

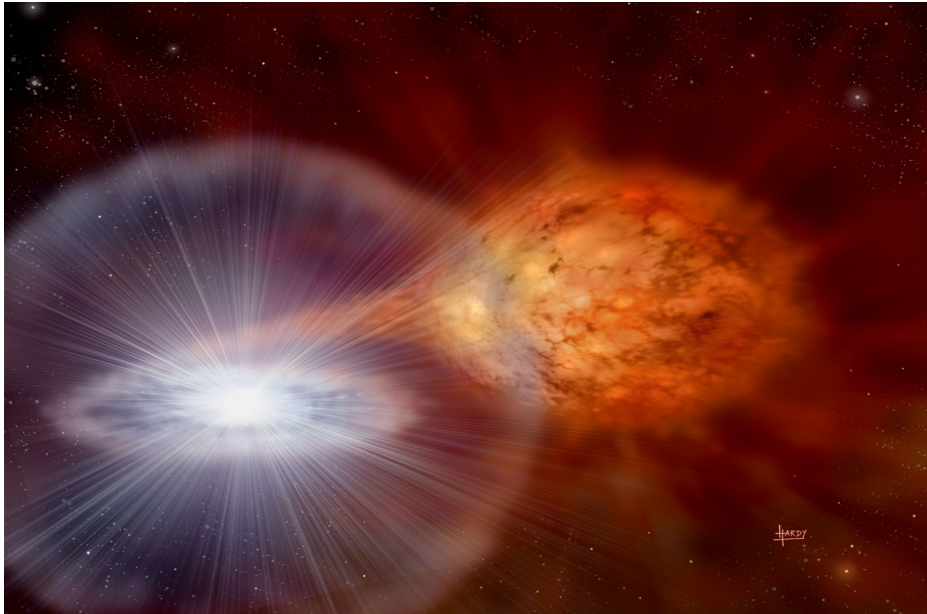


(Mainly) X-ray Observations of Novae with *Swift*

Kim Page

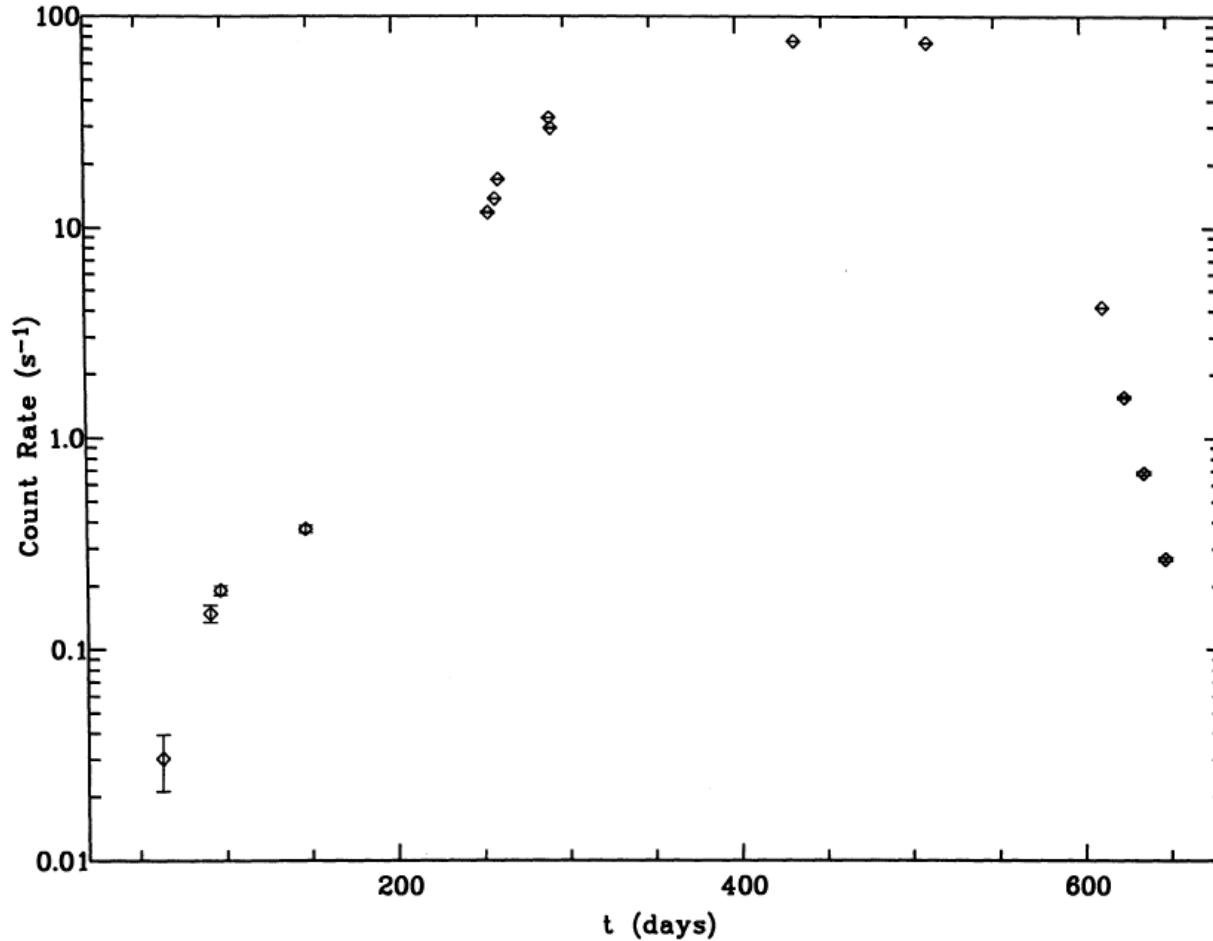
(On behalf of the *Swift* Nova-CV Group)

