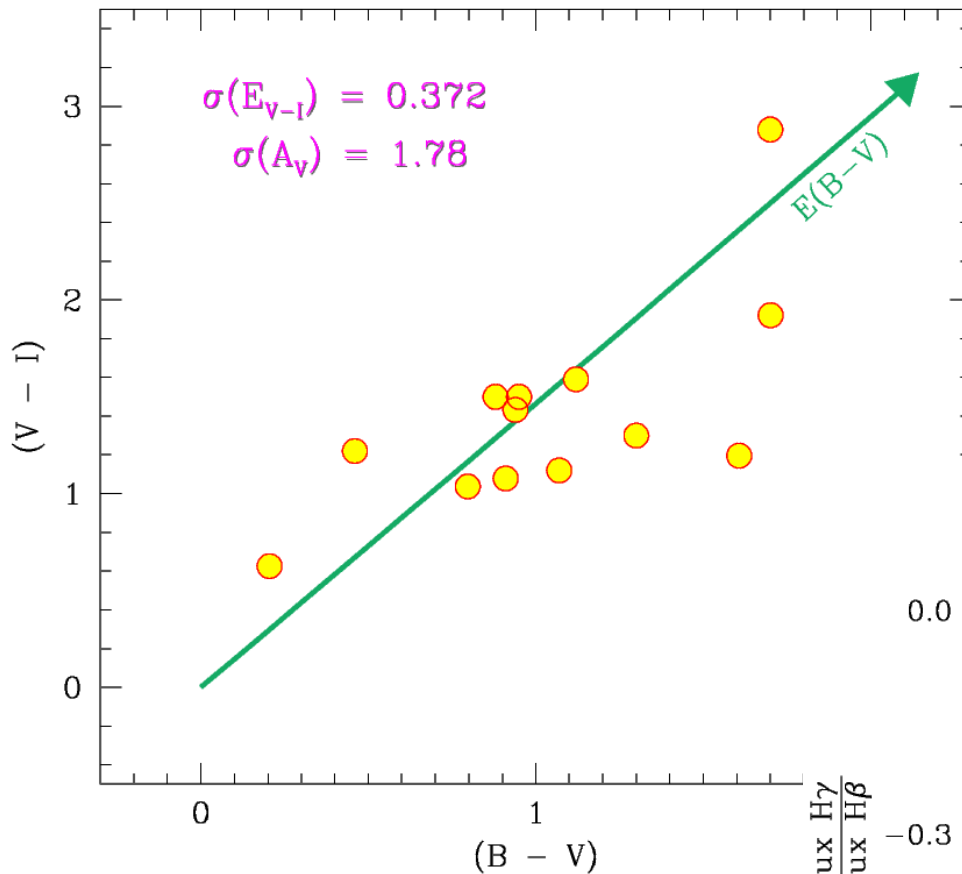


on some aspects of

optical observations of novae

Ulisse Munari

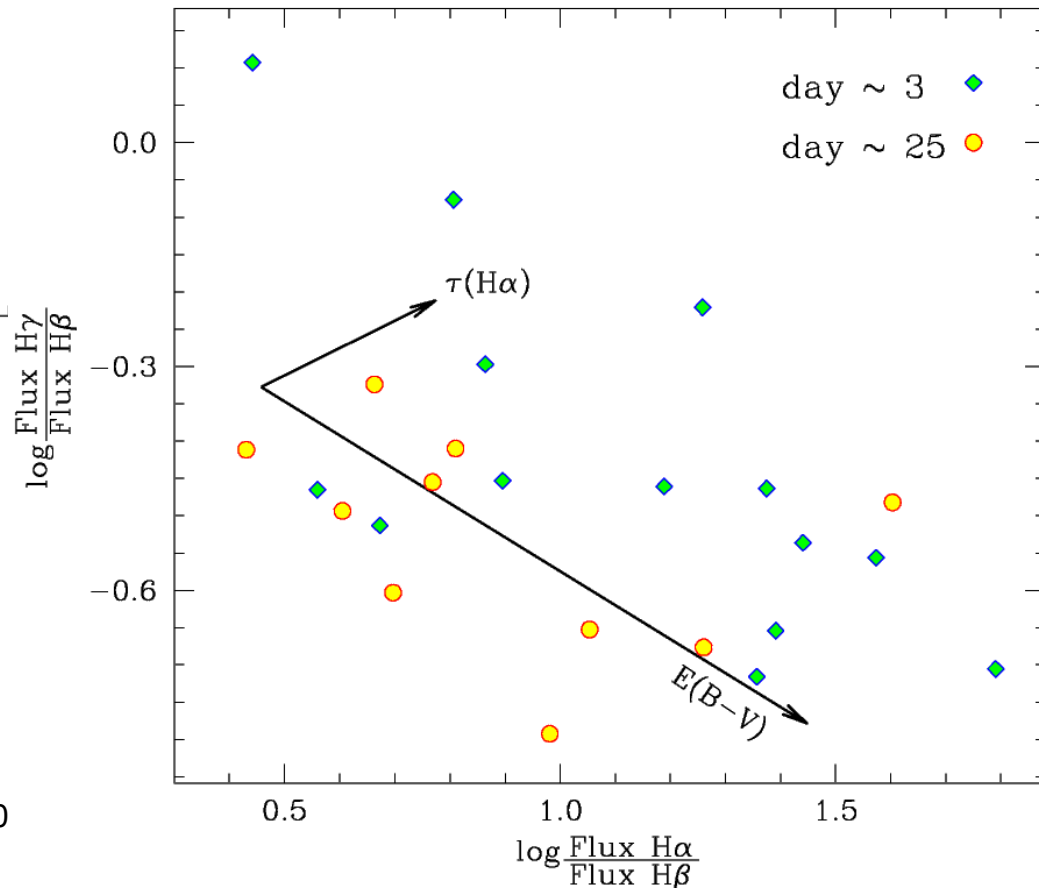
National Institute of Astrophysics INAF
Astronomical Observatory of Padova, Asiago, Italy

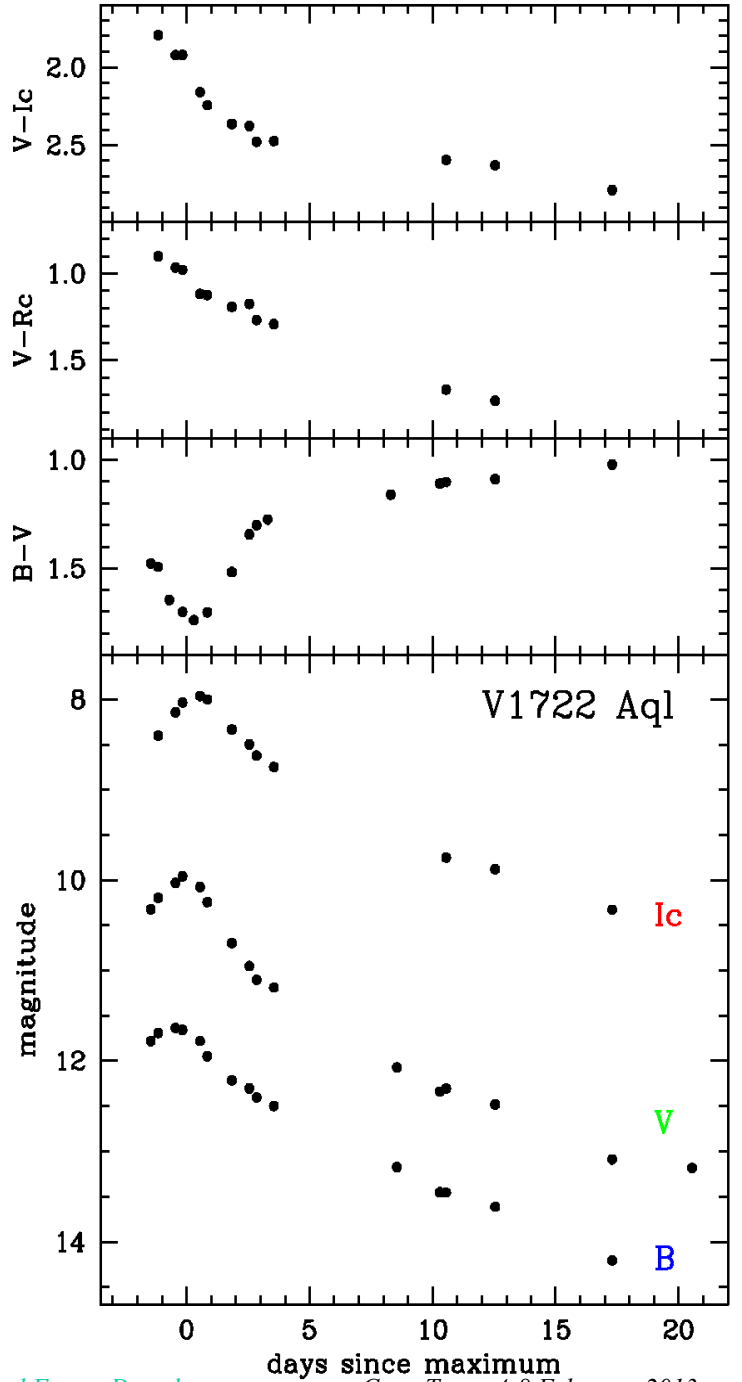
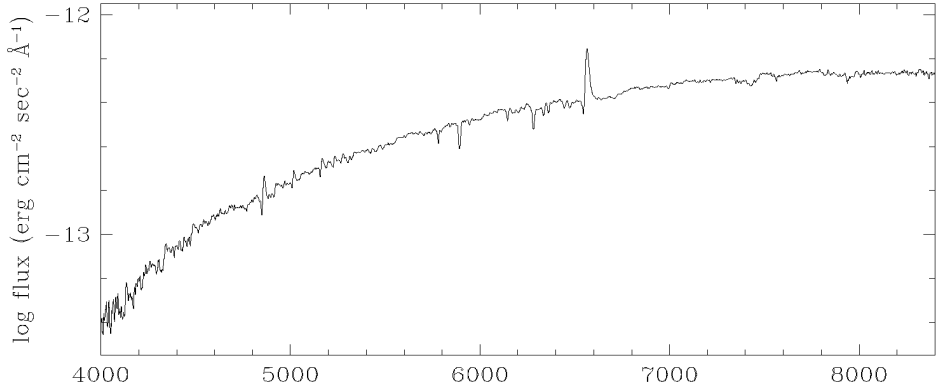
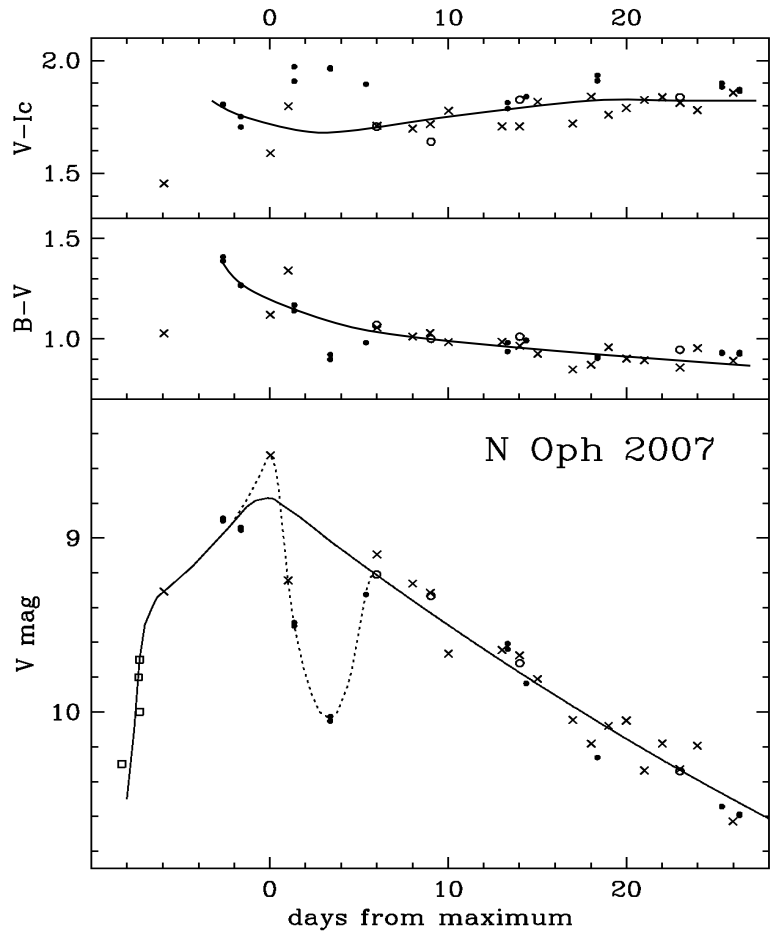


Kasliwal et al. (2011), from observations on novae in external galaxies M31, M81, M82, NGC 2403 and NGC 891 obtained within the P60-FastING program, suggest that they uncovered the existence of a **population of underluminous novae** not earlier noted among Galactic novae

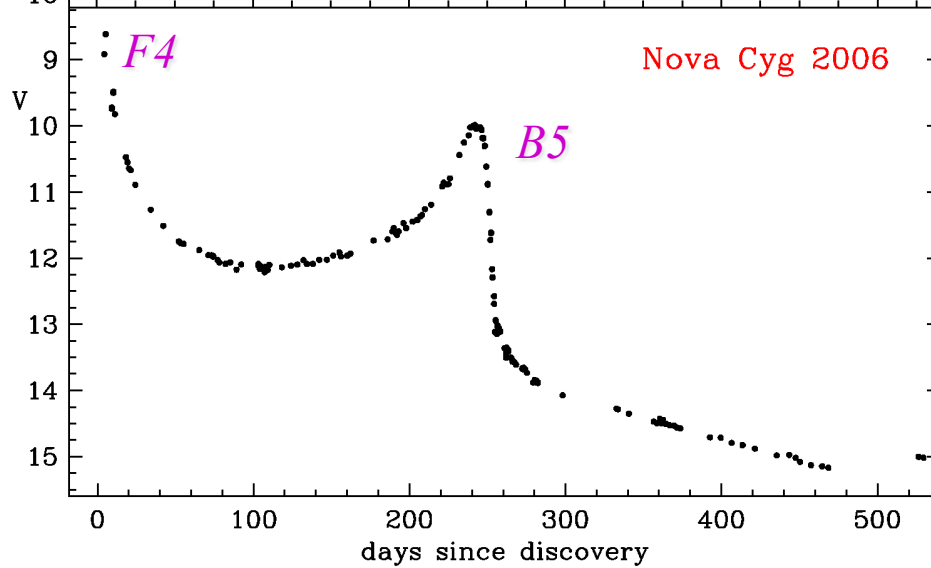
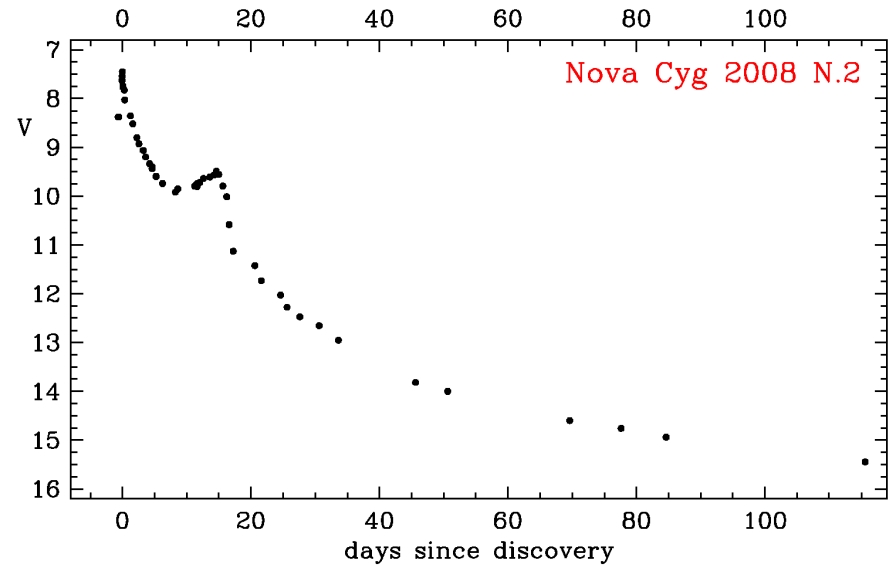
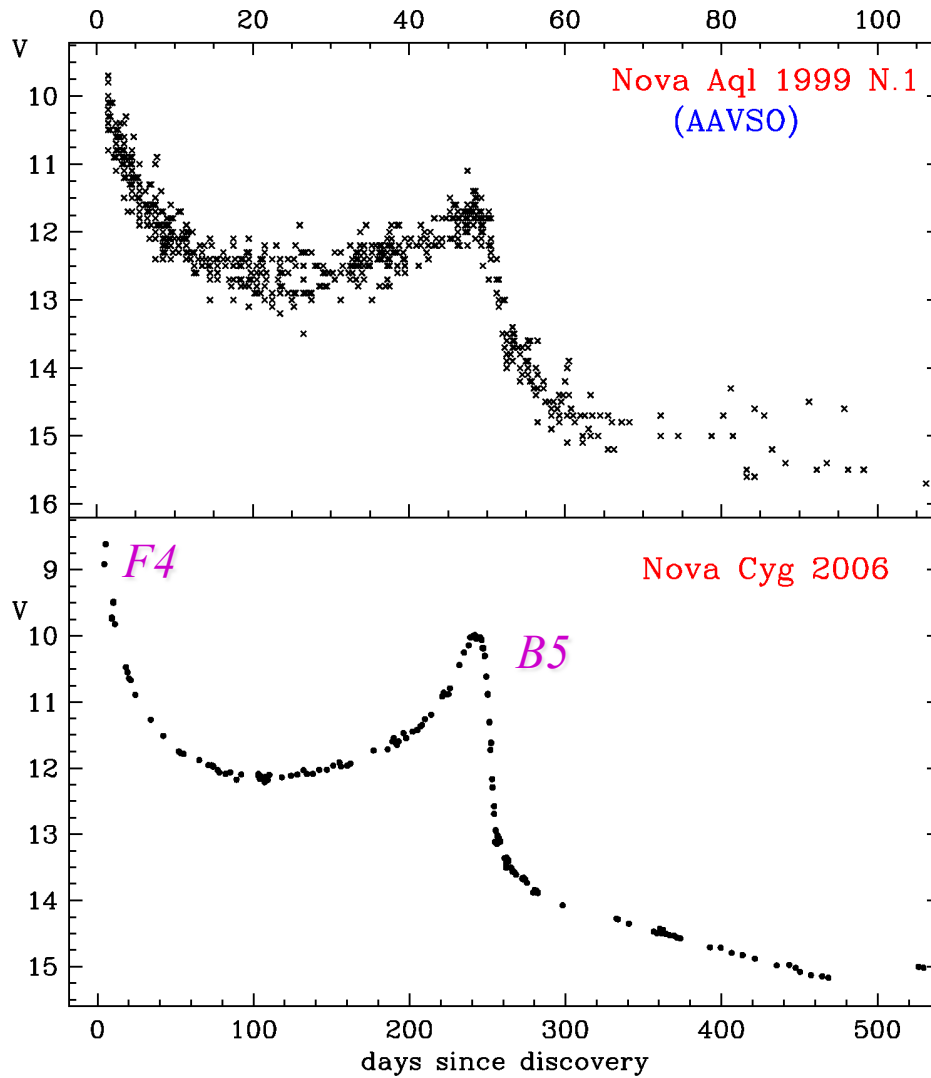
Crucial to their results is the **correction for extinction**, carried out in two ways:

