

BeSS report – January 2015

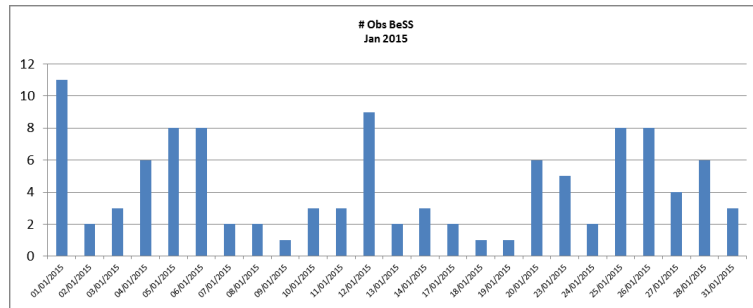
Data compiled by Valérie Desnoux

Be projects section by Ernst Pollmann [here](#)

Observateur	Nb spec
Leonardi	26
Guarro Fló	18
Montigiani	
Mannucci	15
Lester	13
DUBREUIL	8
Fosanelli	7
Desnoux	6
Pollmann	6
Favaro	4
de Bruin	2
Bohlsen	2
Sawicki	1
Li	1
Total général	109

- 109 H-alpha spectra acquired
- 51 objects observed
- 13 observers contributed

The most observed objects were gam Cas, zeta Tau and Pleione



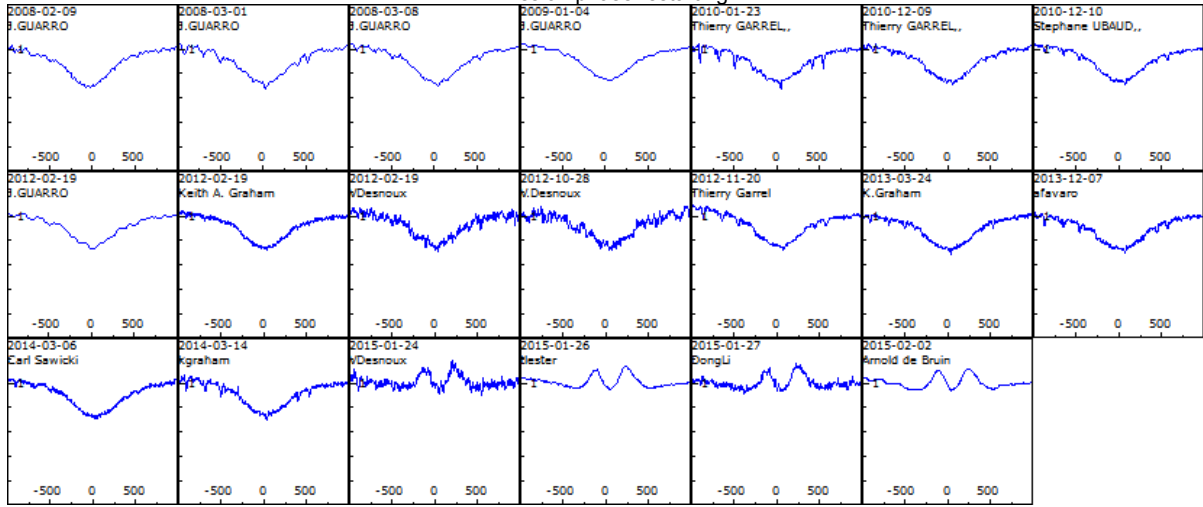
Objects observed

Classique								?	Herbig
gam Cas	ome Ori	V787 Cas	69 Ori	omi And	ups Cyg	HD 71072	HD 37974		XY Per
zet Tau	HD 79066	11 Cam	HD 253214	eps Cas	nu Cyg	Menkhib	29 Dor		
PLEIONE	HD 258782	eta Ori	HD 250163	tet Ari	V408 Lac	CT Cam	V416 Aur		
V442 And	HD 45995	V1369 Ori	HD 250028	omi Cas	HD 20134	V413 Aur	V615 Cas		
OT Gem	HD 91120	V1150 Tau	V715 Mon	25 Ori	FF Cam	HD 257473	BD+56 727		
5 Cnc	59 Cyg	V696 Mon	V378 Pup	bet Psc	bet CMi	V1372 Ori	pi Aqr		
HD 20017	HD 249695	lam Eri							