Novae are binary systems comprising a white dwarf which accretes H-rich material from a companion until the temperature and pressure are sufficient for a thermo-nuclear runaway to occur, forming the observed nova explosion.

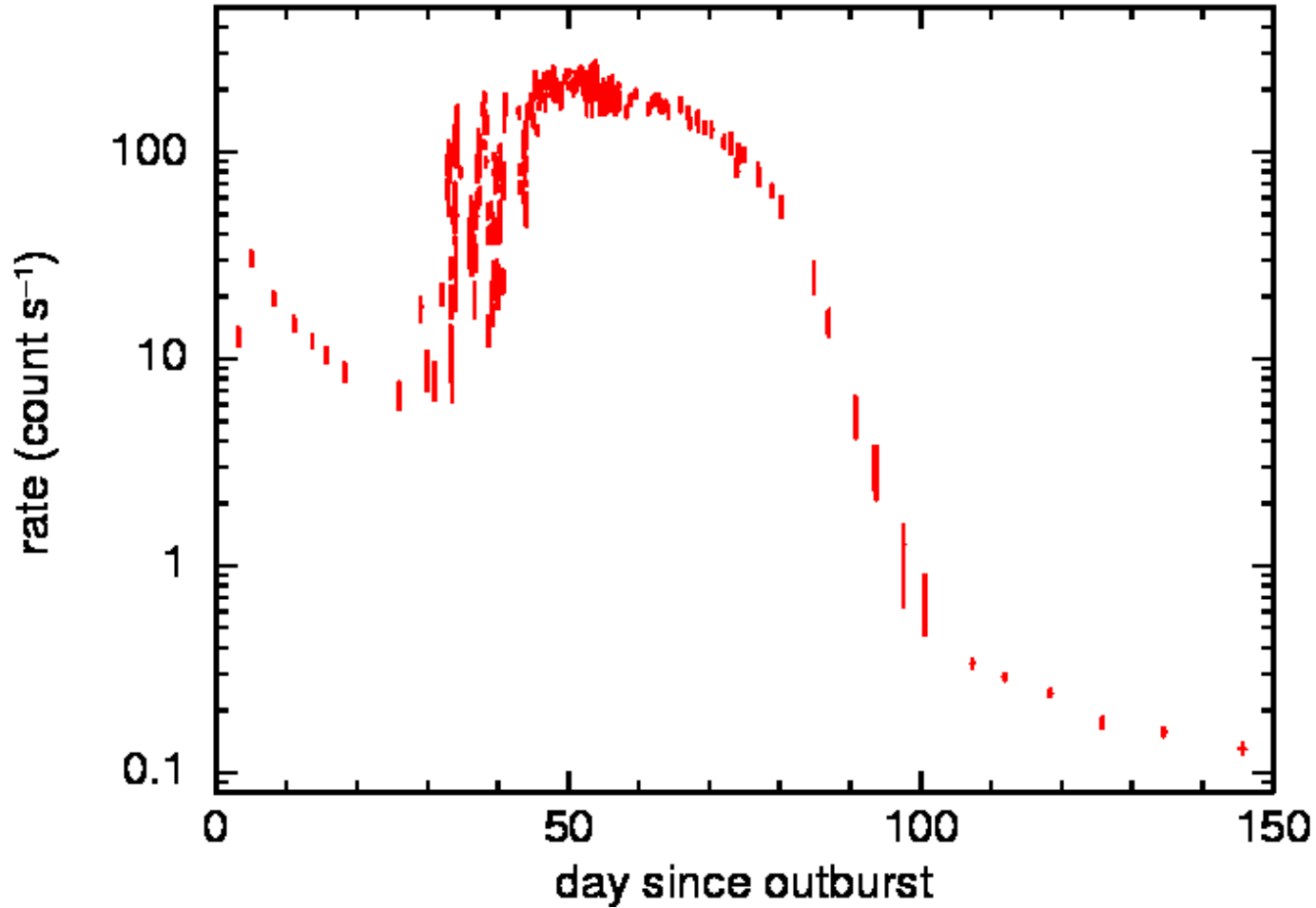


- ★ Some novae are possible SN Ia progenitors.
- ★ They are a source of mid-weight elements
- ★ Optically luminous, interesting physics.
- ★ X-rays from:
 - ★ Hot WD (nuclear burning)
 - ★ High-velocity shocks
 - ★ Re-established accretion

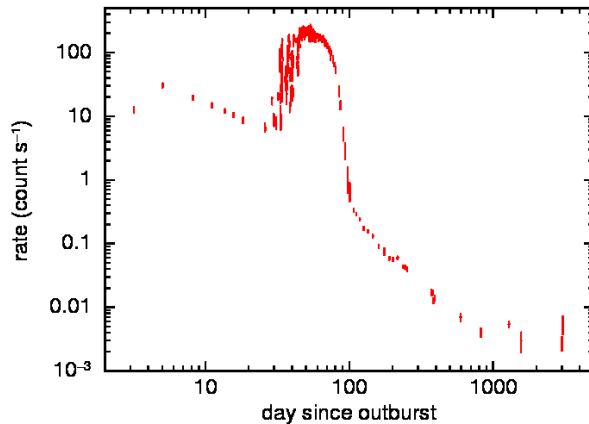
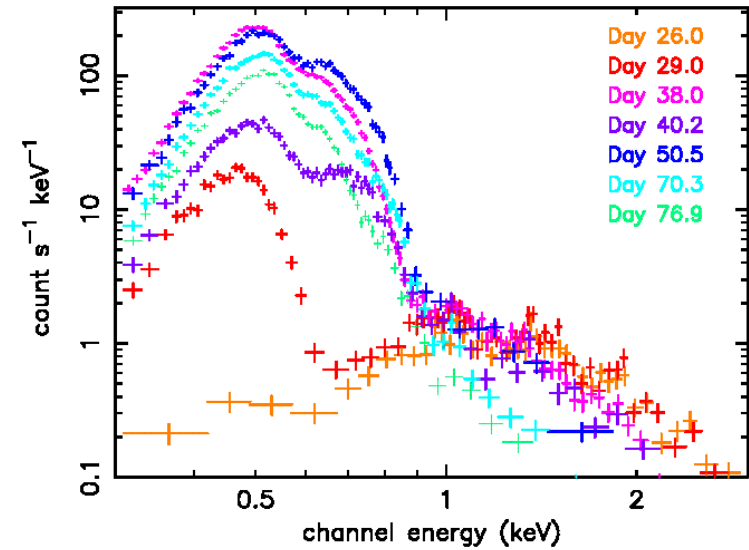
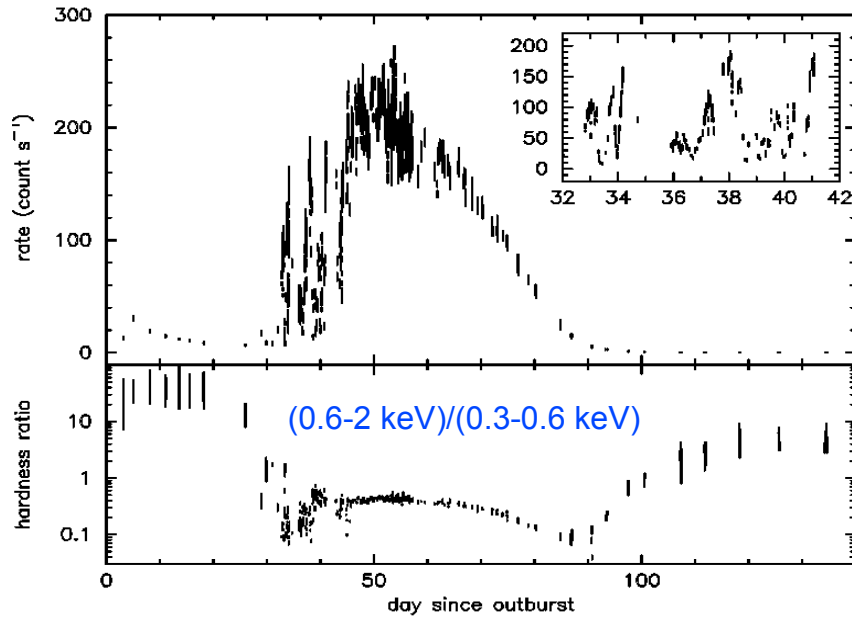
Swift observations have shown that novae can evolve quickly and dramatically so the sensitive instruments and rapid response (within a day of discovery) capability of Swift are extremely useful.