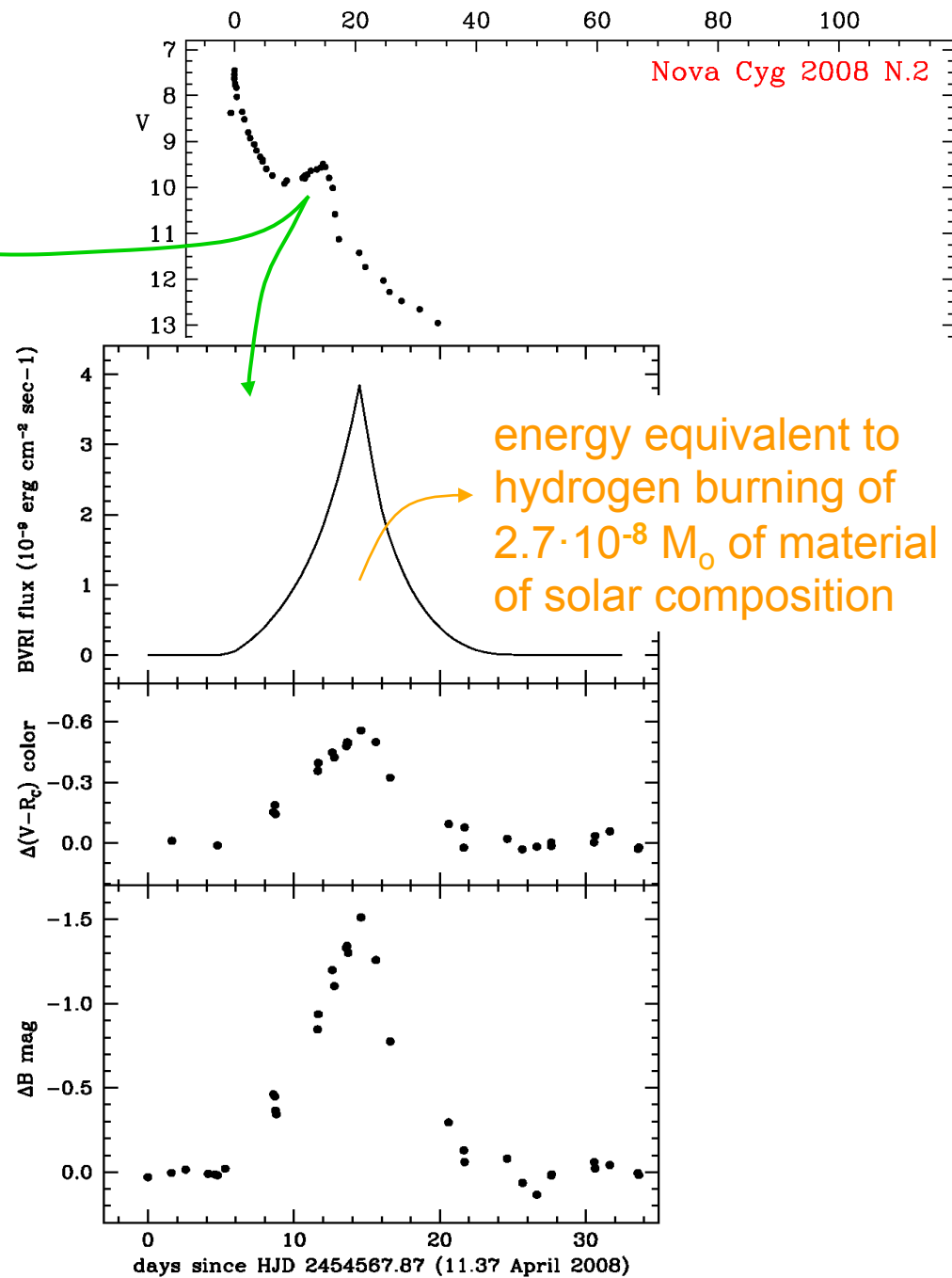
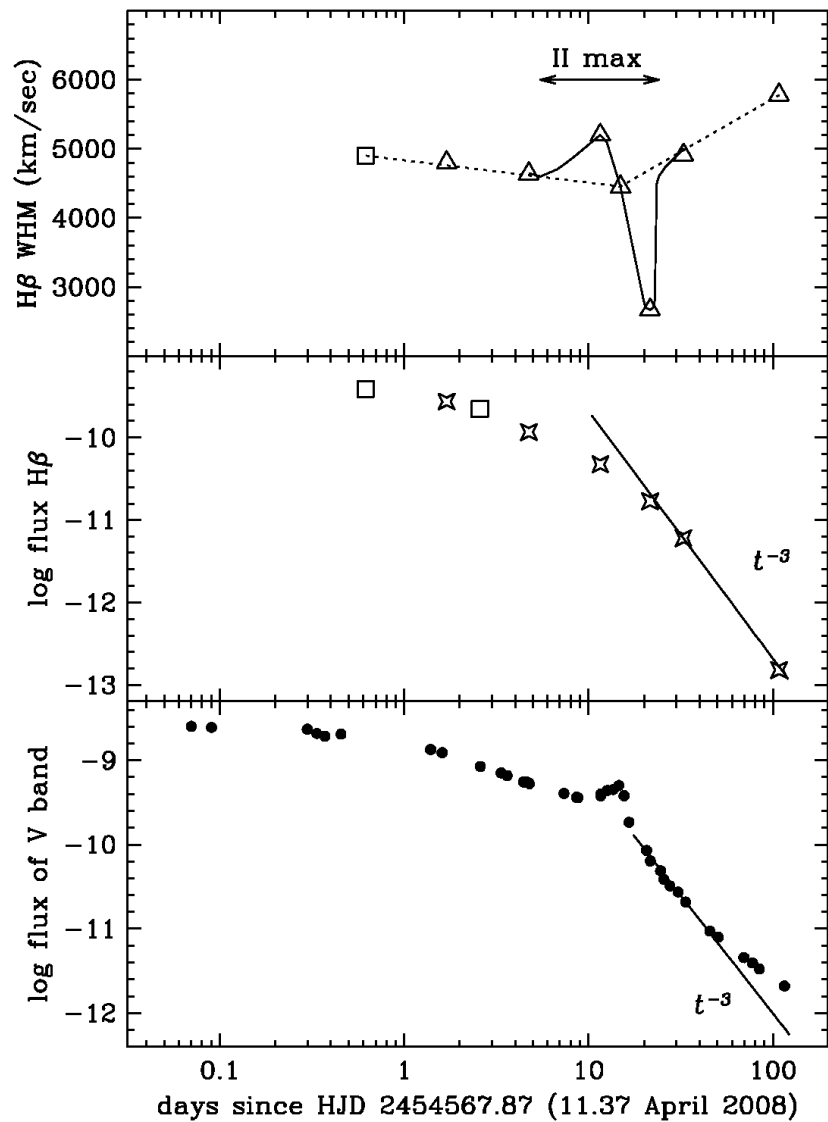
- 1) assuming Case B recombination for $H\alpha/H\beta$ line ratio
- 2) assuming that van den Bergh & Younger (1987) relation for $(B-V)_0$ can be ported to $(V-I)_0$

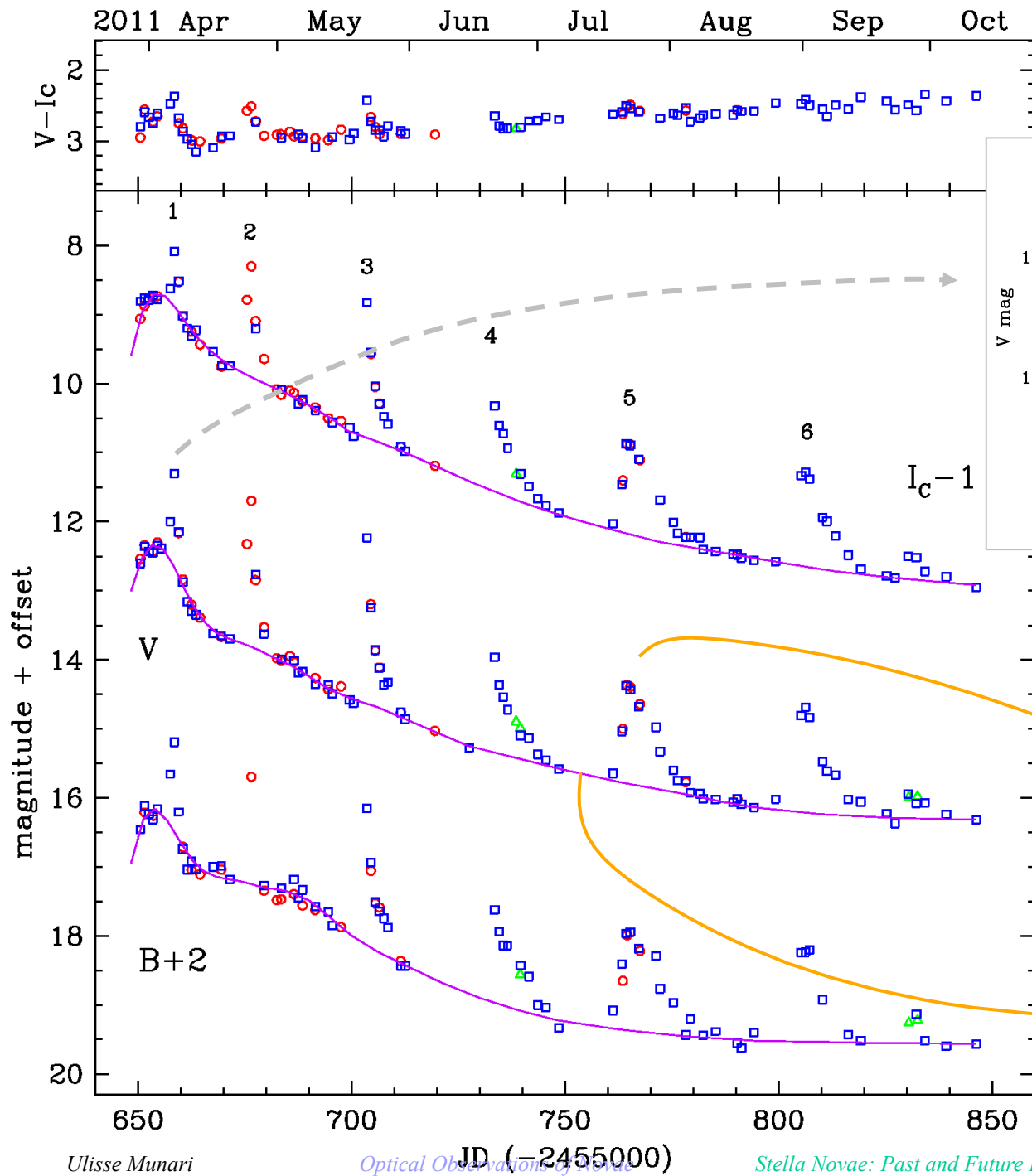




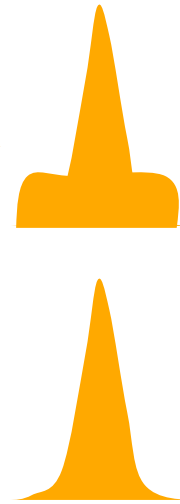
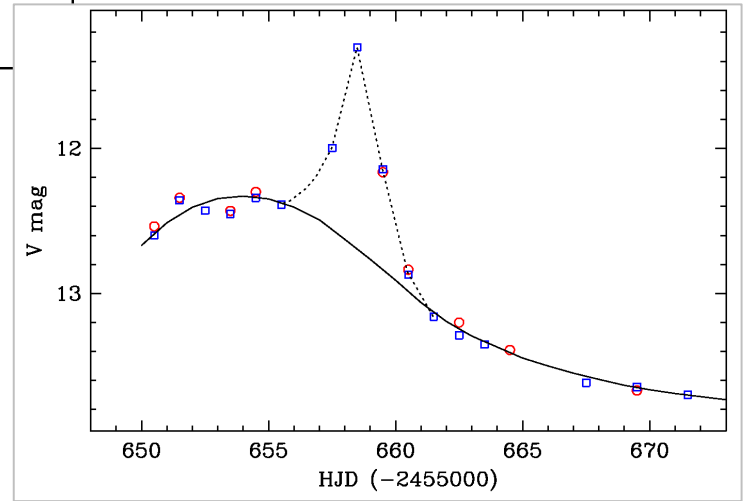
secondary maxima



