

Spectral Monitoring of Nova Sagittarii 2015 No. 2

Dennis Jack



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Outline

1 Introduction

2 TIGRE observations of V5668 Sgr

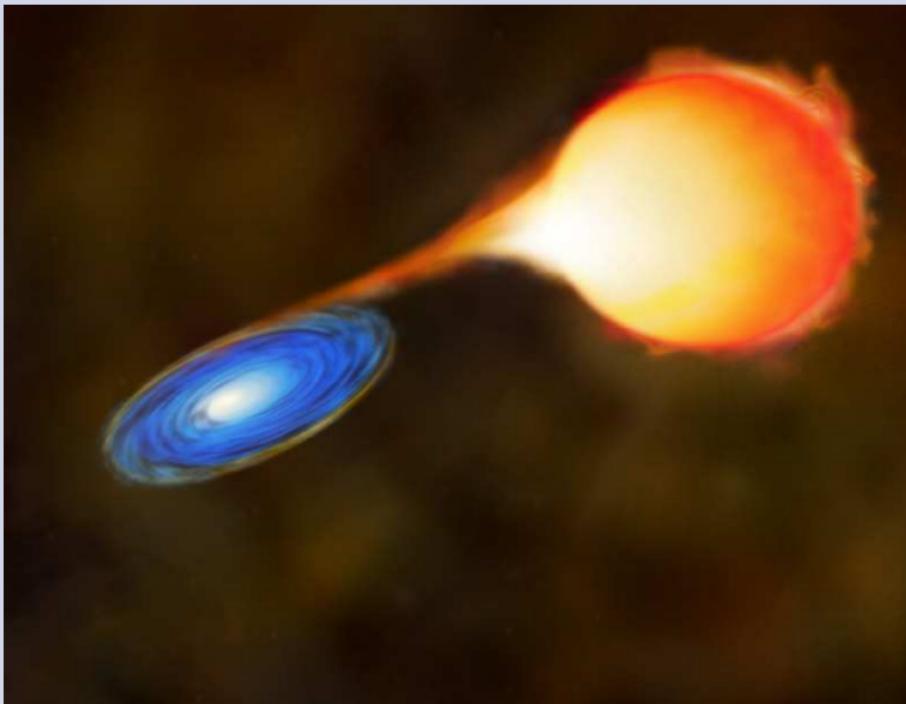
- Light curve
- Spectral monitoring

3 Conclusions

- Outlook



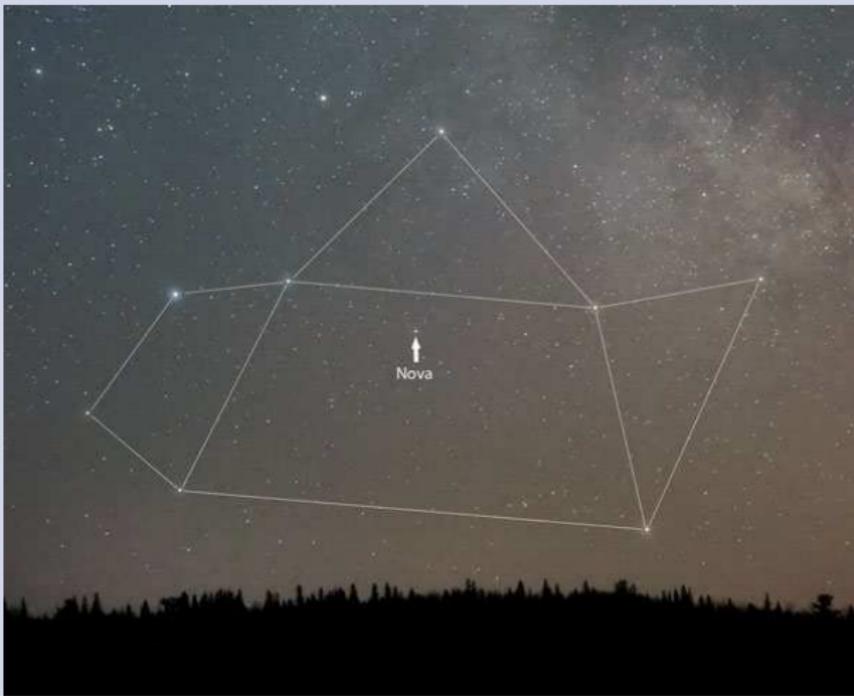