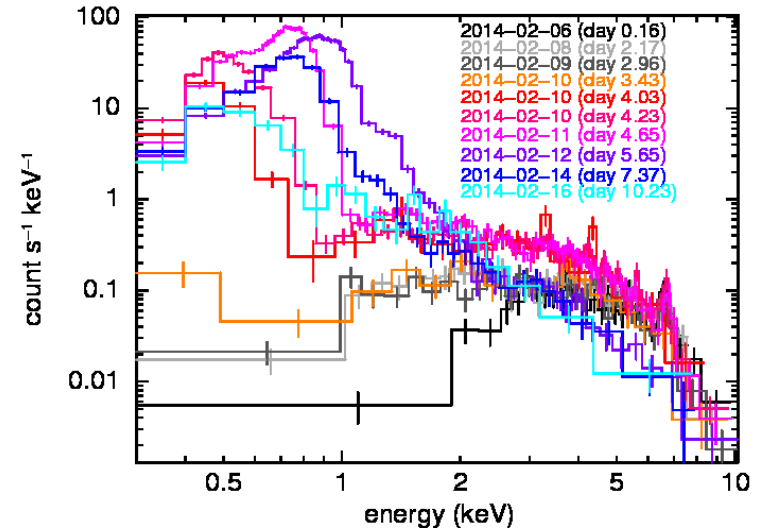
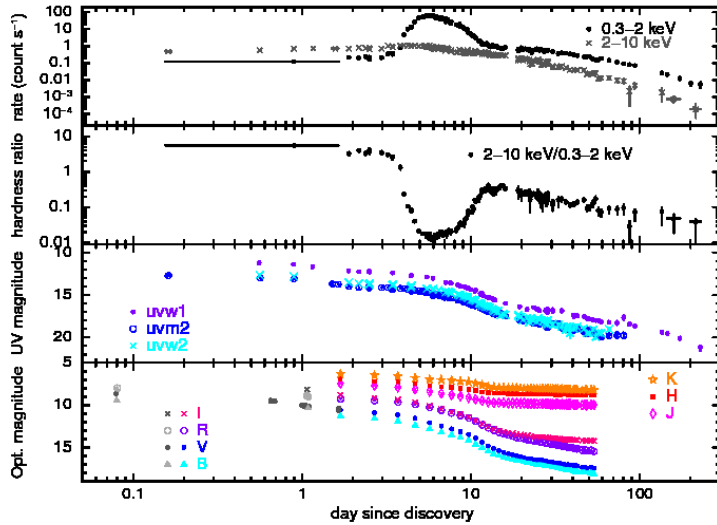
Nova V1974 Cyg 1992
Krautter et al. (1996)



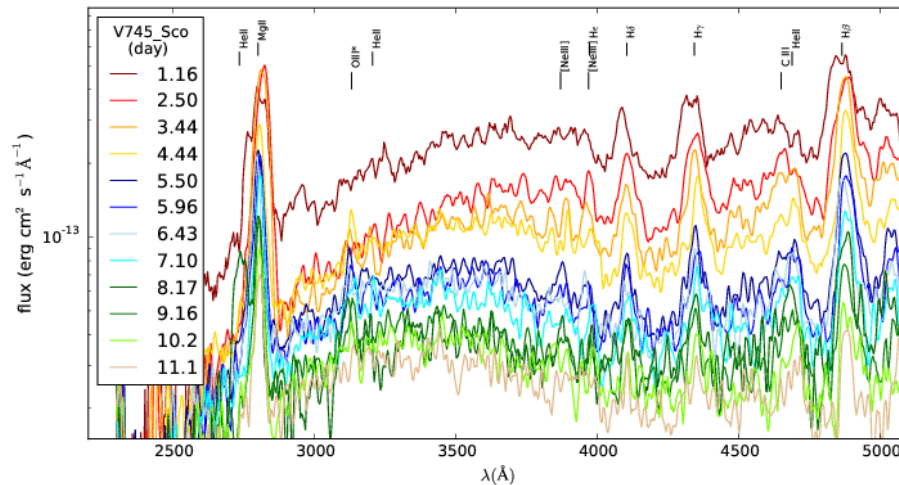
RS Oph
Osborne et al. (2011)



