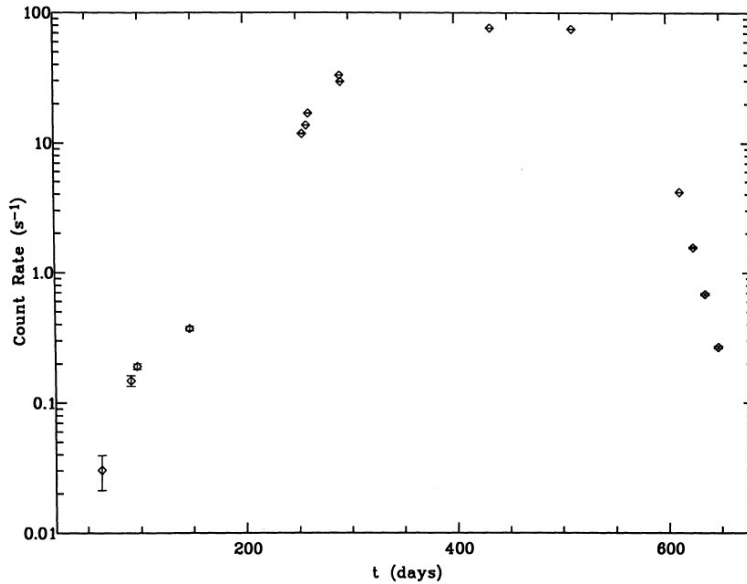


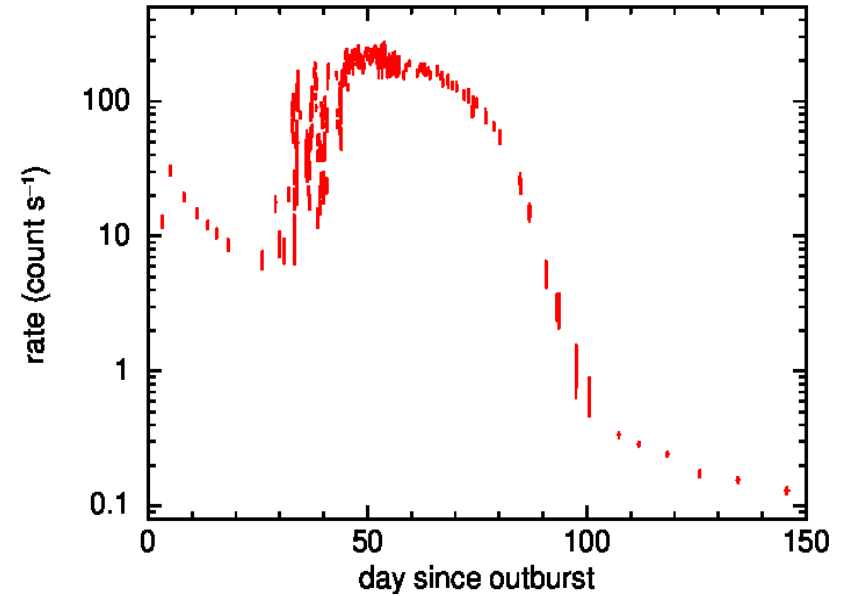
Neil Gehrels Swift Observatory Studies of the Super-Soft Source

Kim Page
University of Leicester

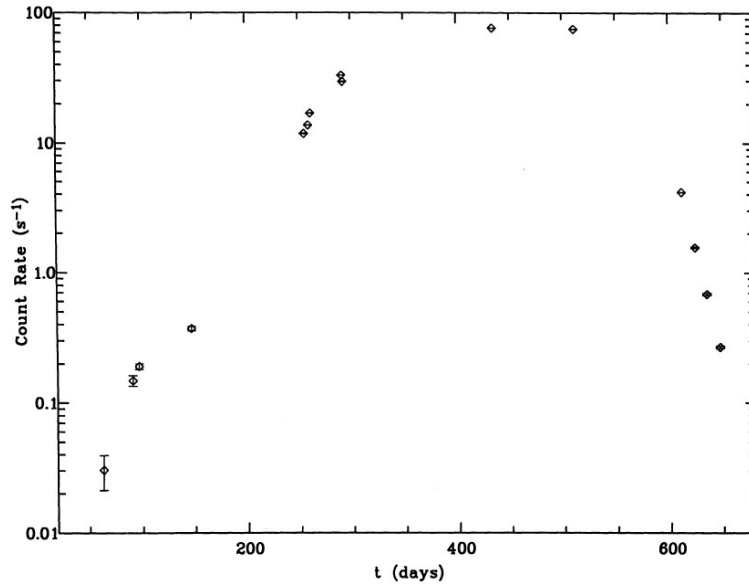
HARDY



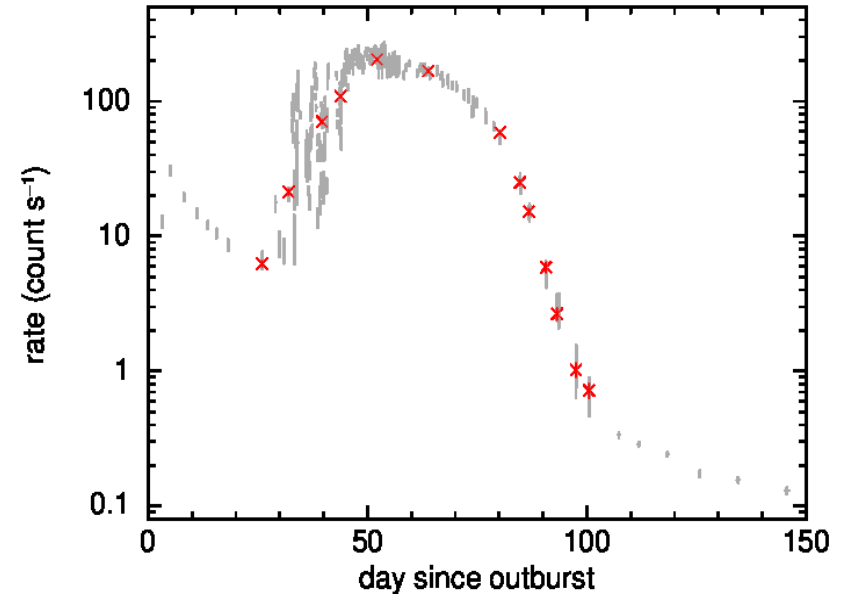
V1974 Cyg (Nova Cyg 1992)
Krautter et al. (1996)



