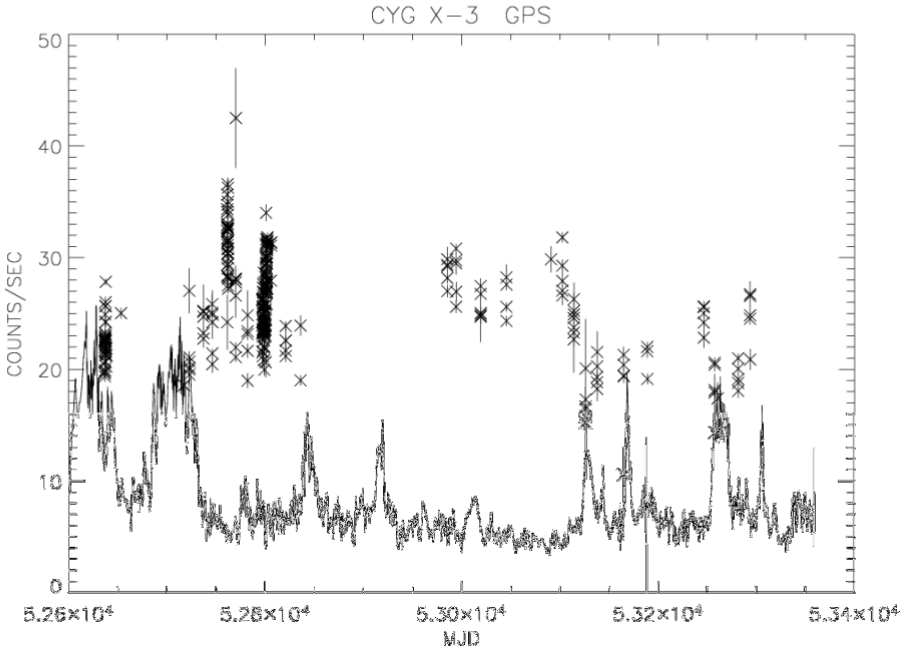
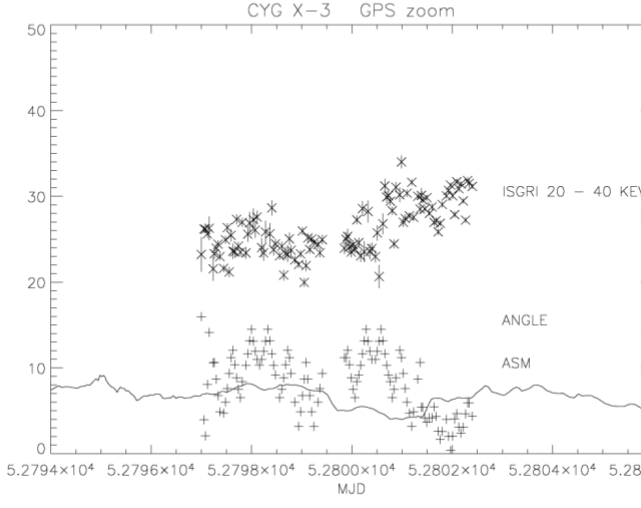
JET SOURCES
CYG X-3 and GRS 1915+105

- CYG X-3 DURING GPS
- GRS 1915+105 DURING AO-1/REV 48
- Hannikainen D.C., Hjalmarsdotter L., Rodriguez J., Paizis A., Beckmann V., Shaw S.,Vilhu O. ,Zdziarski A., Hakala P., Pooley G., Lund N., Westergaard N., Kretchmar P., Belloni T., et al.