Binary System





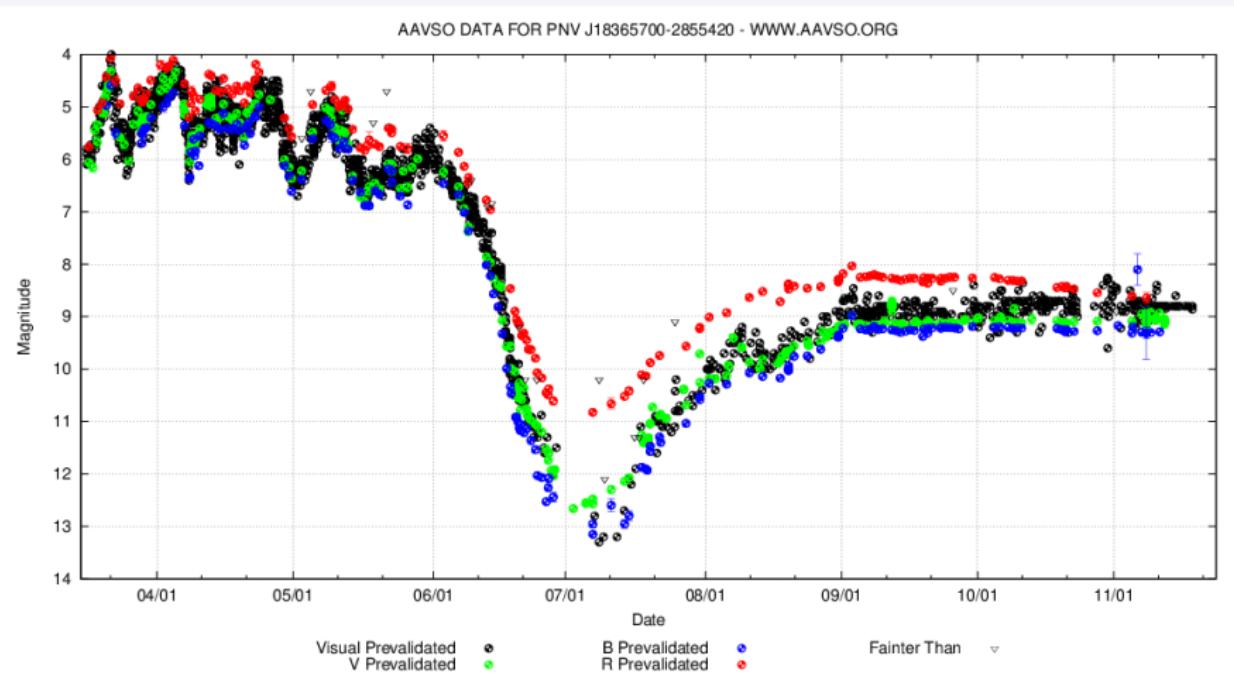
Discovery

A bright nova in Sagittarius



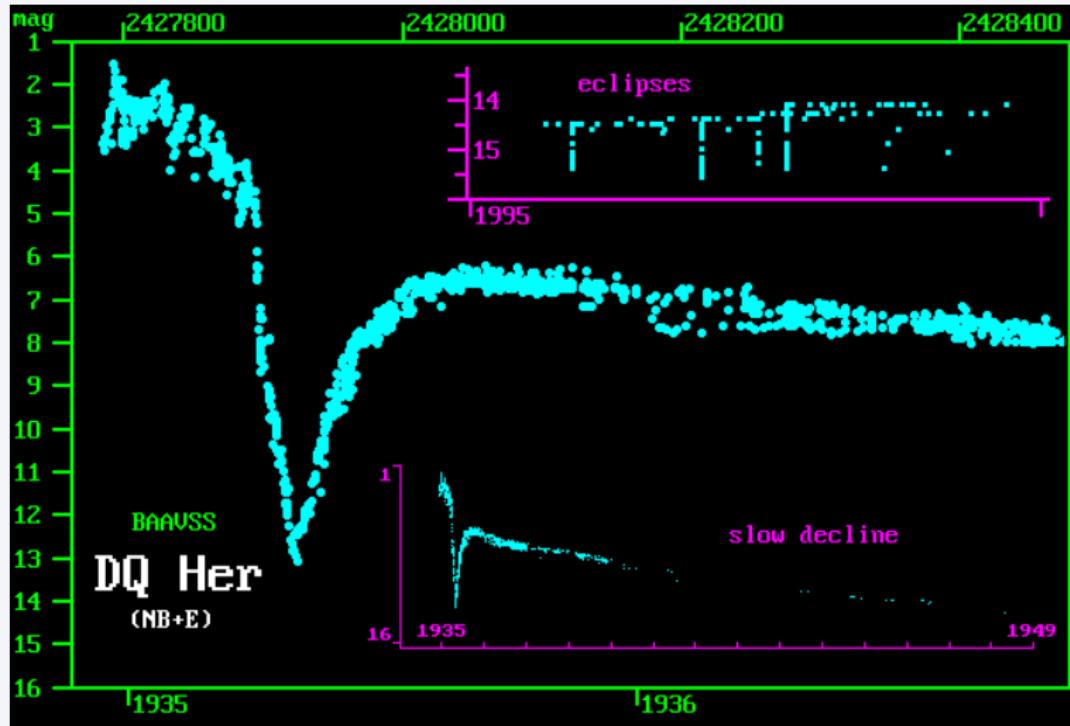


Light curve of V5668 Sgr





Light curve of Dq Her





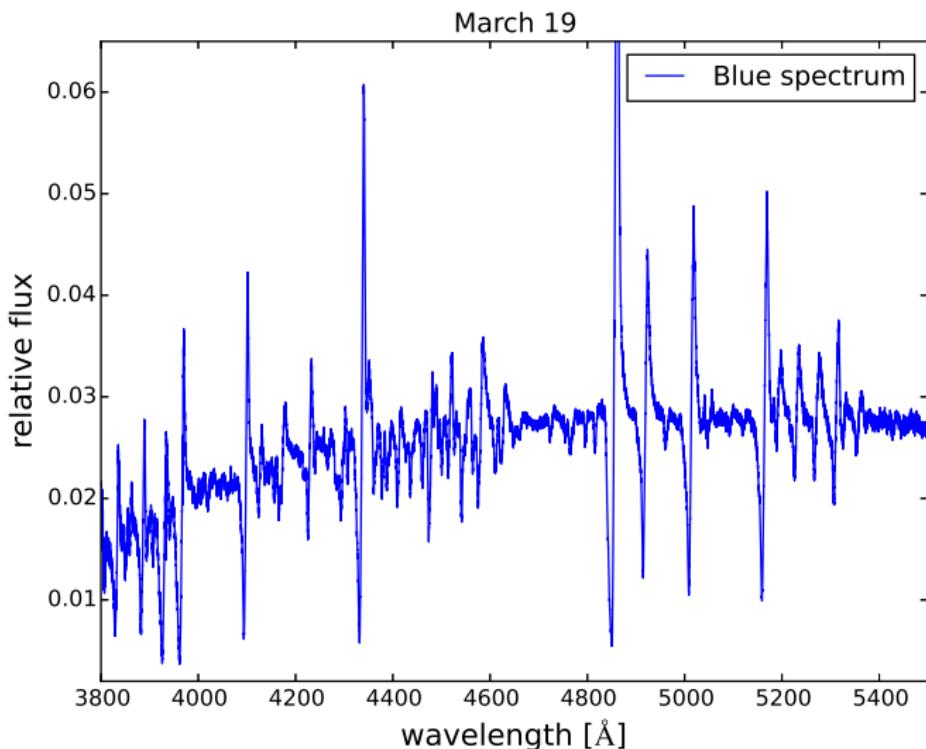
TIGRE Observations of V5668 Sgr

Spectral monitoring

- We started with TIGRE observations of the nova on March 19 this year.
- We were able to obtain a dense time series of high resolution spectra.
- So far we have obtained spectra on 75 different days.
- We covered all the different phases of the evolution of Nova Sgr 2015 No. 2.
- I will briefly present some of the obtained spectra