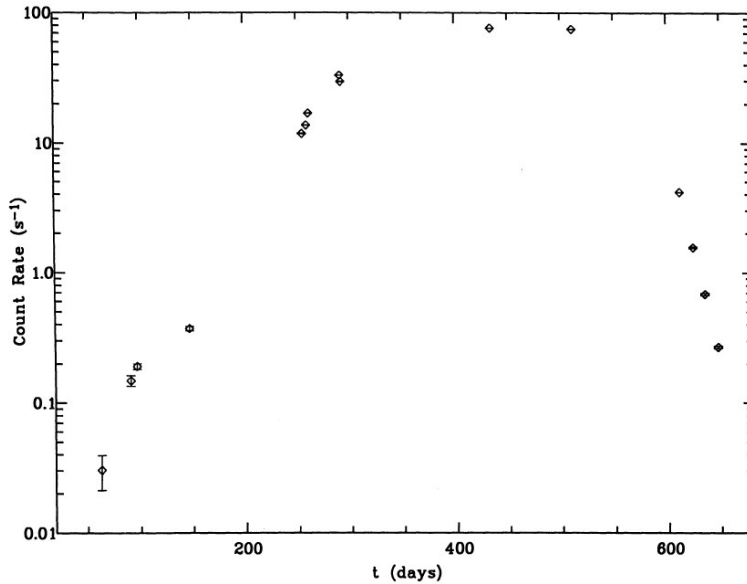
RS Oph (2006)
Osborne et al. (2011)



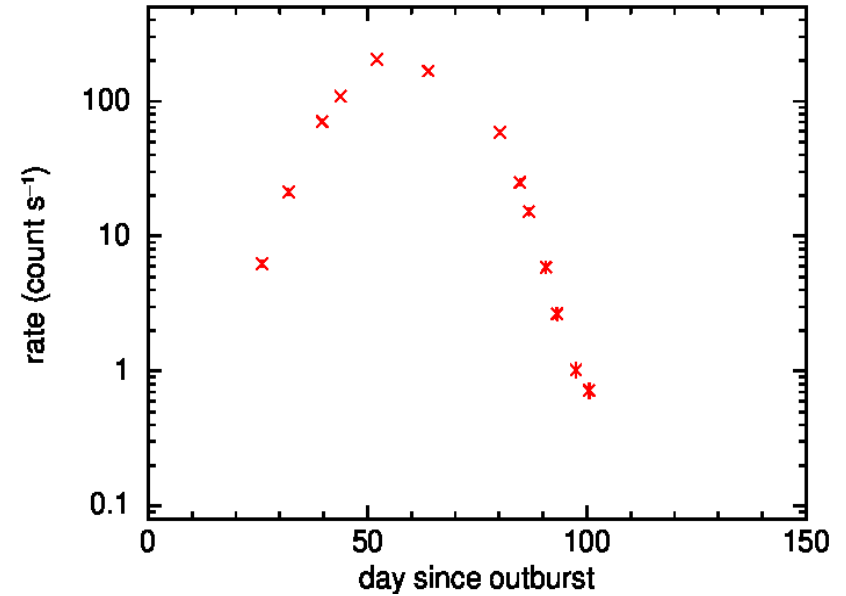
V1974 Cyg (Nova Cyg 1992)
Krautter et al. (1996)



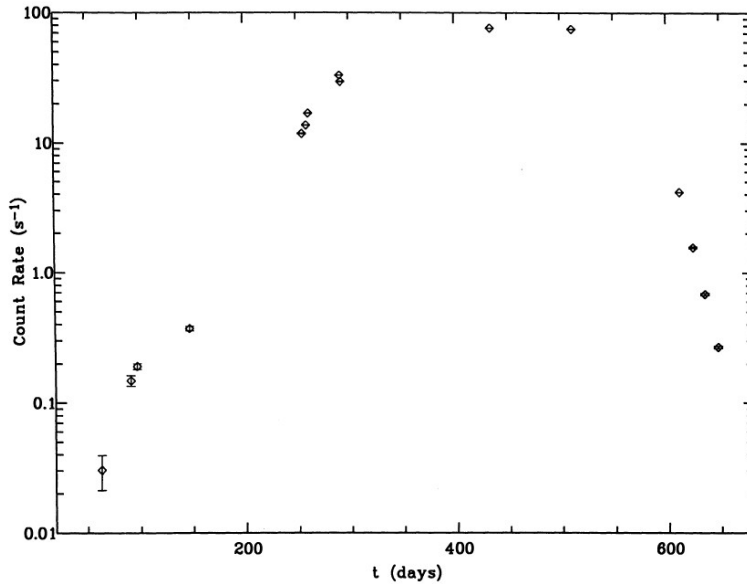
RS Oph (2006)



