

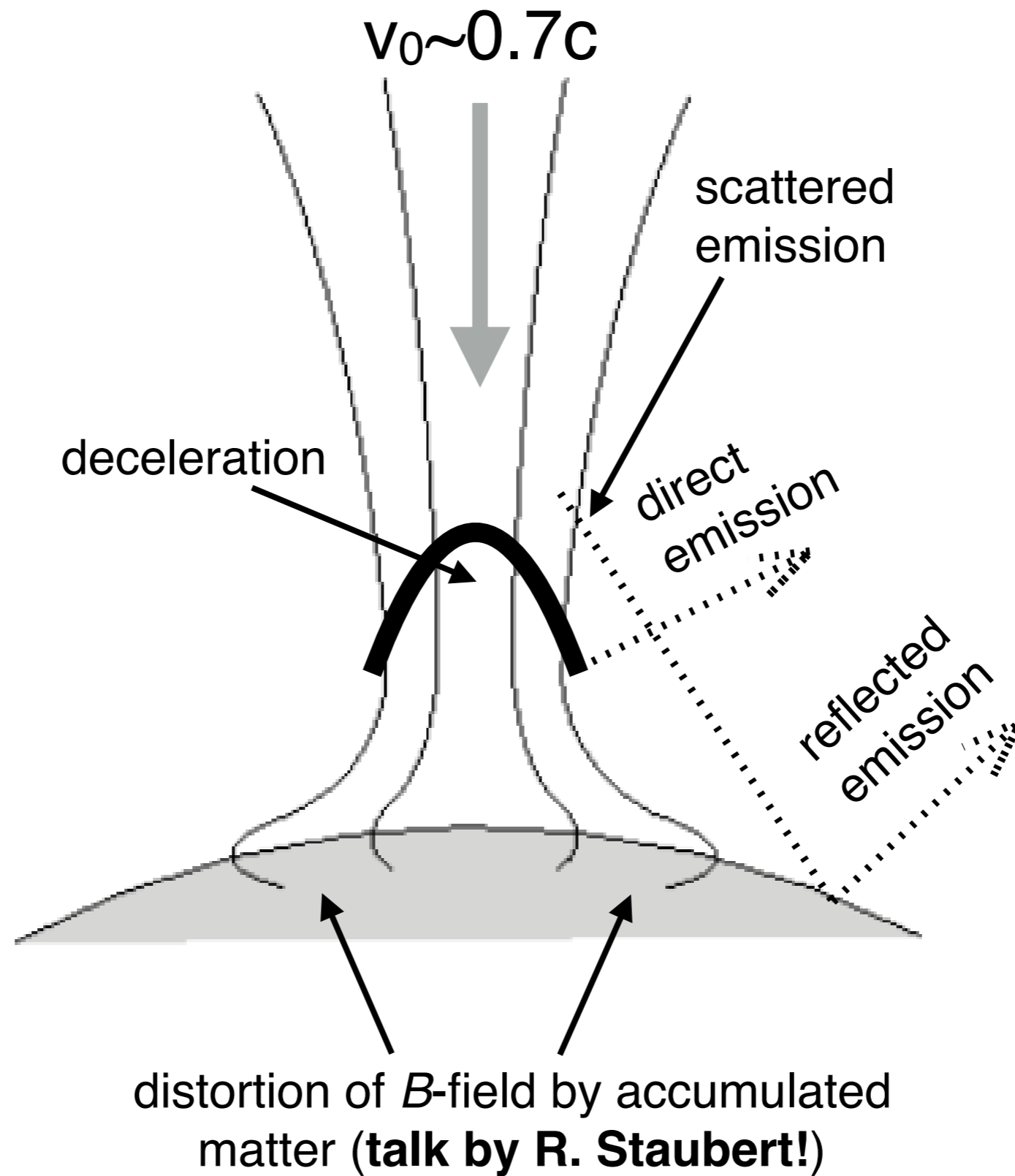


Spectrum-luminosity dependence of radiation from the polar emitting regions in accreting magnetized neutron stars