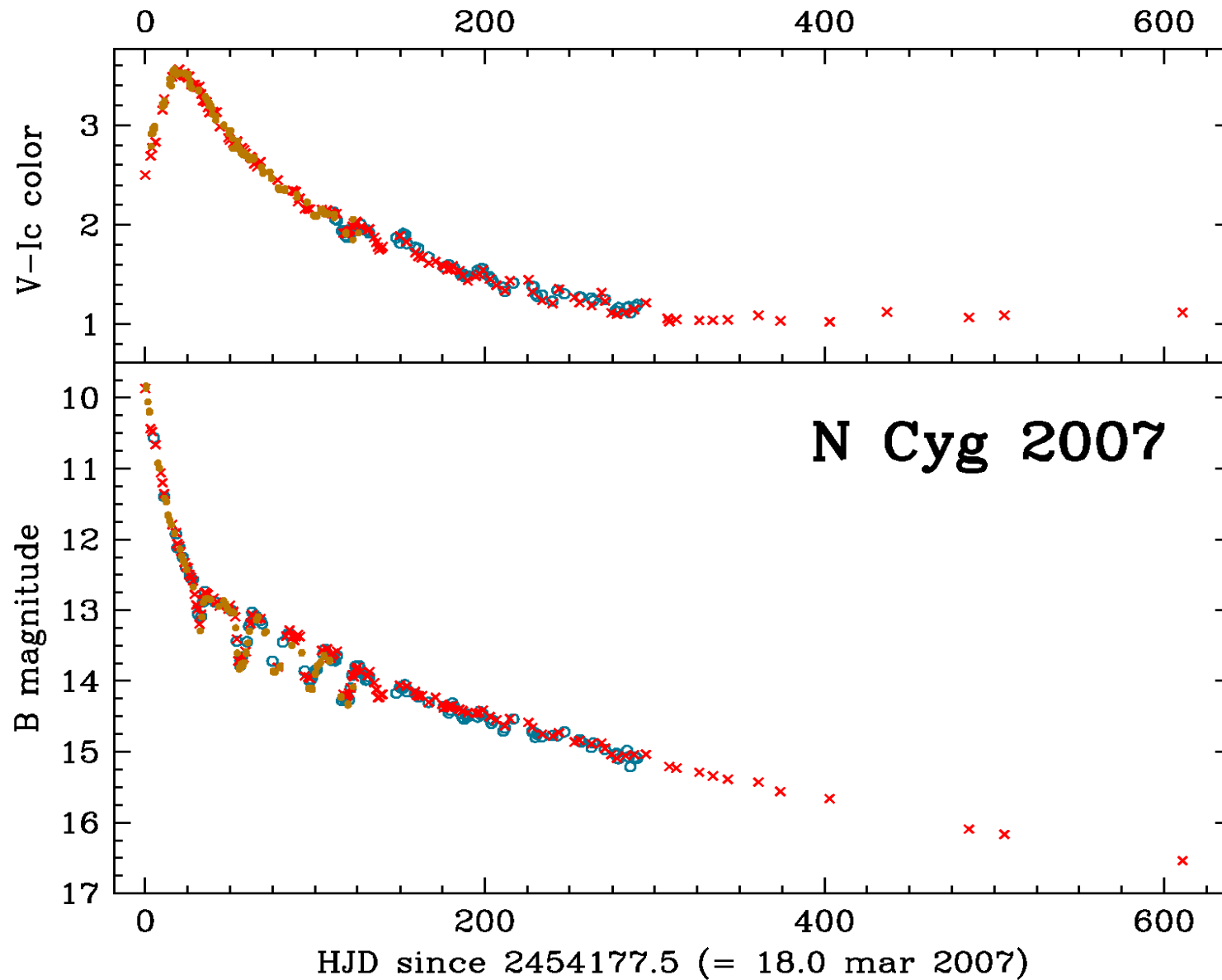


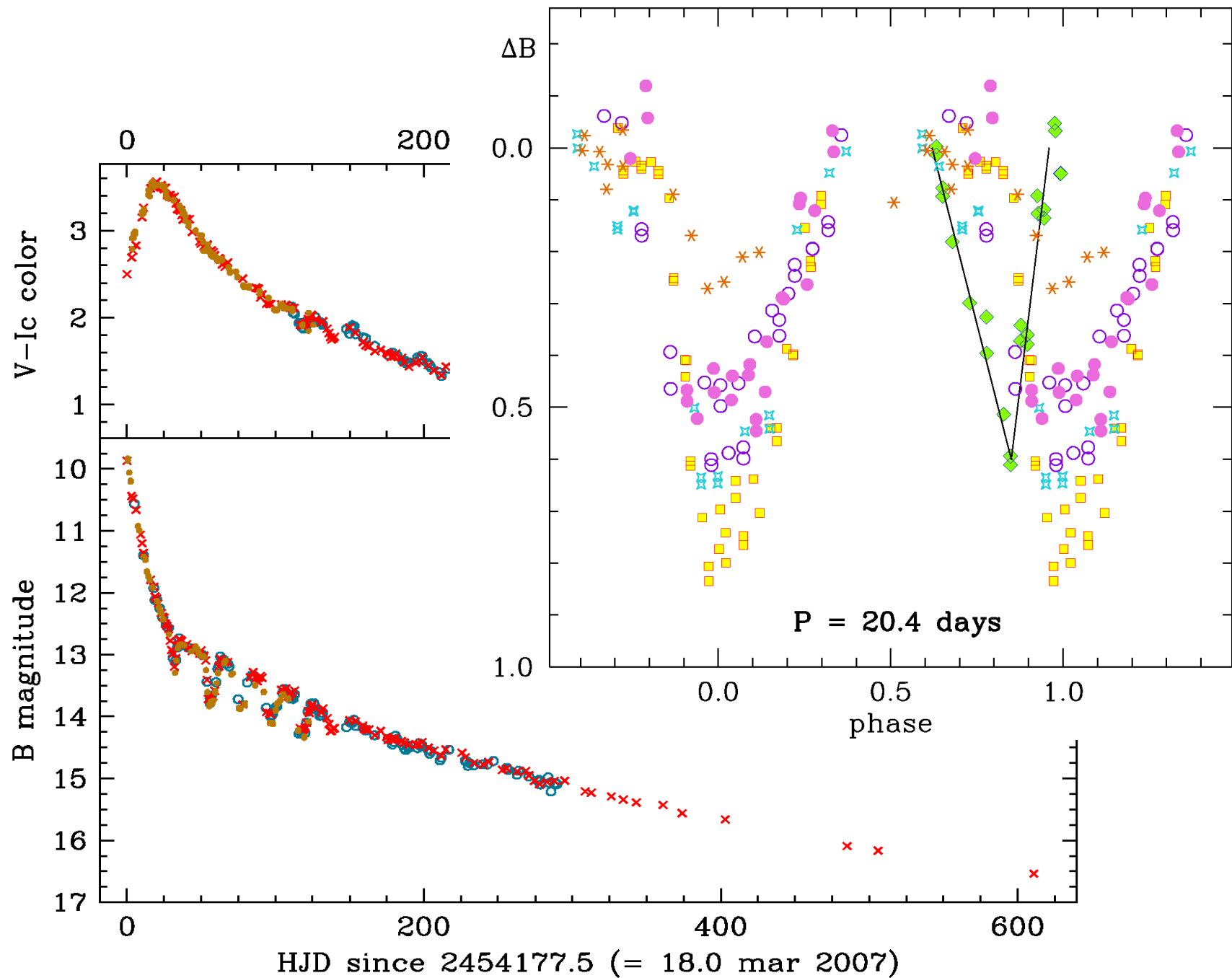


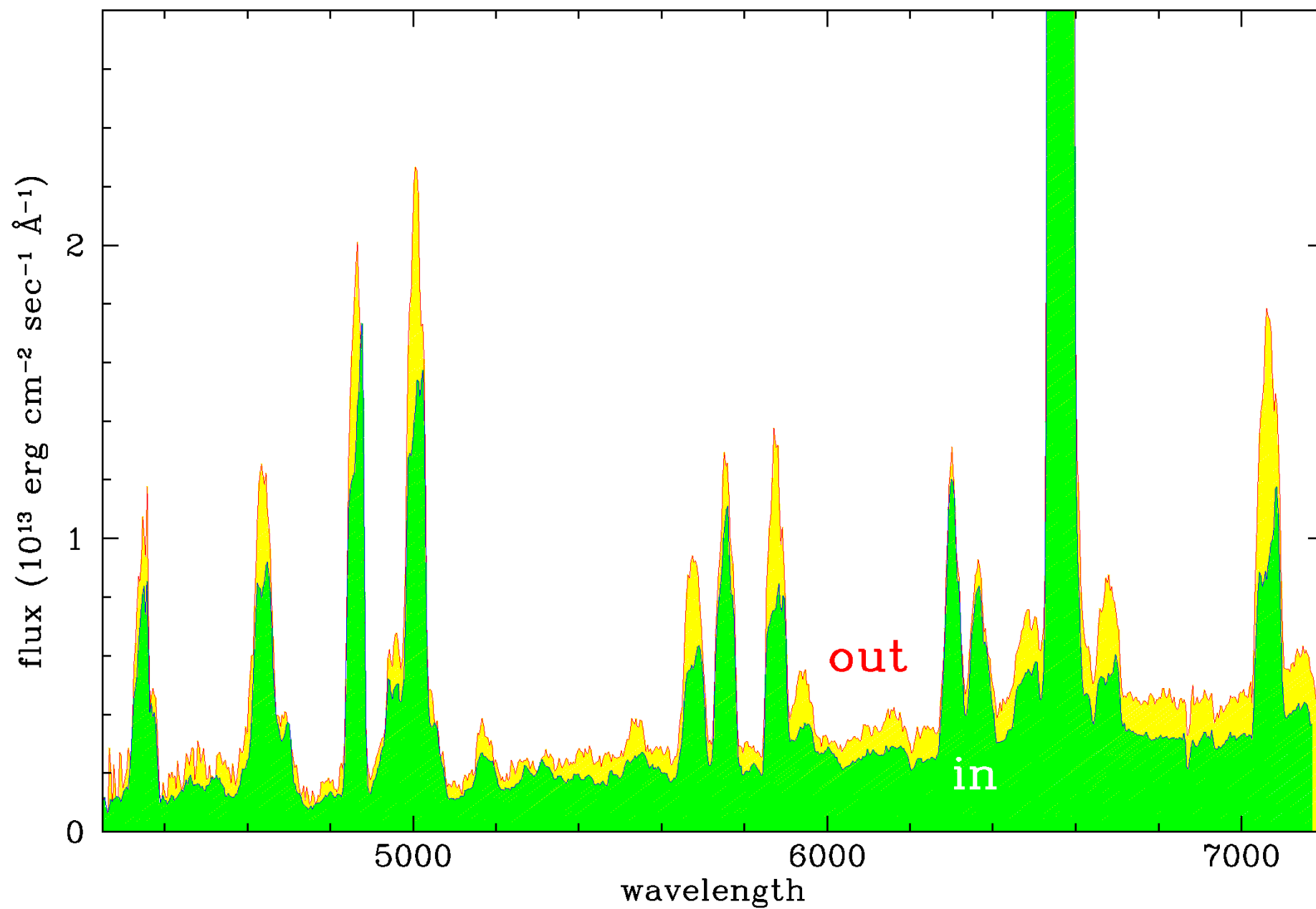
multiple maxima

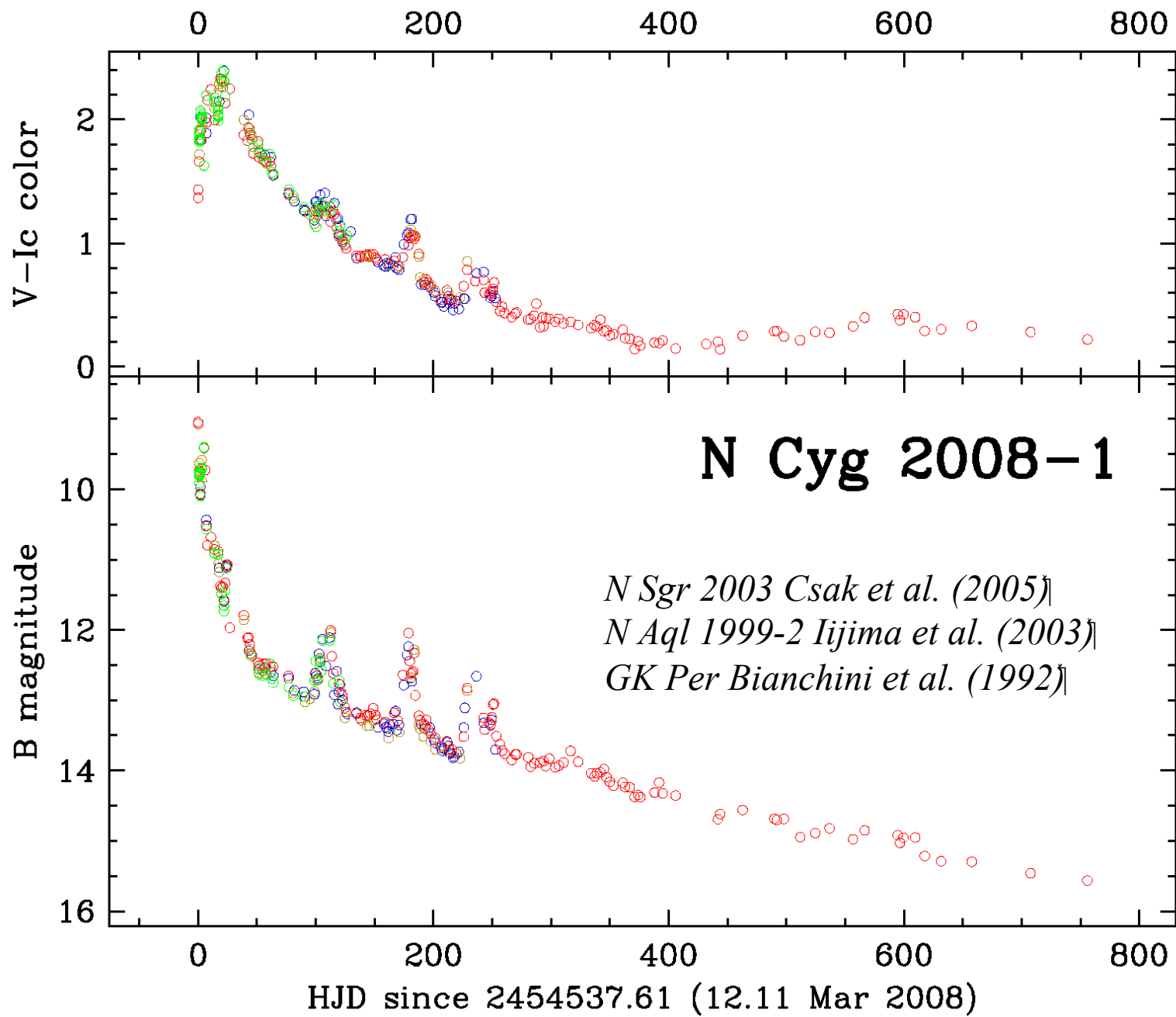


oscillations









progenitors & quiescence

similar assumption:
old plates estimated
against modern B mag

Robinson 1975

50% pre-outburst rise

sometimes larger
variability pre- than
post-outburst

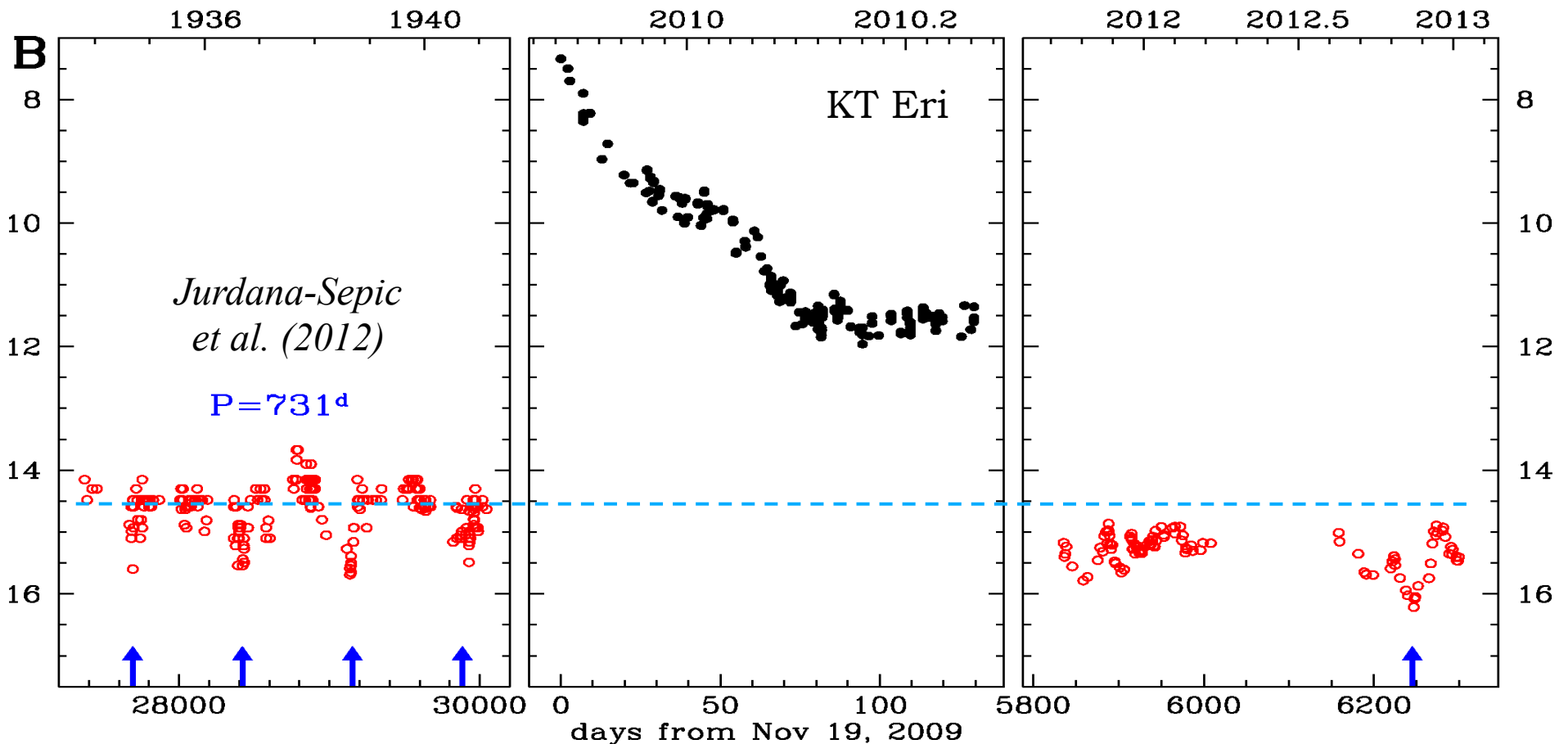
mag(pre) \approx mag(post)

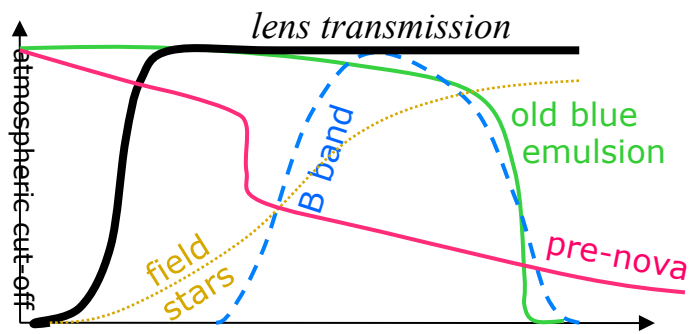
Collazzi et al. 2009

10% pre-outburst rises

not confirmed

mag(pre) \approx mag(post)





Robinson 1975

50% pre-outburst rise

sometimes larger variability pre- than post-outburst

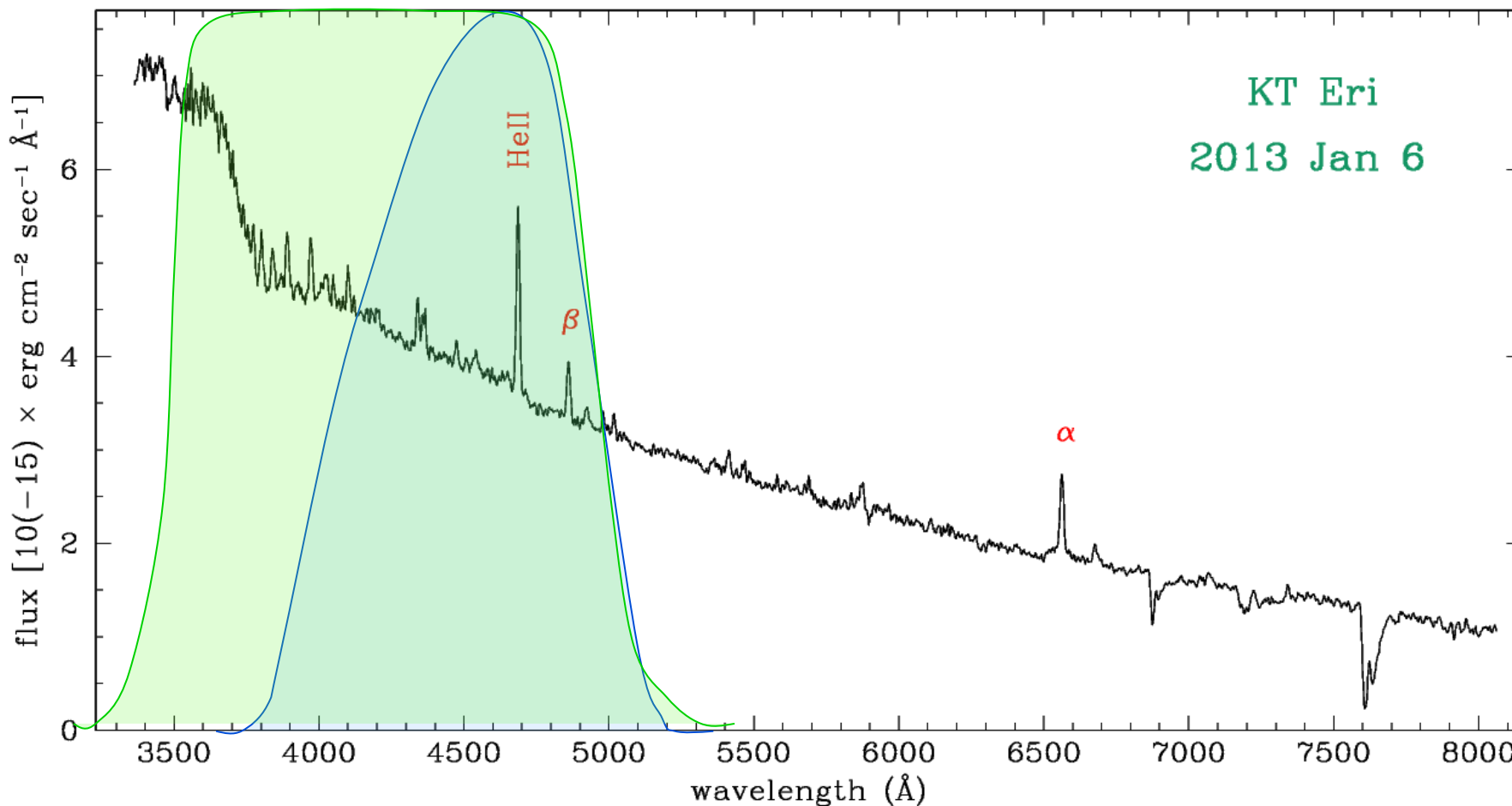
$\text{mag}(\text{pre}) \approx \text{mag}(\text{post})$

