

# BeSS report – January 2015

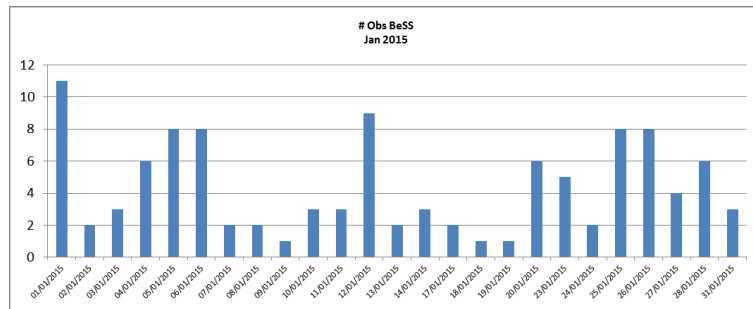
Data compiled by Valérie Desnoux

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
<b>Total général</b>	<b>109</b>

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

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



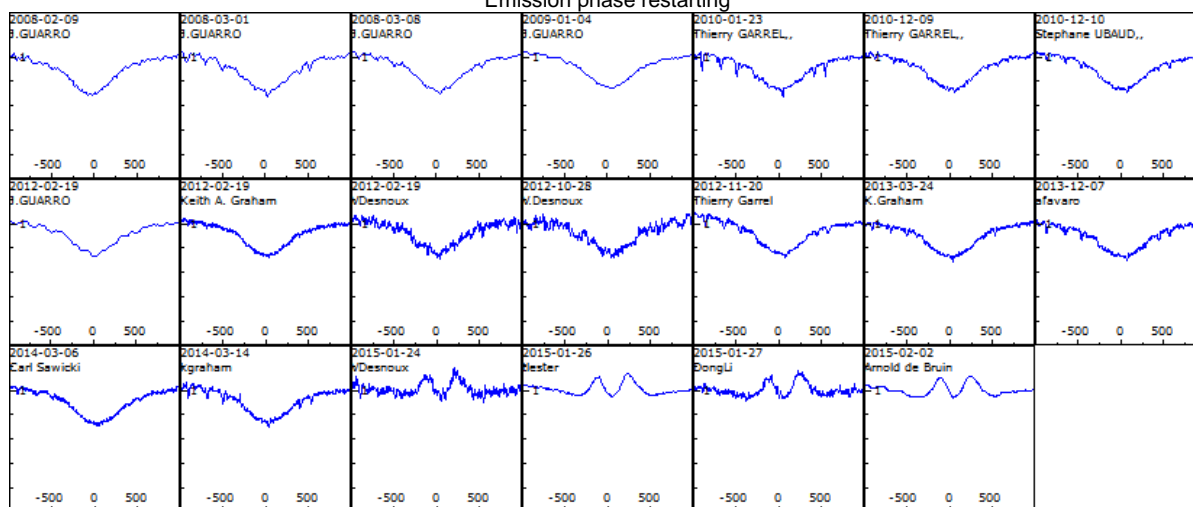
## Objects observed

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

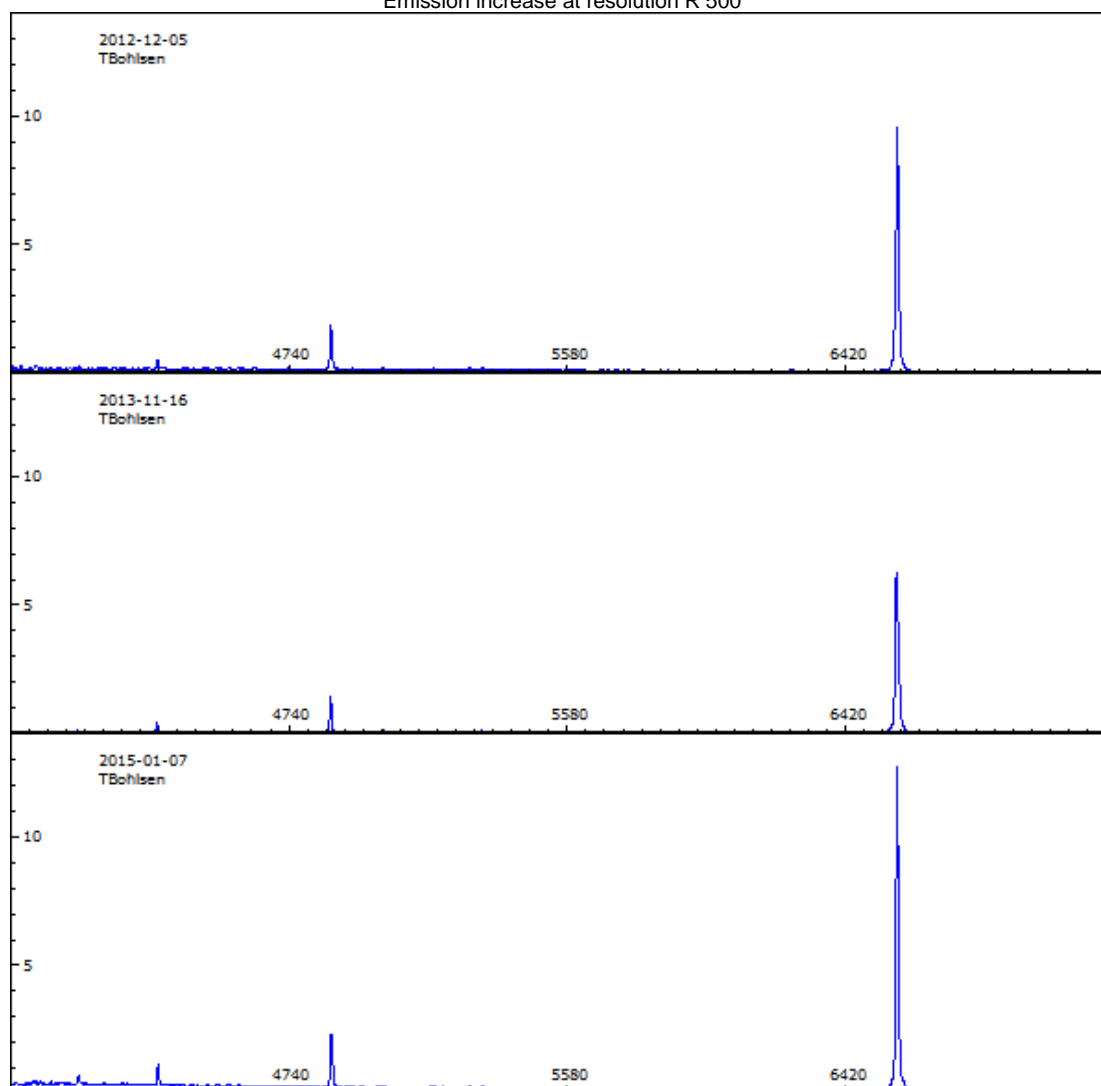
### 69 Ori

Emission phase restarting



### HD37974

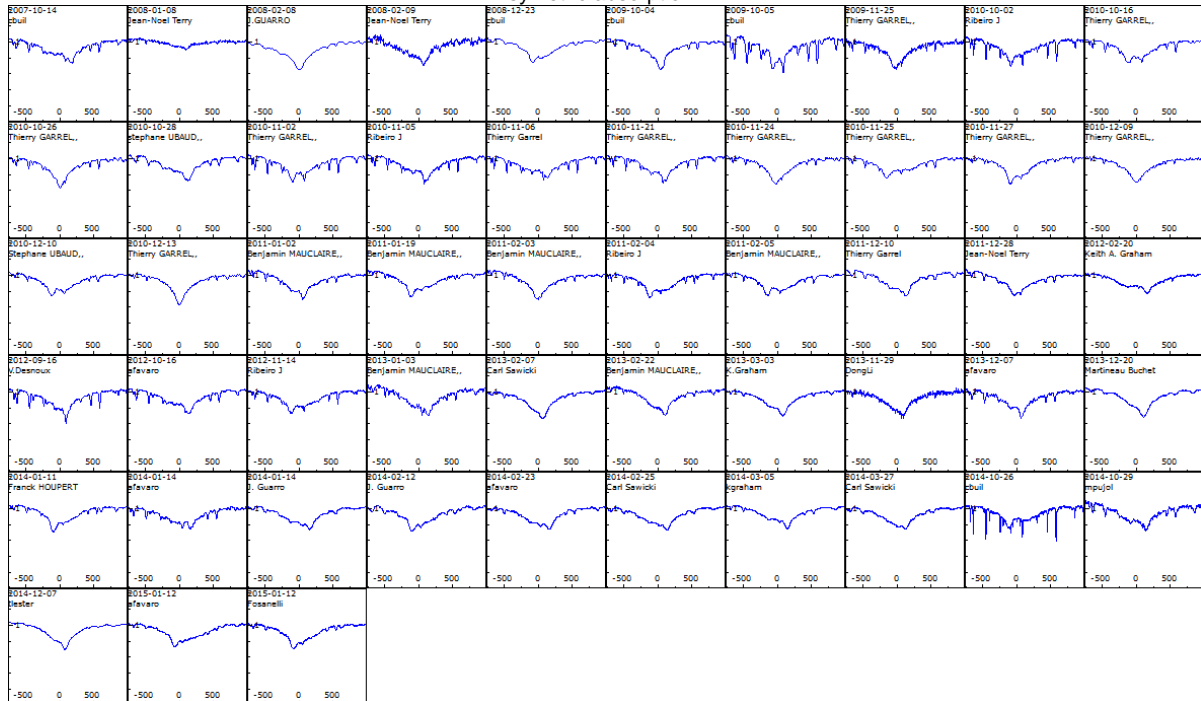