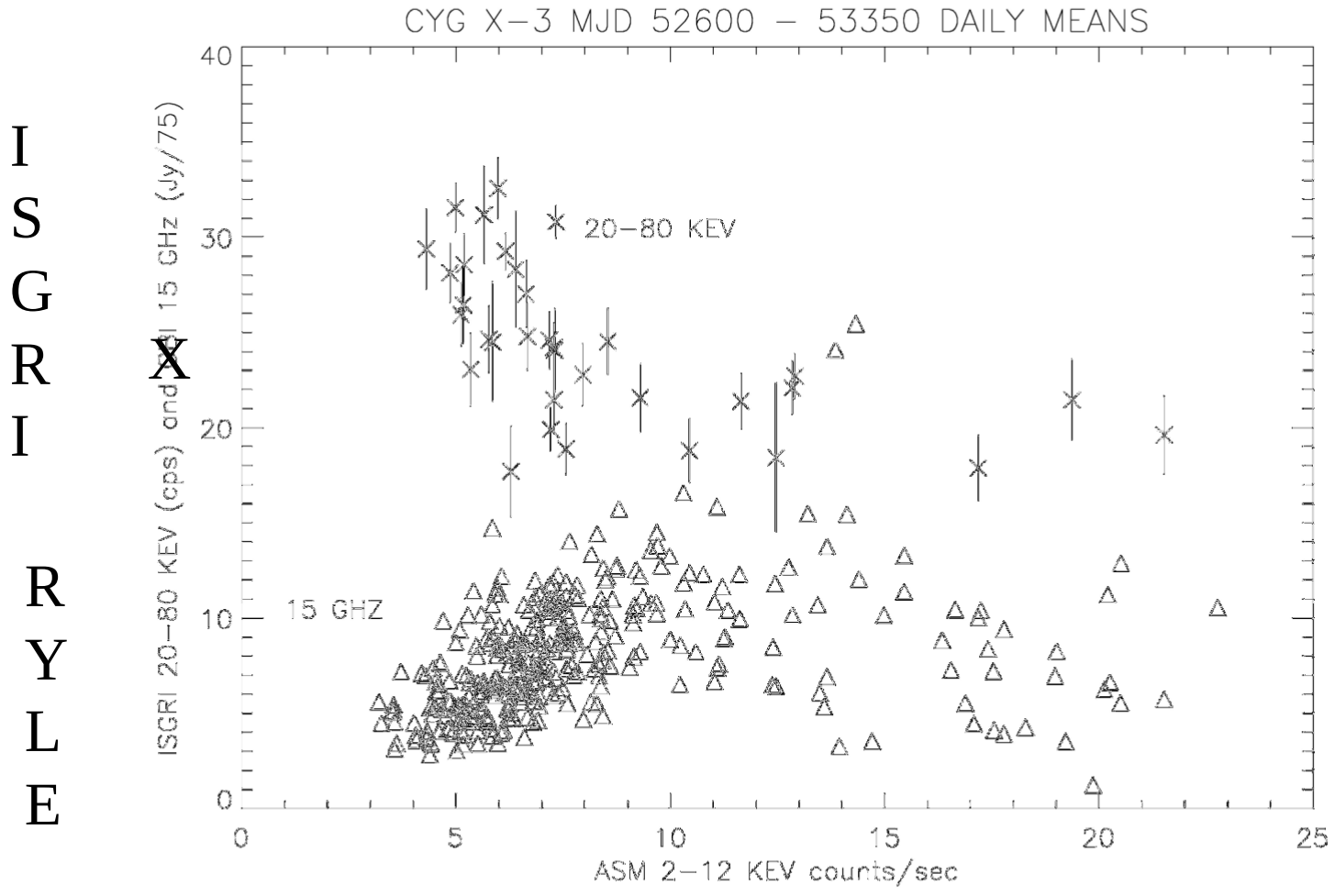
Cyg X-3/ISGRI/GPS





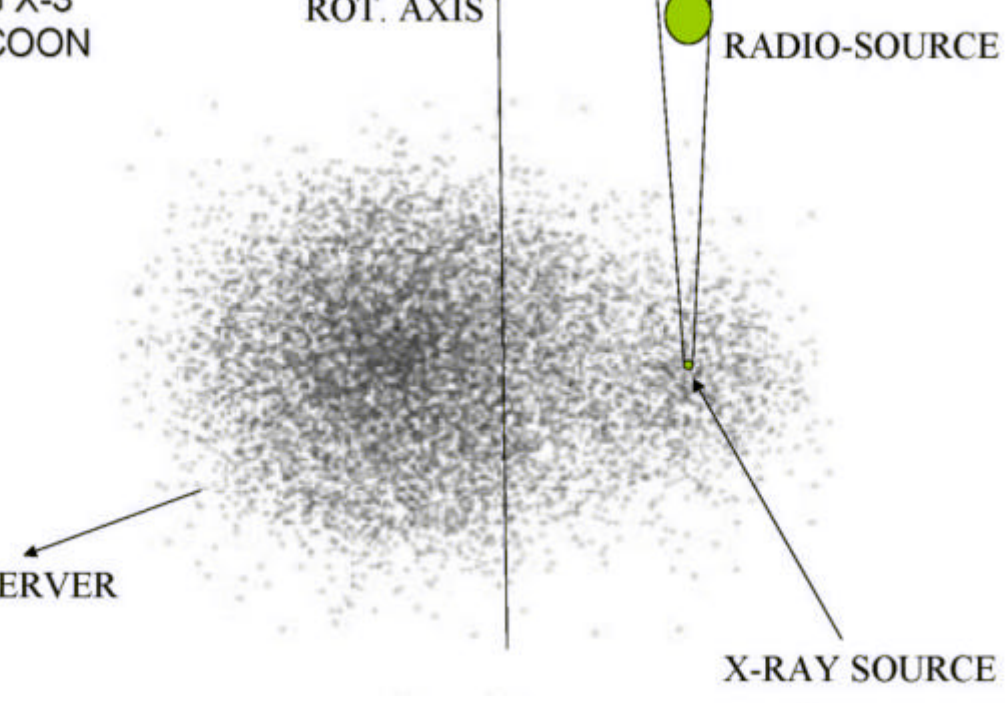
Orbital modulation de-convolved

ISGRI-RYLE-ASM

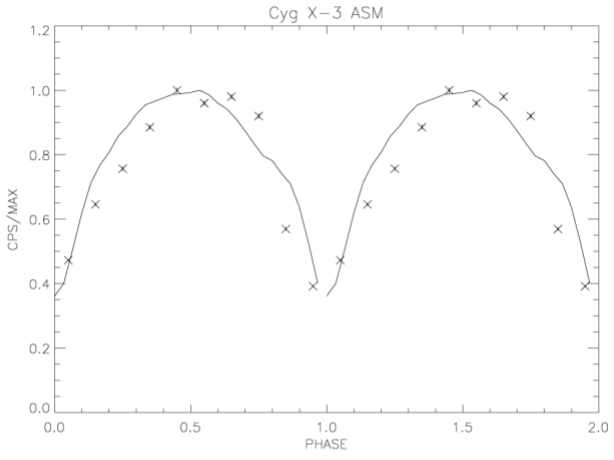