Dmitry Klochkov

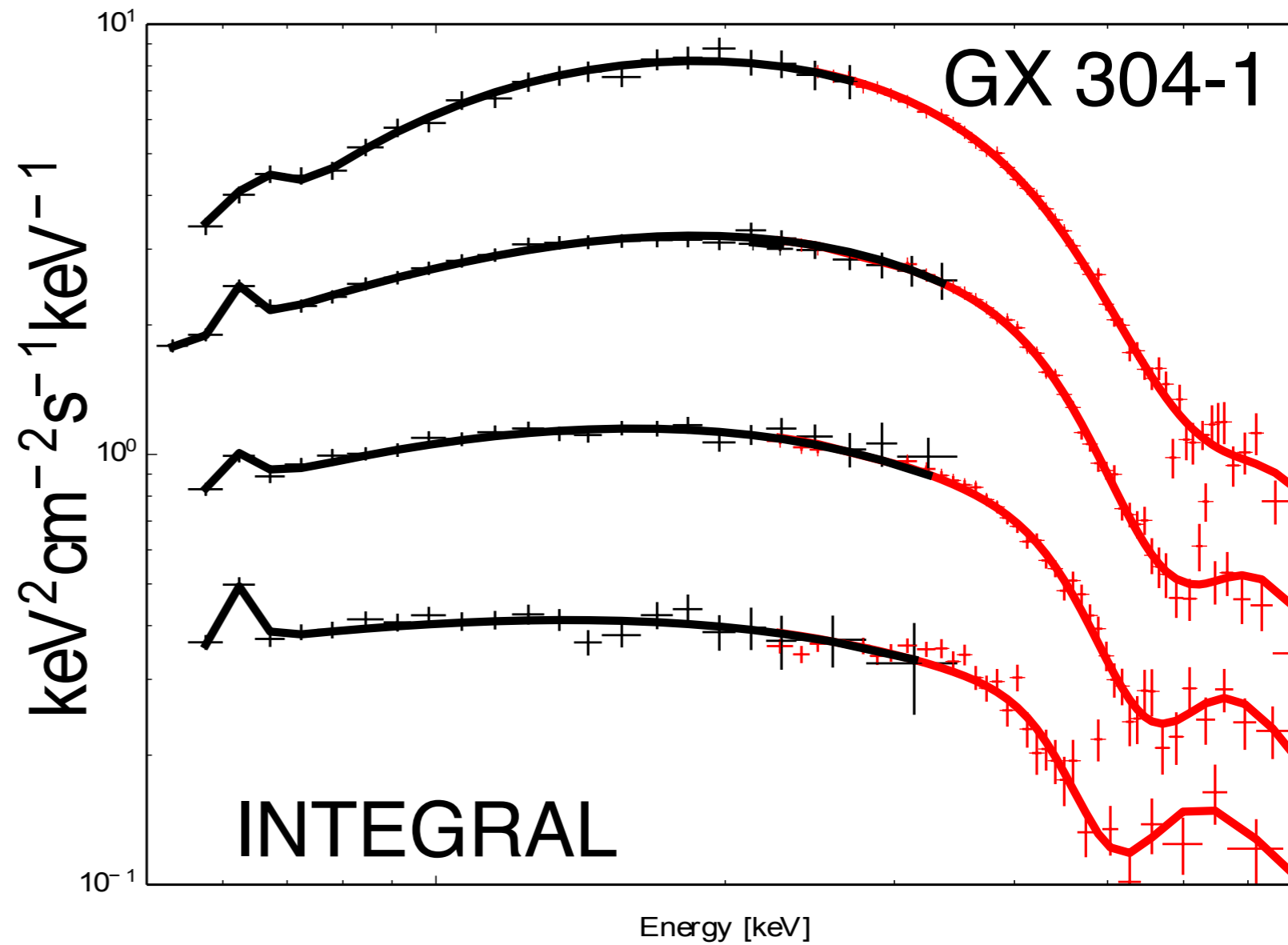
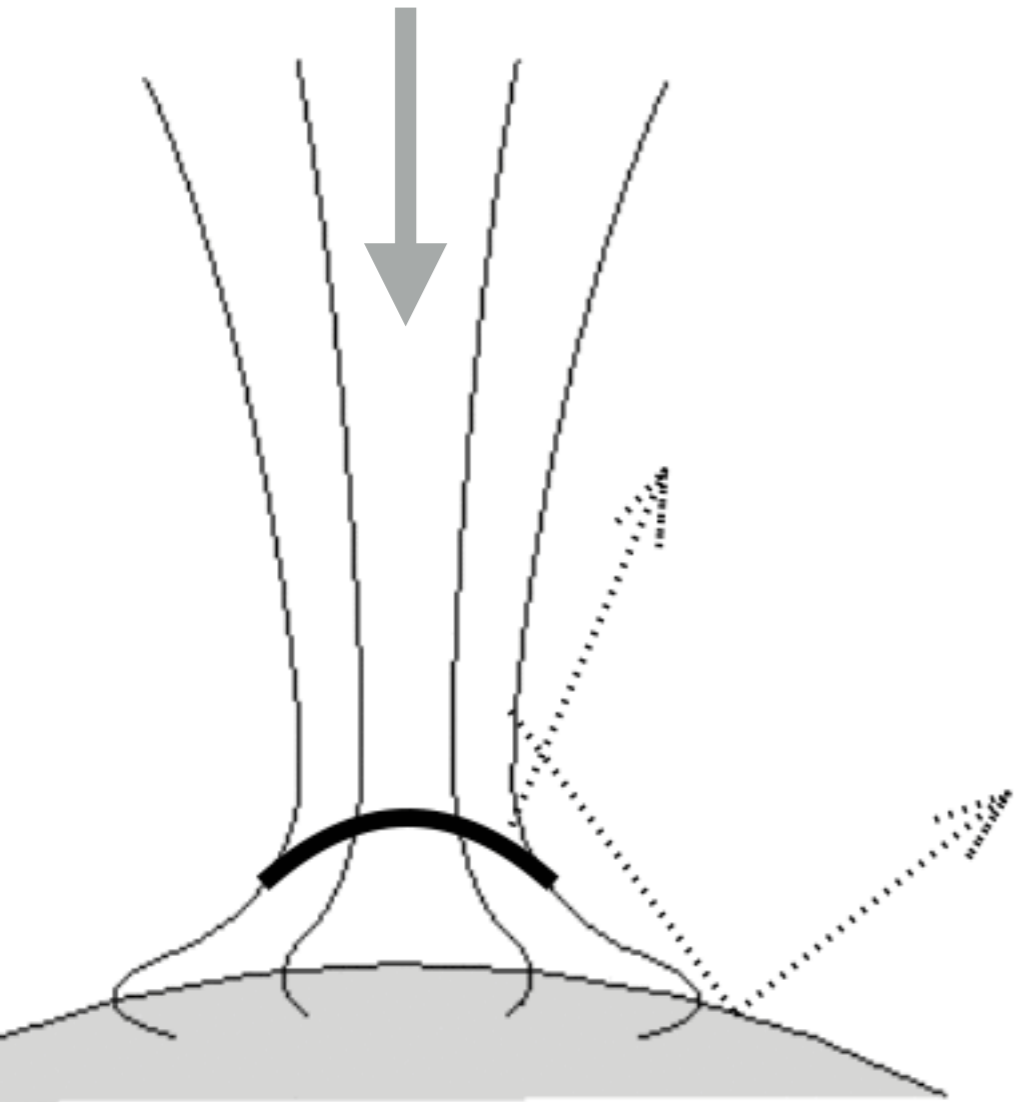
P.A. Becker, C. Ferrigno,
P. Hemphill, P. Kretschmar,
E. Laplace, C. Malacaria,
K. Postnov, K. Pottschmidt,
R.E. Rothschild, A. Santangelo,
G. Schönherr, N. Shakura,
R. Staubert, V. Vybornov,
J. Wilms,

Polar emitting region



Reaction on changes in mass accretion rate

$$v_0 \sim 0.7c$$

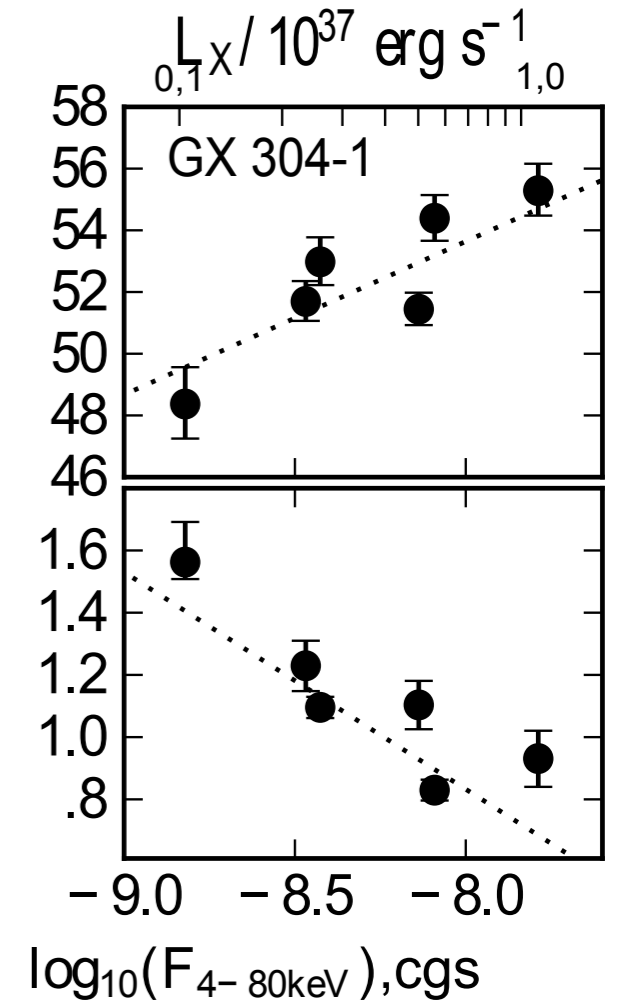
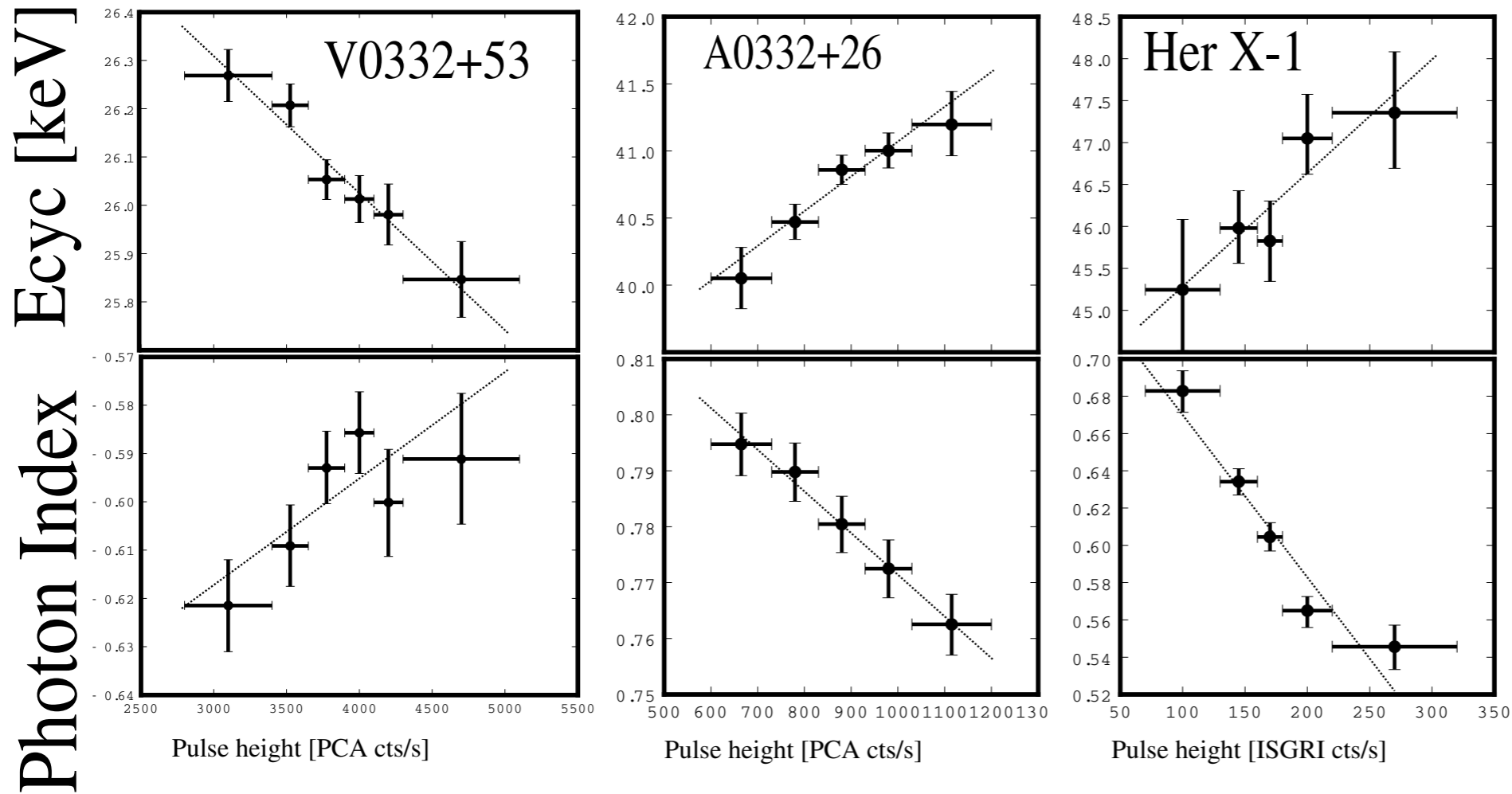