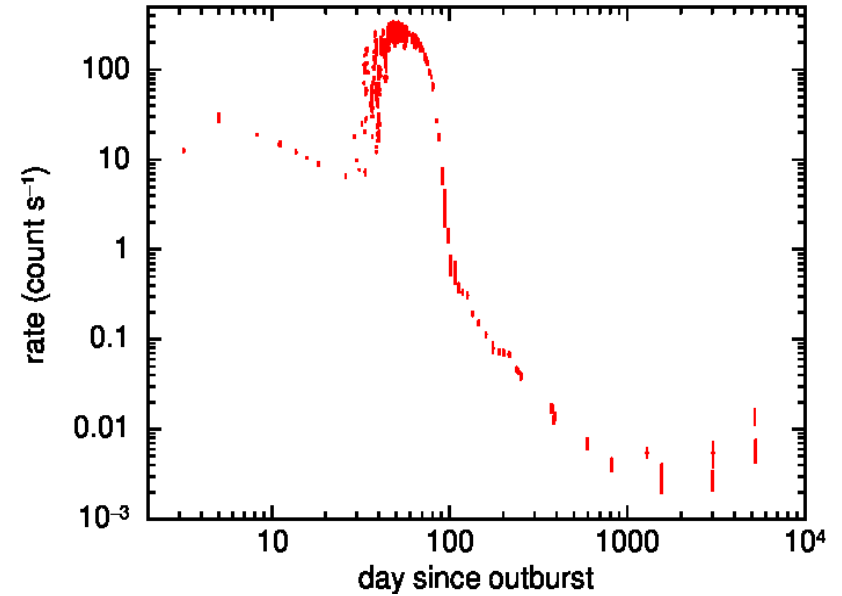
V1974 Cyg (Nova Cyg 1992)
Krautter et al. (1996)



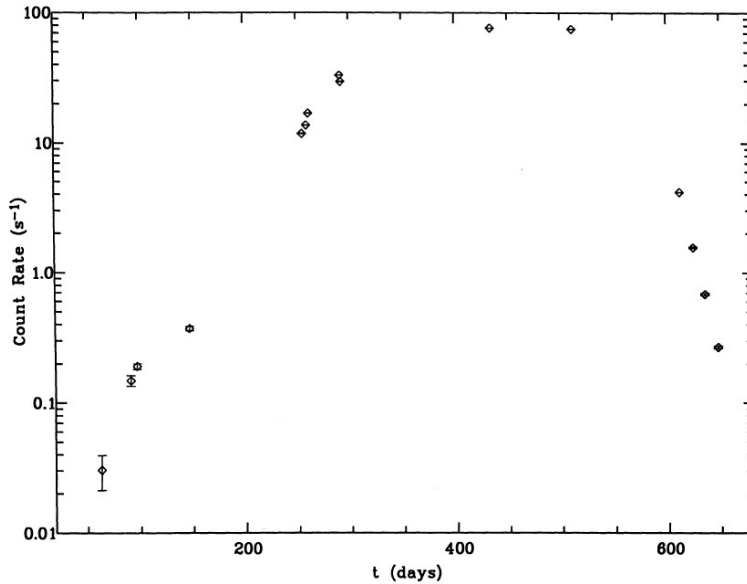
RS Oph (2006)



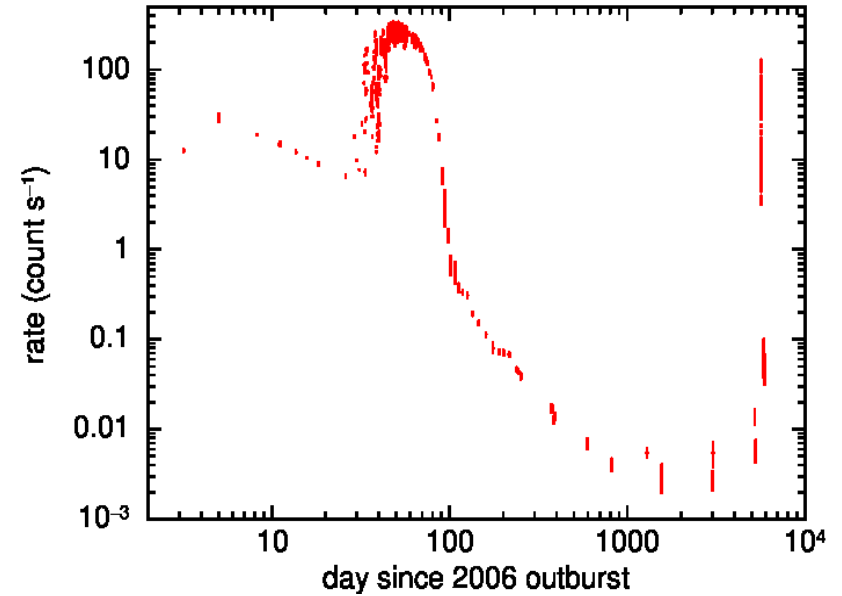
V1974 Cyg (Nova Cyg 1992)
Krautter et al. (1996)



RS Oph (2006)

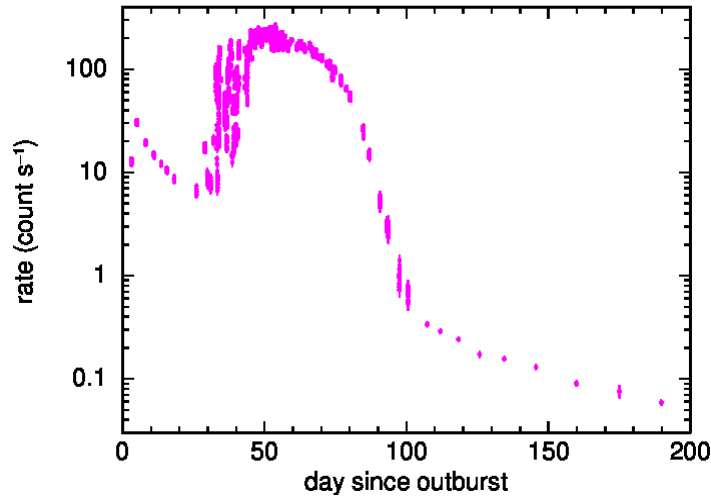


V1974 Cyg (Nova Cyg 1992)
Krautter et al. (1996)