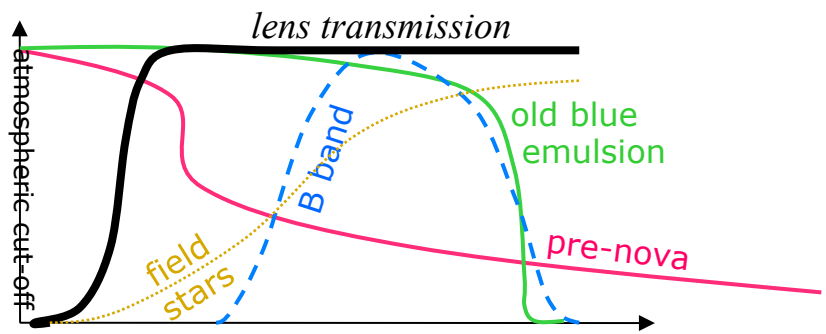
Collazzi et al. 2009

10% pre-outburst rises

not confirmed

$\text{mag}(\text{pre}) \approx \text{mag}(\text{post})$





Robinson 1975

50% pre-outburst rise

sometimes larger variability pre- than post-outburst

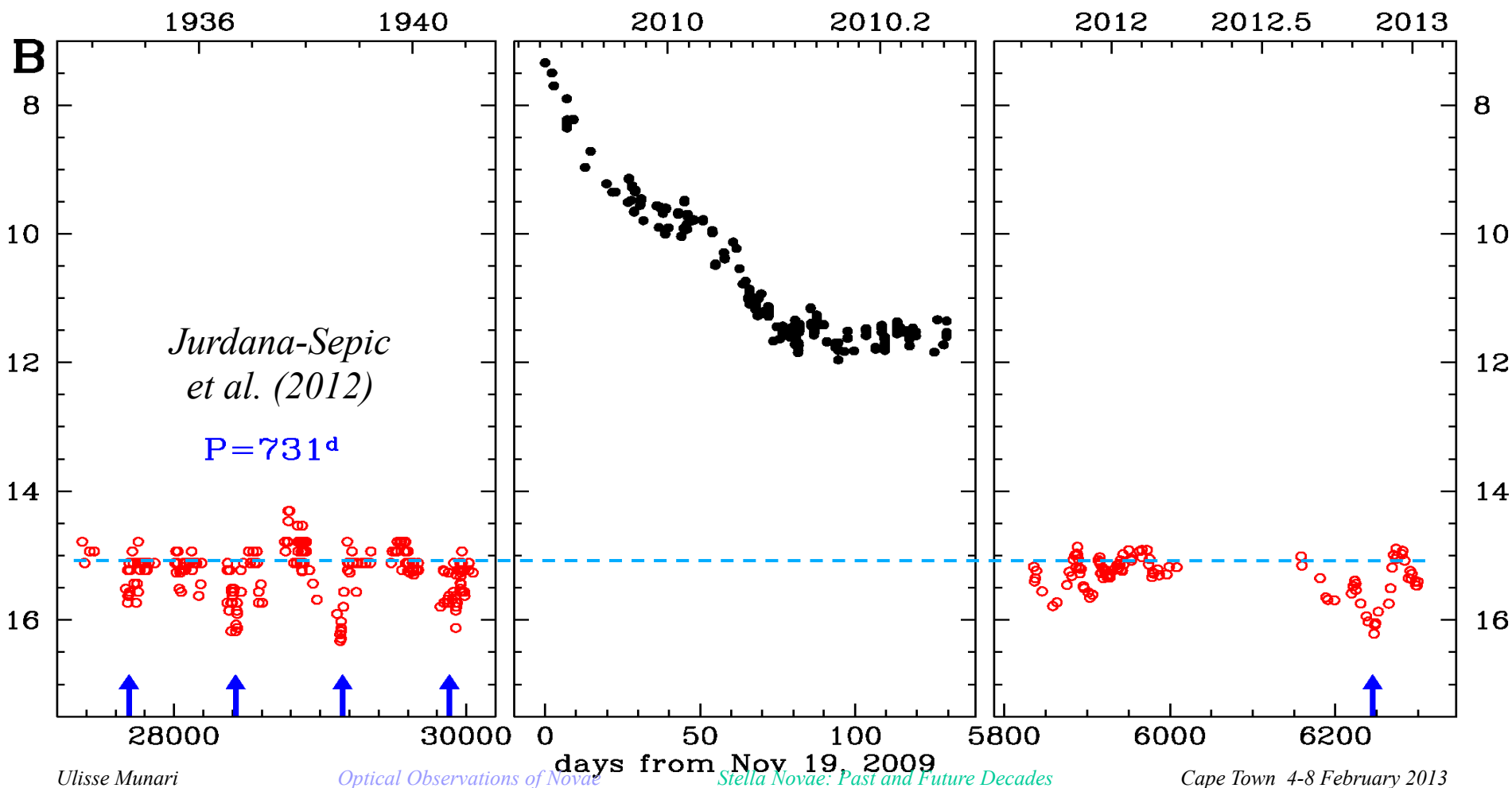
$\text{mag}(\text{pre}) \approx \text{mag}(\text{post})$

Collazzi et al. 2009

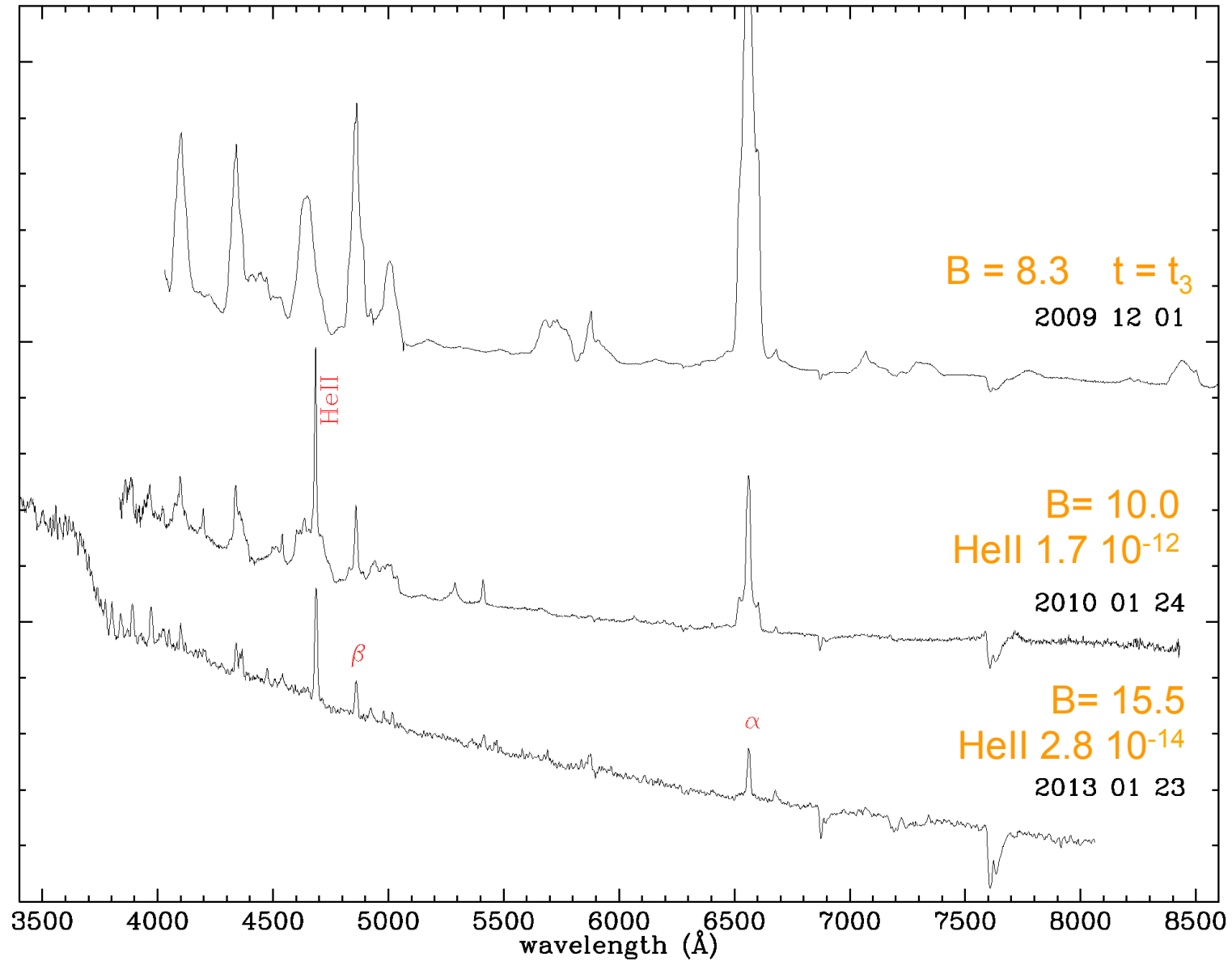
10% pre-outburst rises

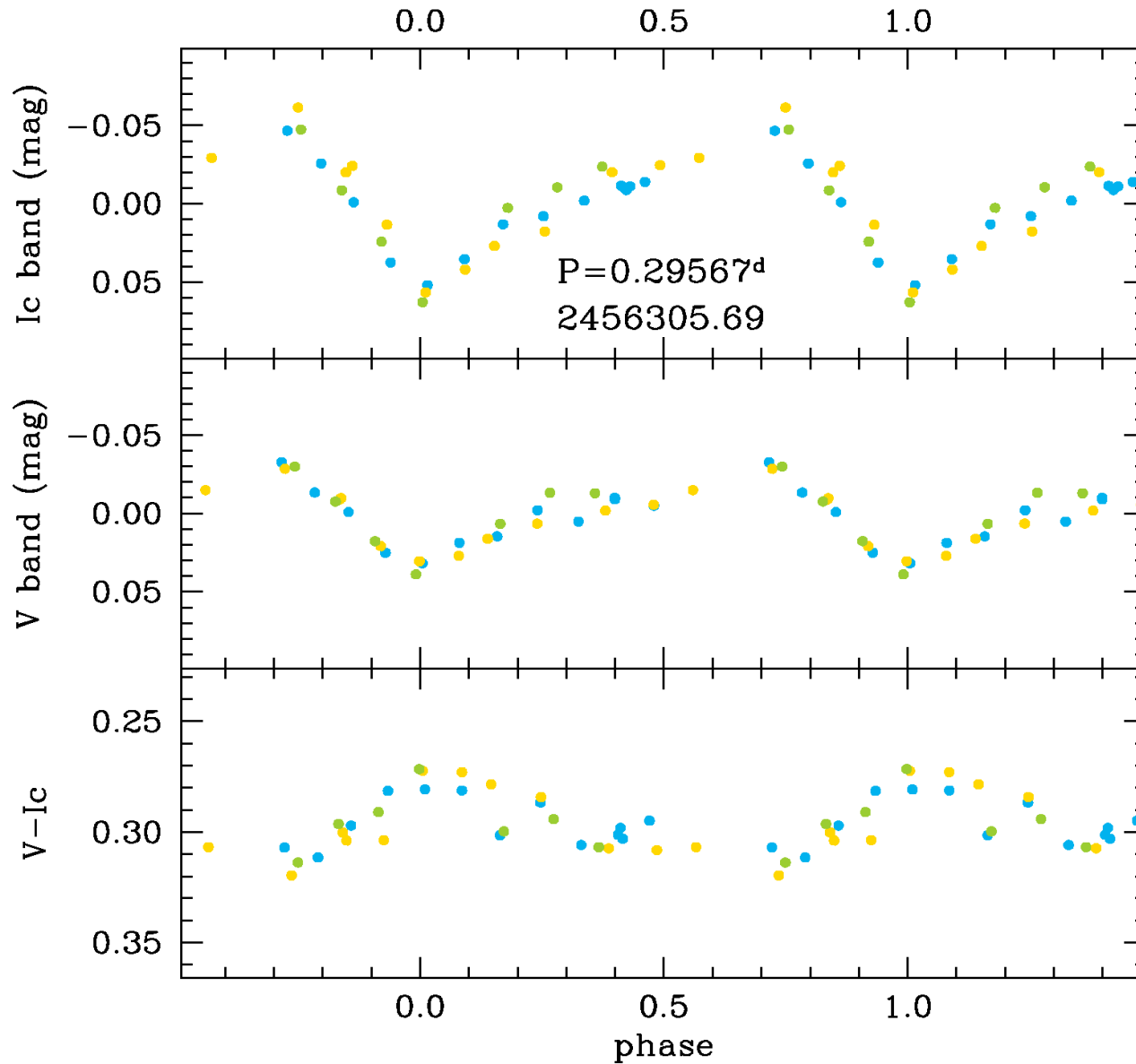
not confirmed

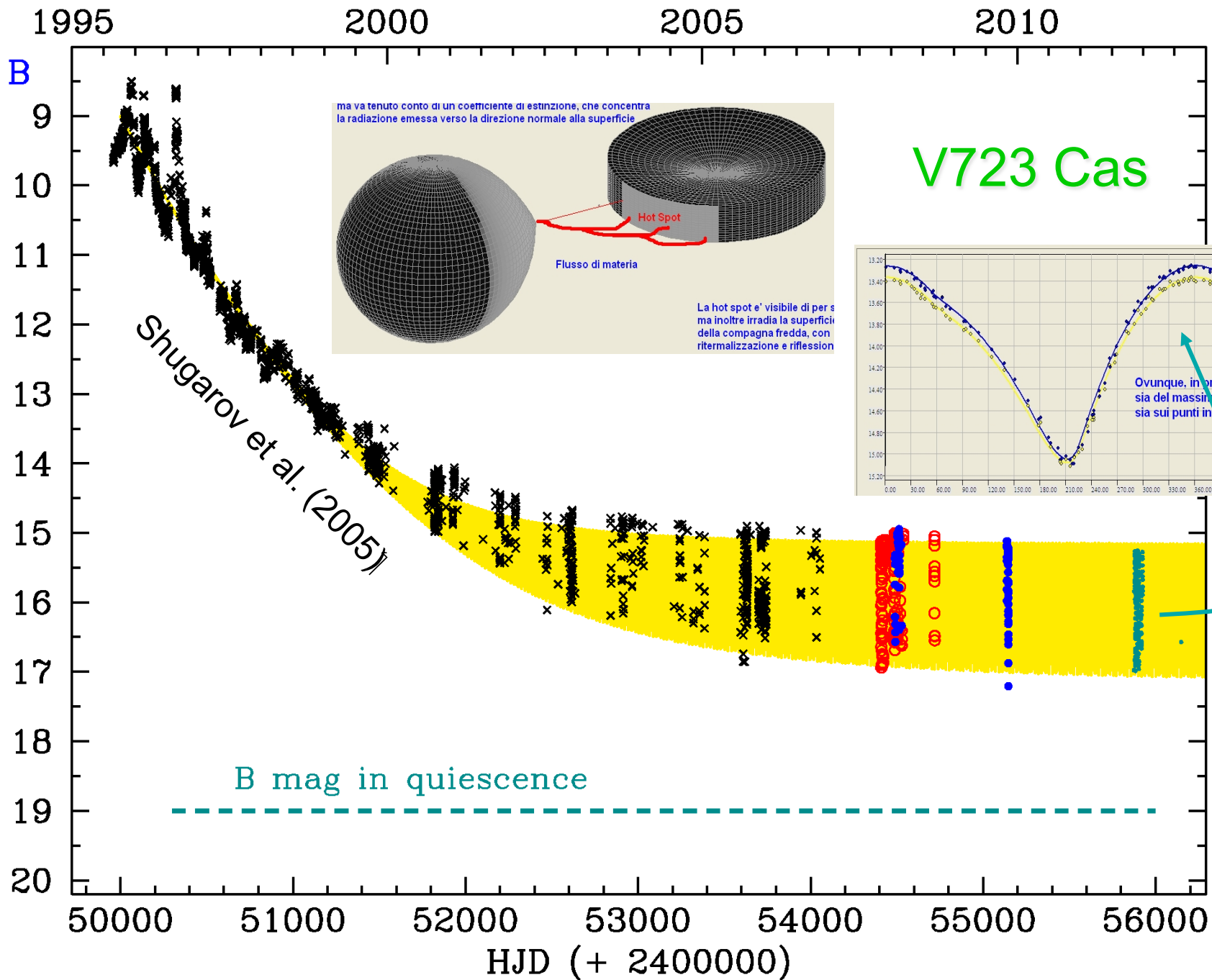
$\text{mag}(\text{pre}) \approx \text{mag}(\text{post})$