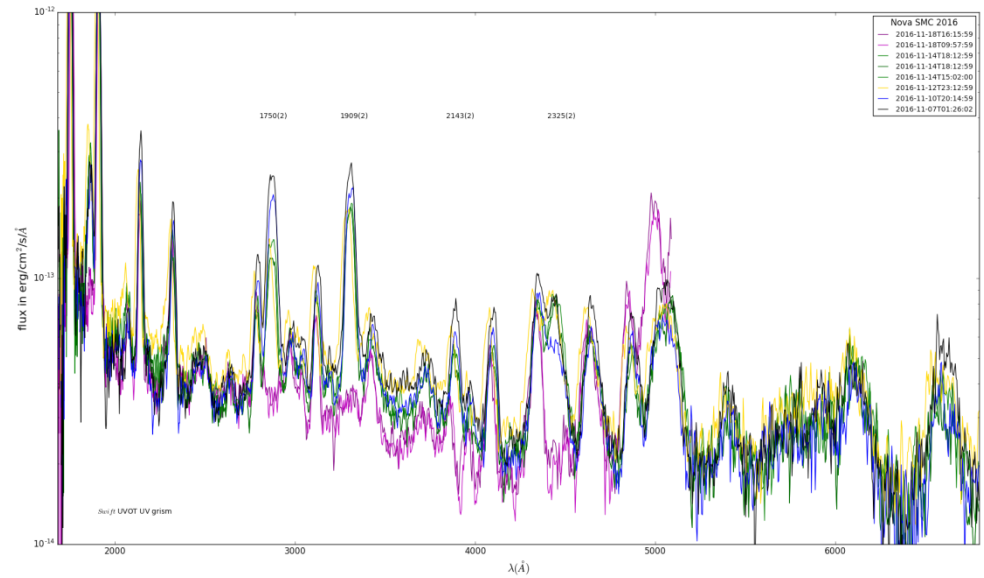
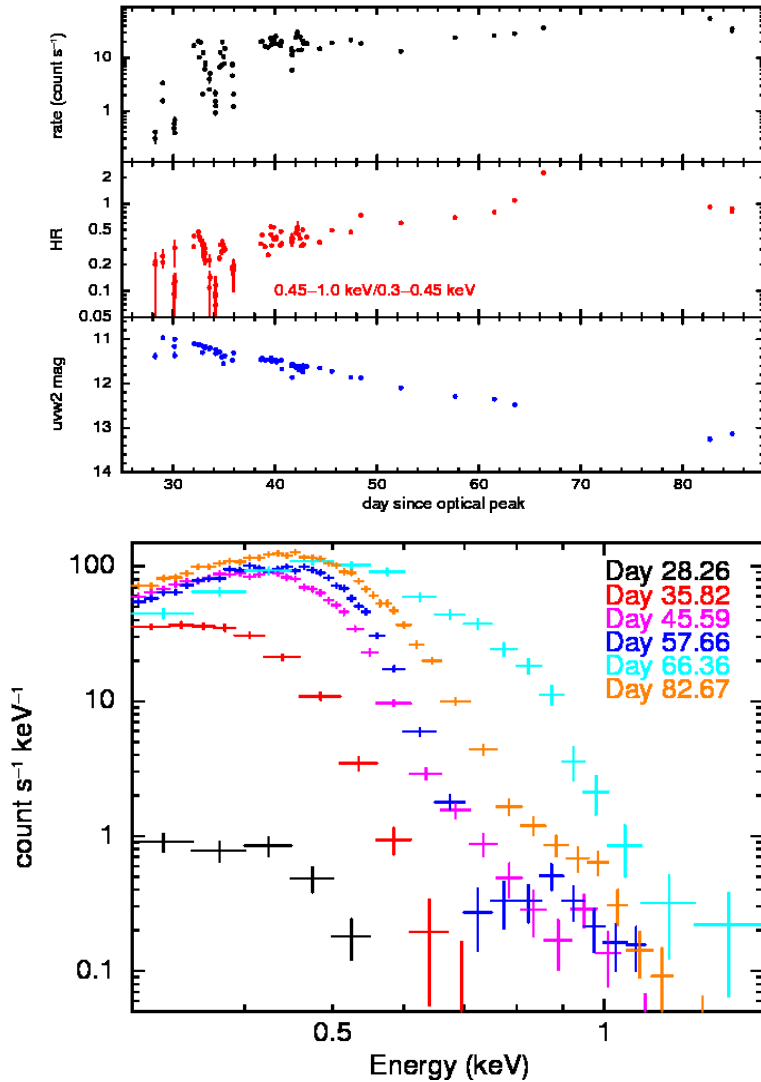
See Osborne et al., 2011, ApJ, 727, 124 for more details.