Malacaria, Klochkov et al. 2015

Spectrum-luminosity dependence

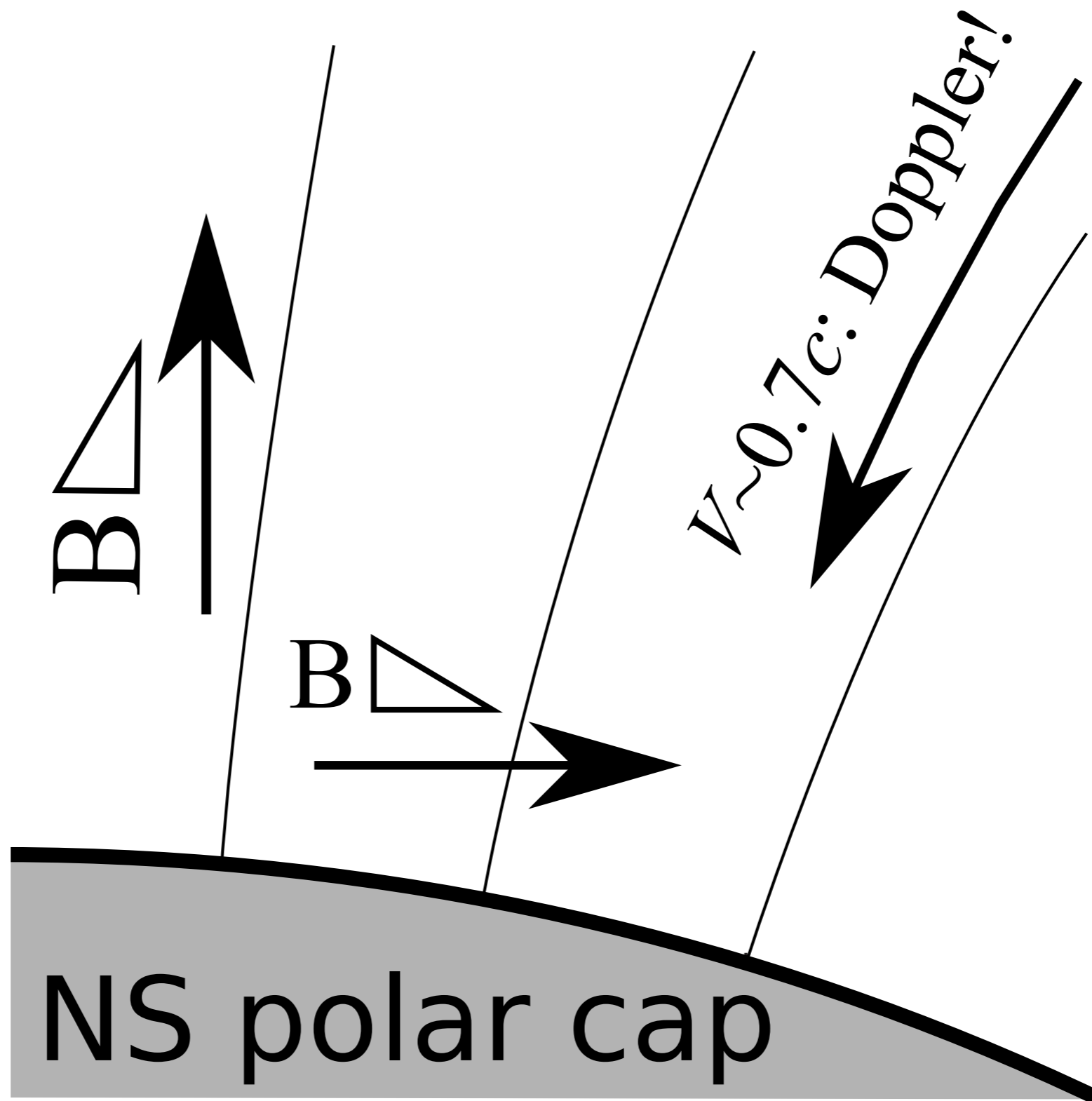
"Pulse-to-pulse" analysis by Klochkov et al. (2011)

Long-term analysis by Klochkov et al. (2012)