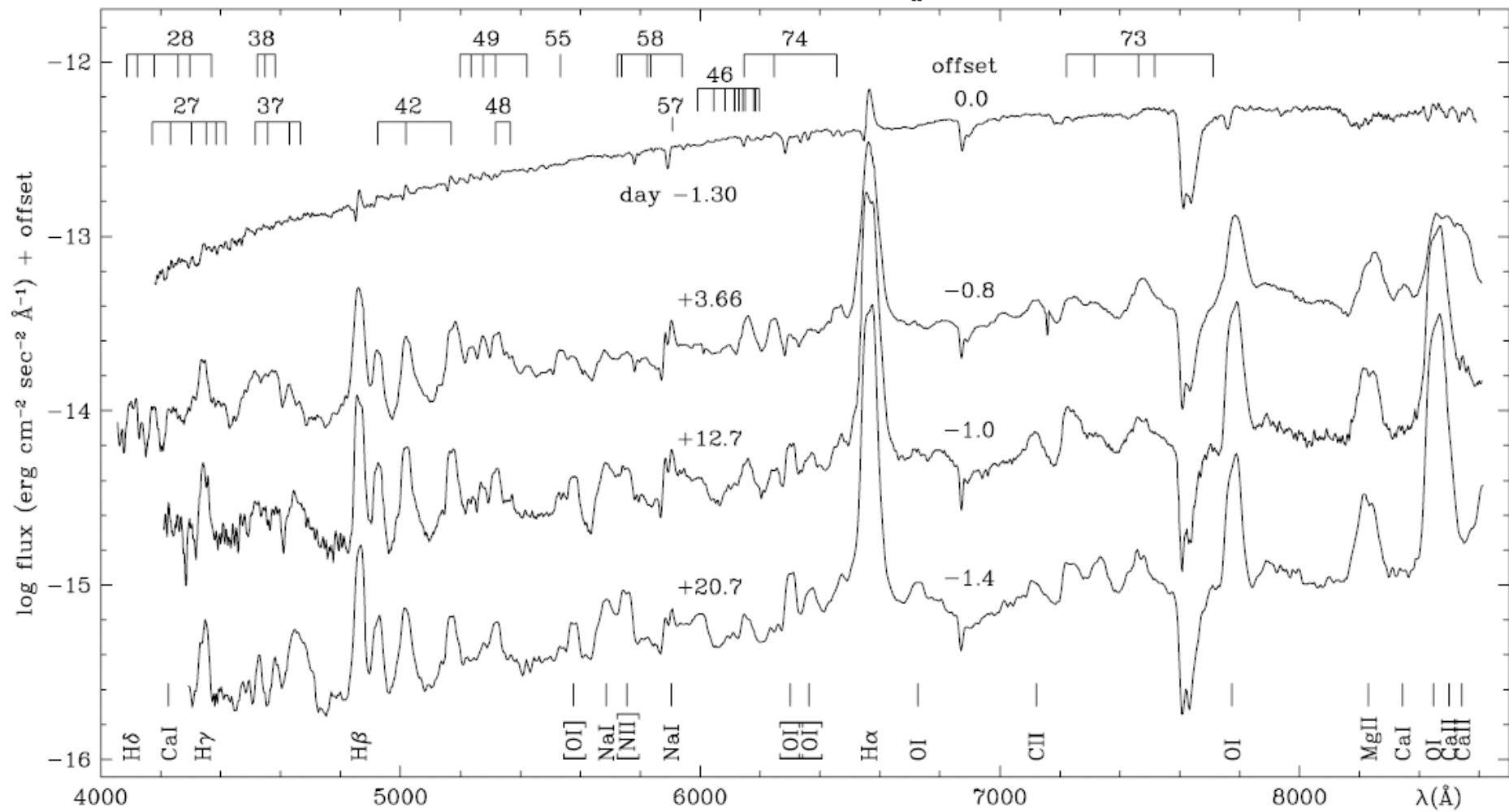
high [He/H] / high magnetic field in KT Eri ?

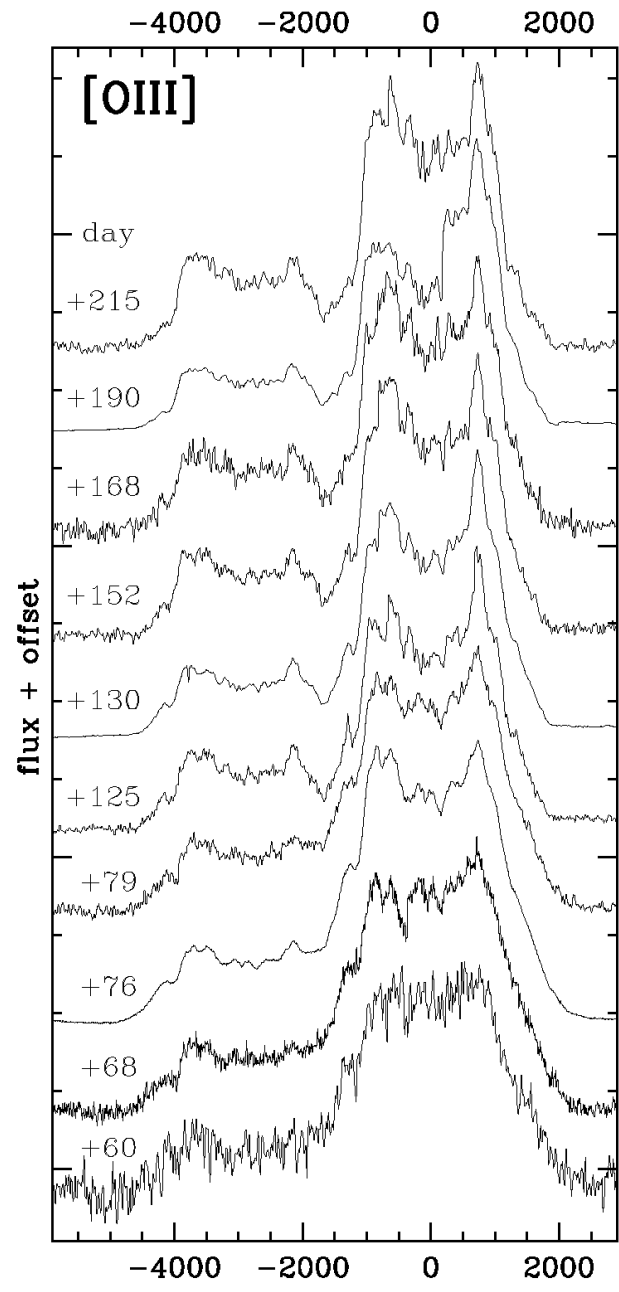
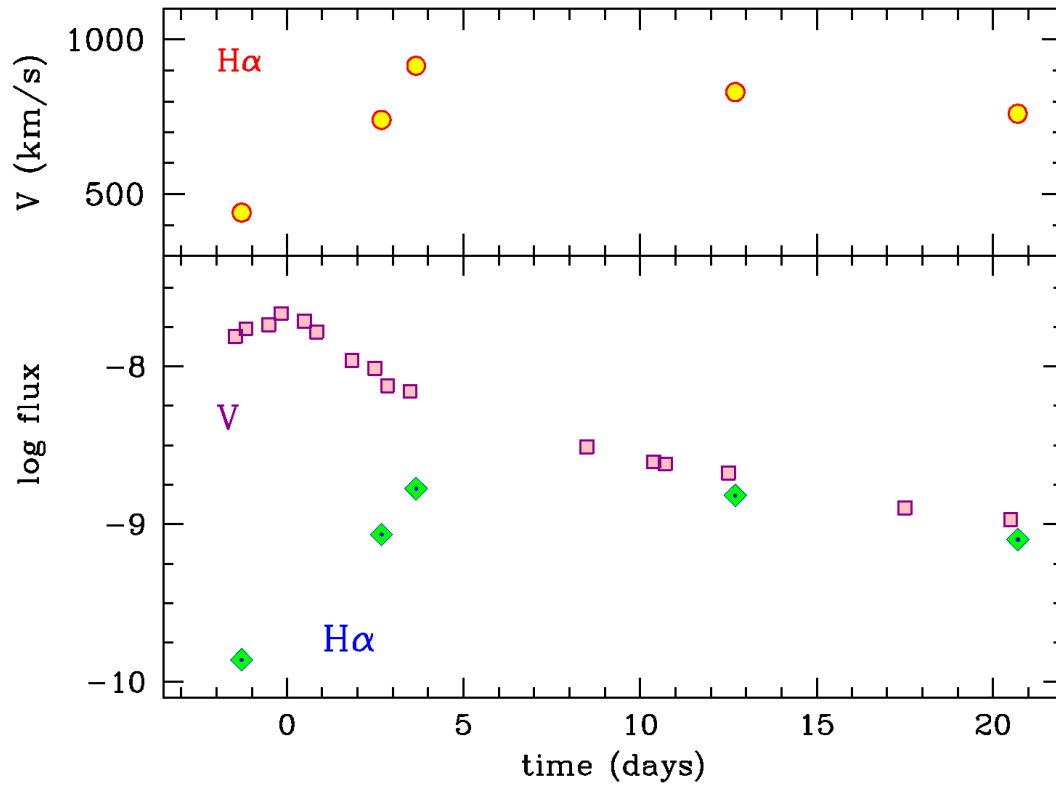
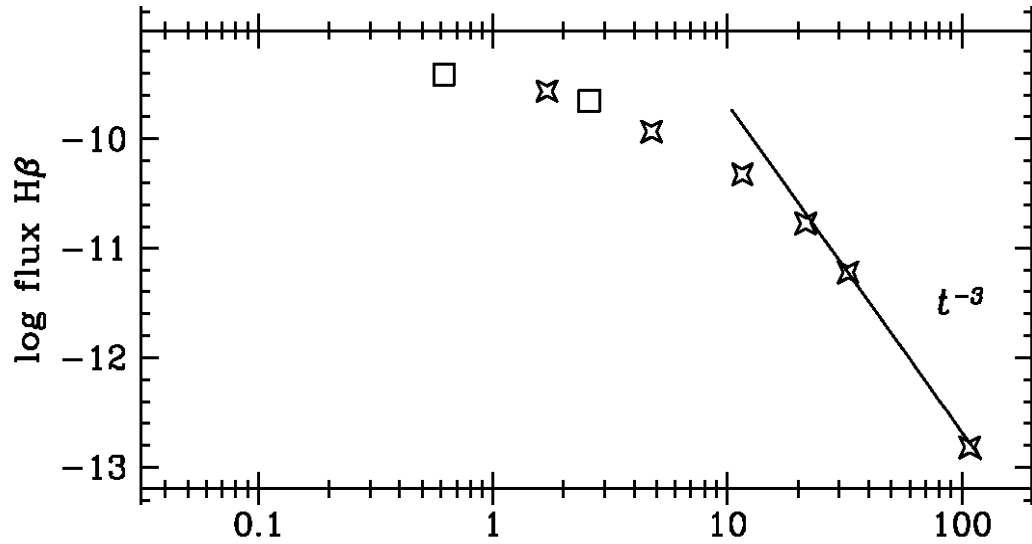