See Page et al., 2015, MNRAS, 454, 3108 for more details

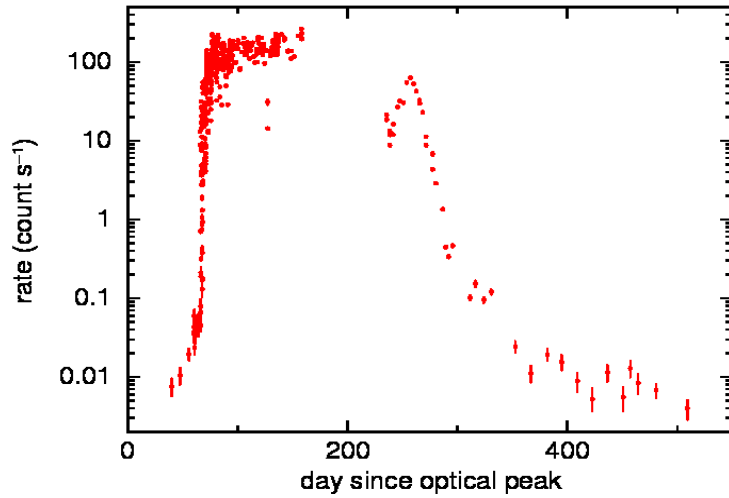


Nova SMC 2016

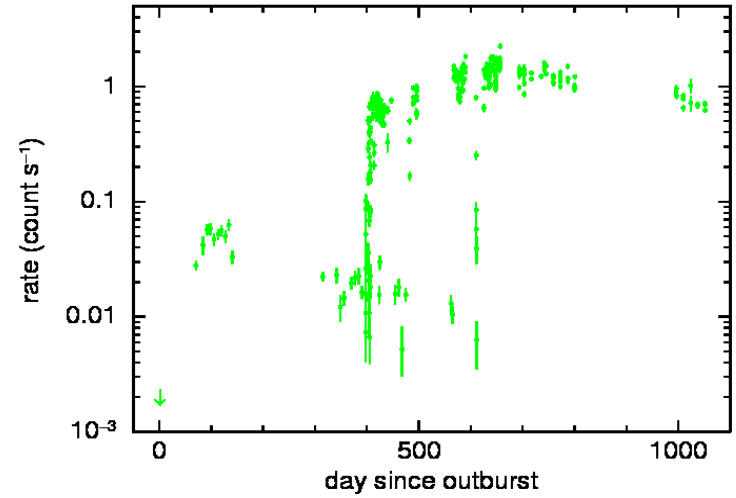


Paper in prep. (E. Aydi et al. 2017)