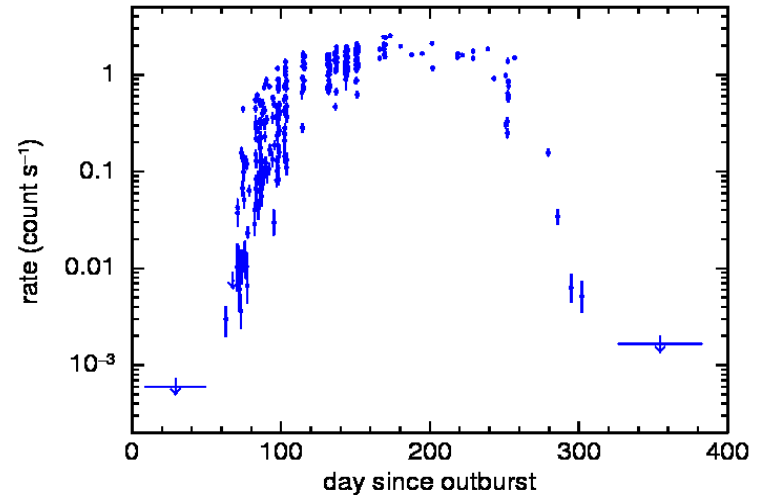


RS Oph (2006+2021)

