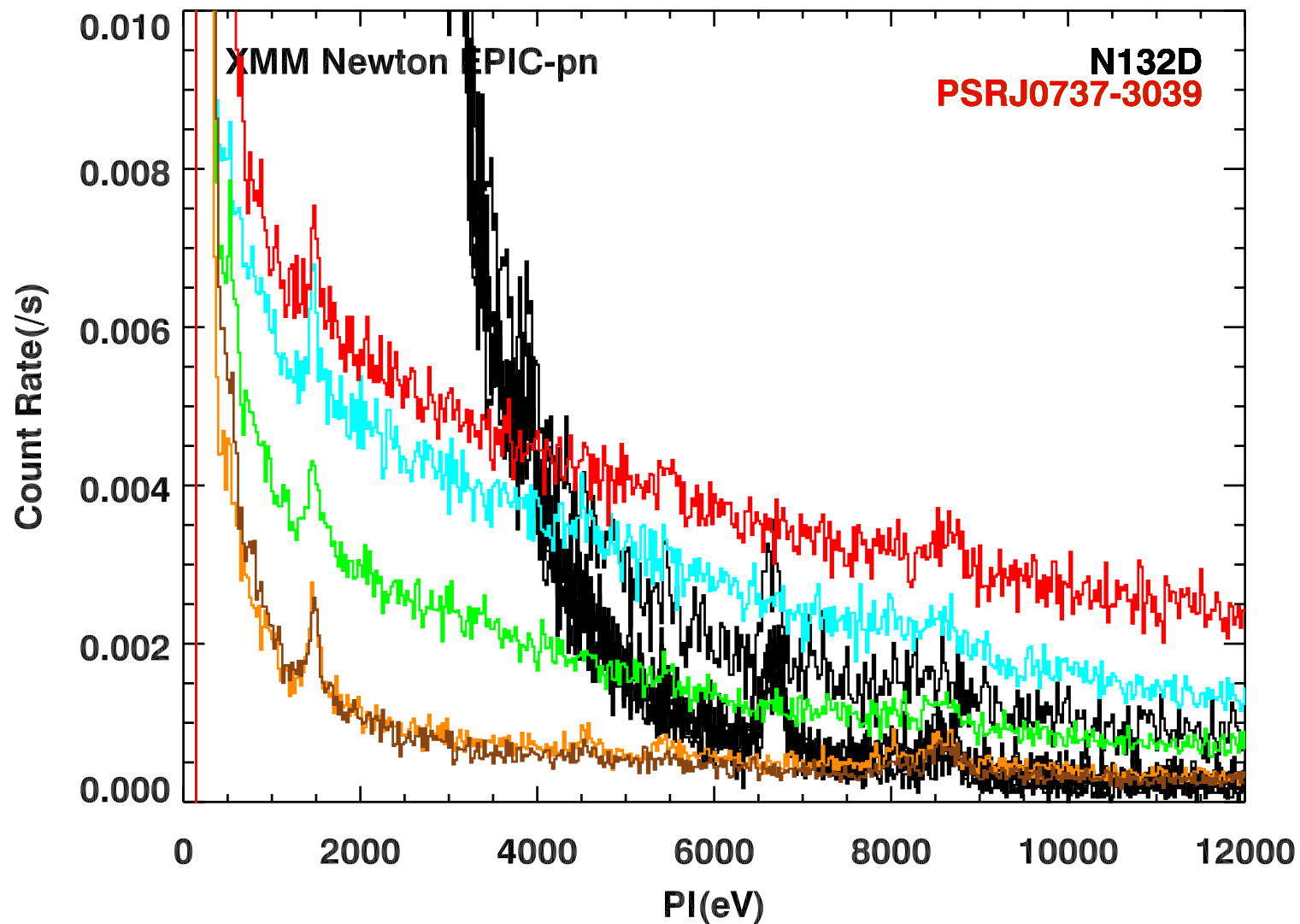
# N132D EPIC-pn small-window thin filter ×5(+1)