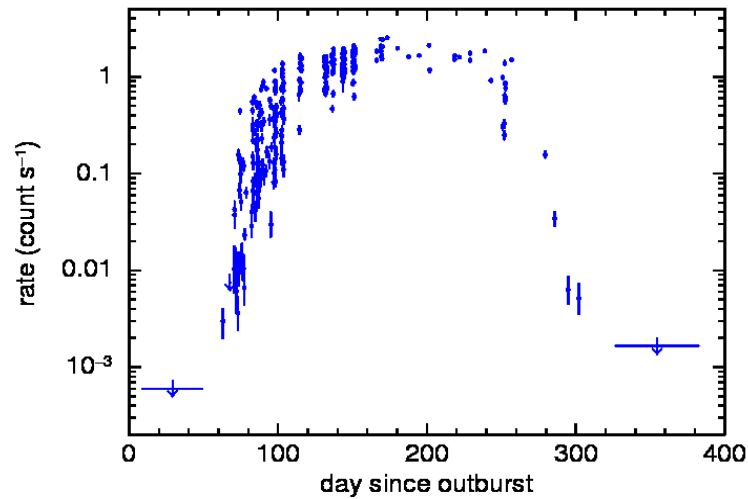
KT Eri



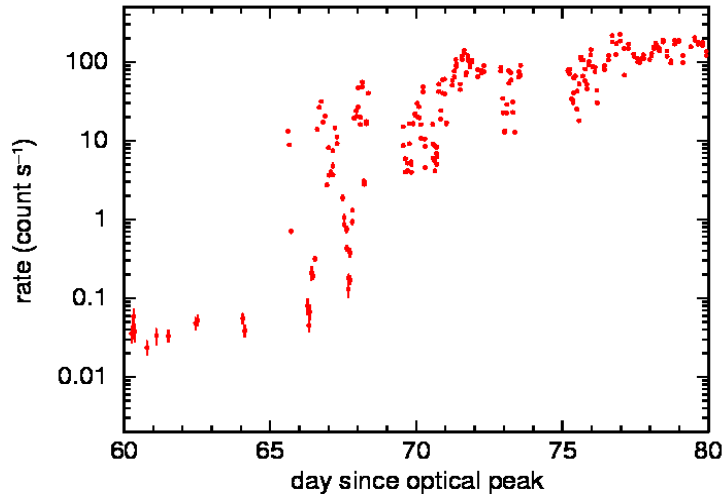
V458 Vul



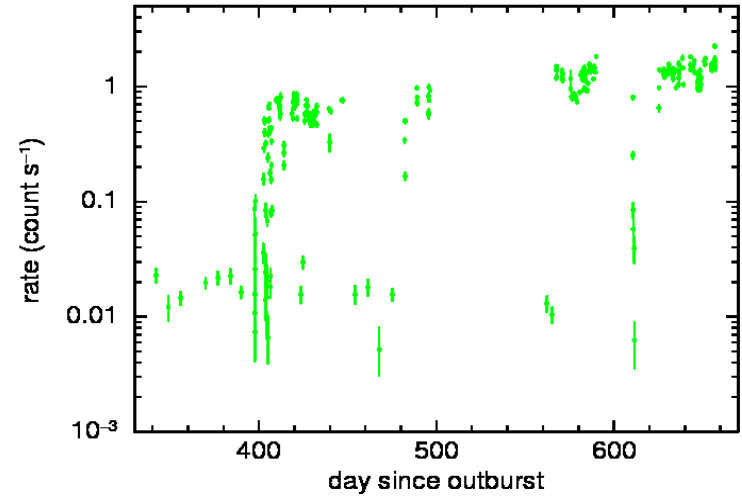
Nova LMC 2009a



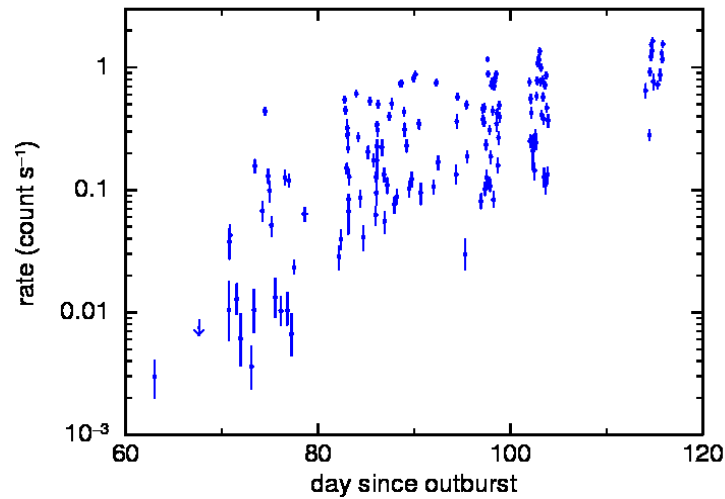
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