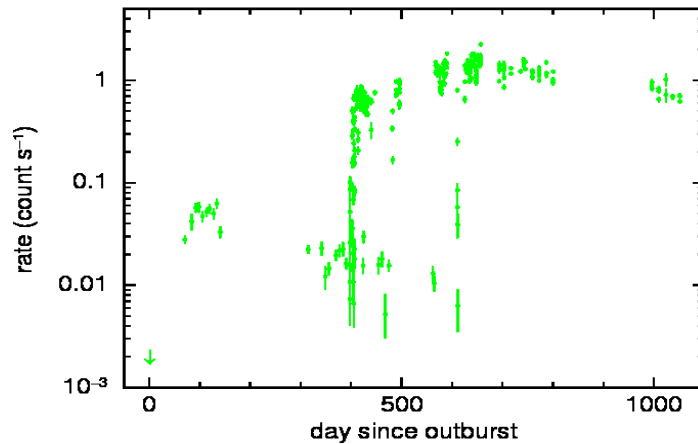
RS Oph



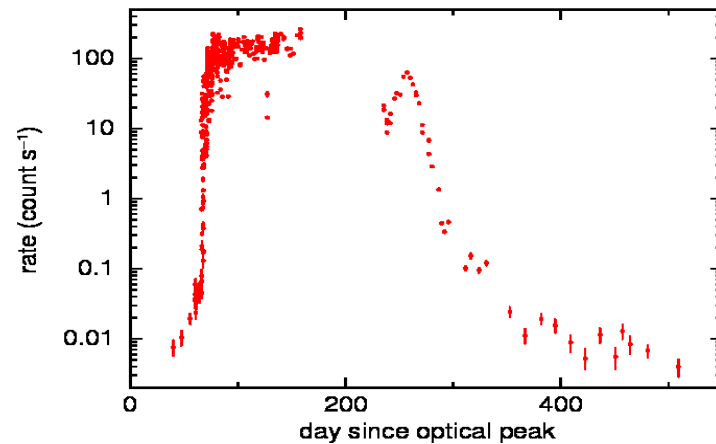
Nova LMC 2009a



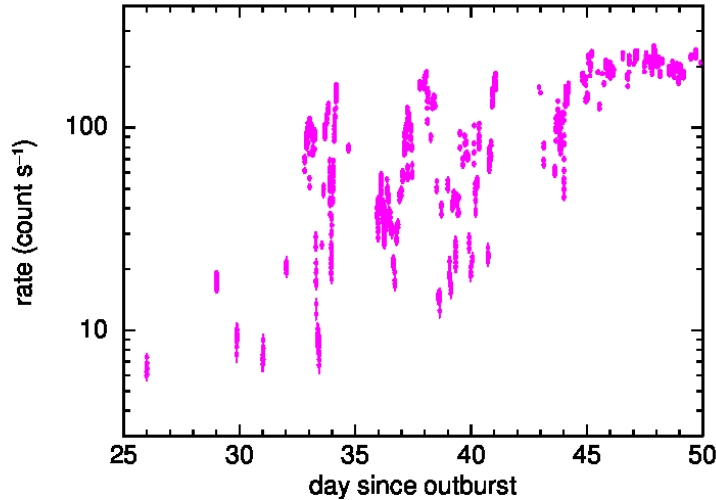
V458 Vul



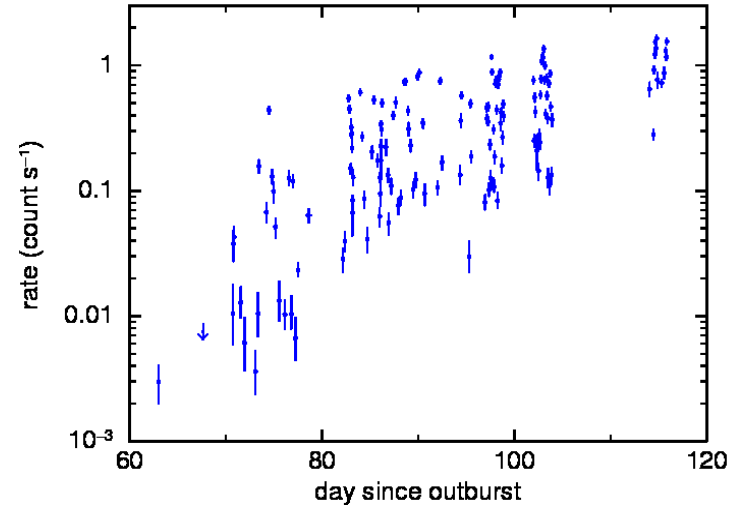
KT Eri



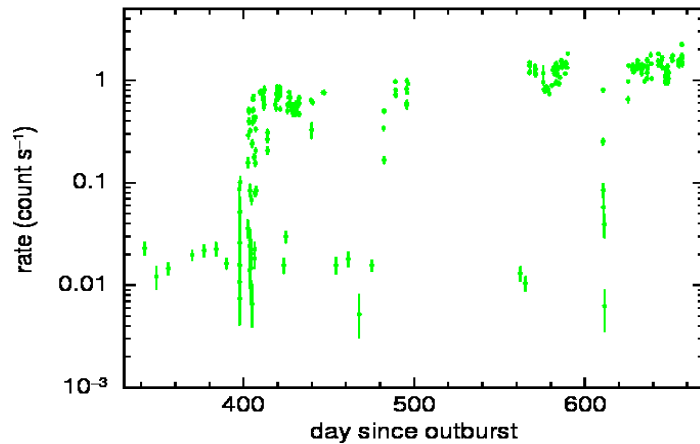
RS Oph



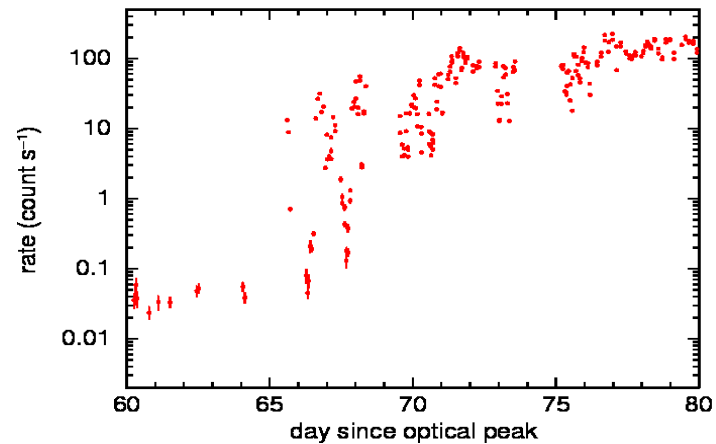
Nova LMC 2009a



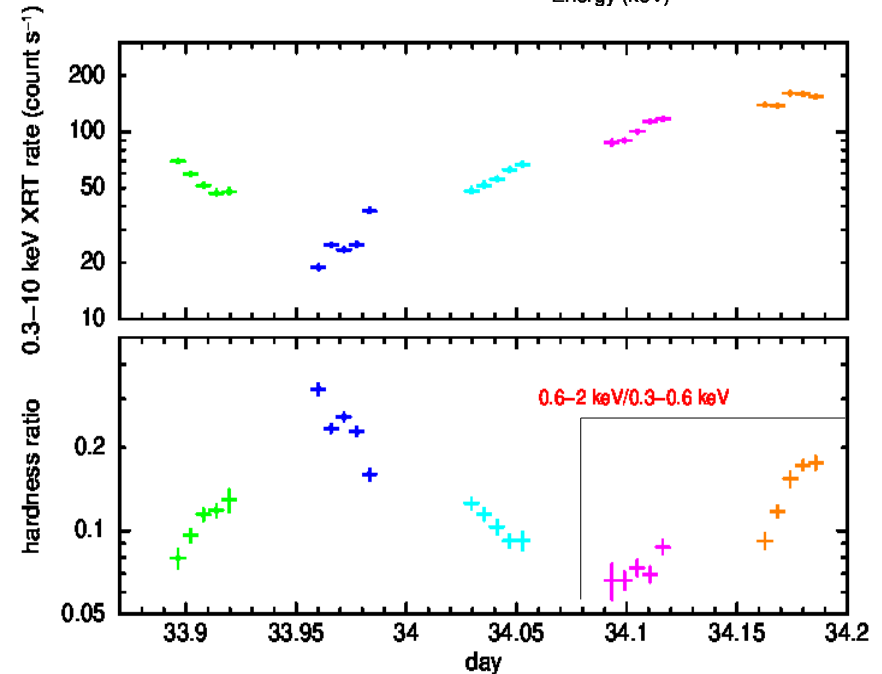
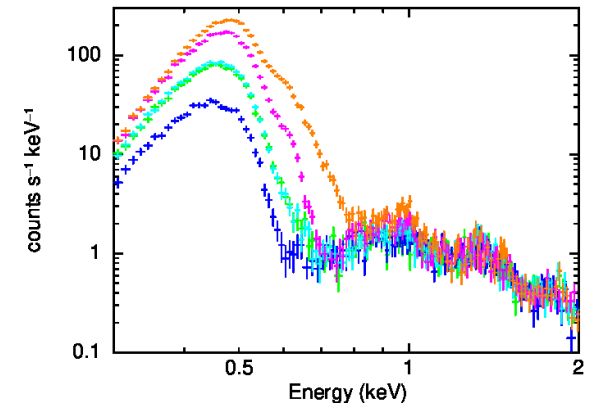
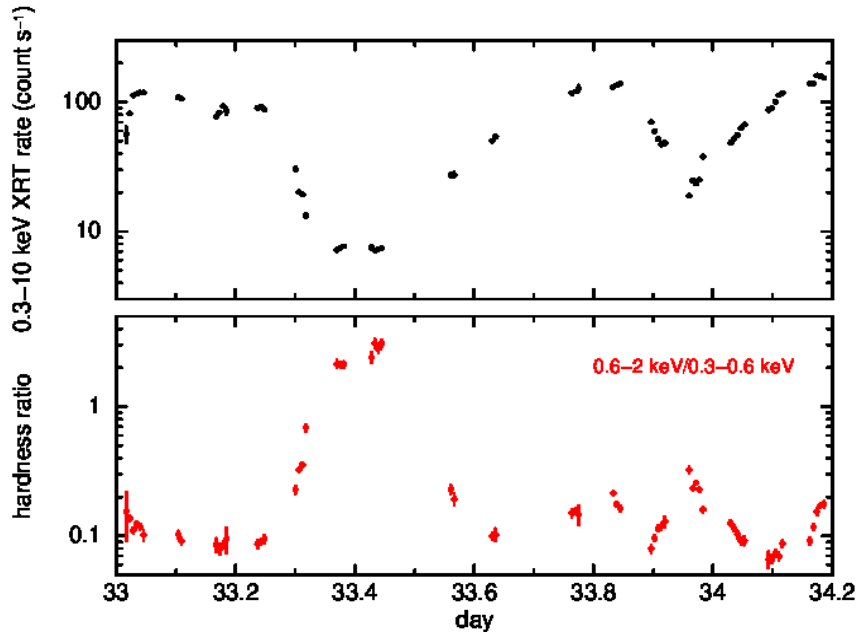
V458 Vul