FLAG==0 && PATTERN <= 4



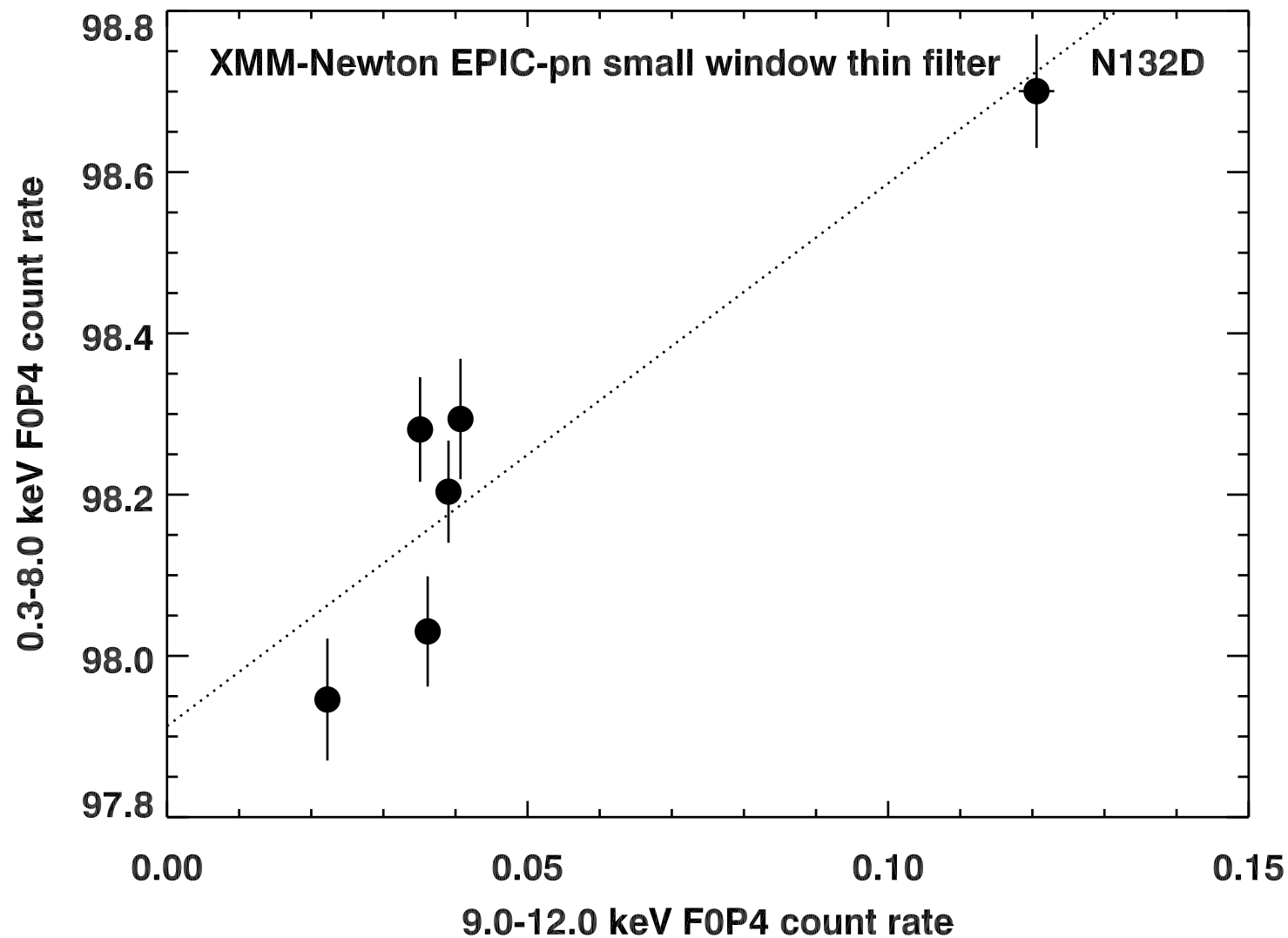
# N132D EPIC-pn small-window thin filter ×5(+1)