Emission increase at resolution R 500



## Moderate evolutions of H-alpha line

eta Ori

Asymmetric absorption fill



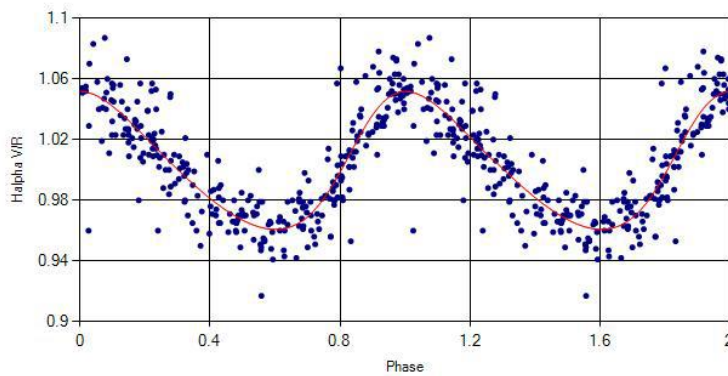
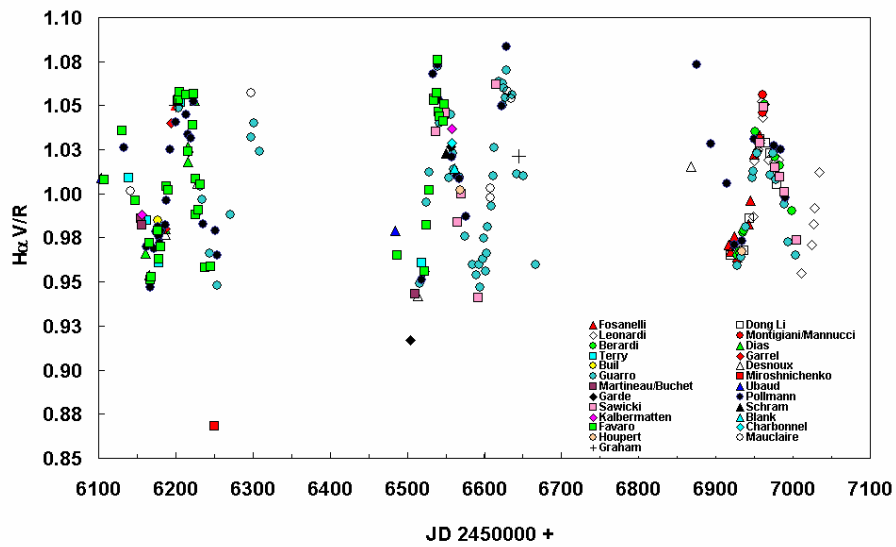
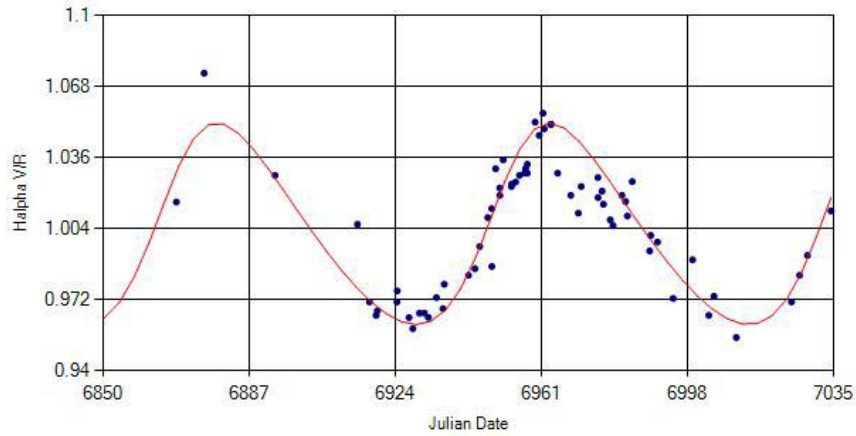
## Emission decrease of H-alpha line