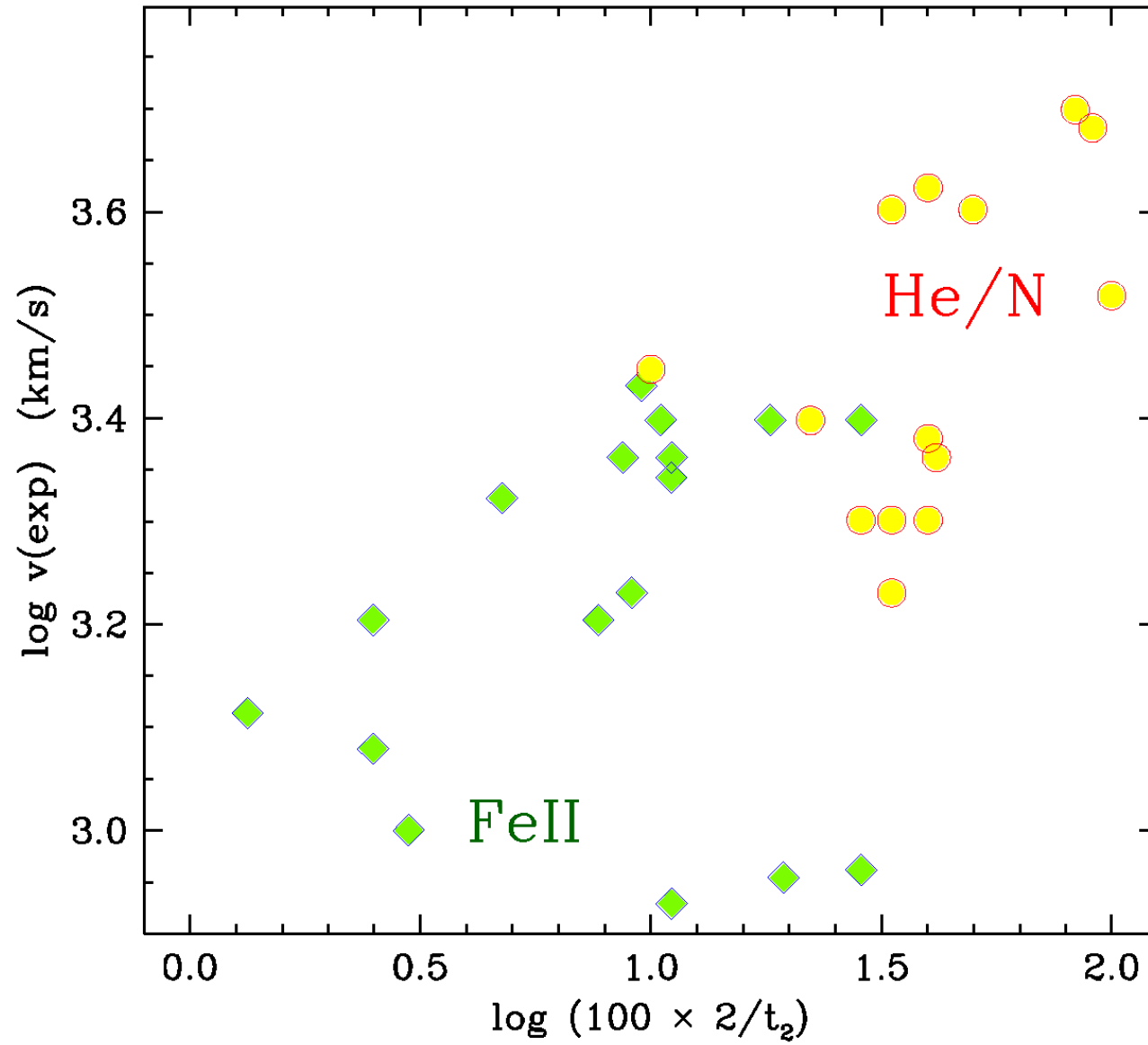
spectra

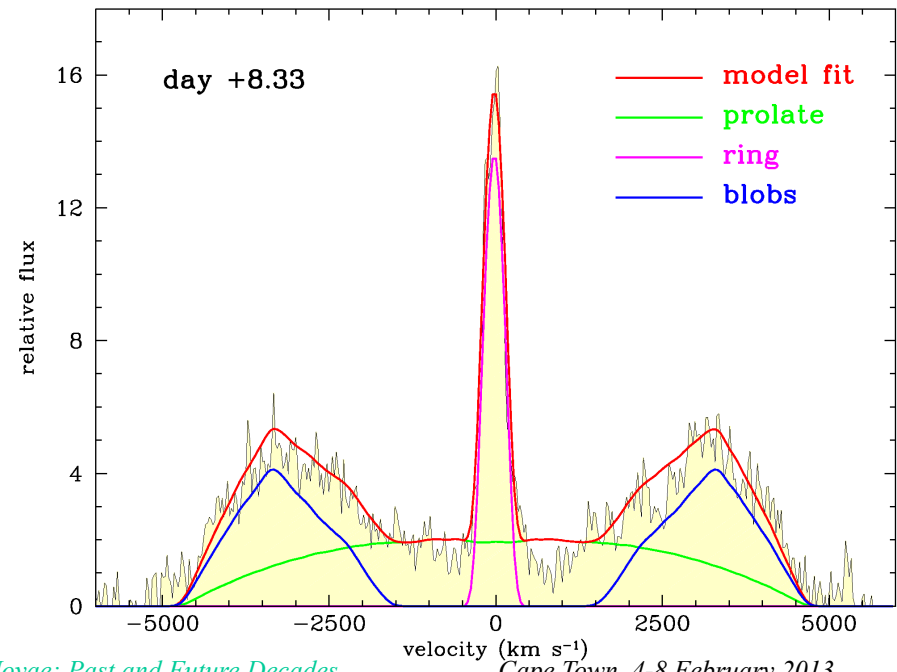
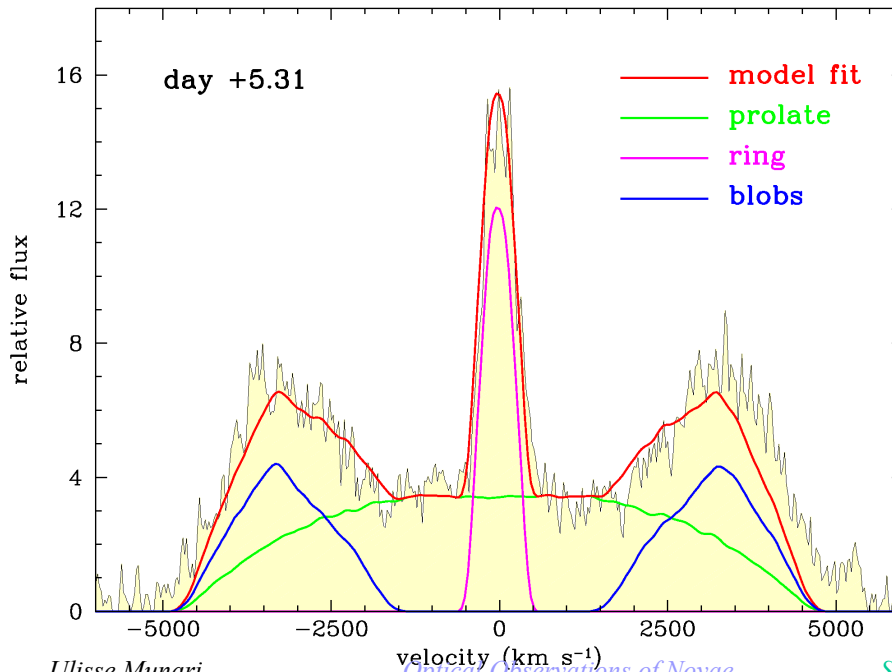
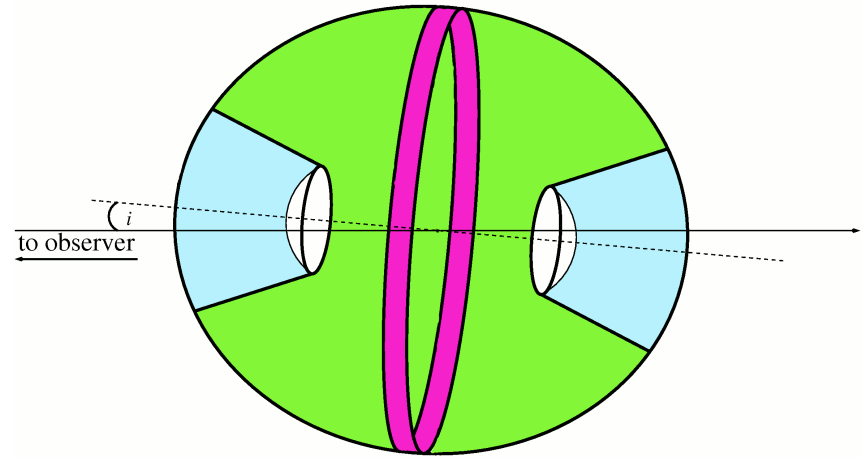
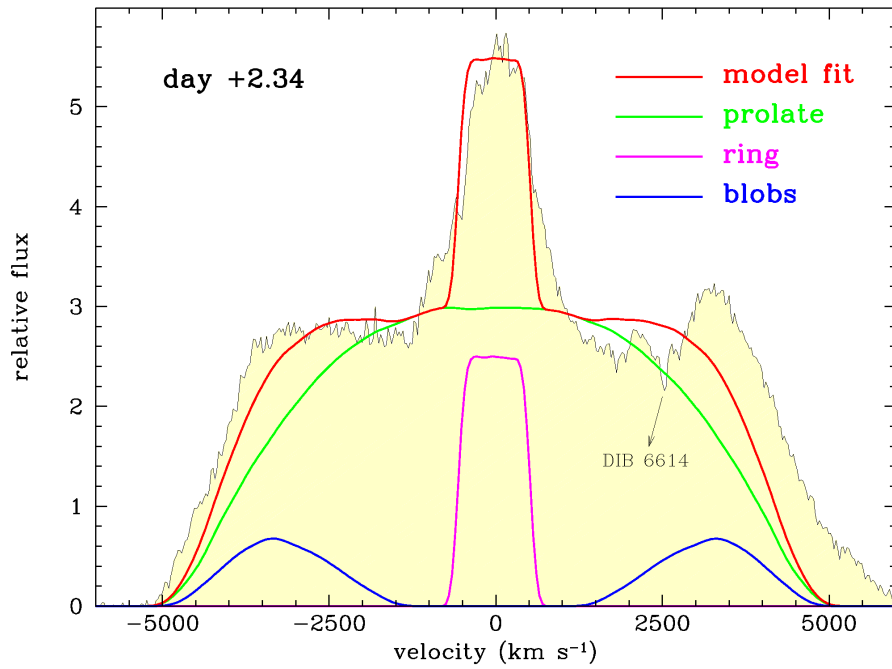




Nova Mon 2012

della Valle & Livio (1998) updated

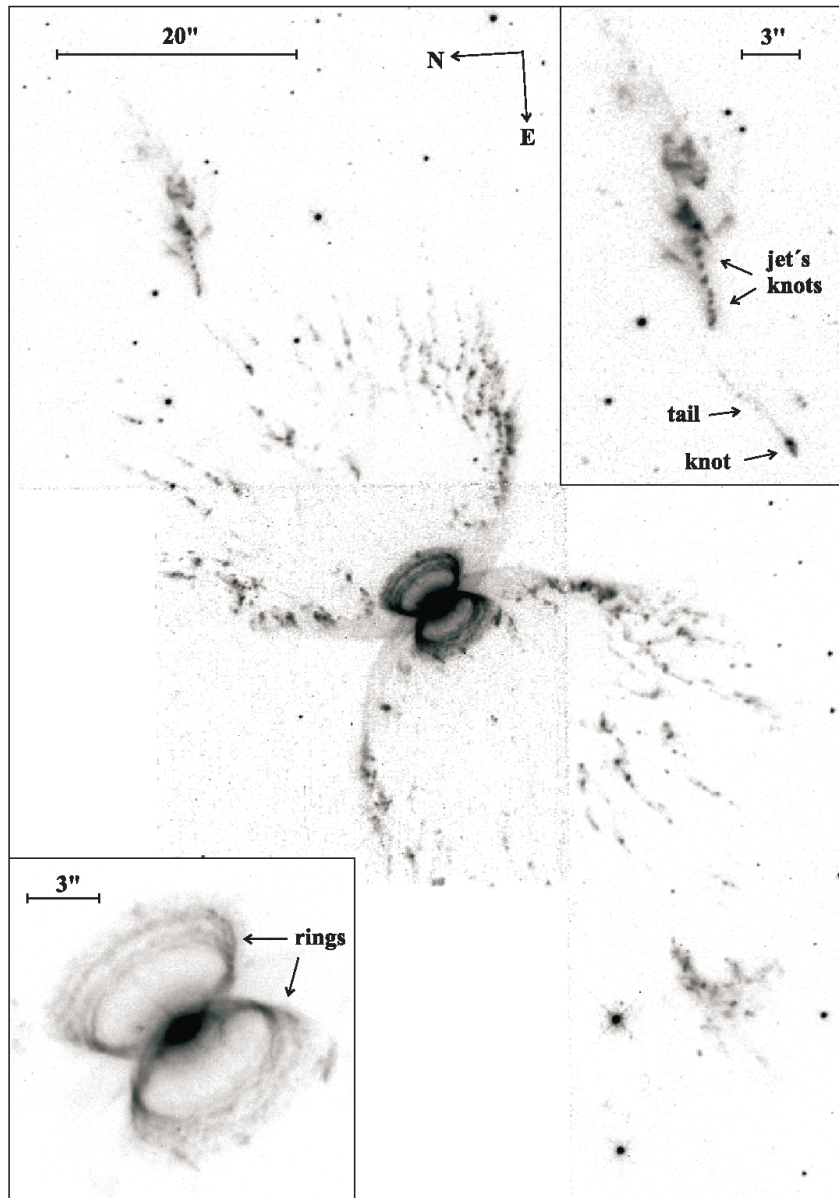




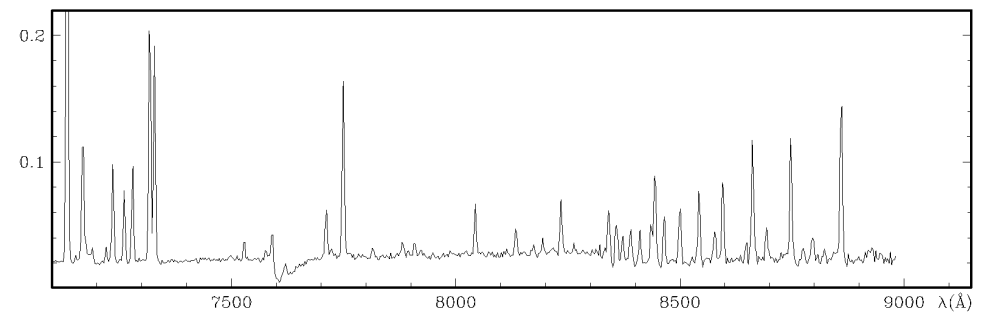
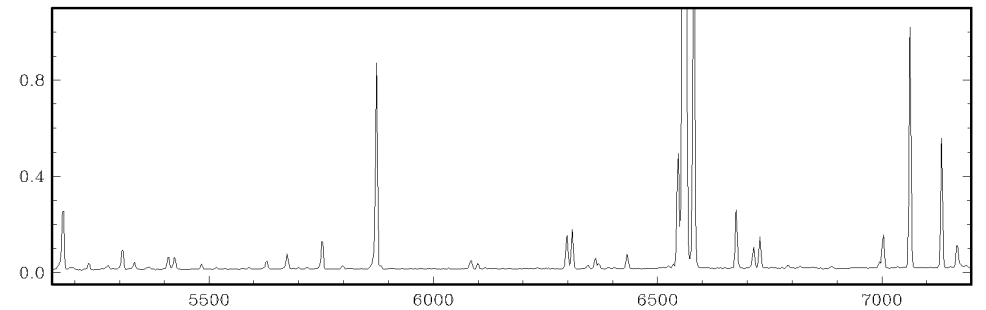
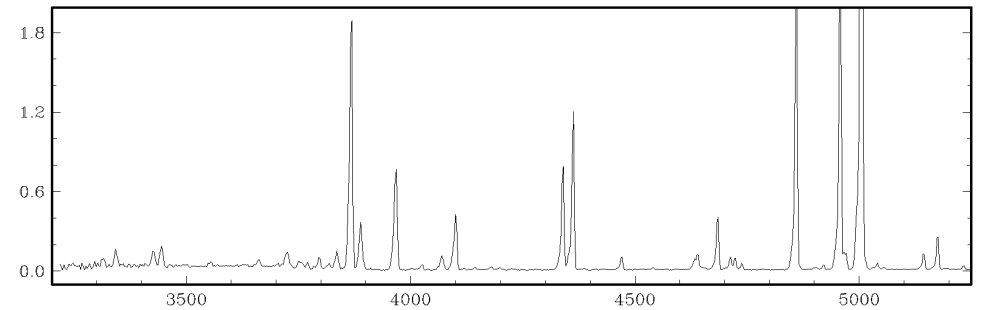
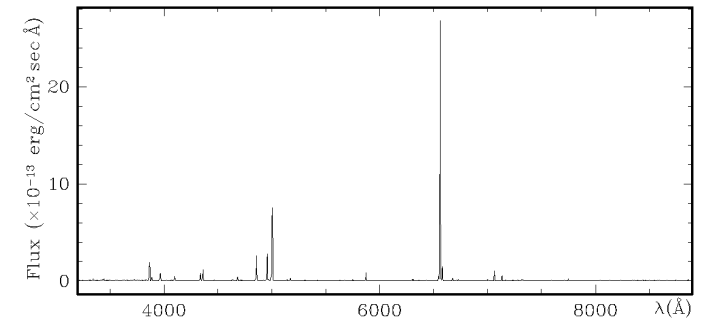
He 2-104

Corradi, Munari et al. (2001)

super-soft X-ray source
2 nested hourglass nebulae + polar jets
5700 yr common kinematical age

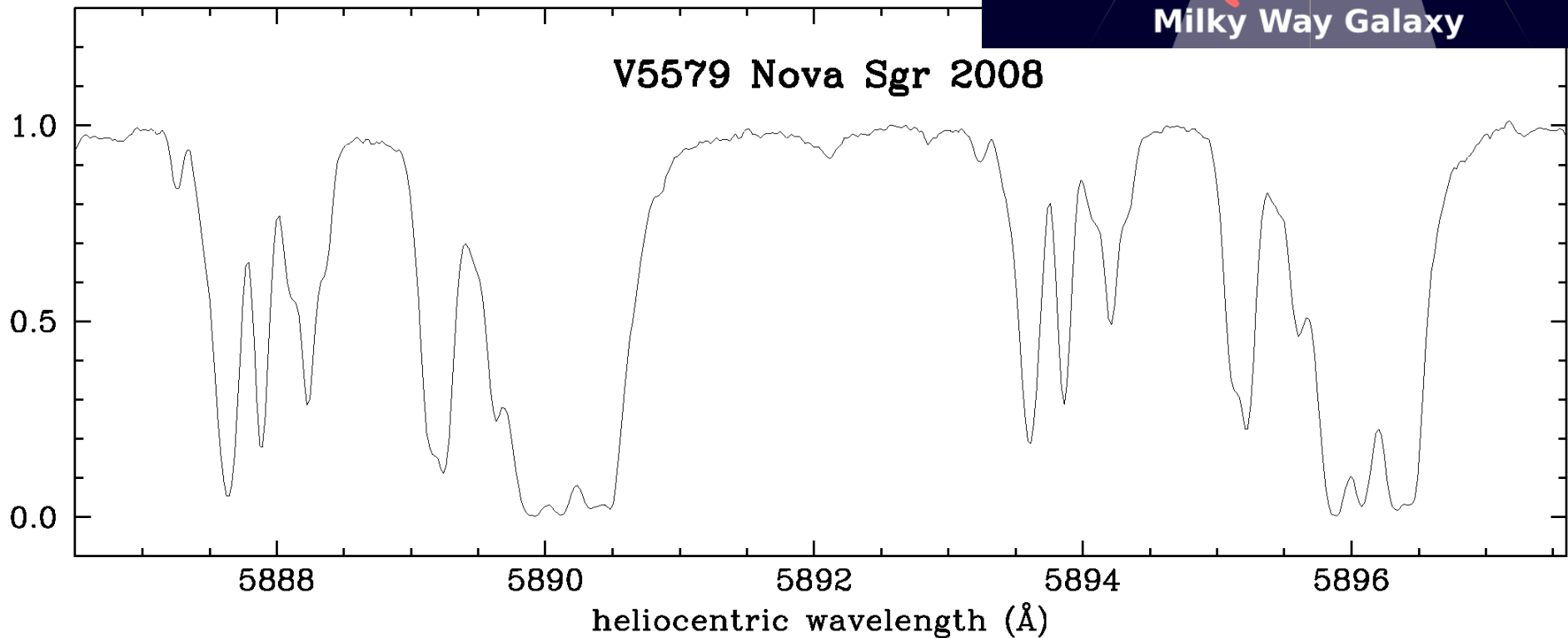
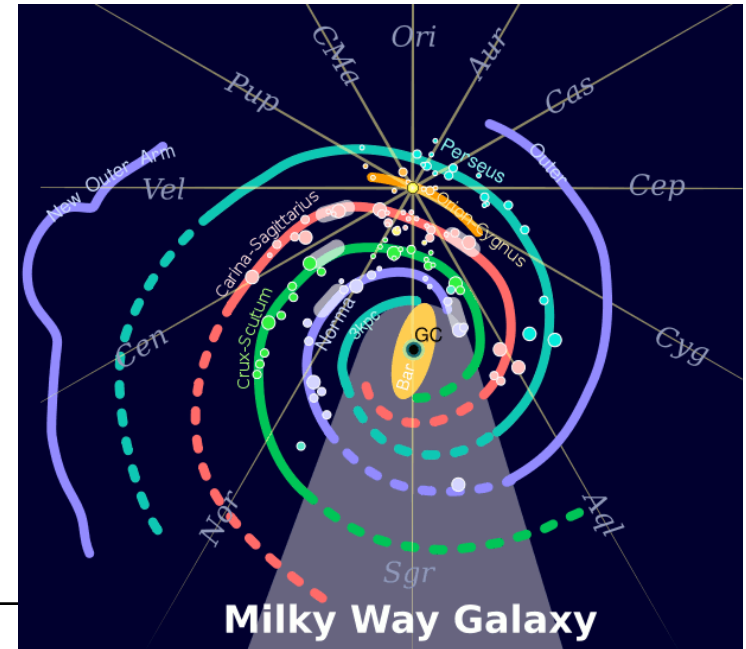