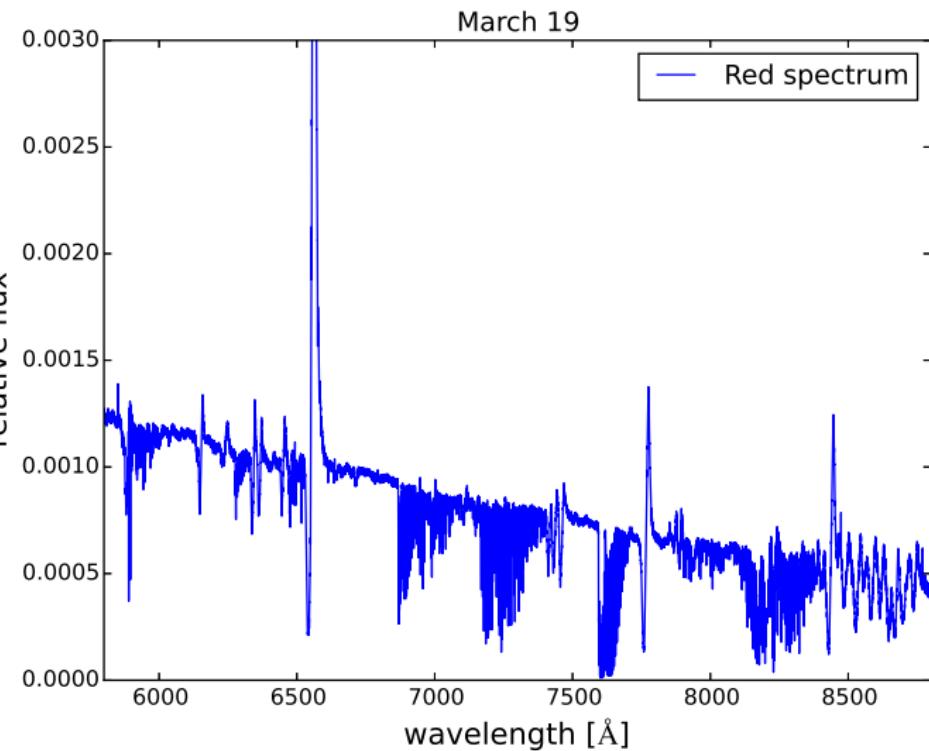


First spectrum



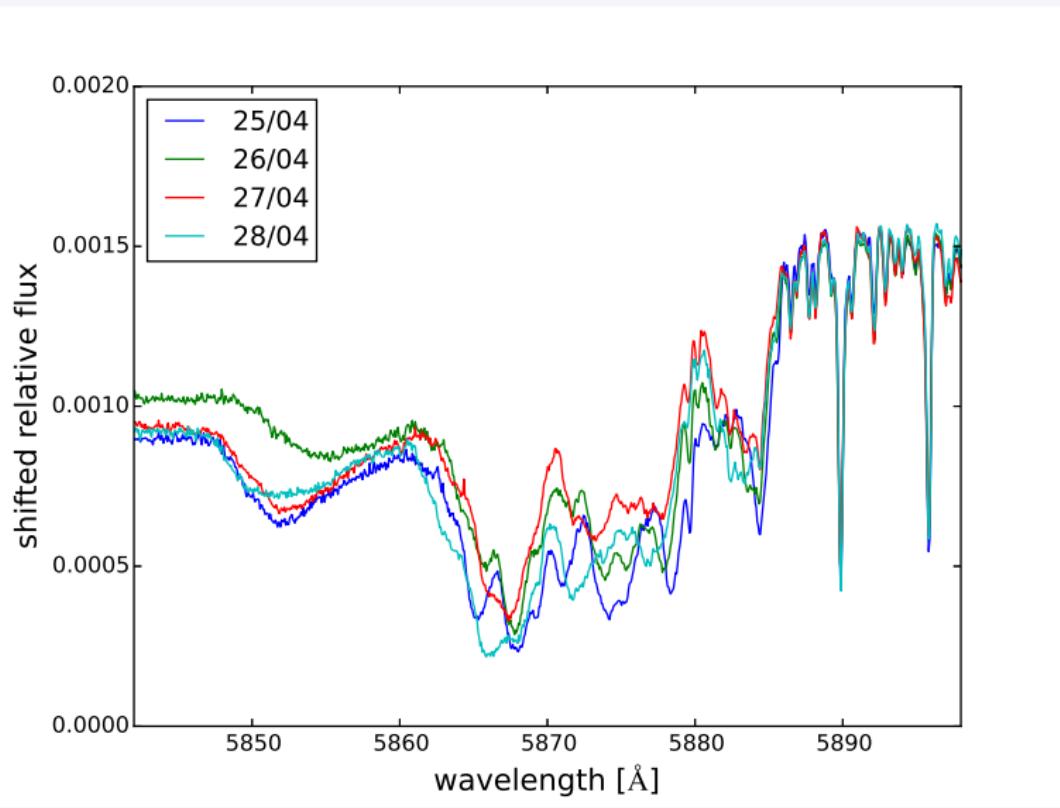


First spectrum



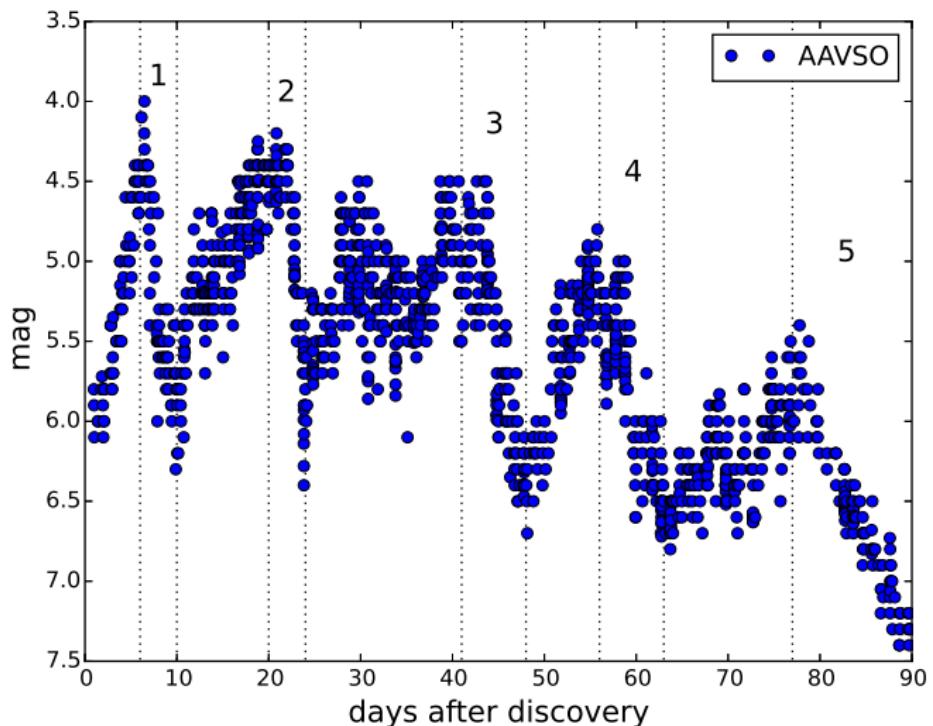


Daily variations in Na D lines



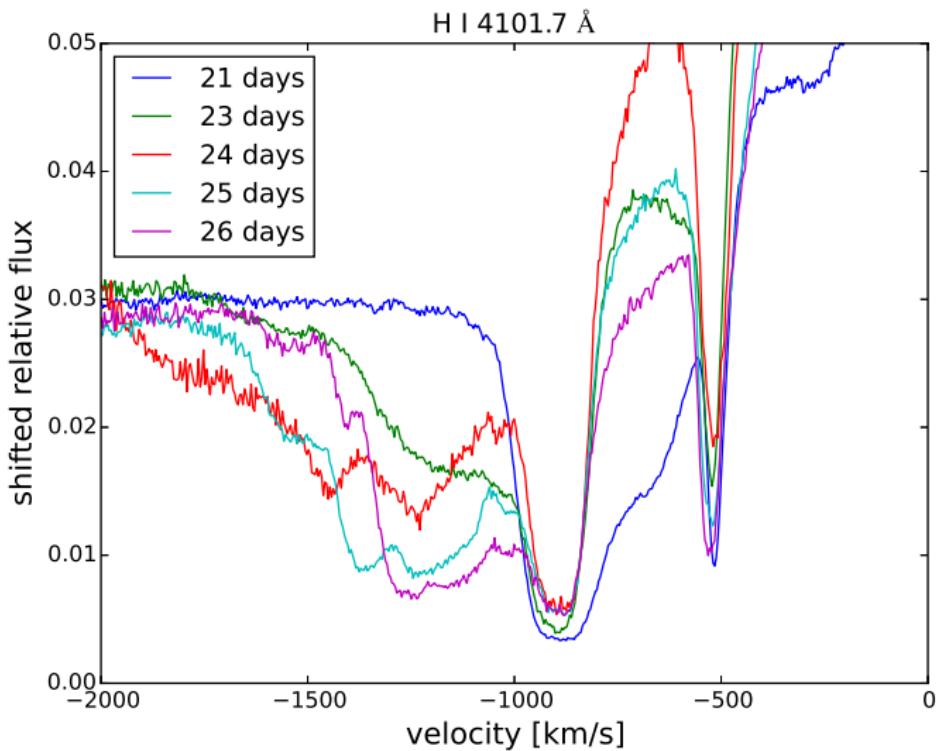


Light curve of variation phase