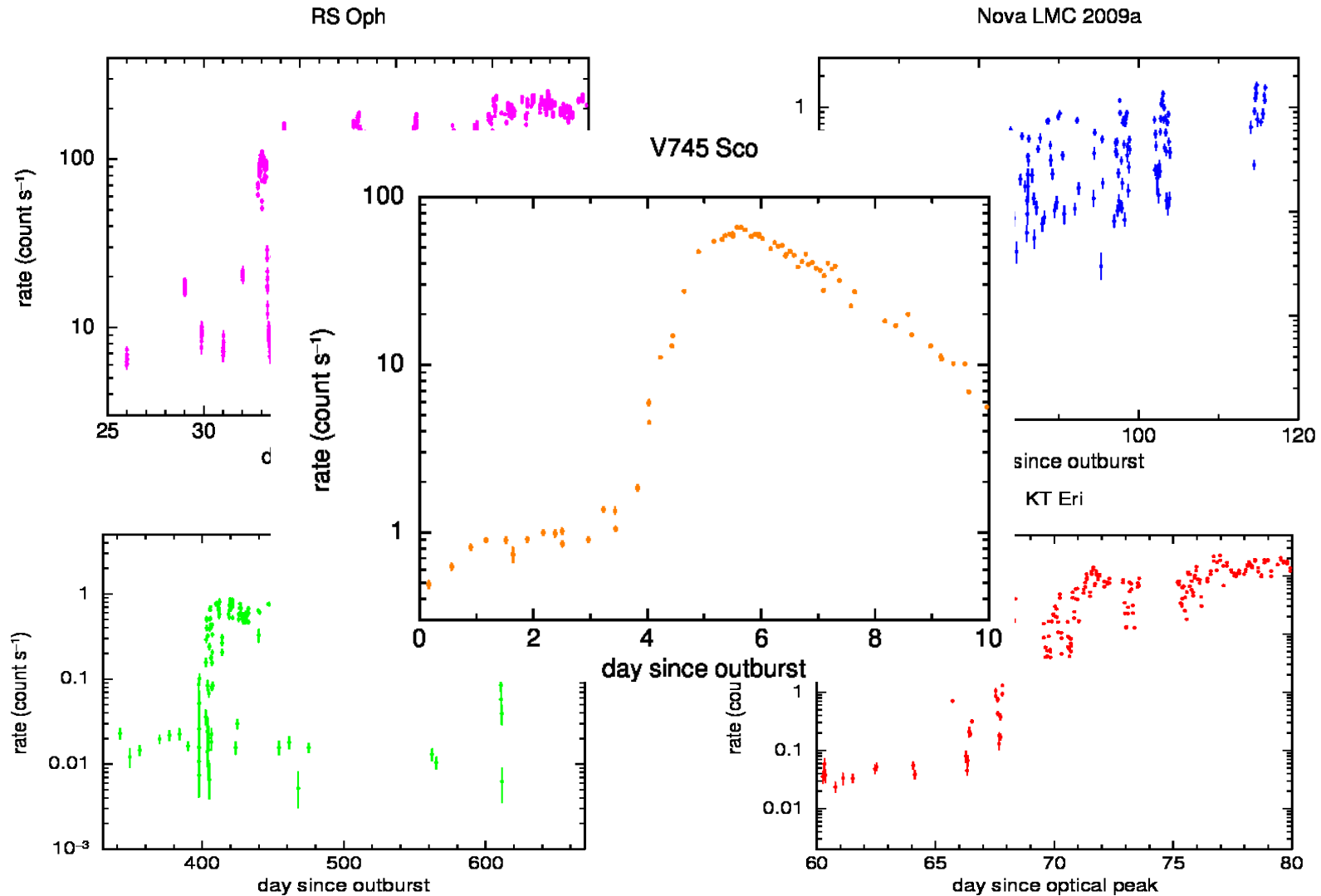


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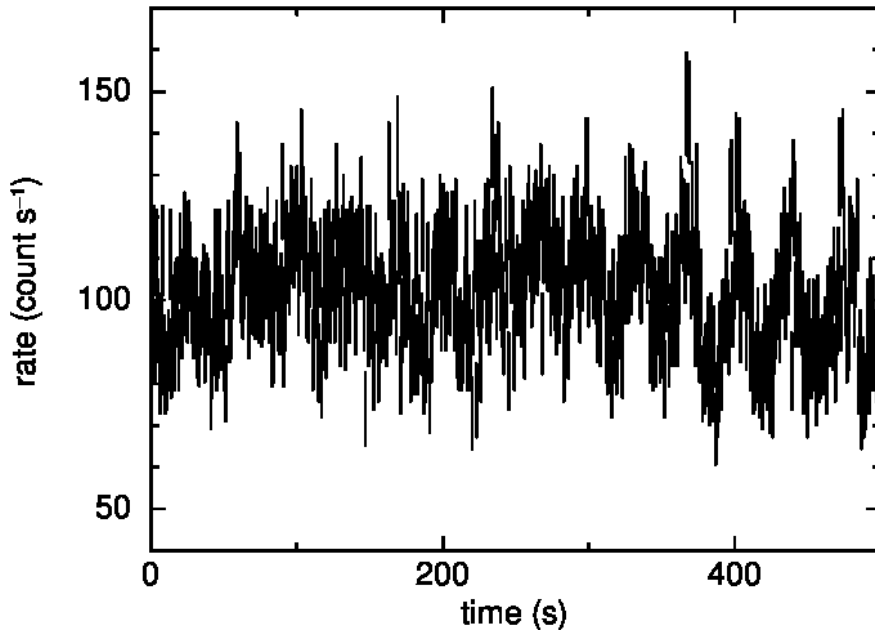


RS Oph (2006)