Emission increase since last observations

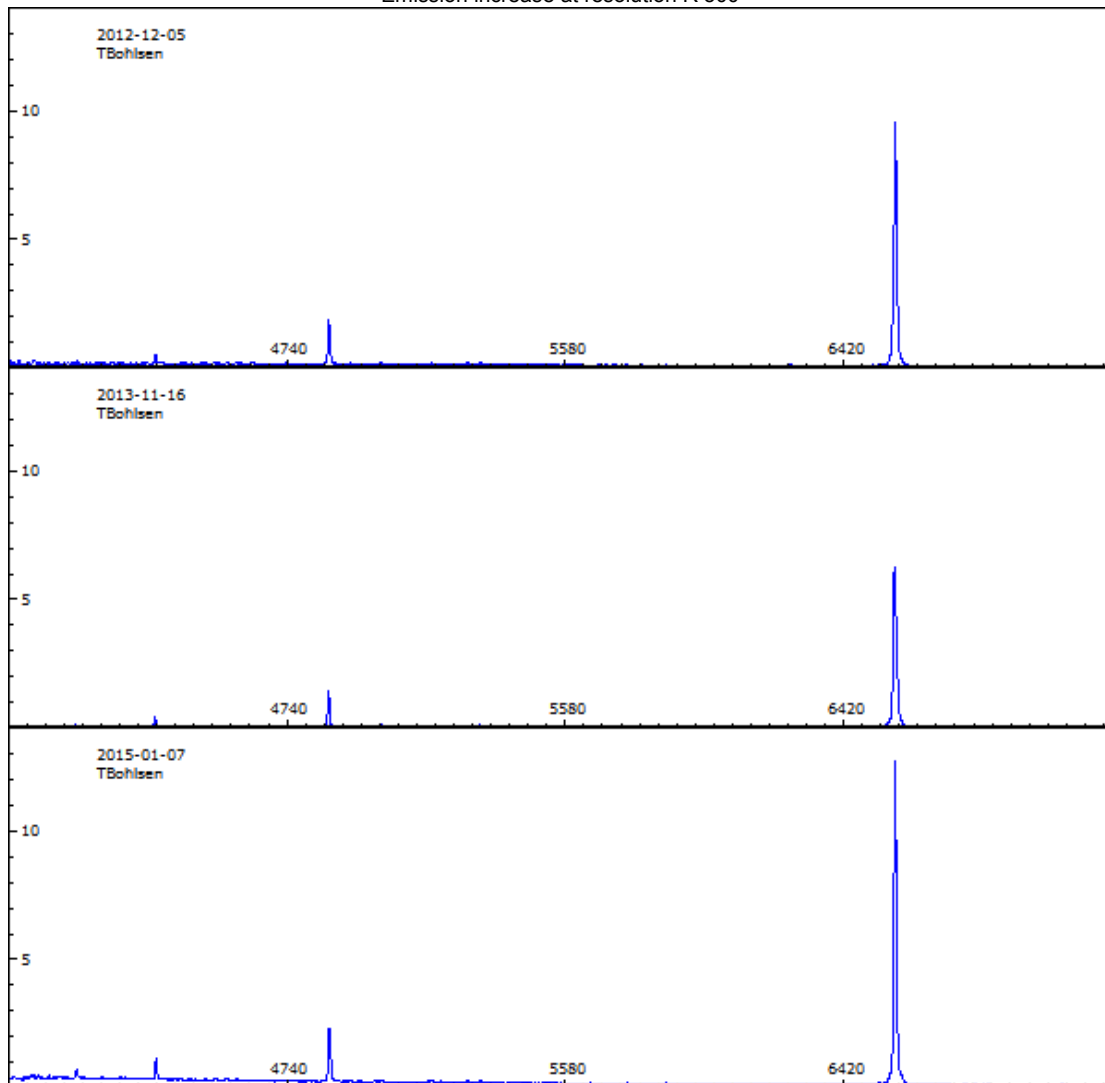
69 Ori

Emission phase restarting



HD37974

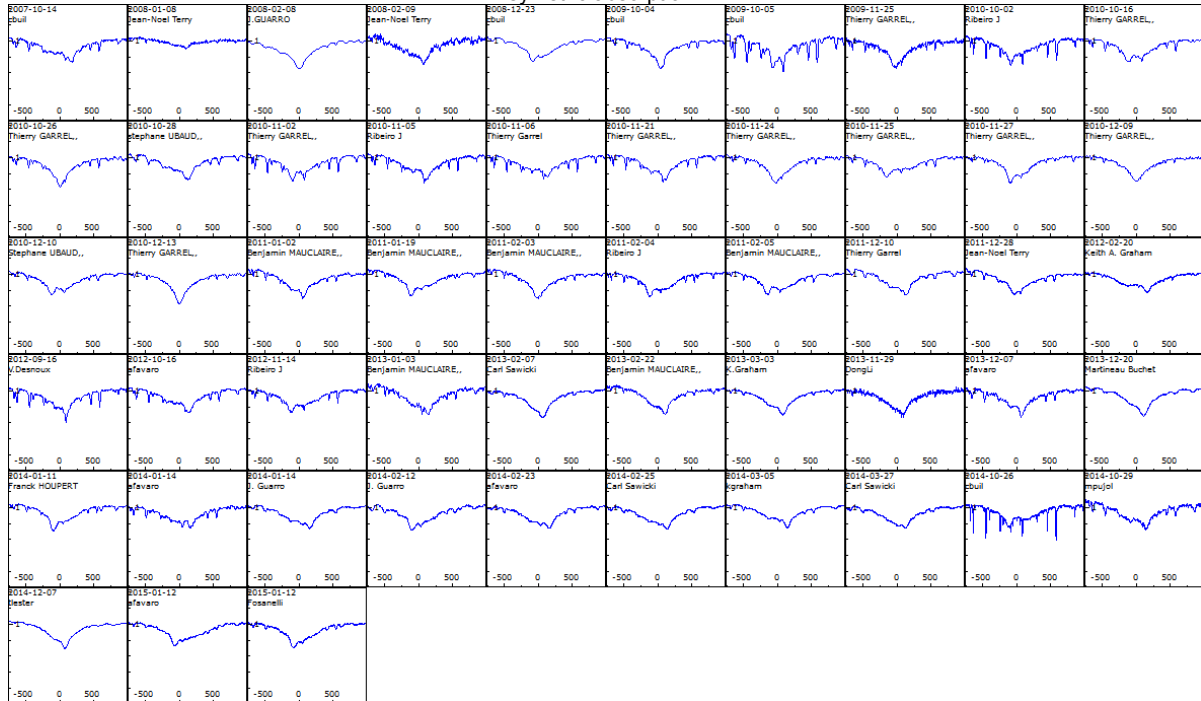
Emission increase at resolution R 500