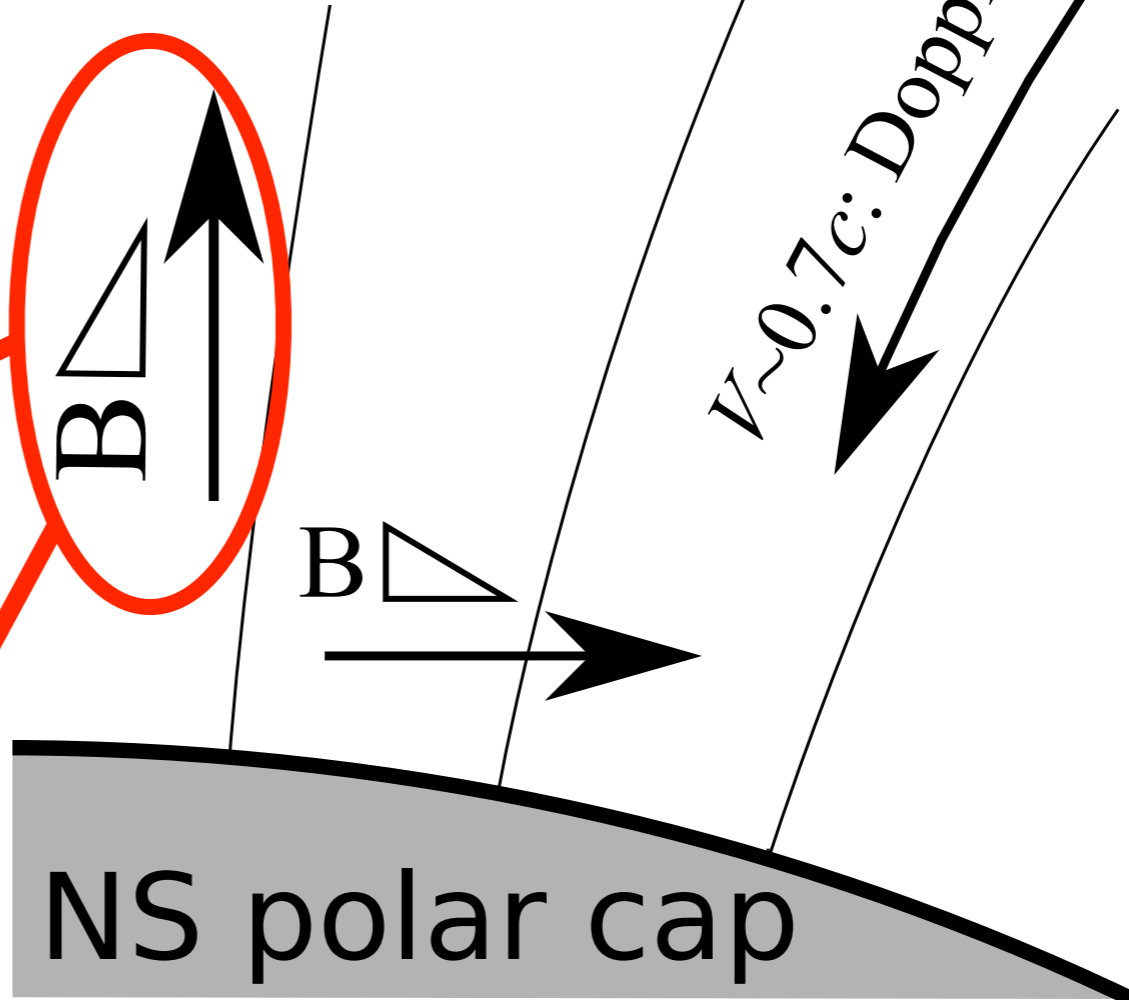
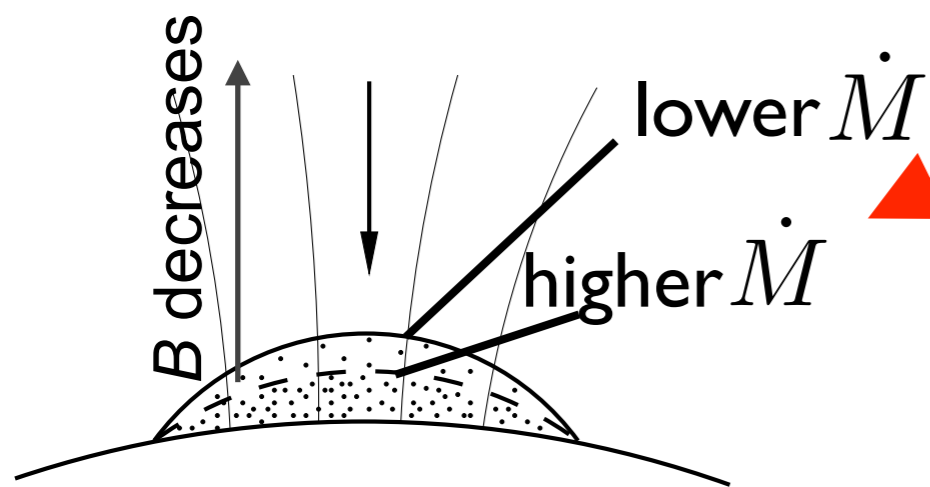
Flux