I S G R I X R Y L E

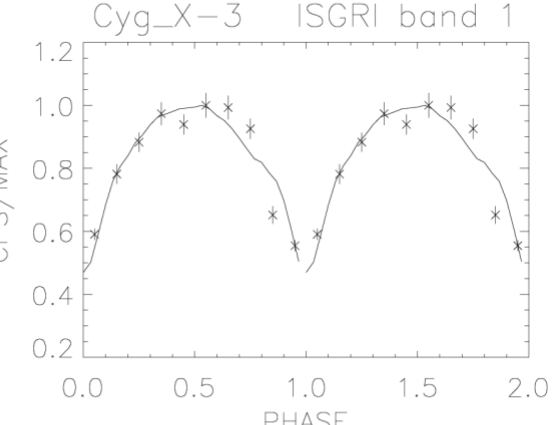
0.4 Cral



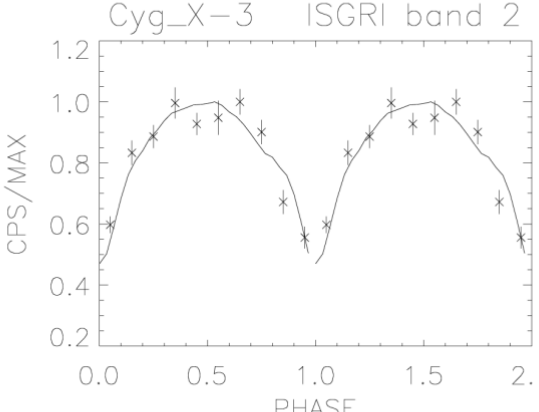
2 – 12 KEV



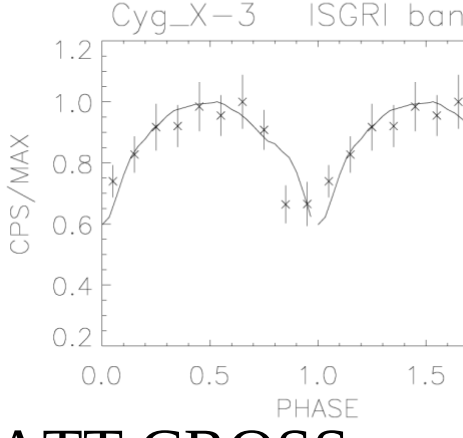
20 – 40 KEV