Moderate evolutions of H-alpha line

eta Ori

Asymmetric absorption fill



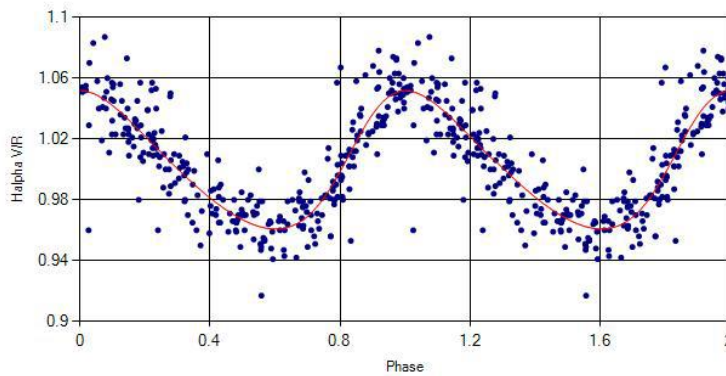
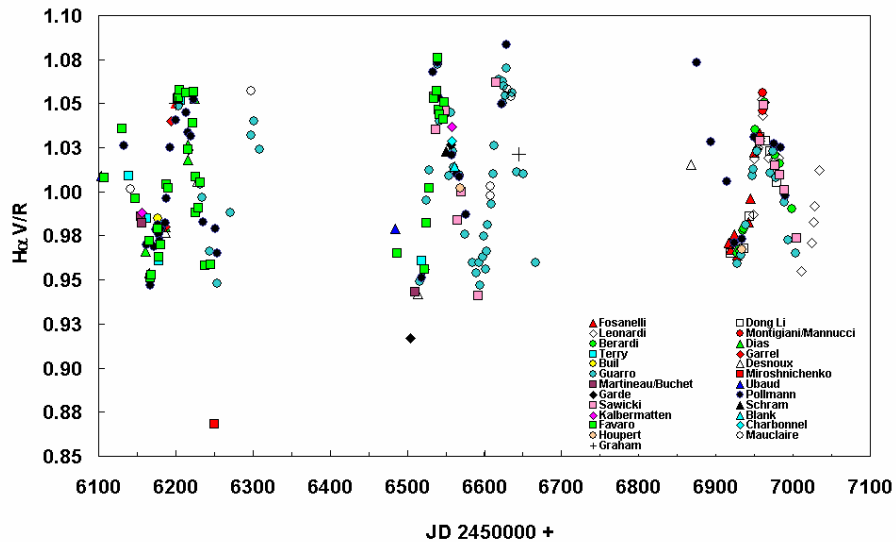
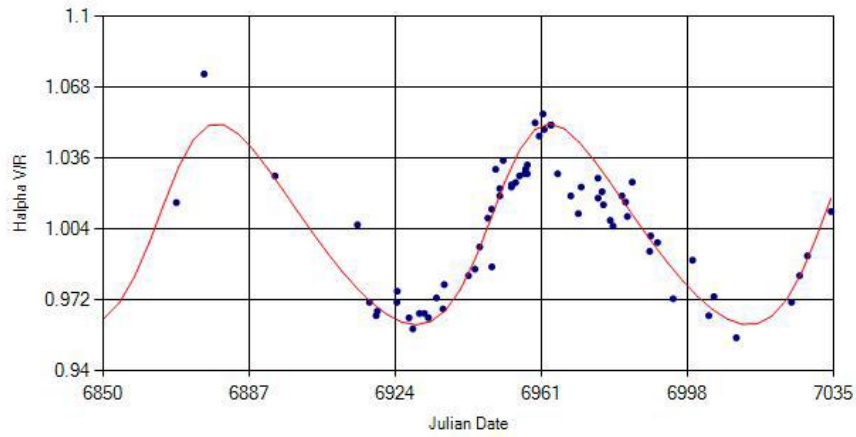
Emission decrease of H-alpha line