CRSF-luminosity dependence

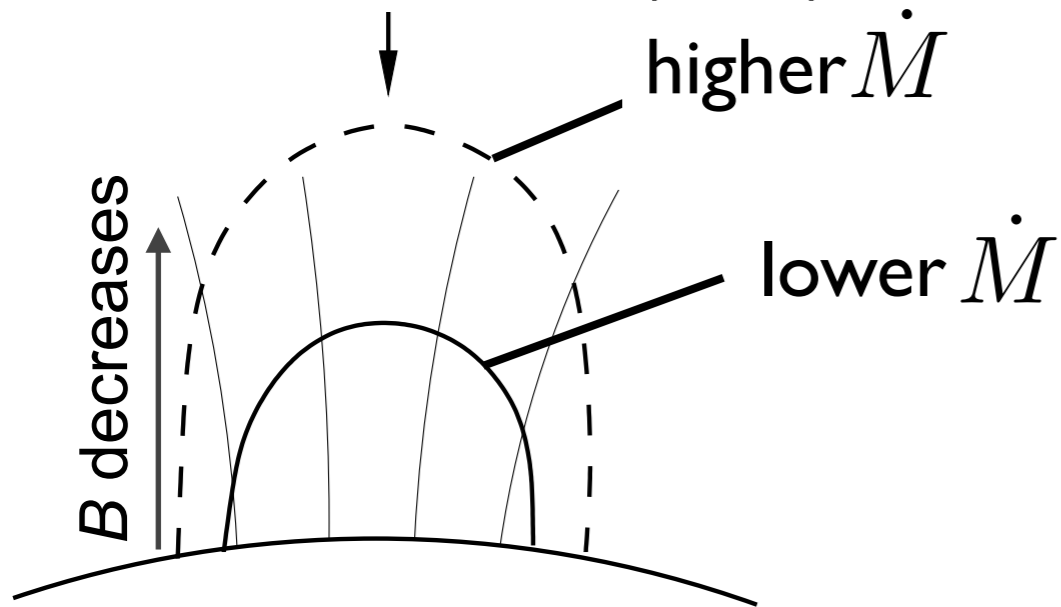


CRSF-luminosity dependence

*Staubert et al. (2007),
Klochkov et al. (2011)*

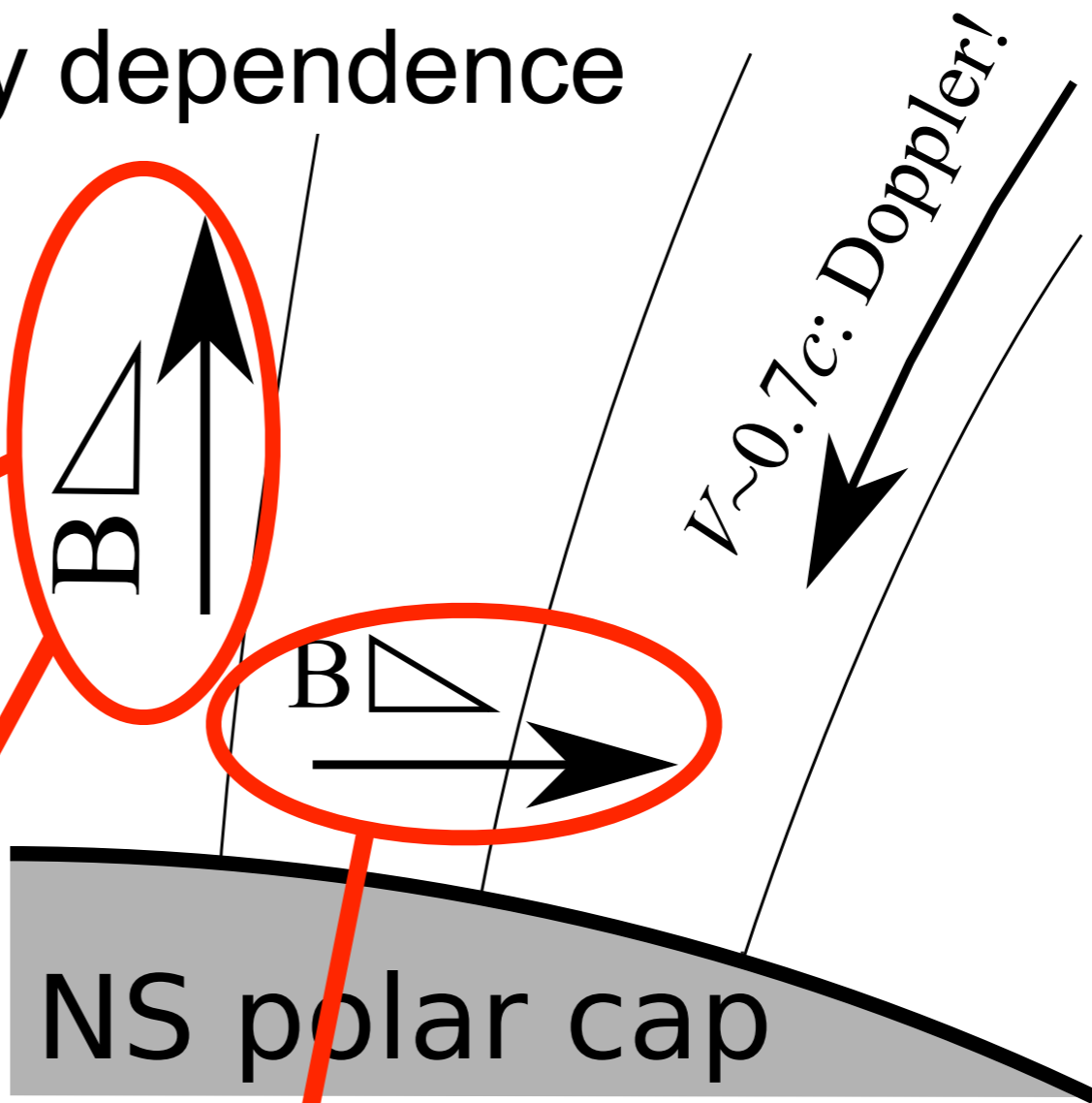
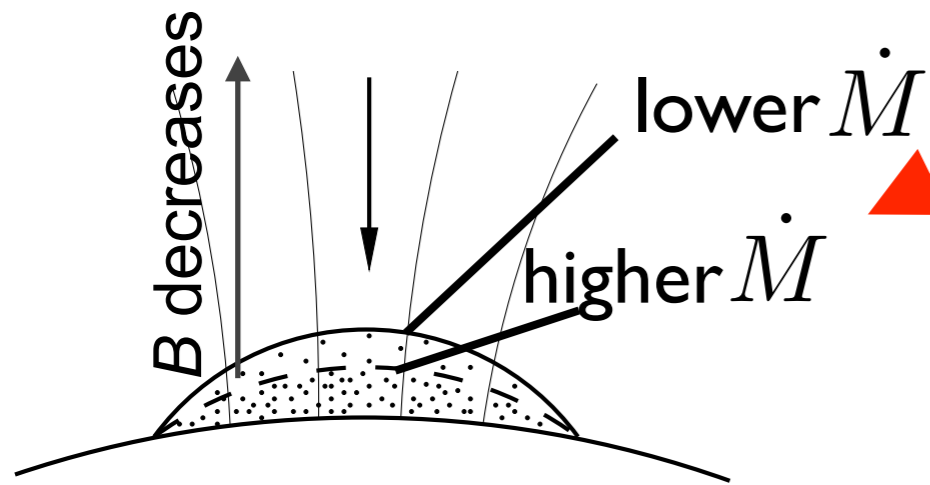


Becker, Klochkov et al. (2012)

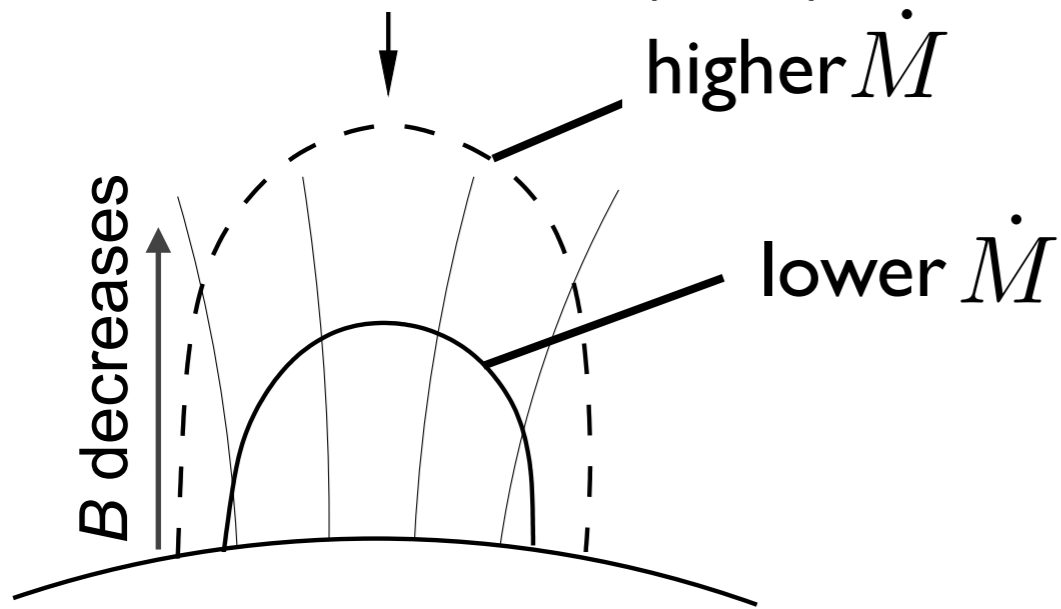


CRSF-luminosity dependence

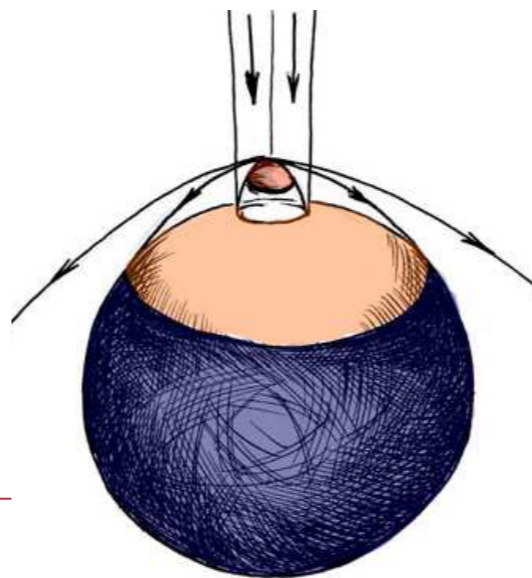
*Staubert et al. (2007),
Klochkov et al. (2011)*



Becker, Klochkov et al. (2012)