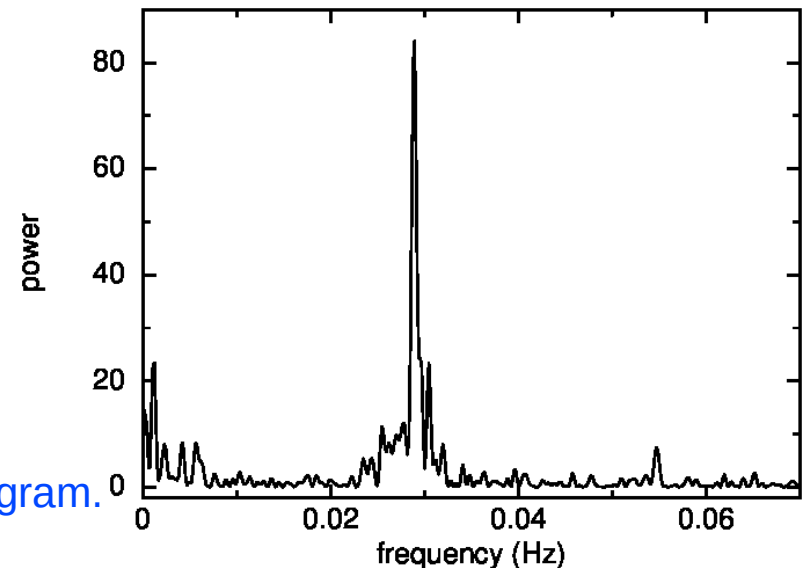




Swift-XRT has found significant QPOs in RS Oph, KT Eri, V339 Del, V5668 Sgr, with periodicities ranging from 35-70 s. XMM-Newton, Chandra and NICER have also detected similar QPOs.

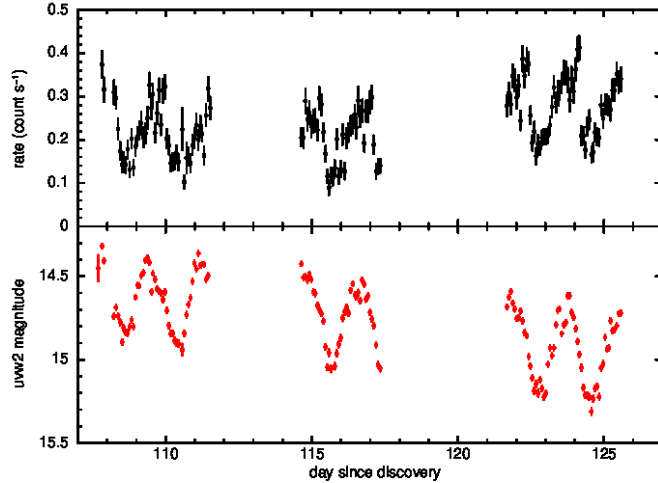


Snapshot of RS Oph (2006) when the ~35 s QPO was very obvious. Initially detected on day 32.82; final detection on day 65.92.



Corresponding LS periodogram.

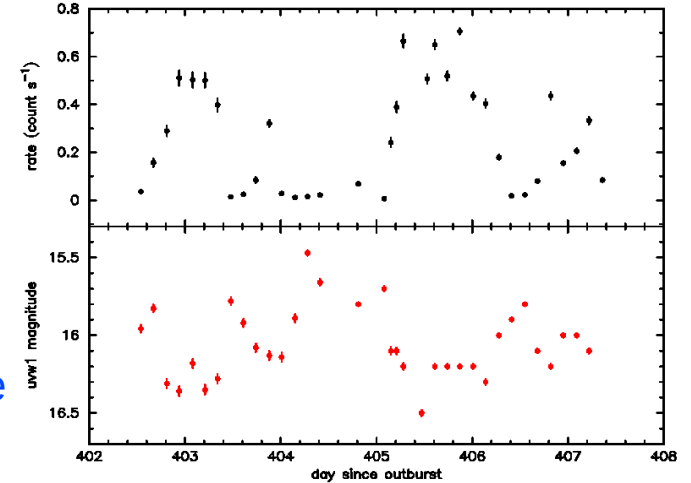
HV Cet



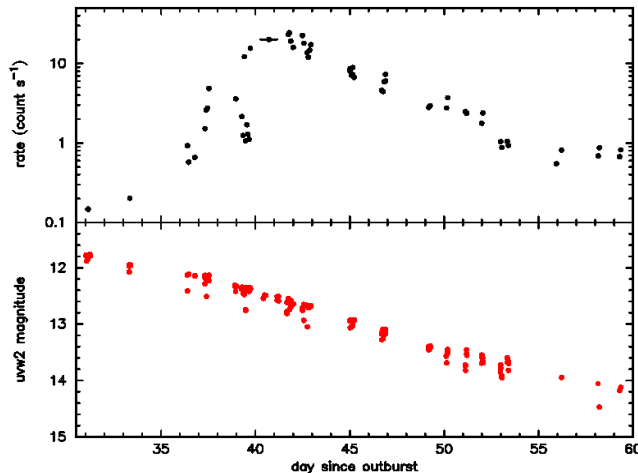
In phase:
obscuration in
a high-inclination
system?

Anti-phase:
temperature
variations?