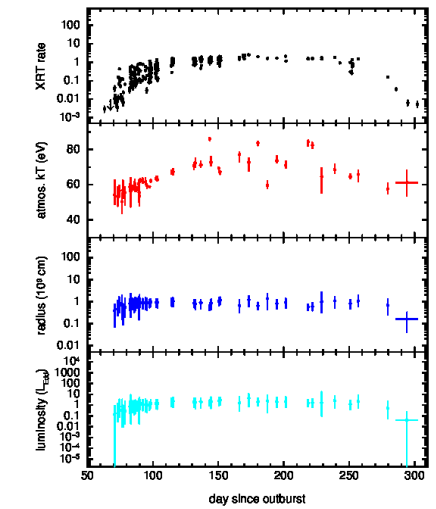
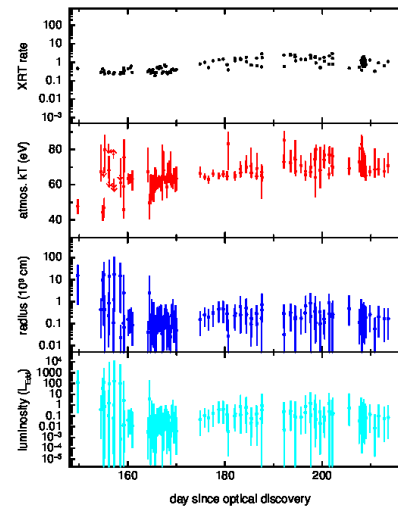
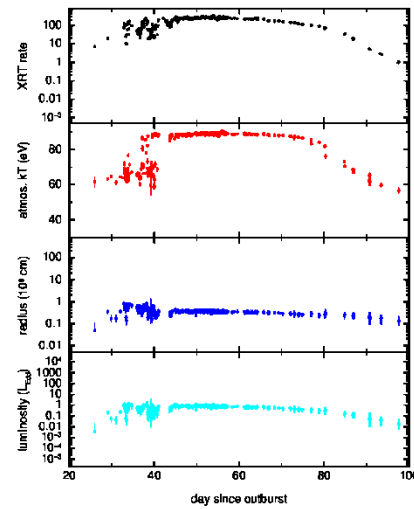
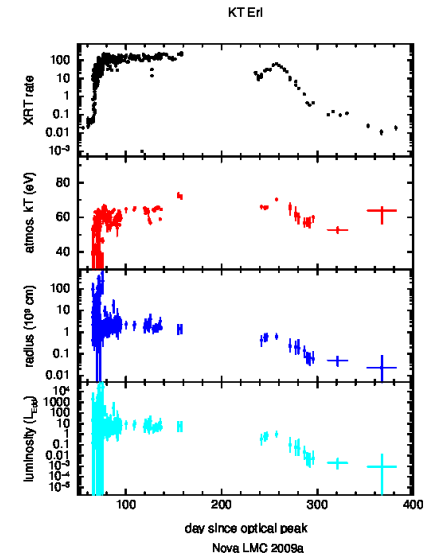
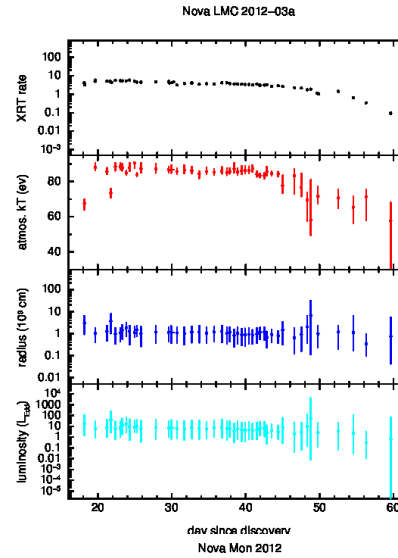
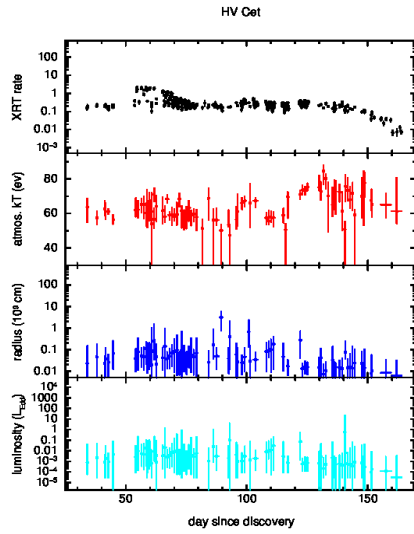