None observed this month

Be monitoring projects

By Ernst Pollmann

pi Aqr Campaign 07/2014-01/2015

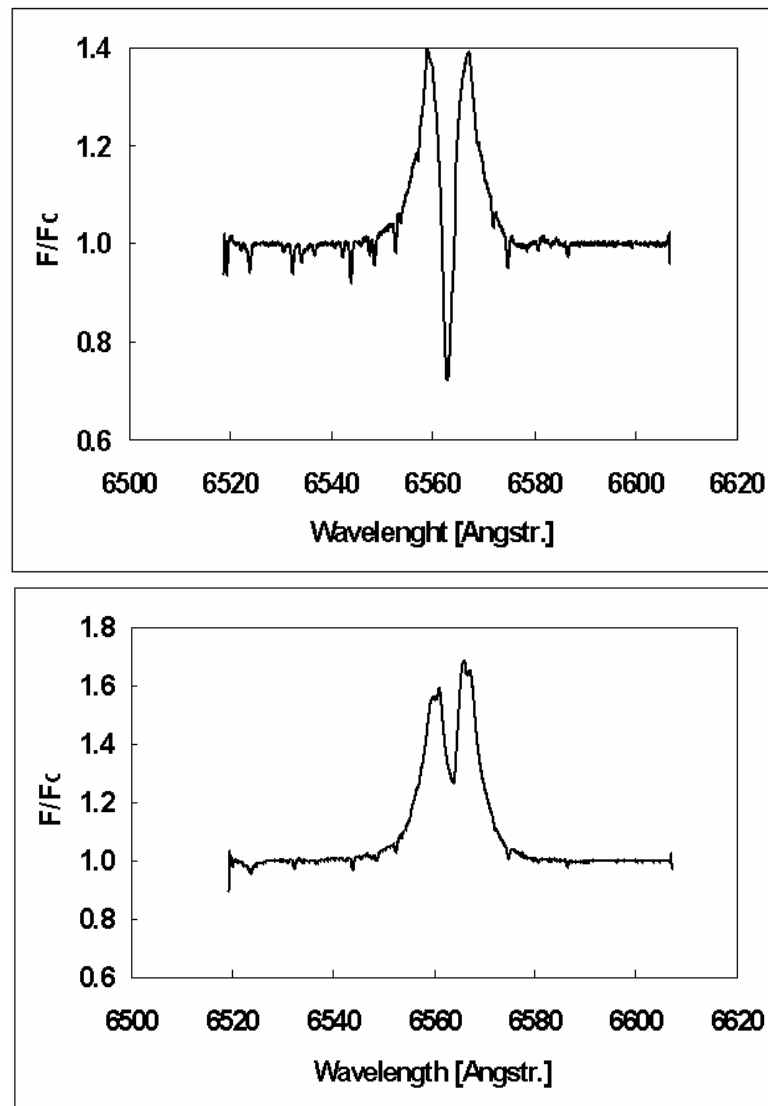


During the campaign 07/2014-01/2015 ARAS observer could determine two V/R maxima & minima (Fig. 1 & 2) for consolidation the period and eccentricity.