V458 Vul



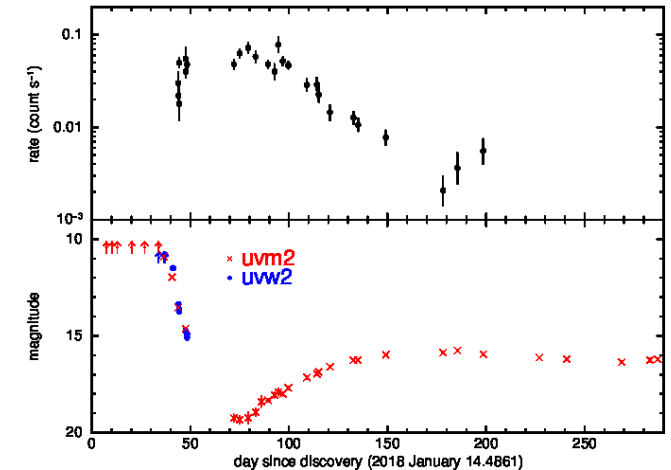
V2491 Cyg

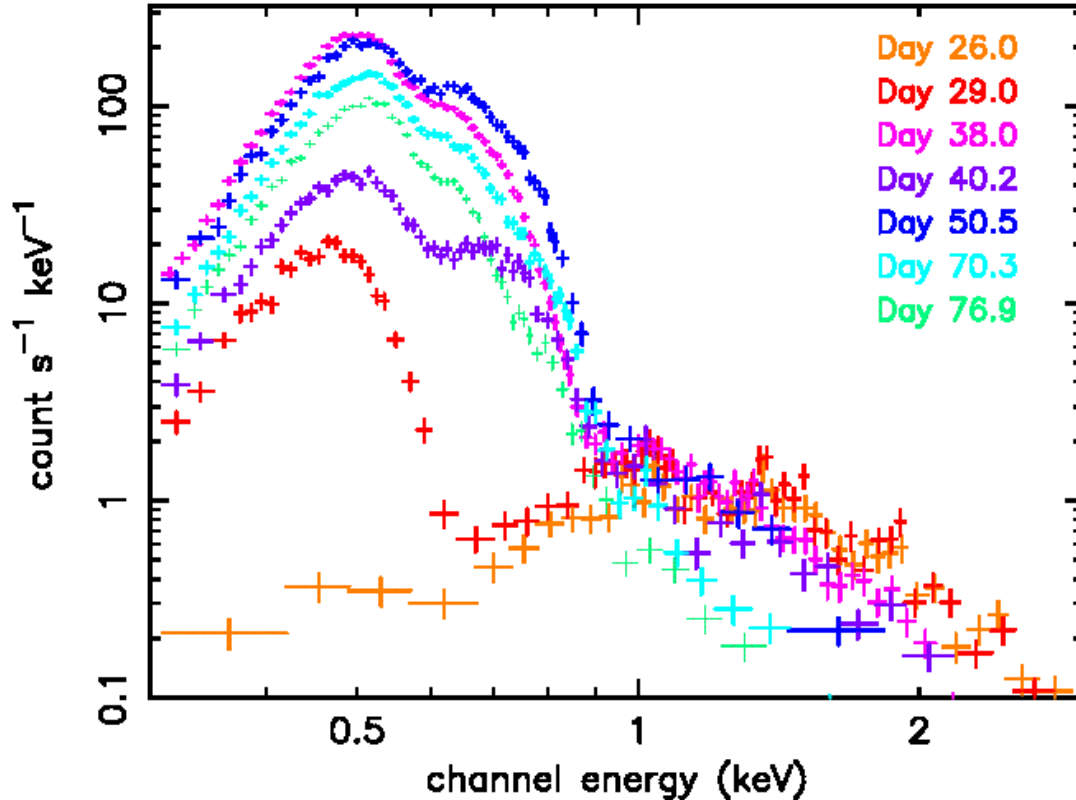


No correlation:
different emitting
regions for X-ray
and UV?

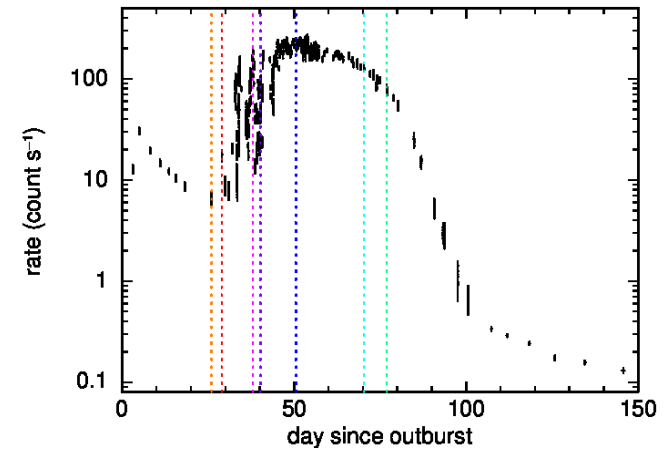
UV rebrightens,
coming out of a
dust dip.

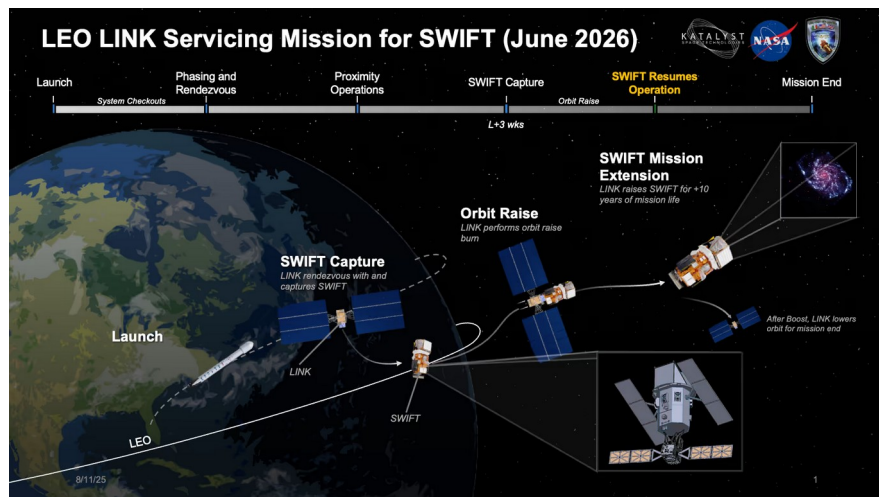
Nova Mus 2018





Example spectra during the SSS phase of RS Oph (2006).





Credit: NASA/Ron Beard

Capture planned for mid-late August.

<https://science.nasa.gov/blogs/swift/>

<https://www.katalystspace.com/>