40 – 60 KEV

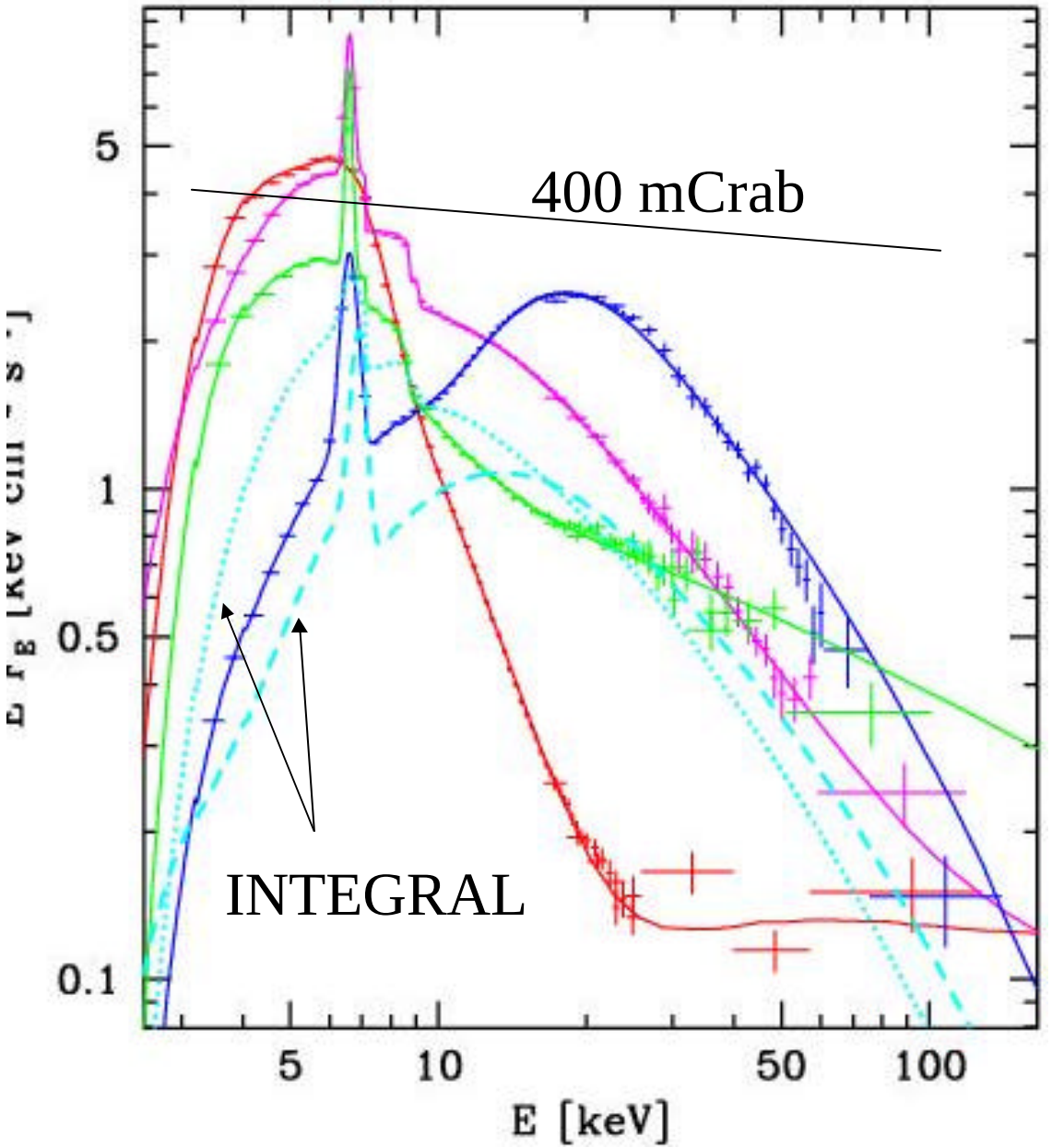


60 – 80 KEV

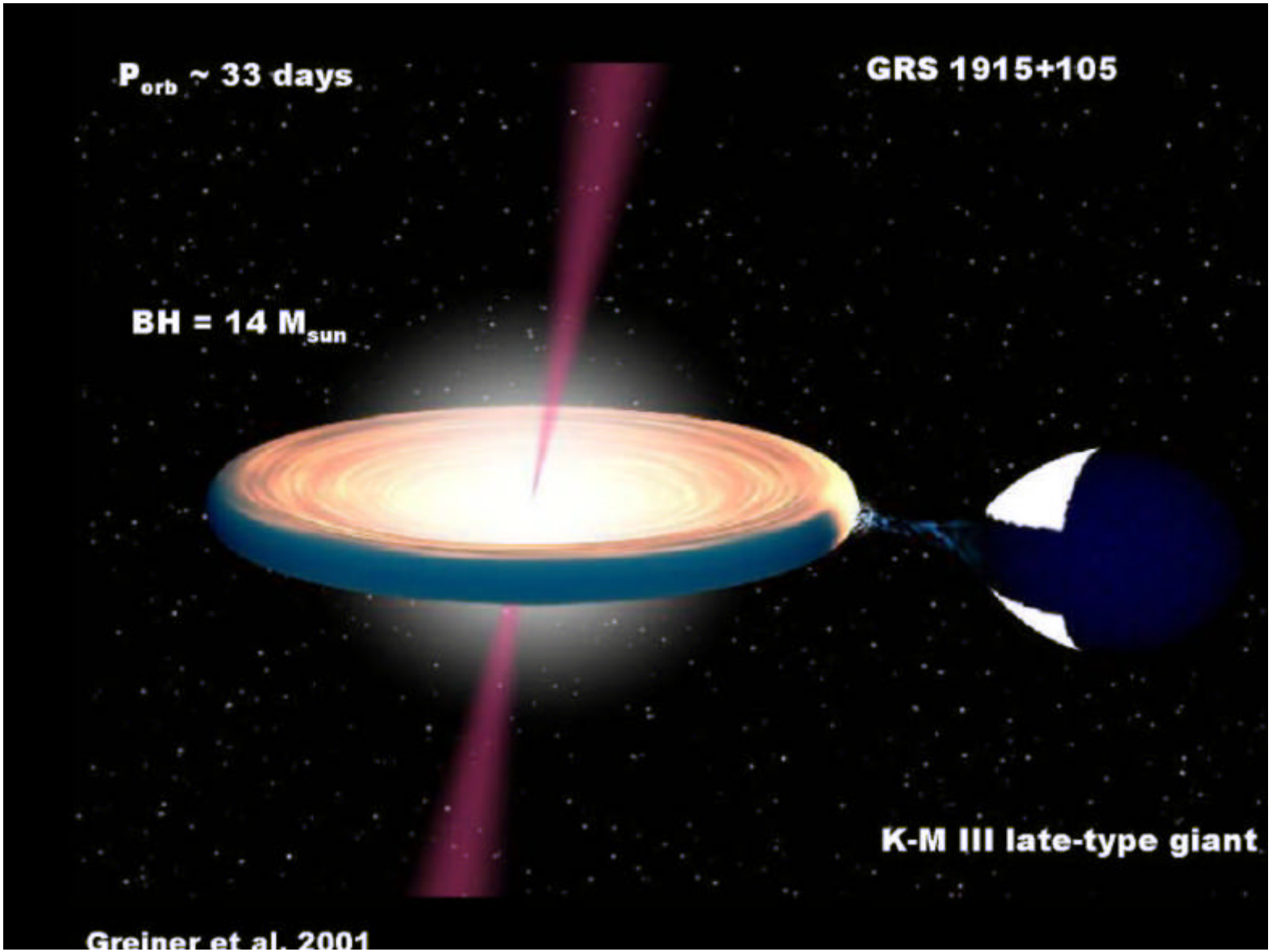


MULATION FROM WR-WIND , COMPTON SCATT CROSS,

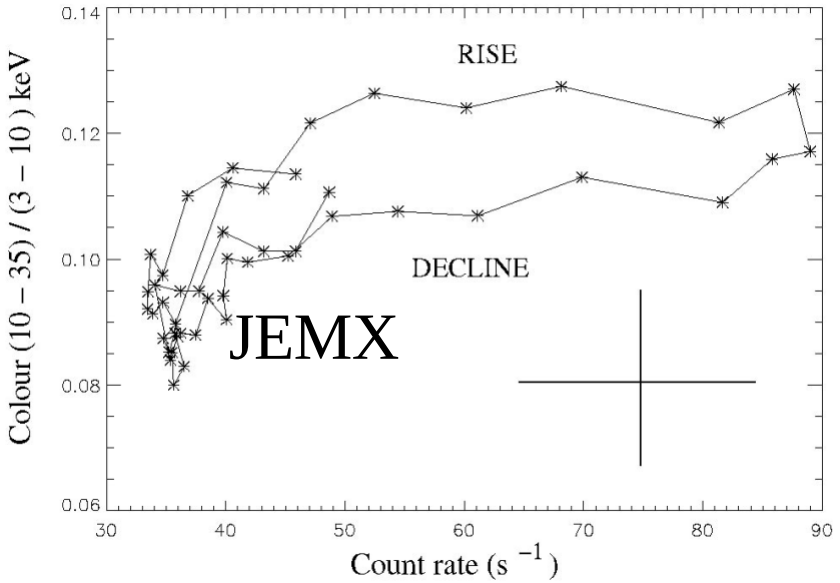