FLAG==0 && PATTERN <= 4



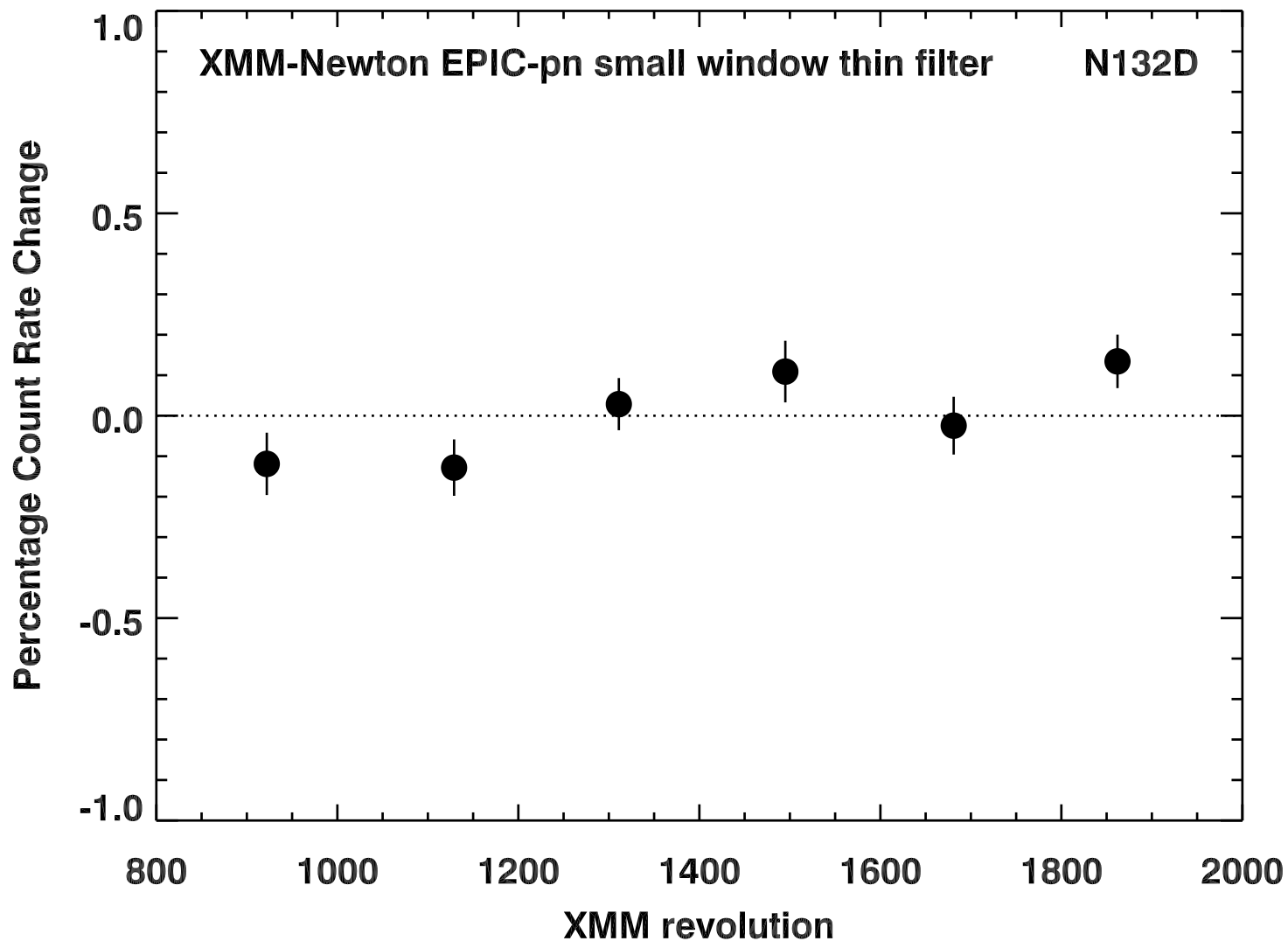
# N132D EPIC-pn small-window thin filter $\times 5(+1)$

FLAG==0 && PATTERN <= 4



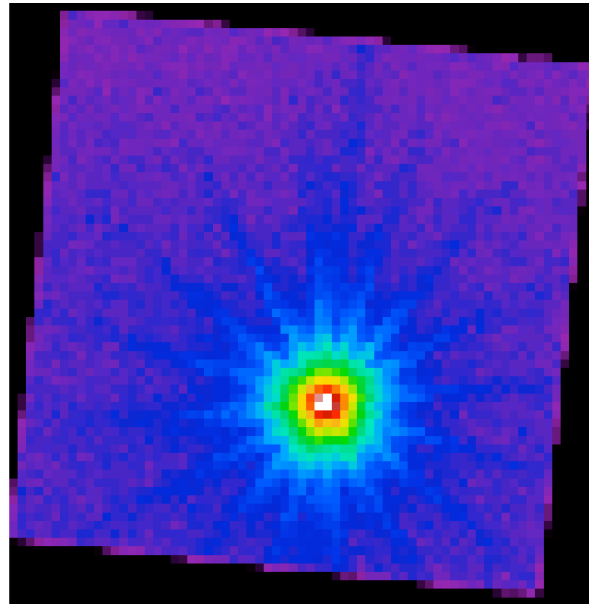
# N132D EPIC-pn small-window thin filter ×5(+1)