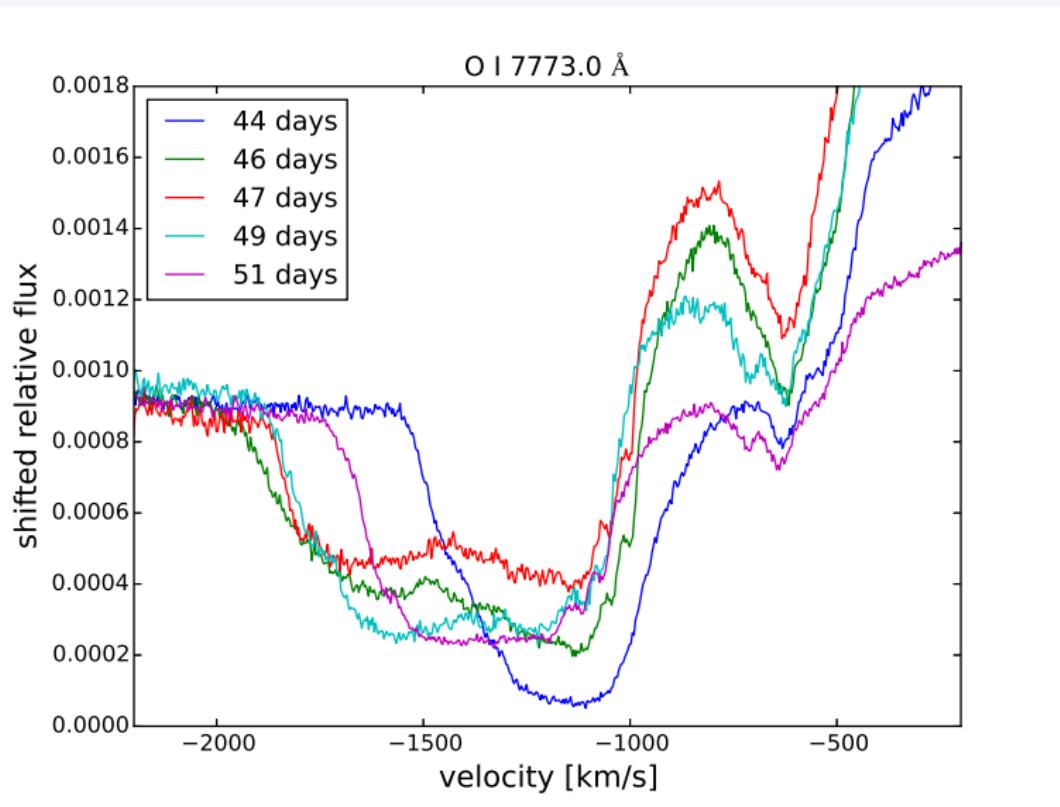


Second drop



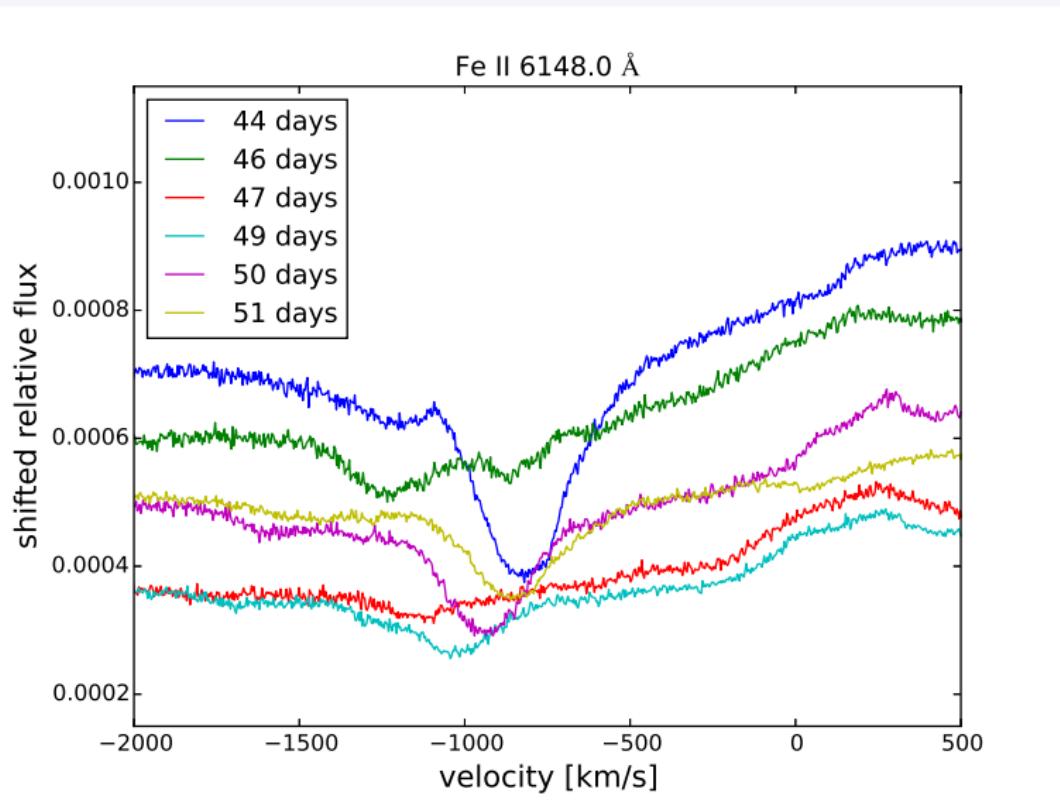


Third drop



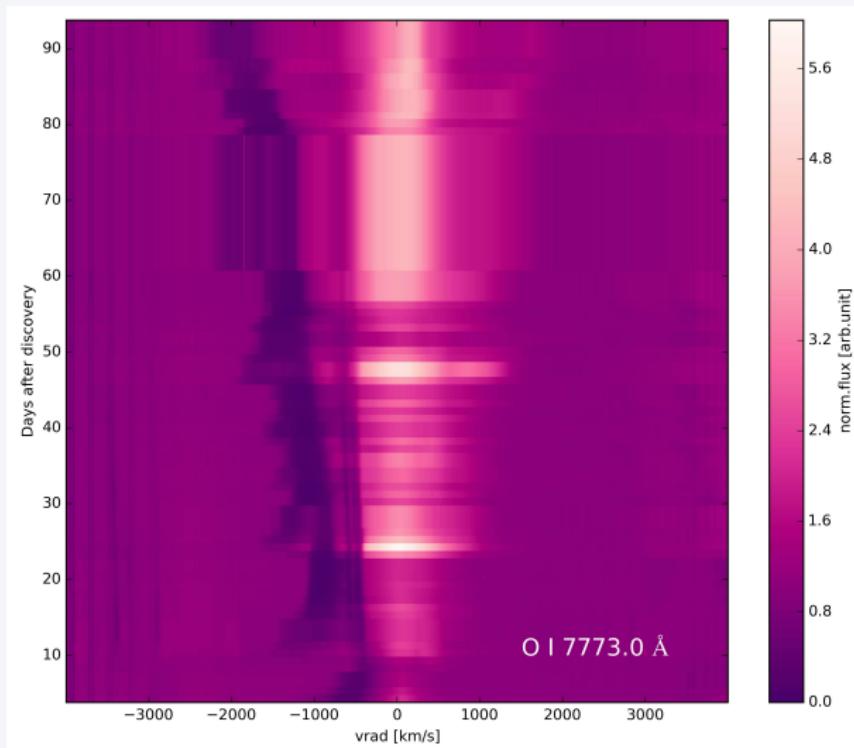


Iron feature



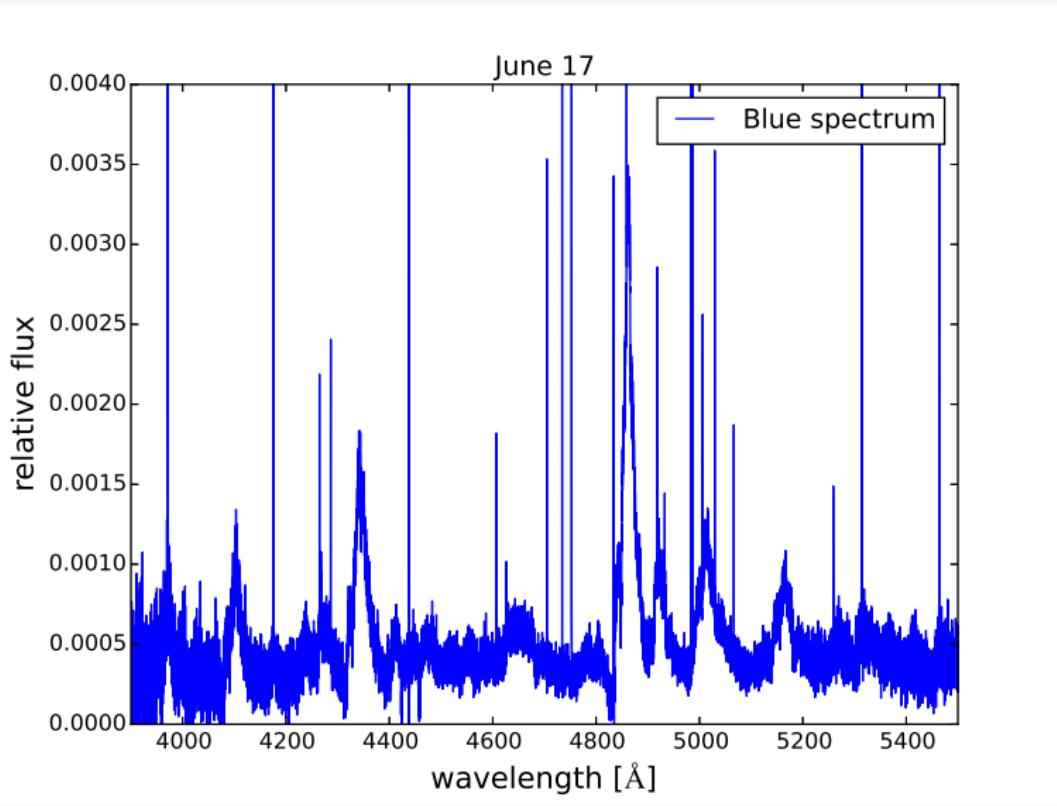


2D plot of O I



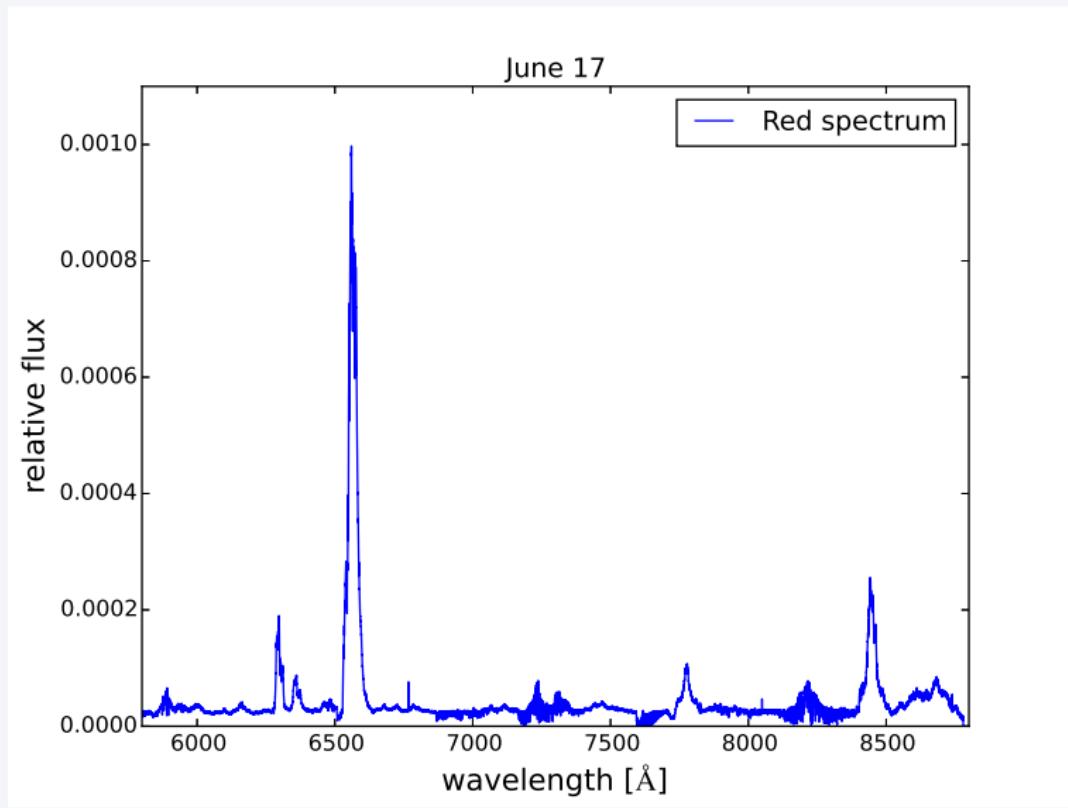