CYG X-3 RATE-OSSE-INTEGRAL-GIS spectra

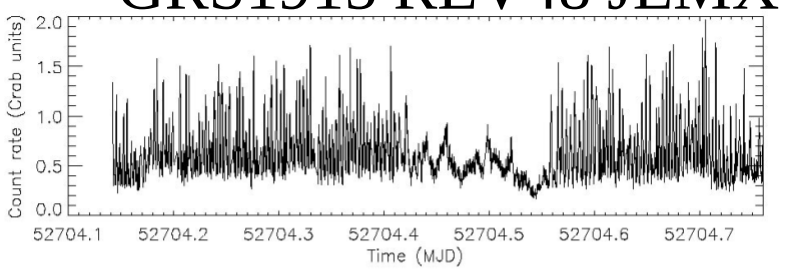


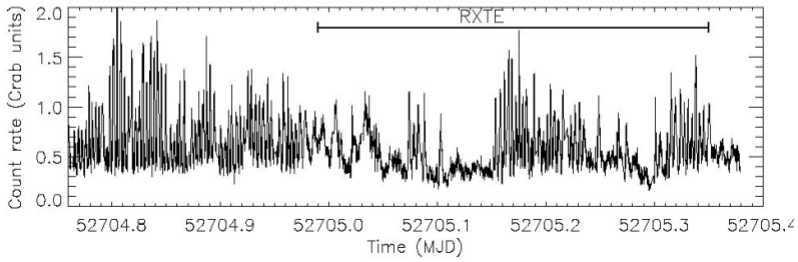
BINARY STAR GRS1915+105

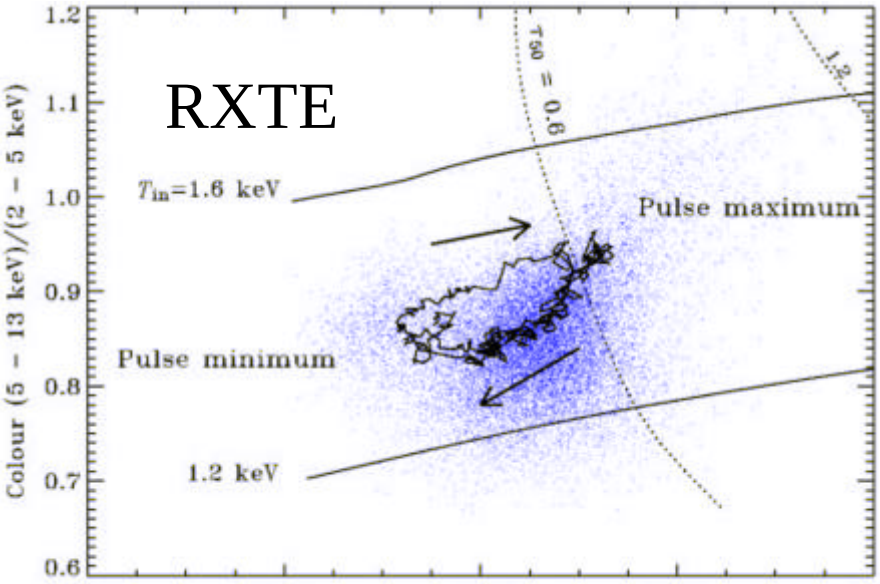