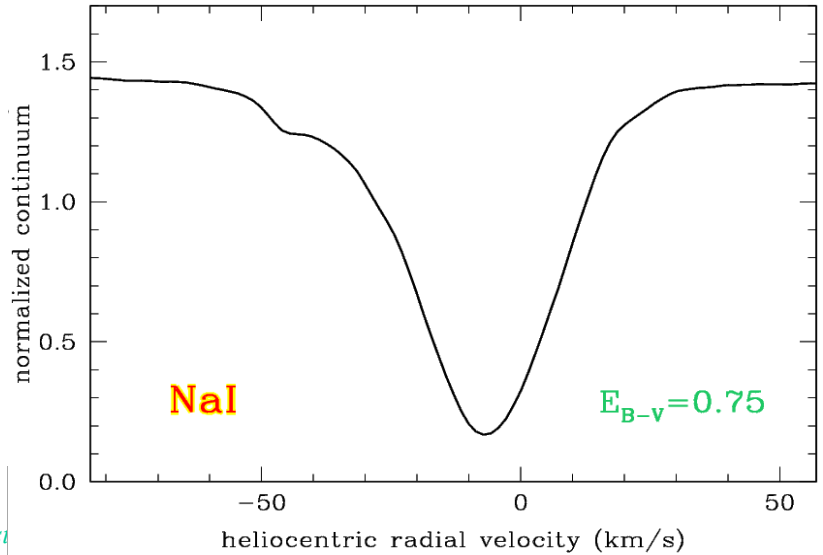
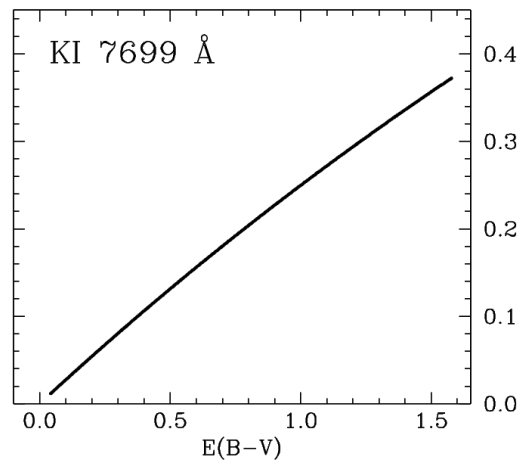
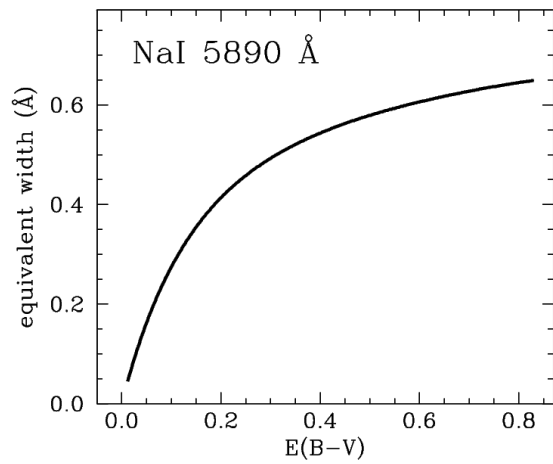
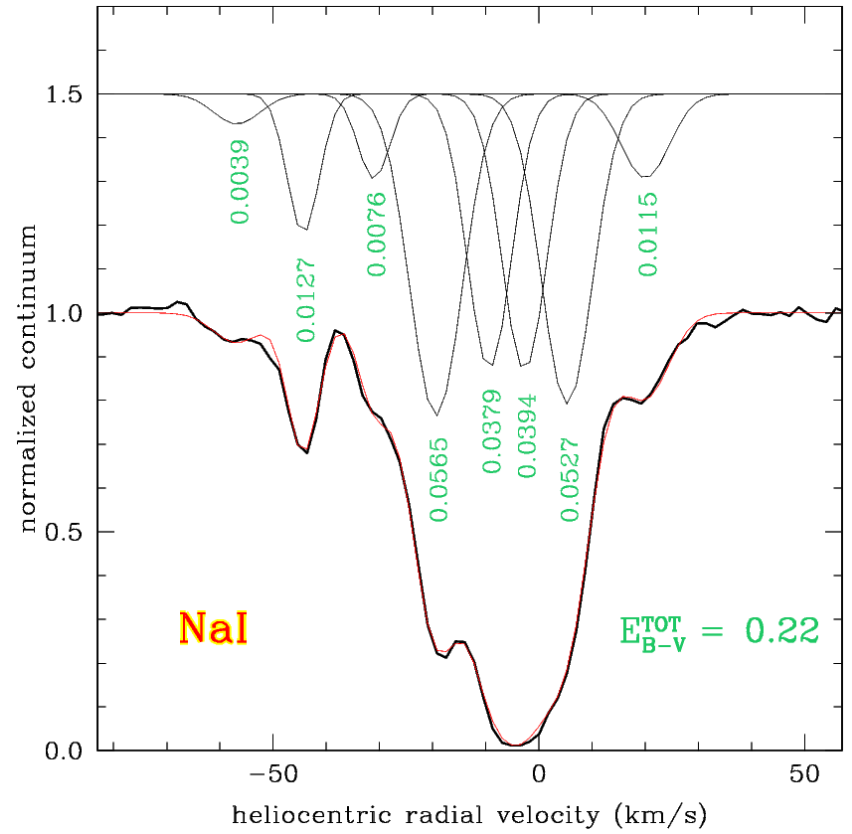
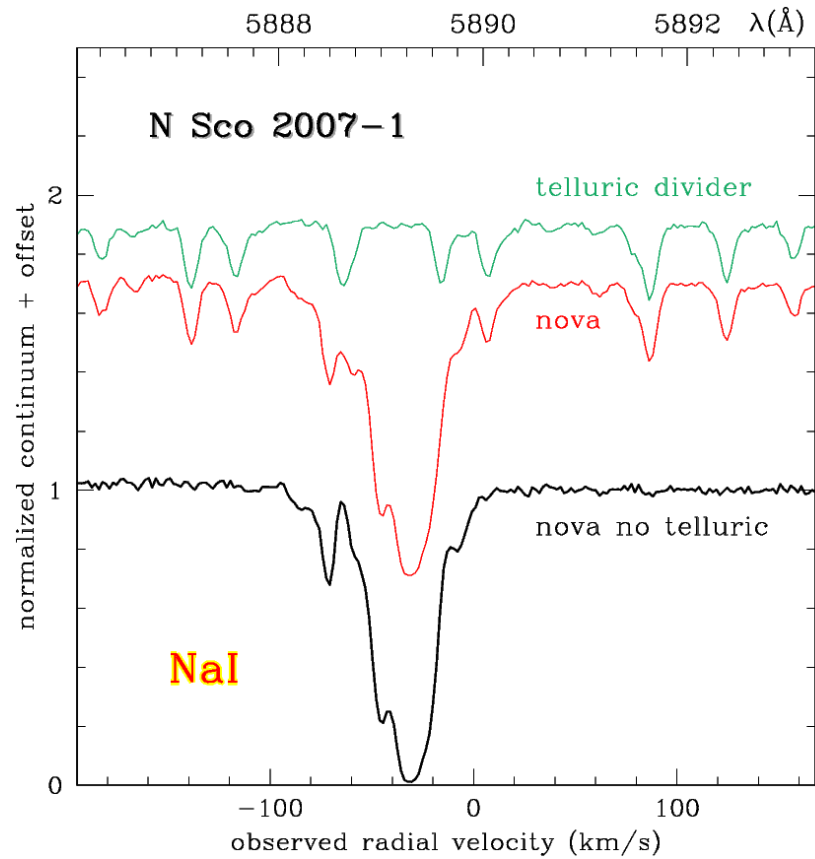
22.08/04/95
ESO 1.5 m + B&C

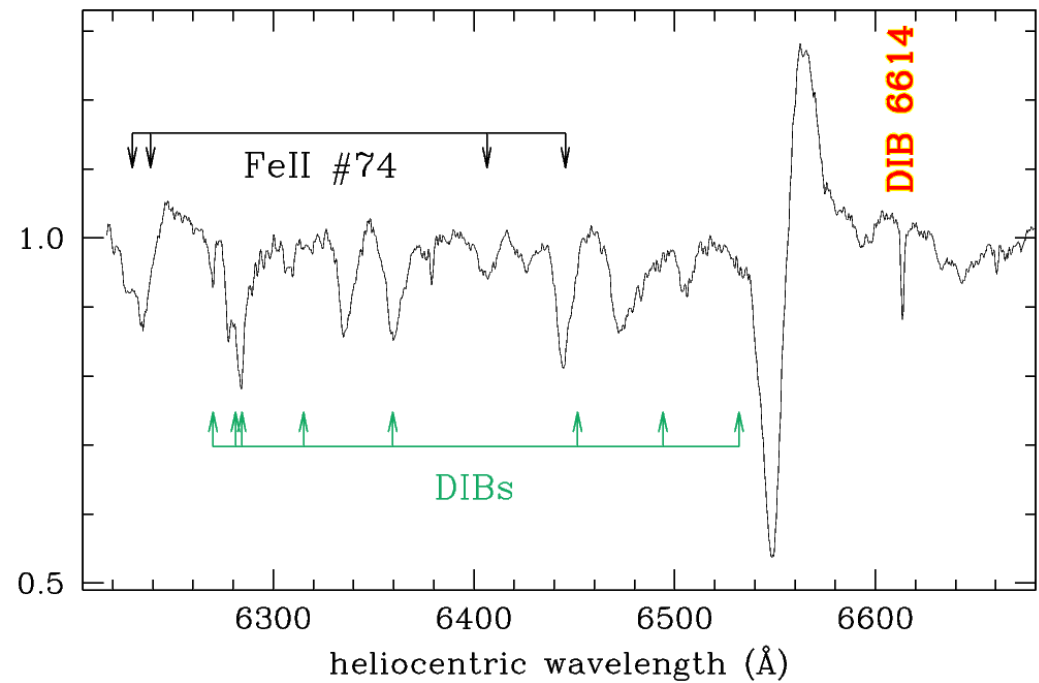
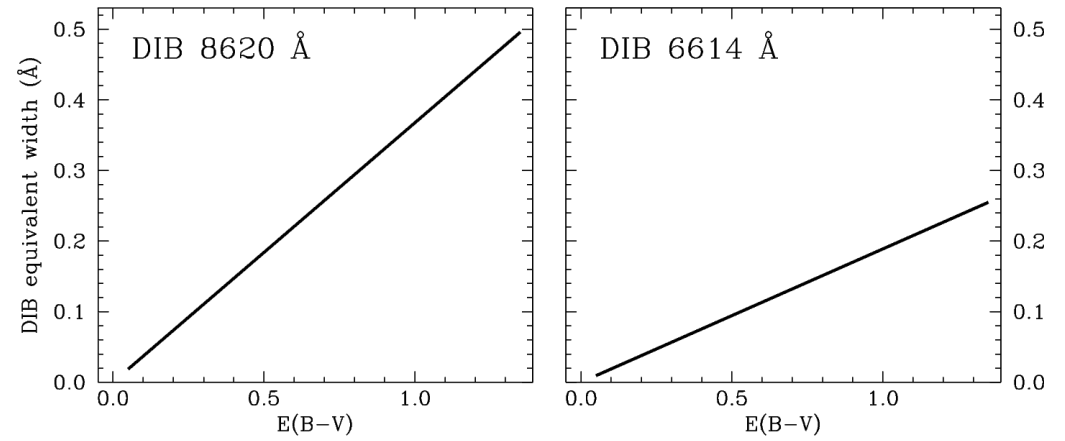
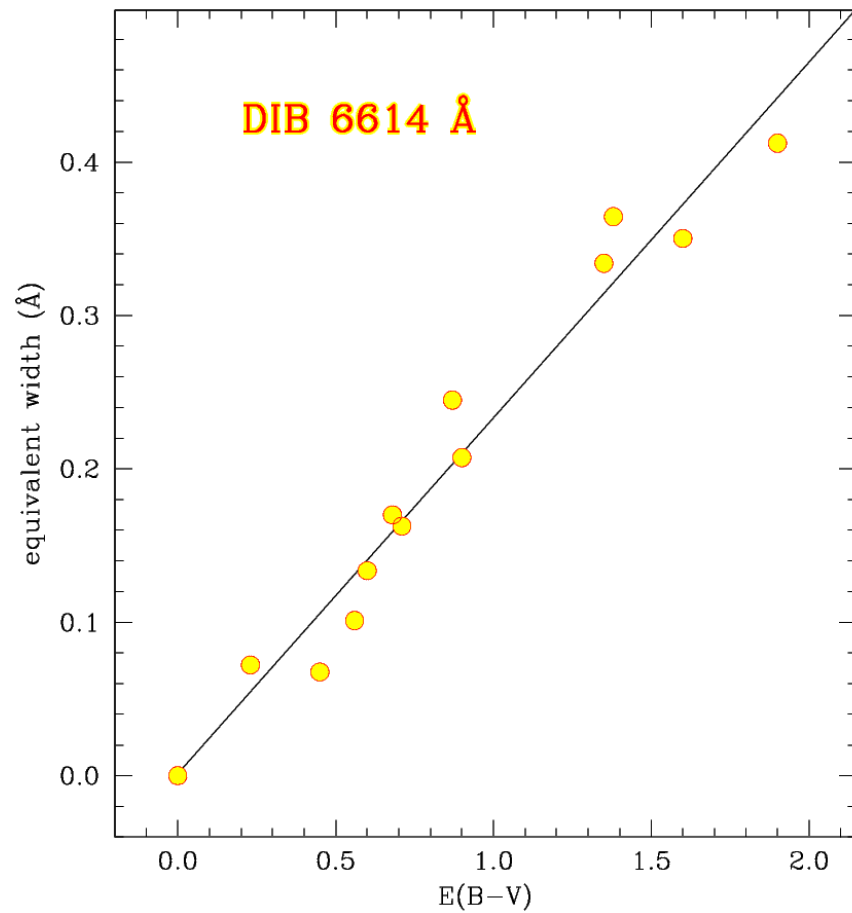


interstellar lines

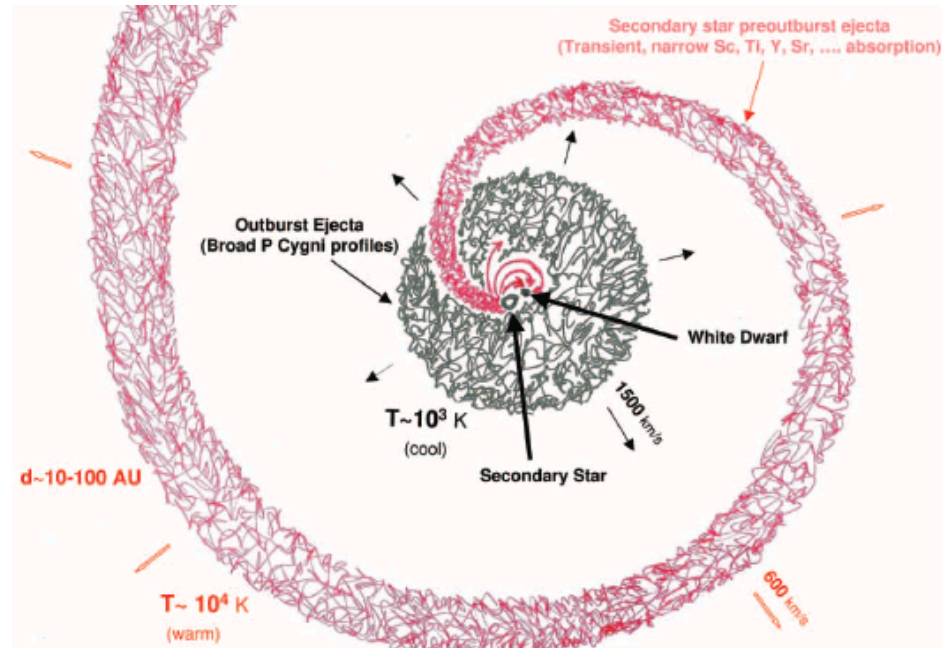
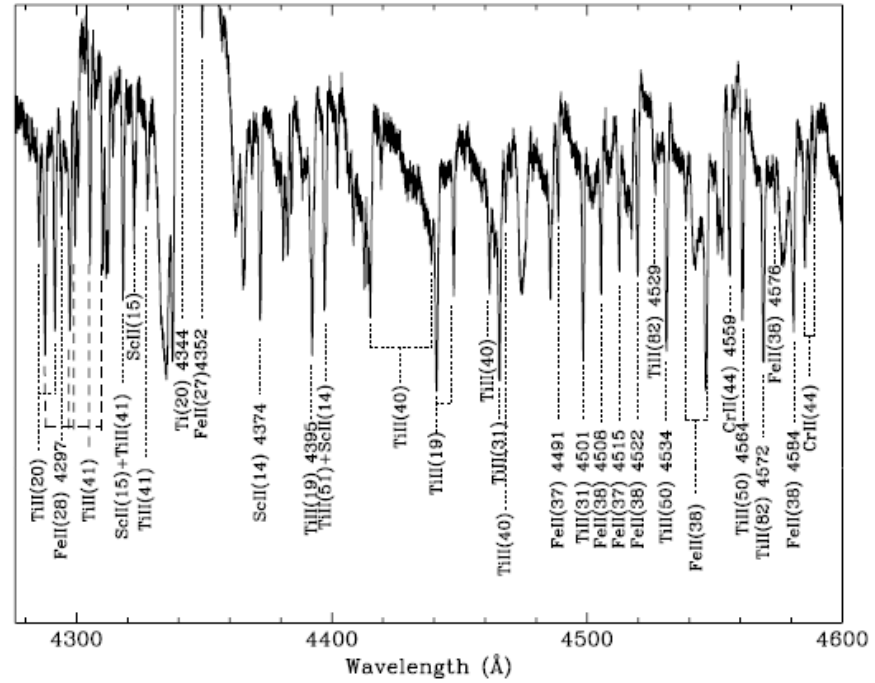
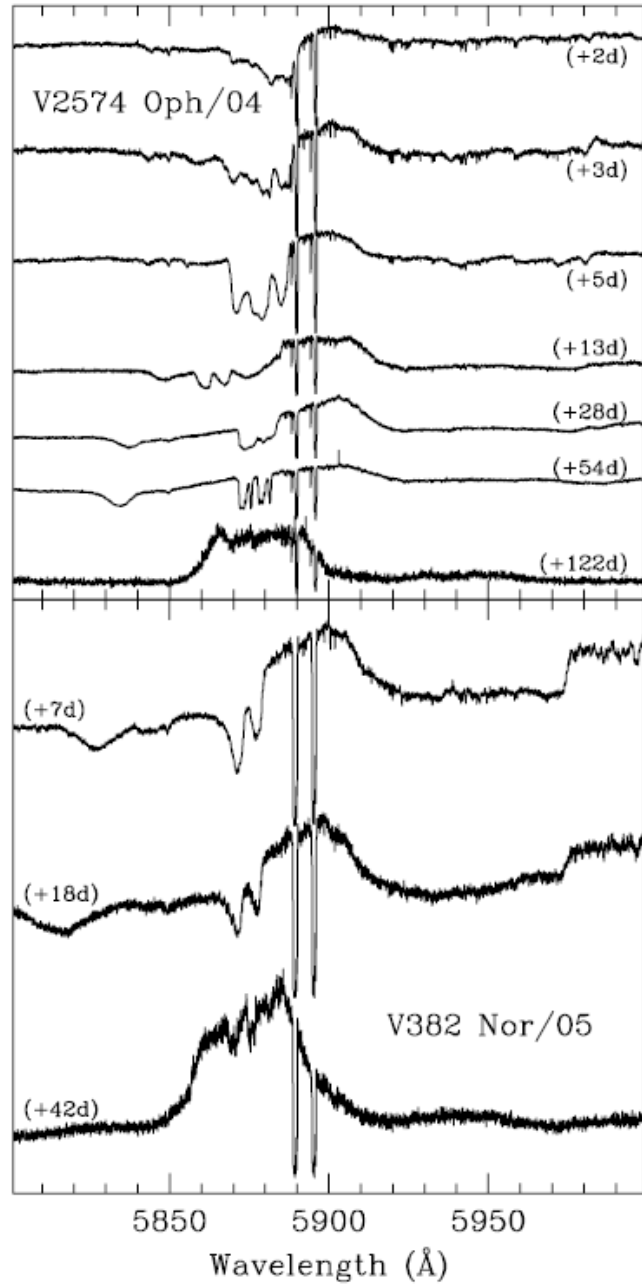
clues on distance, useful constrains to MMDR for galactic novae: revisiting Williams et al. (2008) Echelle database