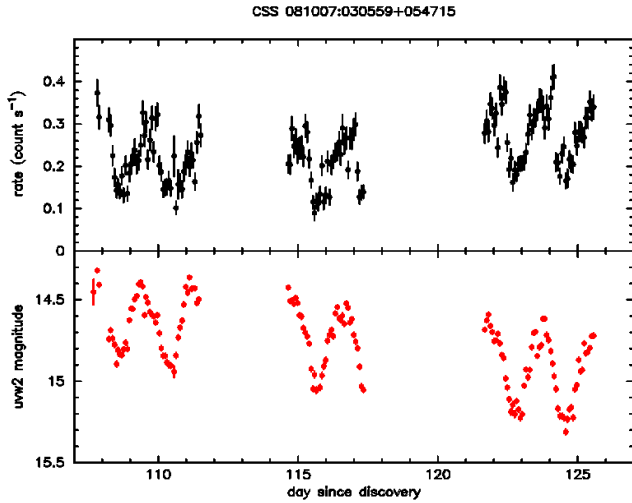
V458 Vul



Nova LMC 2009a

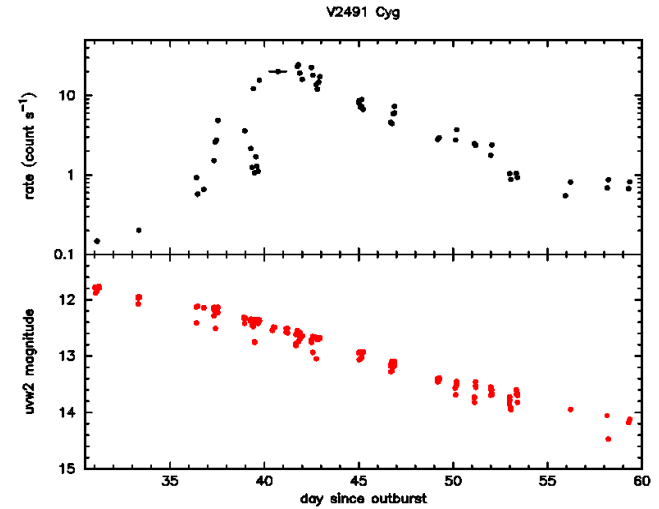






In phase: obscuration
in a high-inclination
system?

Anti-phase:
temperature
variations?



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