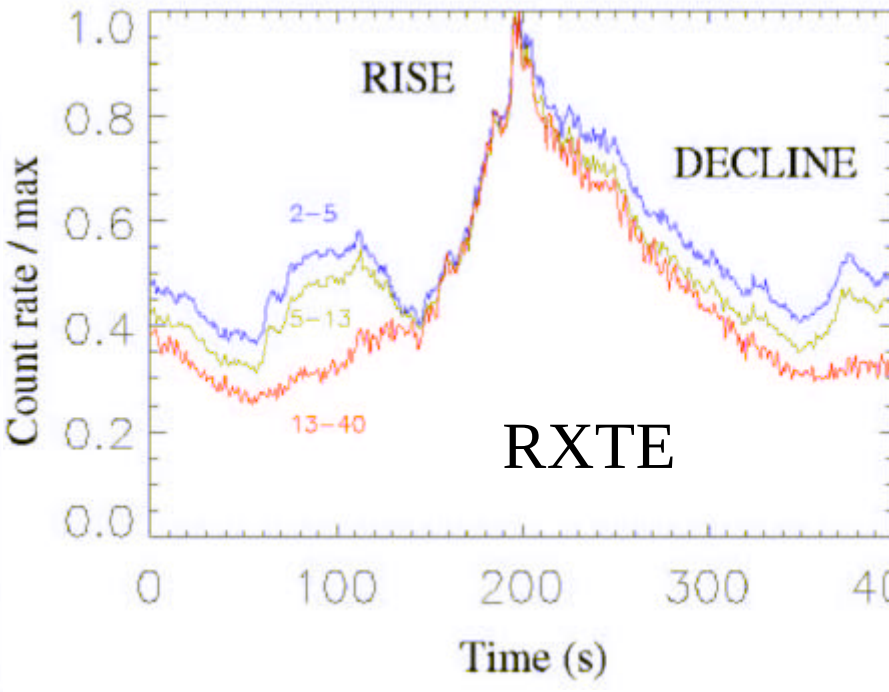
REV 48 LC


RISE
DECLINE
JEMX
Colour (10 – 35) / (3 – 10) keV
Count rate (s $^{-1}$)


GRS1915 REV 48 JEMX
Count rate (Crab units)
Time (MJD)