FLAG==0 && PATTERN <= 4



# RXJ1856.6-3754 EPIC-pn small-window thin filter

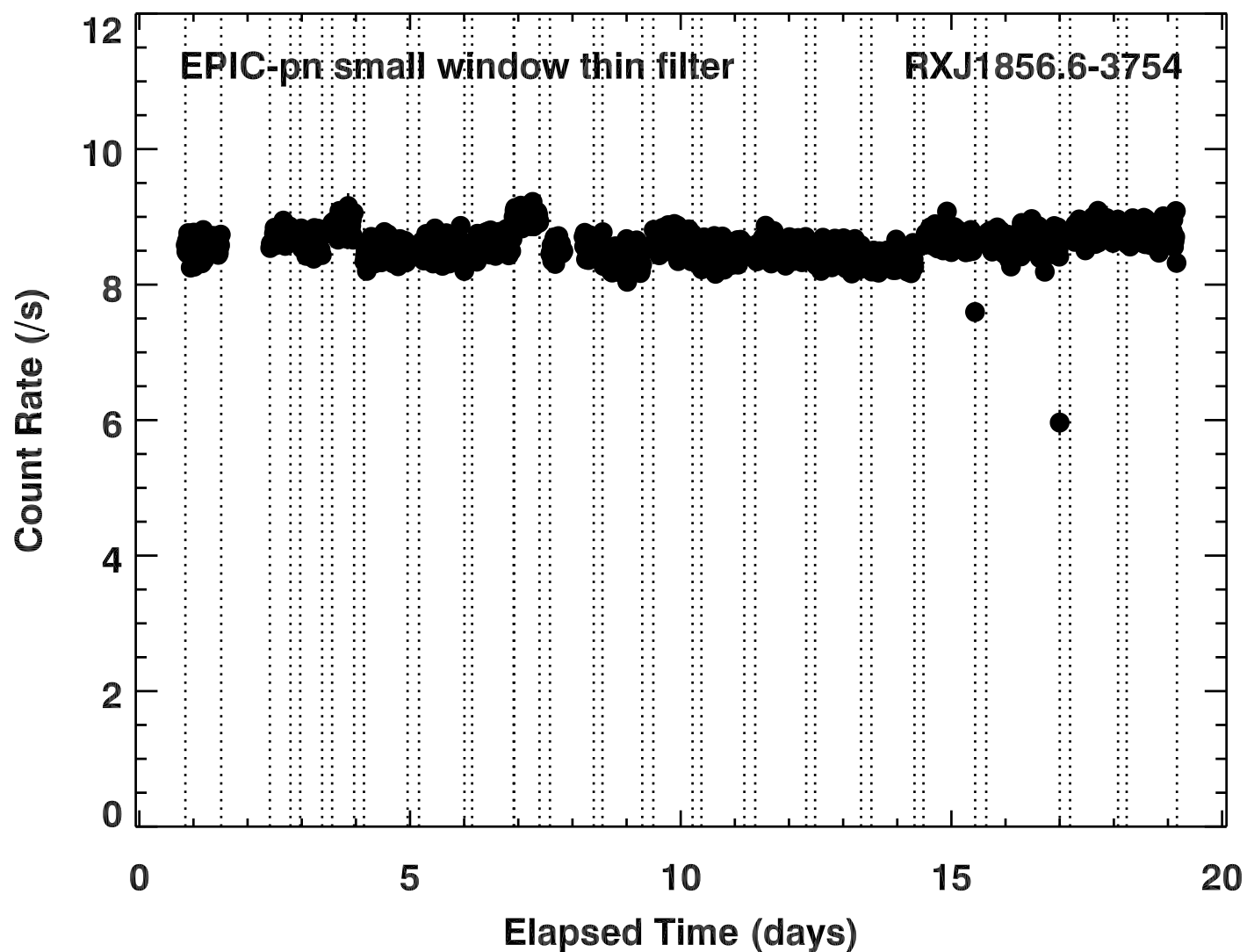
FLAG==0 && PATTERN <= 4



- data  $n(x,y)$
- model  $\mu(x,y) = s * \text{PSF}(x,y) + b(x,y)$
- Beware
  - PI threshold
  - RAWX response
- *cf* Sartore+ 2012
  - $\Delta f_x < 3\%$