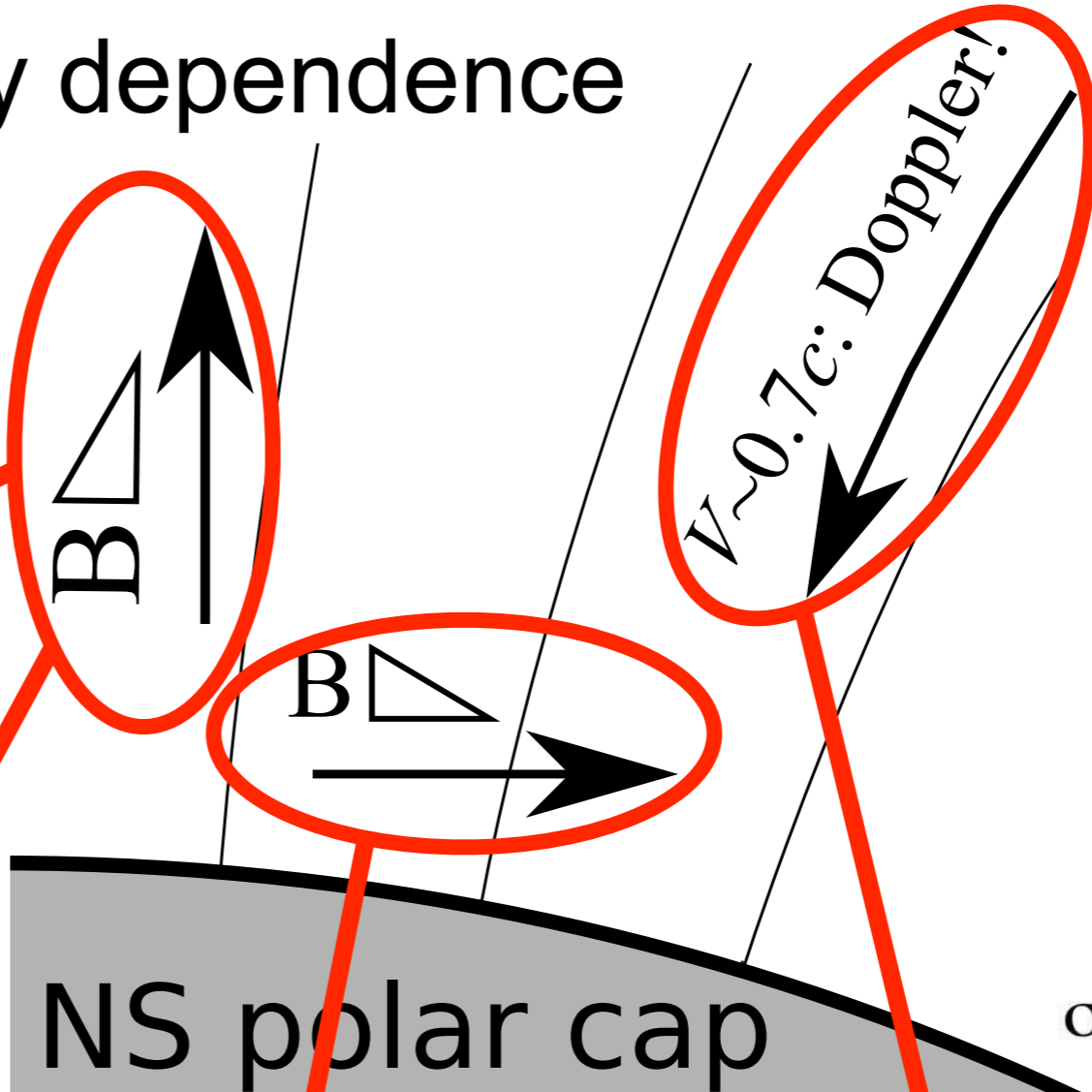
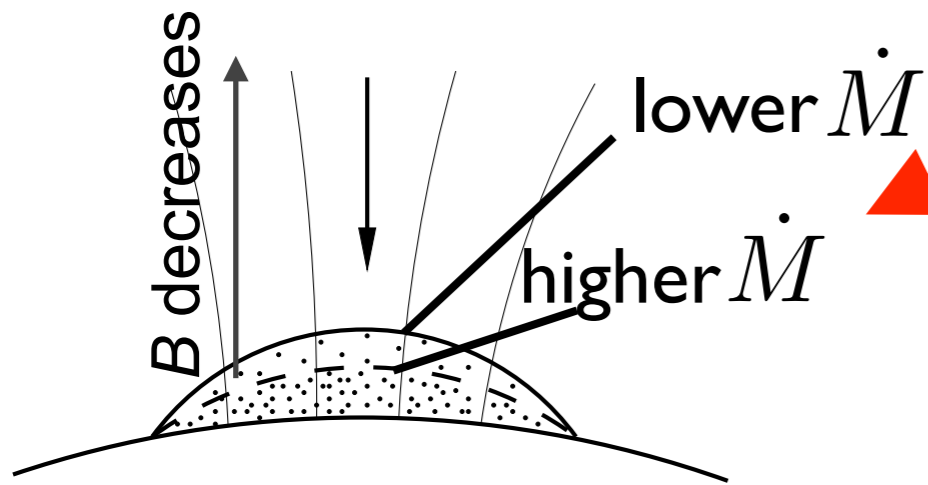


Poutanen et al. (2013)