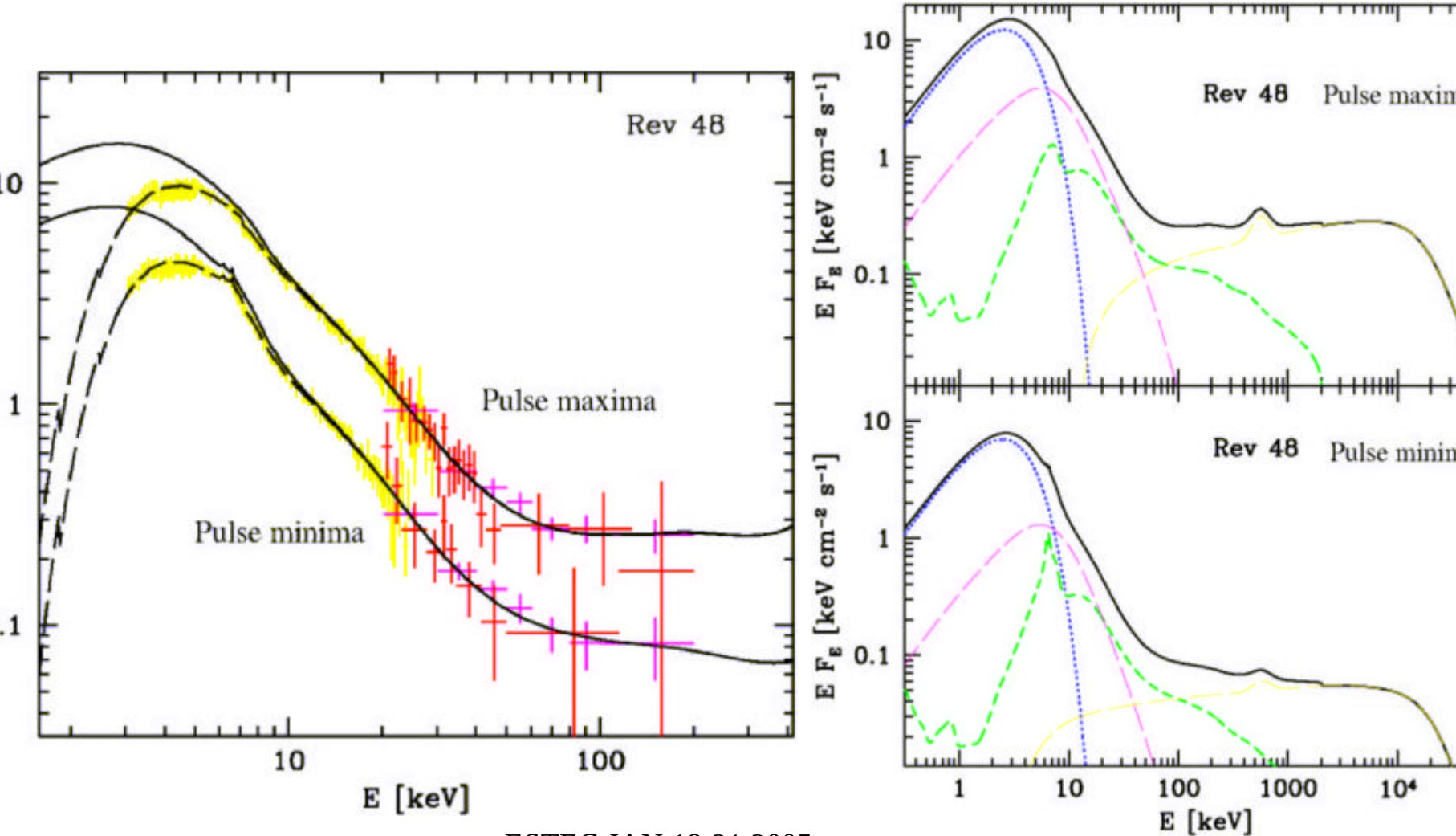

RXTE
Count rate (Crab units)
Time (MJD)


RXTE
T_{60} = 0.6
1.2
T_{in}=1.6 keV
Pulse maximum
Pulse minimum
1.2 keV
Colour (5 – 13 keV)/(2 – 5 keV)