# RXJ1856.6-3754 EPIC-pn small-window thin filter

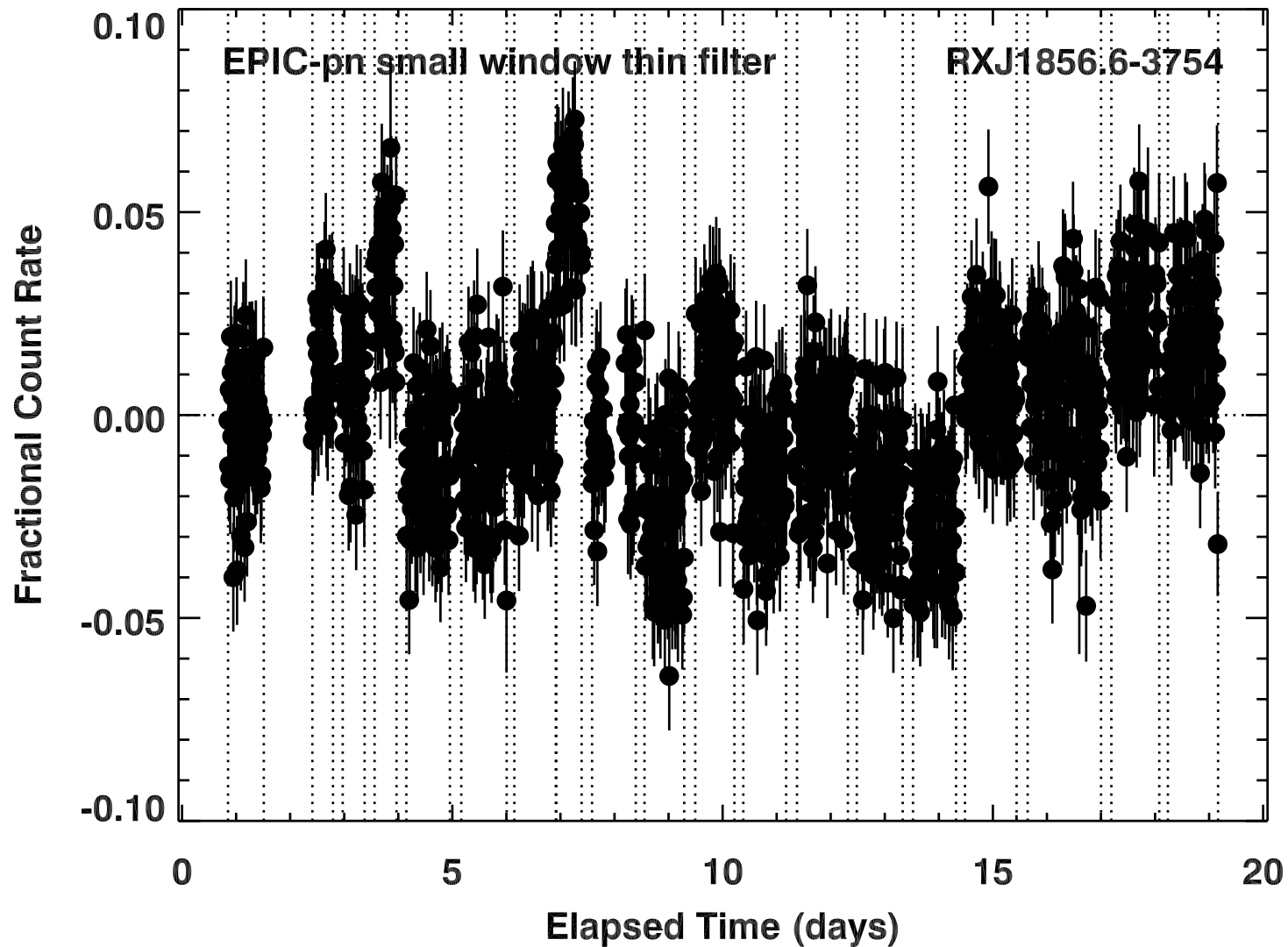