The period analysis (Fig. 3) of all data in Fig. 1 led to following values:

Period: 84.2 d (± 0.038) Eccentricity: 0.17252 (± 0.03) Eccentricity by Bjorkman et al. (ApJ, 573, 2002): zero RMS: 0.018

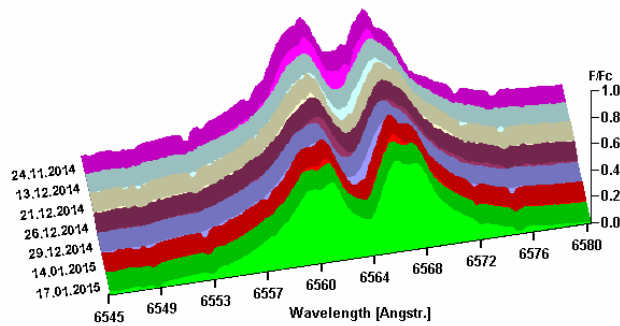
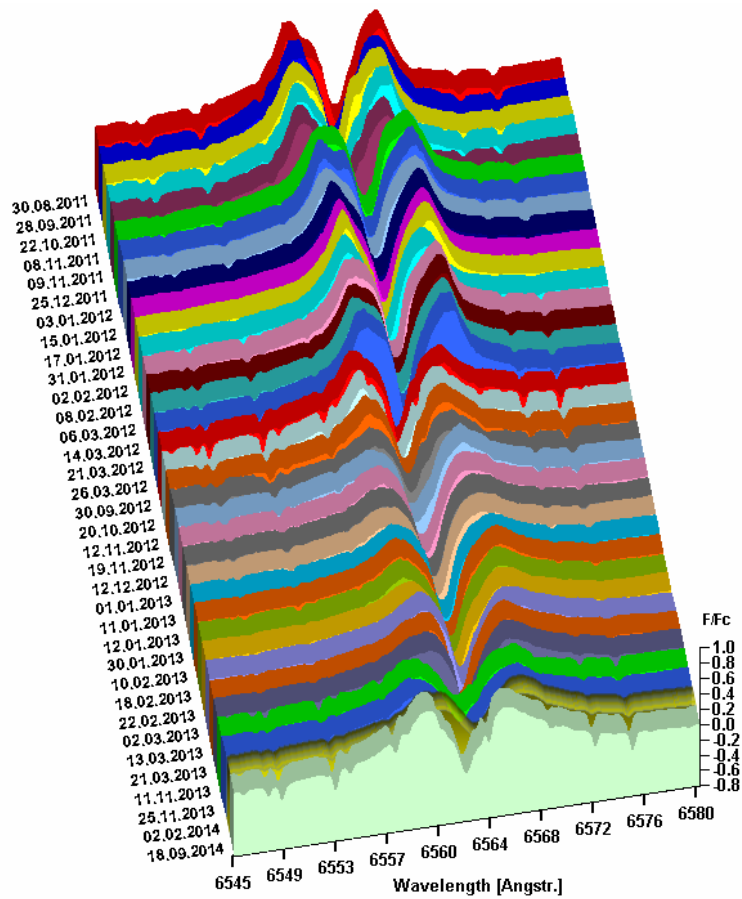
ζ Tau is developing back in the Be phase



H α shell criterion (R. W. Hanuschik, Astron. Astrophys. 308, 170-179, 1996):

Definition of the parameter F_p / F_{cd} as H α shell criterion where F_p is the mean intensity of the double peaks, and F_{cd} the central depression in the H α profile.

- $F_p / F_{cd} \geq 1.5$ for shell stars
- = 1.5 ... 1.2 in intermediate cases
- ≤ 1.2 for Be stars



Be phase

Authors

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Aras Site at <http://www.astrosurf.com/aras/>

BeSS database at <http://basebe.obspm.fr/basebe/>

ArasBeAM portal at <http://arasbeam.free.fr/>

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International Working Group ASPA

Active Spectroscopy in Astronomy

<http://www.astrospectroscopy.de>

<http://www.astronomie.de/astronomische-fachgebiete>