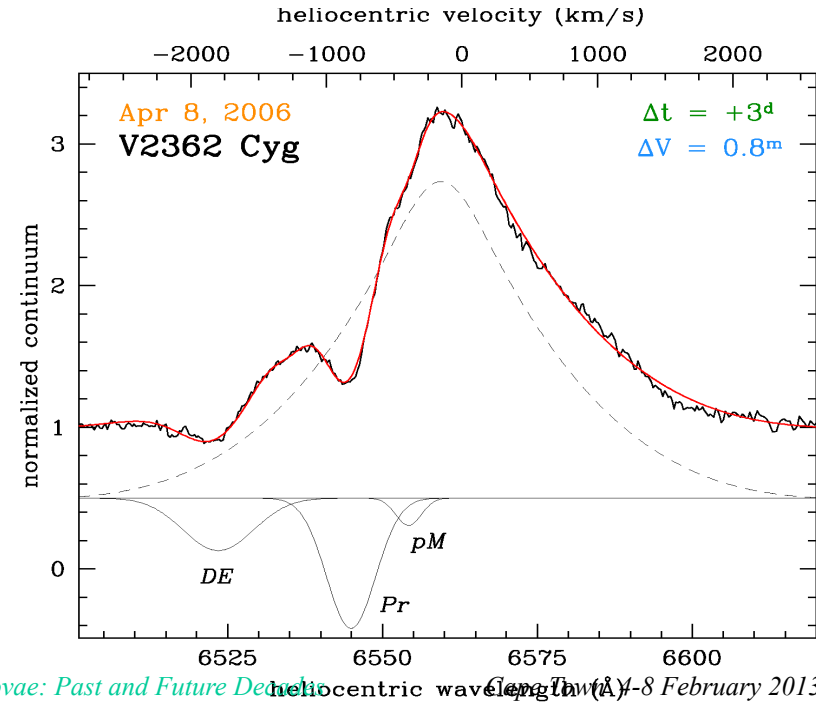
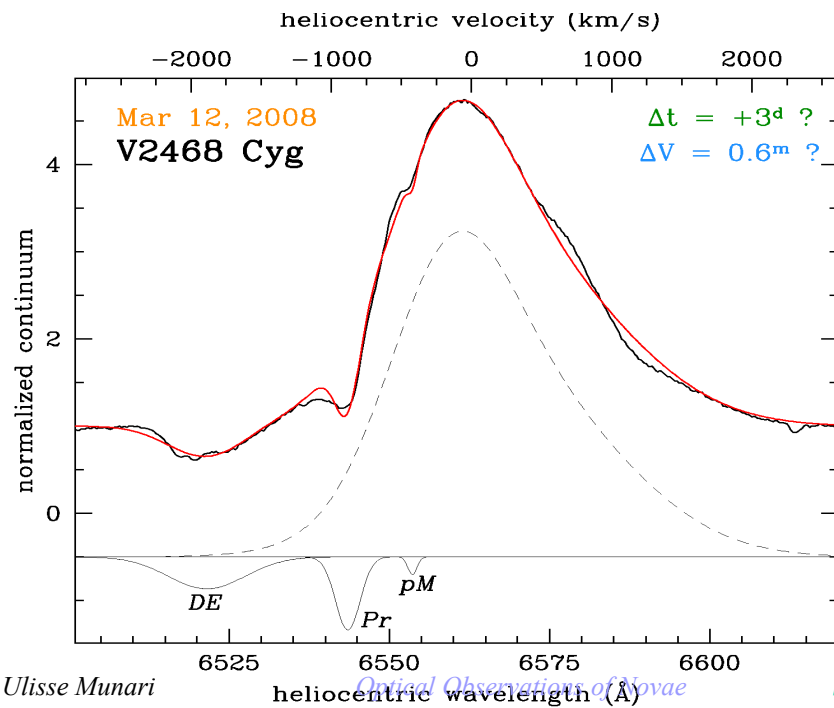
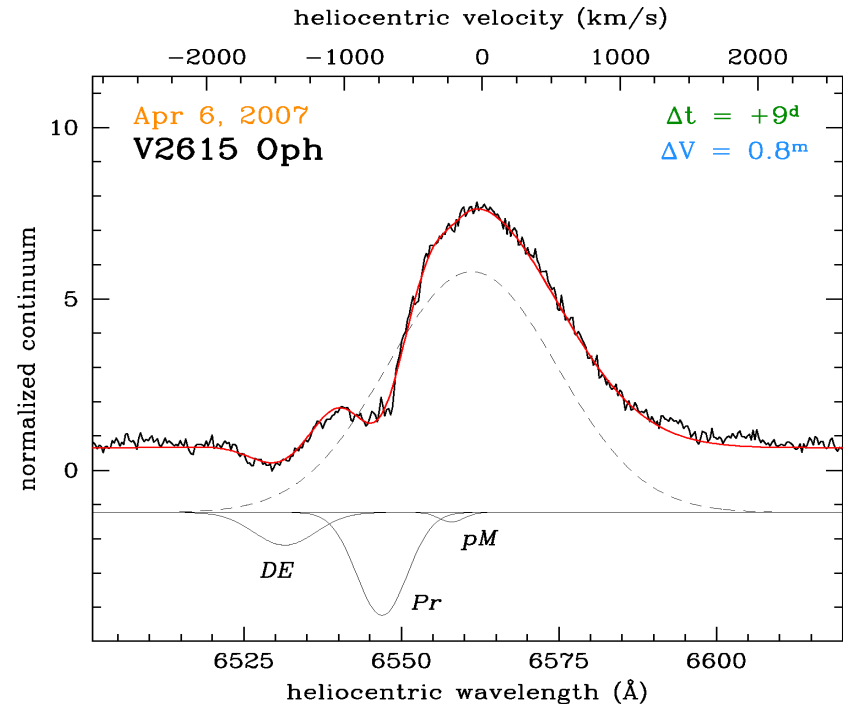
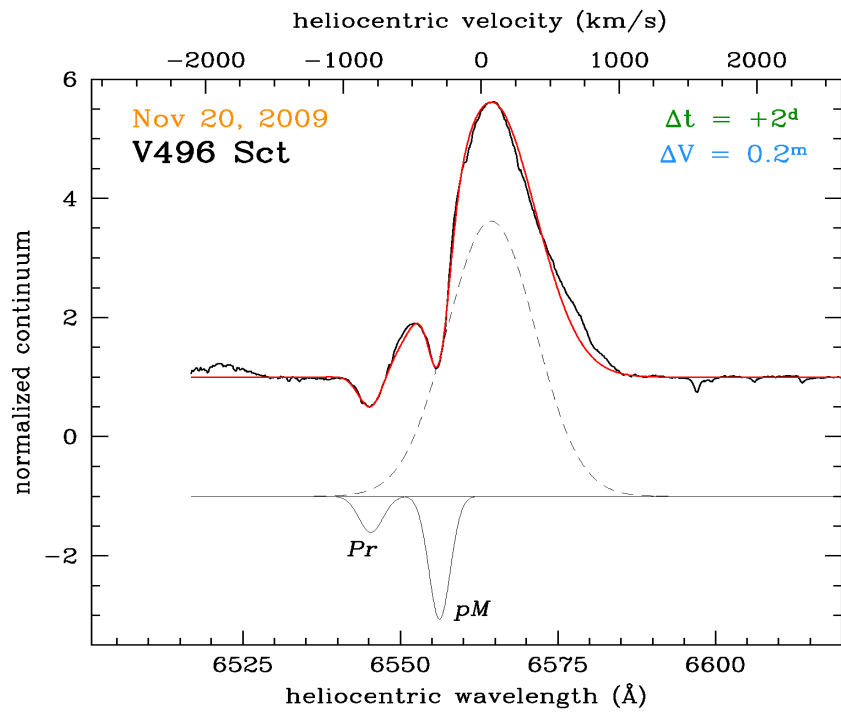


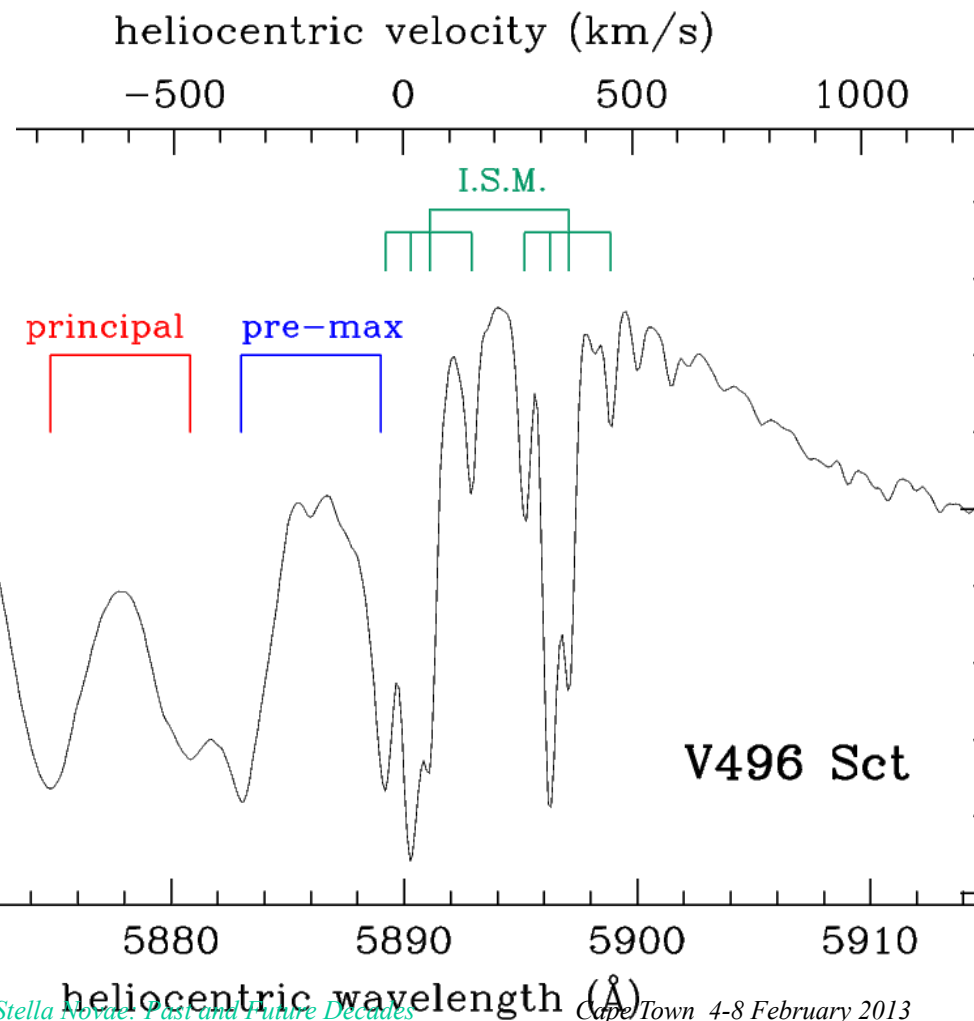
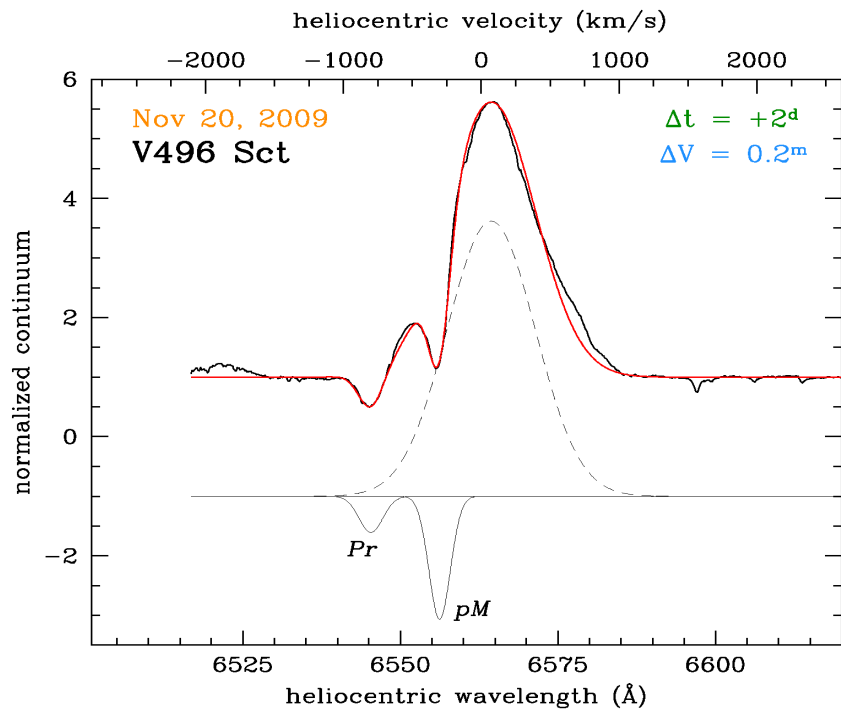


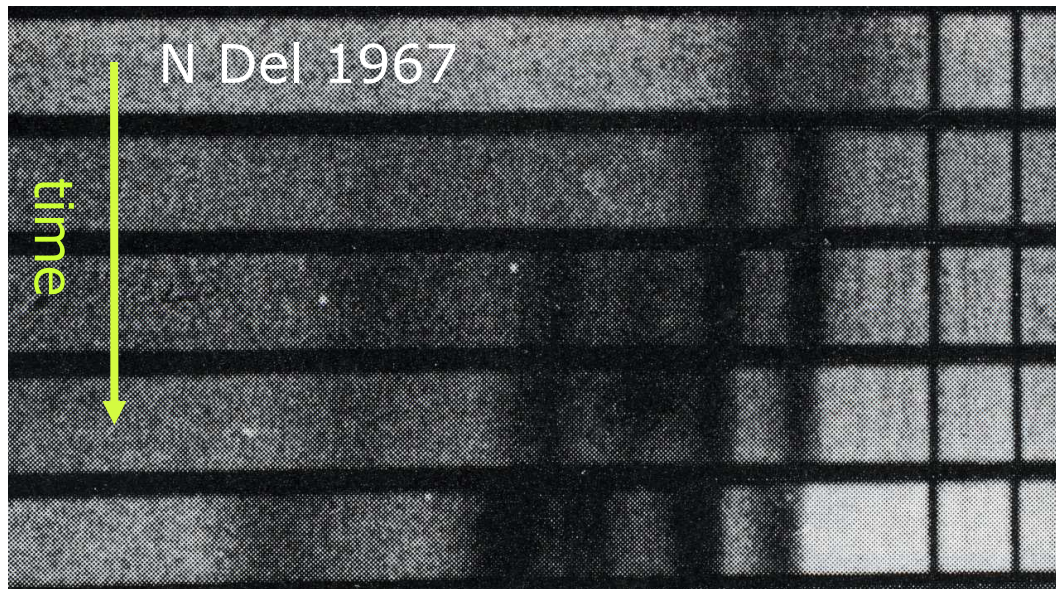


Williams et al. (2008)

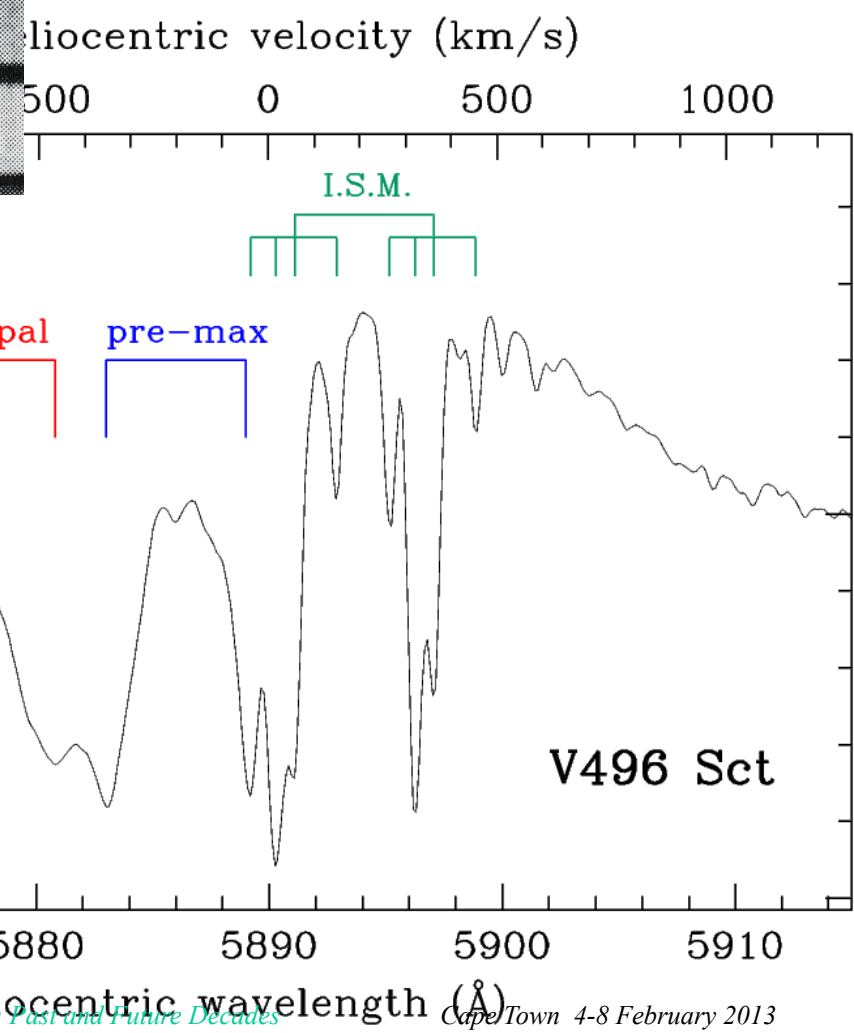








Struve (1972)



thanks to Organizers for taking care of having a new nova (Nova Cep 2013) to erupt right at the time of Conference opening, even and for a change north of the Equator ... !

Nova Cep 2013

Feb 4, 2013 (16 hours ago)