FLAG==0 && PATTERN <= 4





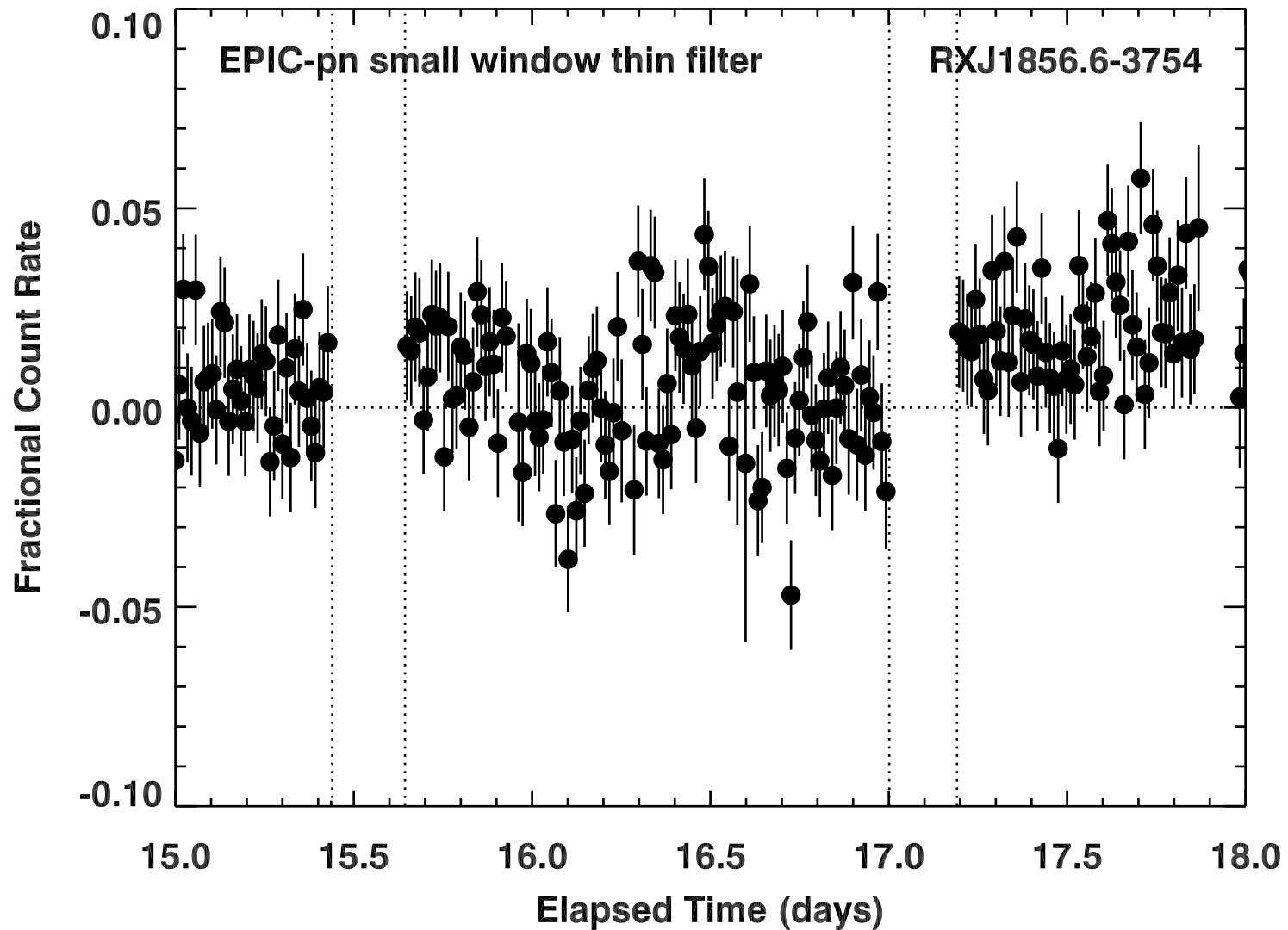
# RXJ1856.6-3754 EPIC-pn small-window thin filter