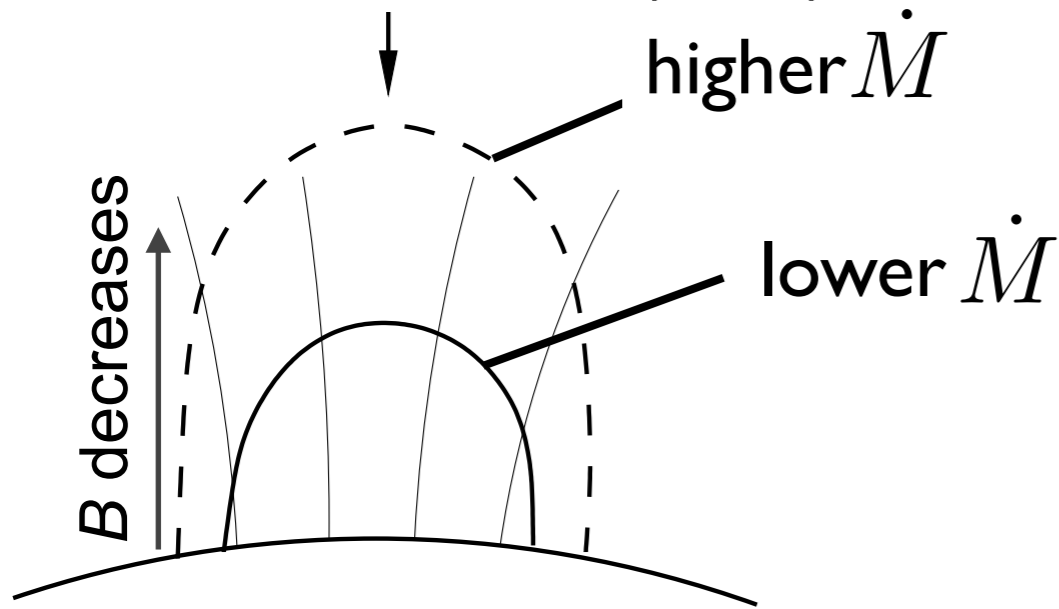


CRSF-luminosity dependence

*Staubert et al. (2007),
Klochkov et al. (2011)*



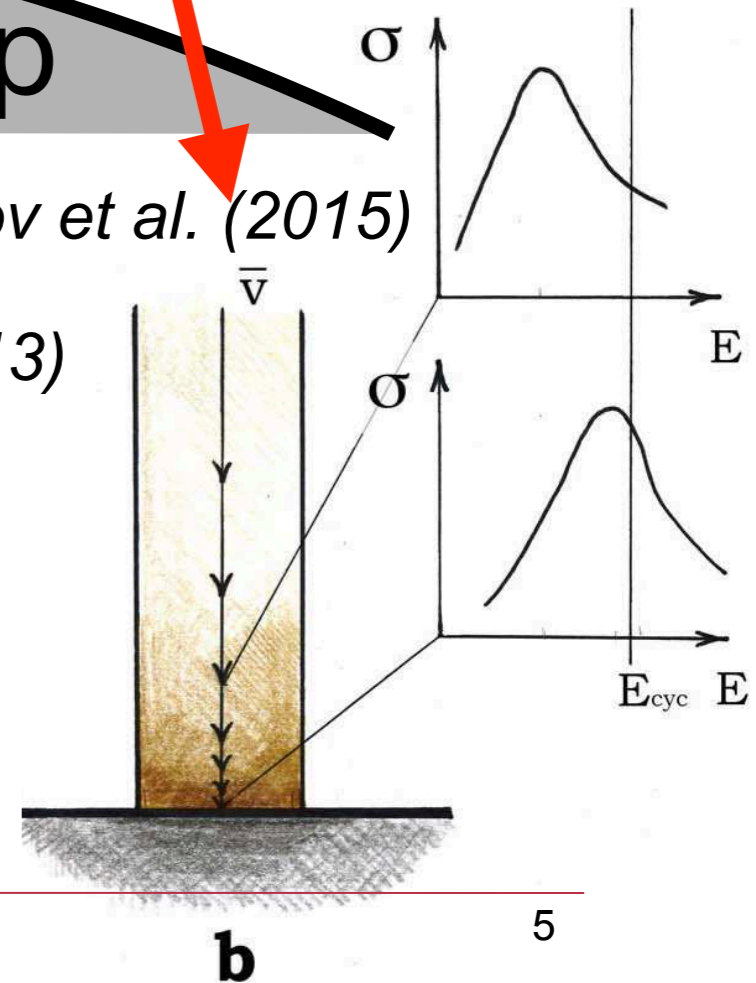
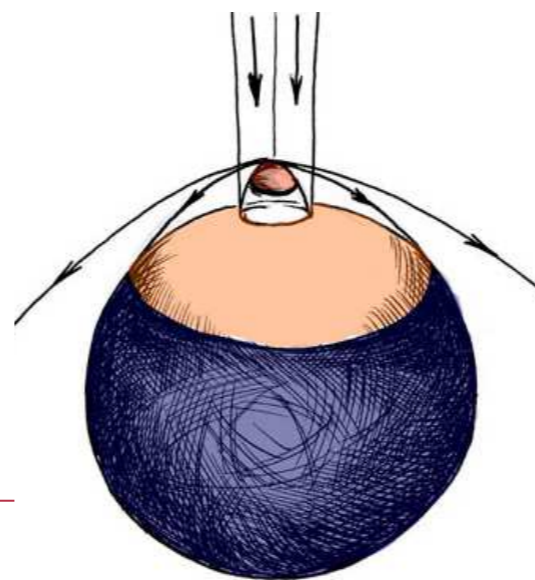
Becker, Klochkov et al. (2012)



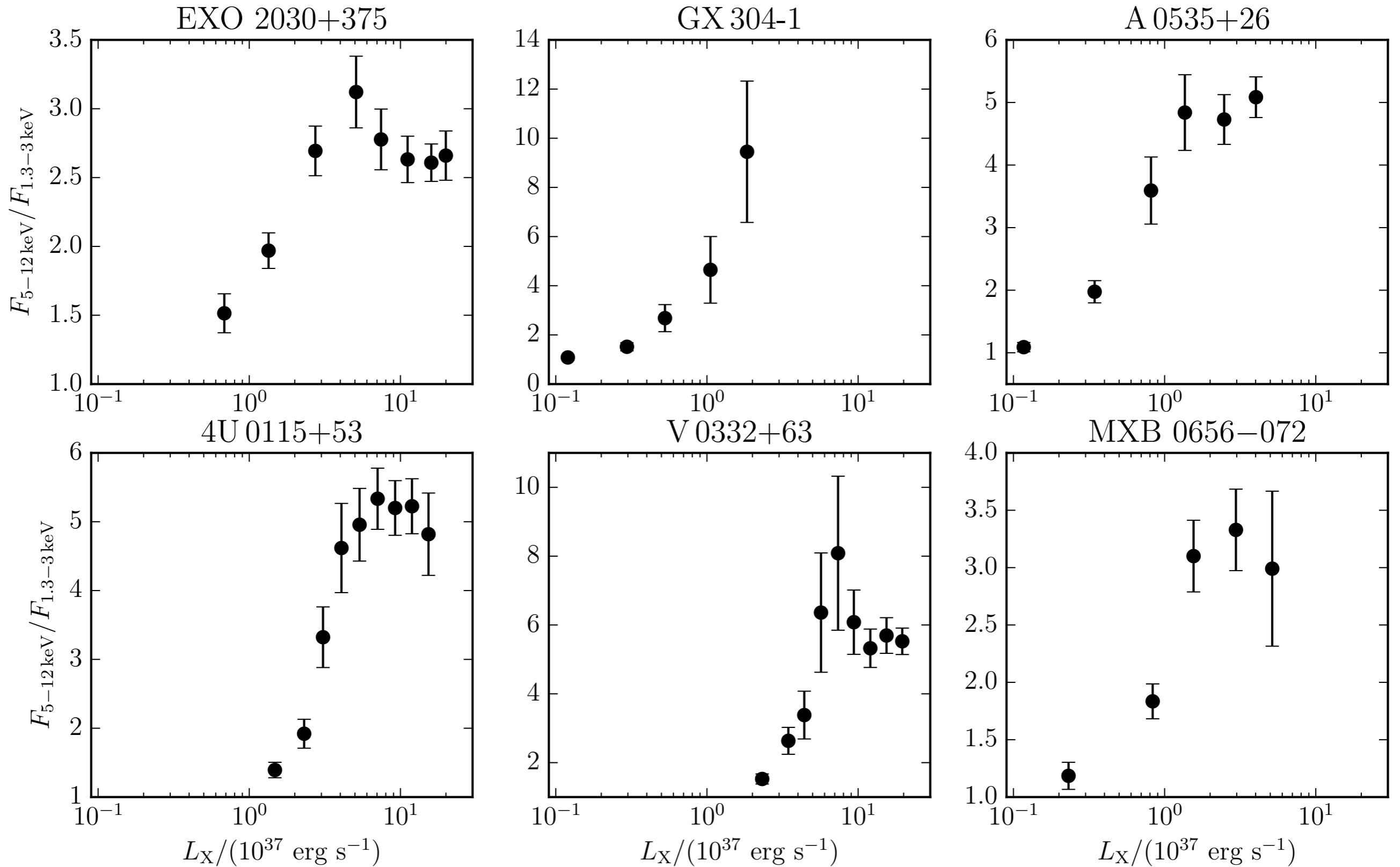
NS polar cap

Mushtukov et al. (2015)