Last spectrum before deep minimum



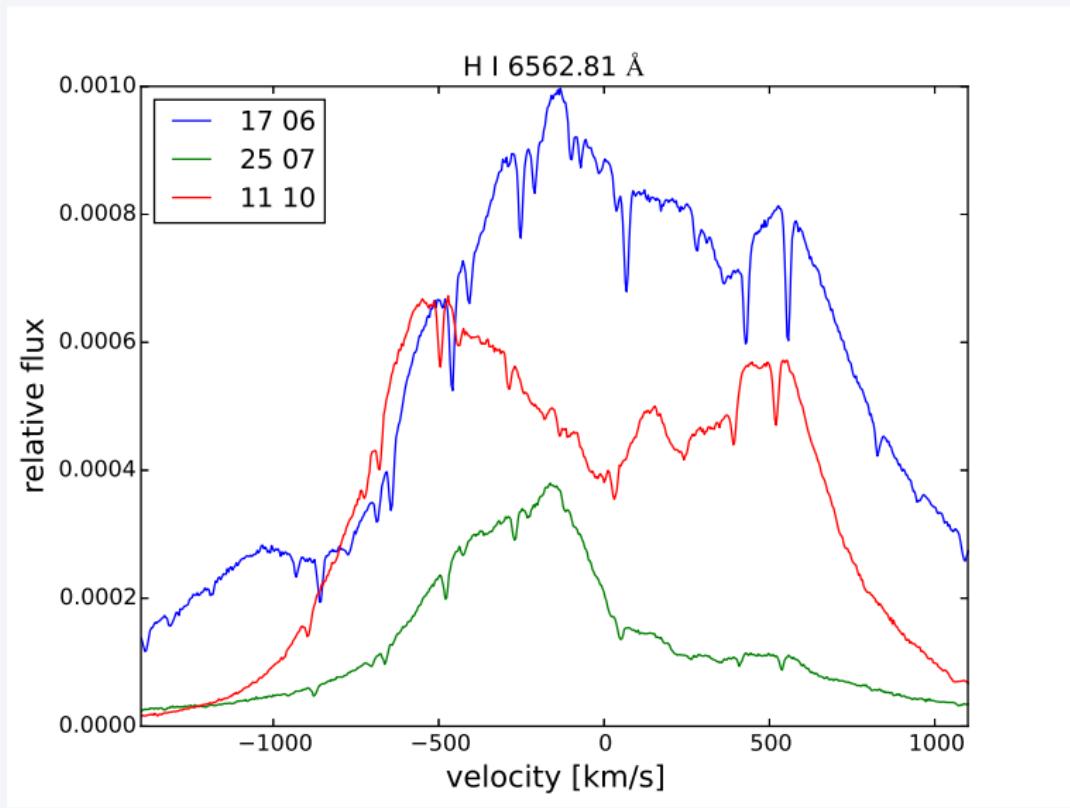


Last spectrum before deep minimum





Evolution of emission feature of H α





TIGRE Observations of V5668 Sgr

Conclusions

- We obtained a very unique dense time series of high resolution spectra of Nova Sgr 2015 No. 2 with a total of 75 days of observations.
- First observation was on 19 March, the last on 11 October 2015.
- We covered all the different phases of the evolution of V5668 Sgr.
- A lot of details in the feature could be observed thanks to the high resolution of the HEROS spectrograph.



Outlook

- We have a lot of spectra and a lot of work ahead
- Absolute flux
- Order and identification of lines in different phases
- Detailed study of variation phase
- Studying in detail the emission spectra
- More observations starting March 2016???