FLAG==0 && PATTERN <= 4



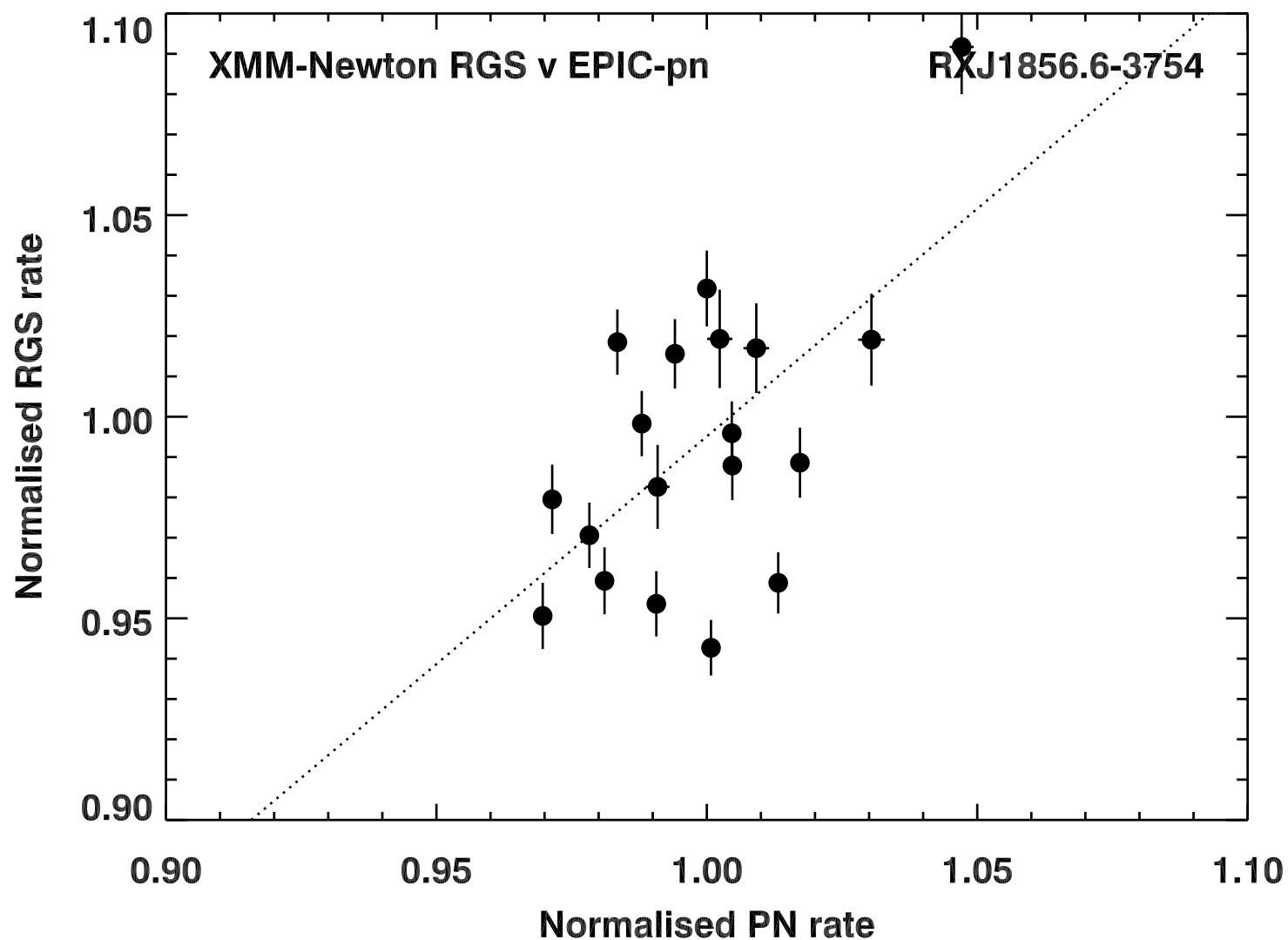
# RXJ1856.6-3754 EPIC-pn small-window thin filter

FLAG==0 && PATTERN <= 4



# RXJ1856.6-3754 EPIC-pn small-window thin filter

FLAG==0 && PATTERN <= 4



# Variability of XMM calibration sources



- ◆  $\pm 0.1\%$  N132D
- ◆  $\pm 1.2\%$  RXJ1856.6-3754
- ◆  $\pm 2.4\%$   $\zeta$  Puppis