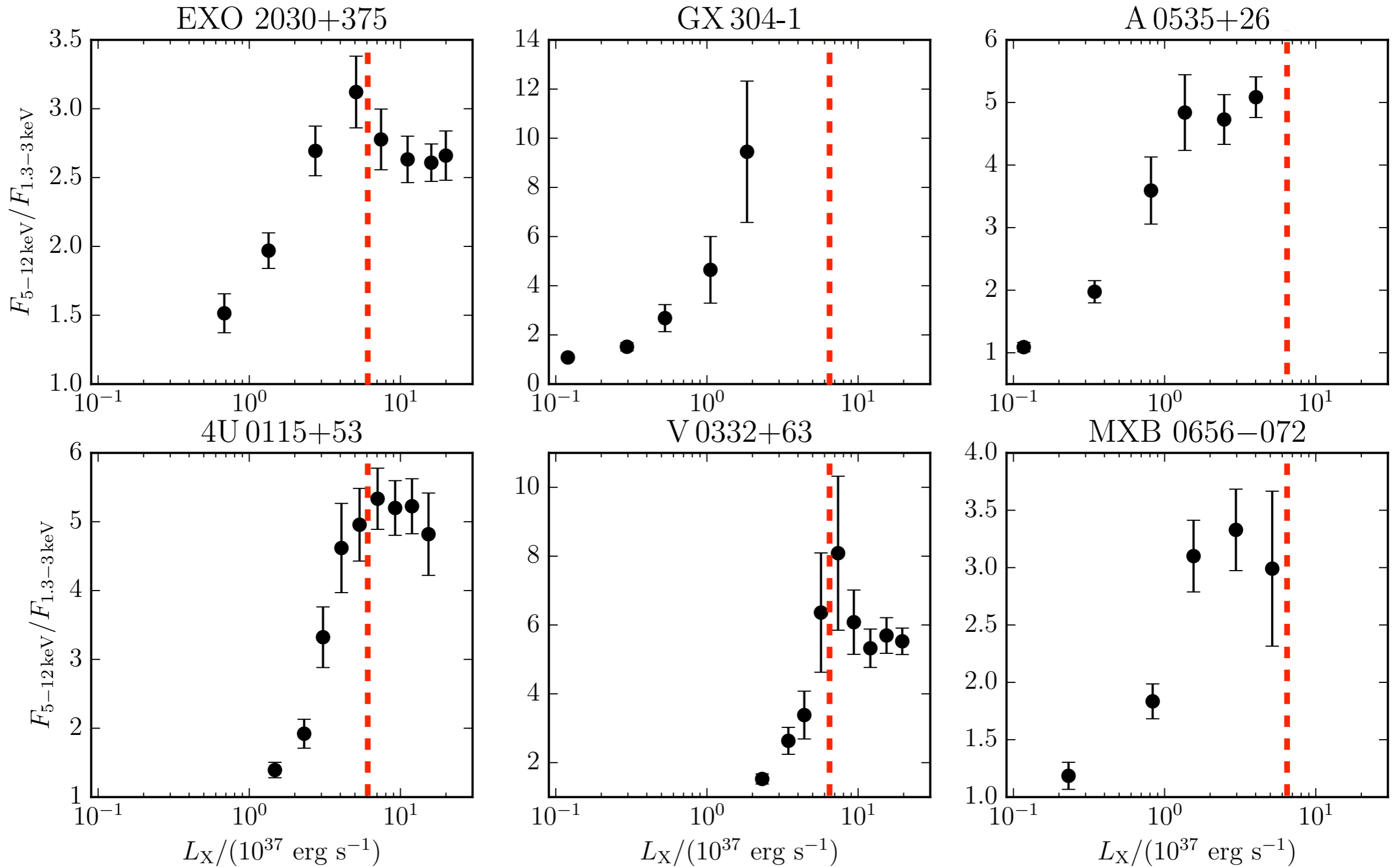
Poutanen et al. (2013)



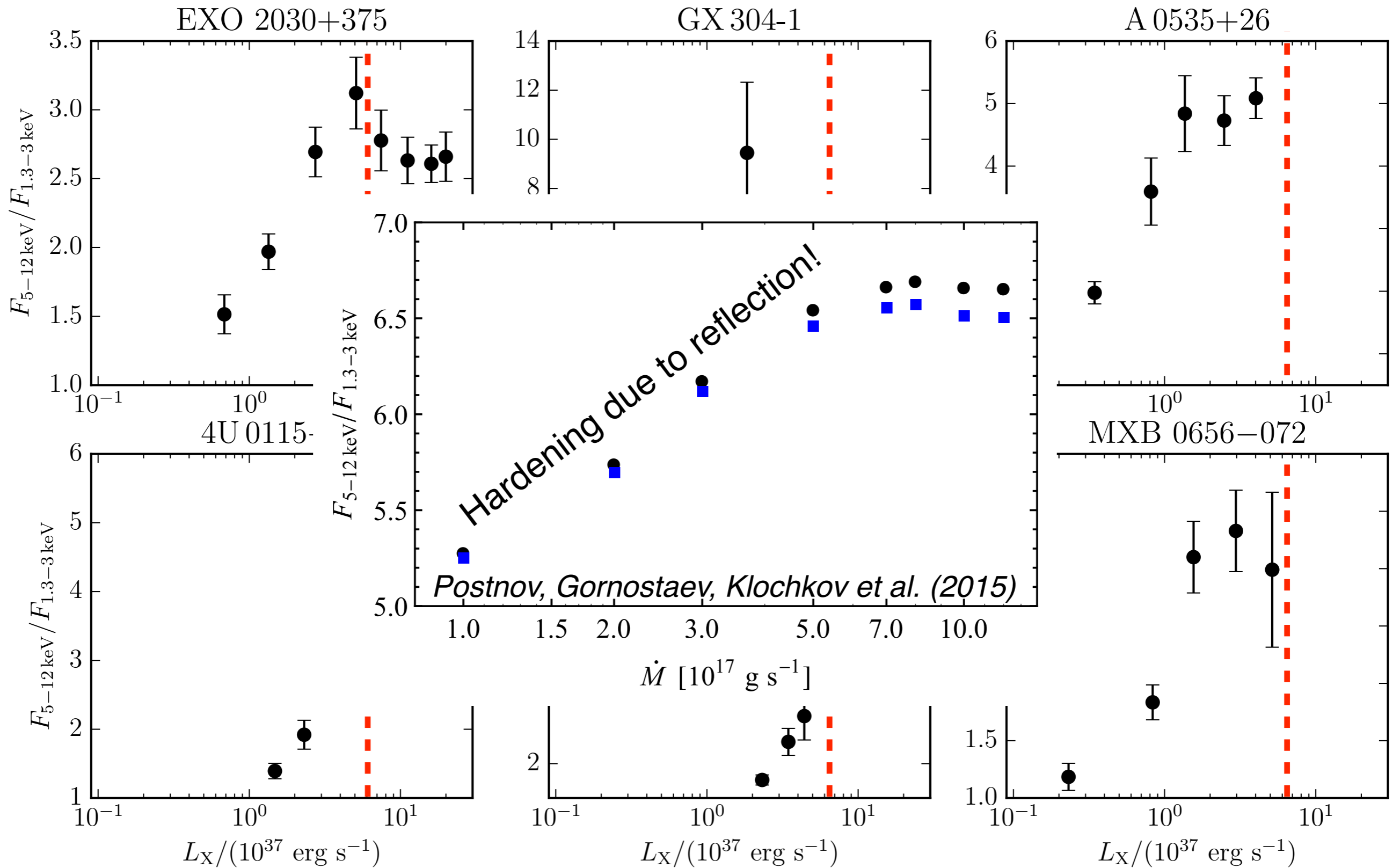
Continuum hardness as a function of luminosity



Continuum hardness as a function of luminosity



Continuum hardness as a function of luminosity



$E_{\text{cyc}}-L_X$ dependence in GX 304-1
(poster by *R. Rothschild!!*)