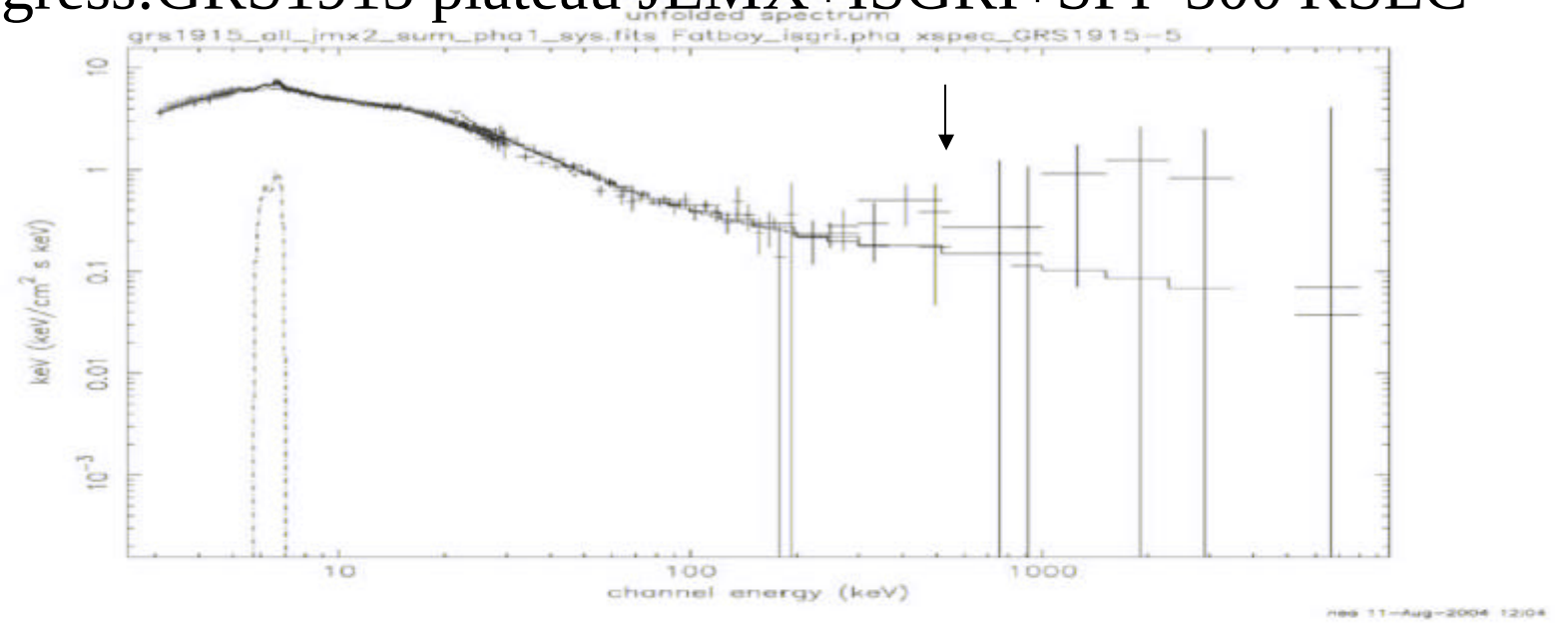

RISE
DECLINE
2–5
5–13
13–40
RXTE
Count rate / max
Time (s)

GRS 1915+105 REV 48

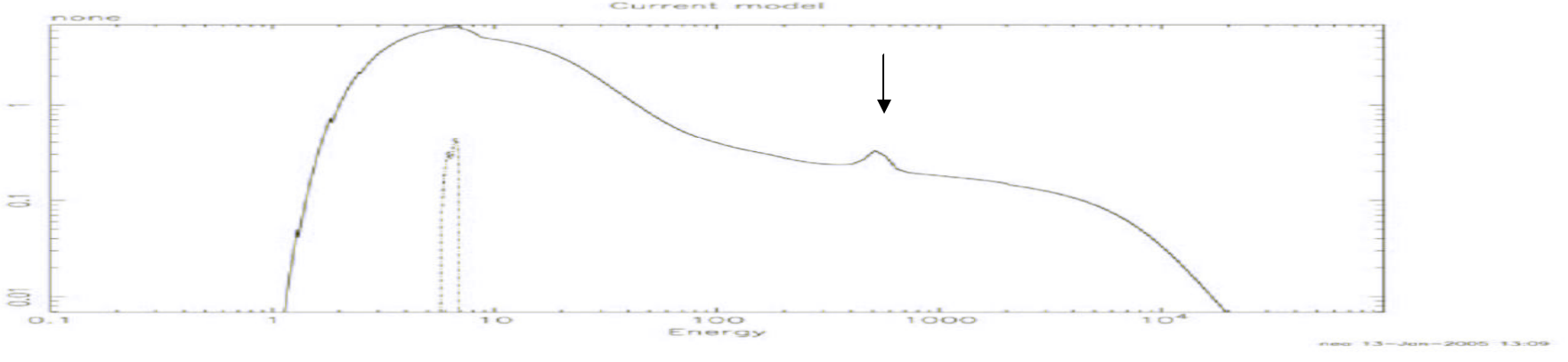
JEMX+ISGRI+SPI spectra



In progress:GRS1915 plateau JEMX+ISGRI+SPI 500 KSEC



EQPAIR MODEL . fit 3 – 300 keV . PREDICTS 511 KEV LINE.



conclusions

- Cyg X-3: was in the low-medium state during 2003-2004 GPS. ISGRI and ASM-Radio anticorrelate. Folded ISGRI light curves permit modelling of the hard X-ray absorber.

  ISWT: consider to add a soft ToO (ASM 2-10 keV 400 mCrab)

- GRS 1915+105: A new variability type discovered and characterized during rev 48. Modelling of Jem-X, ISGRI and SPI spectra below 300 keV predict non-thermal components and 511 keV line.

  All: Push the Integral sensitivity and bkg subtraction to the ultimate limit to detect 511 keV.