*None observed this month*

# Be monitoring projects

By Ernst Pollmann

## pi Aqr Campaign 07/2014-01/2015

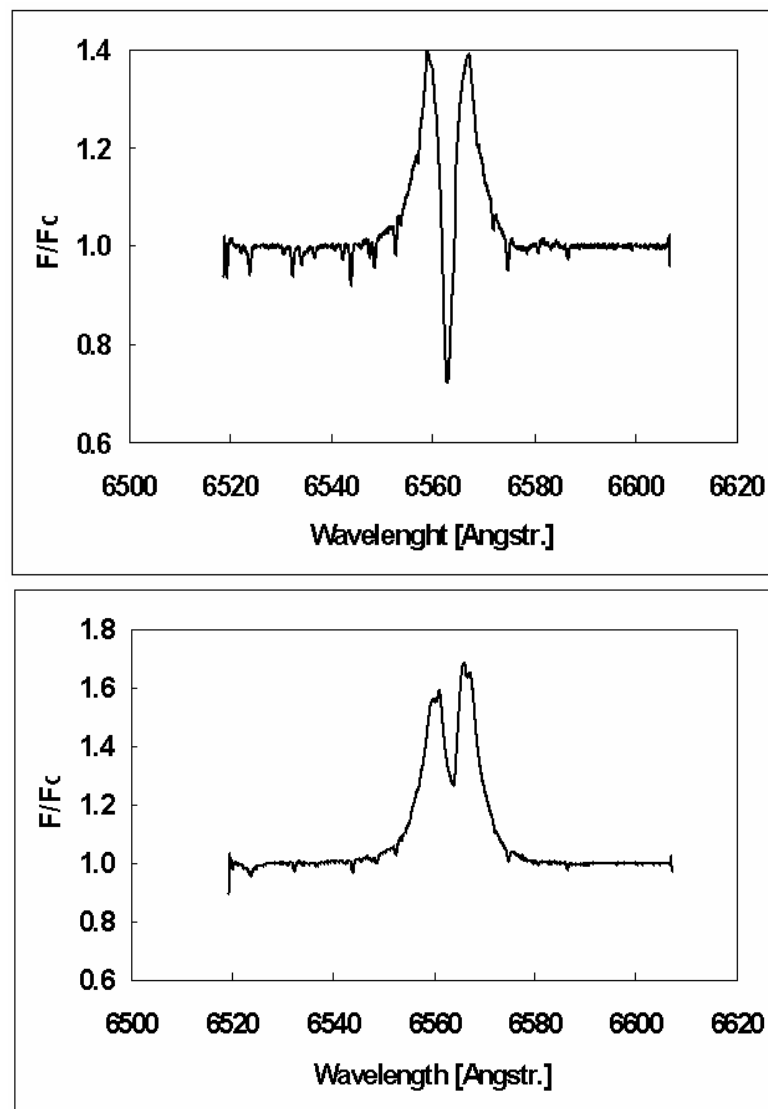


During the campaign 07/2014-01/2015 ARAS observer could determine two V/R maxima & minima (Fig. 1 & 2) for consolidation the period and eccentricity.

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

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

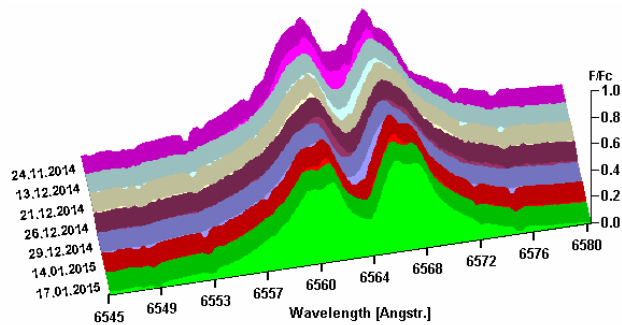
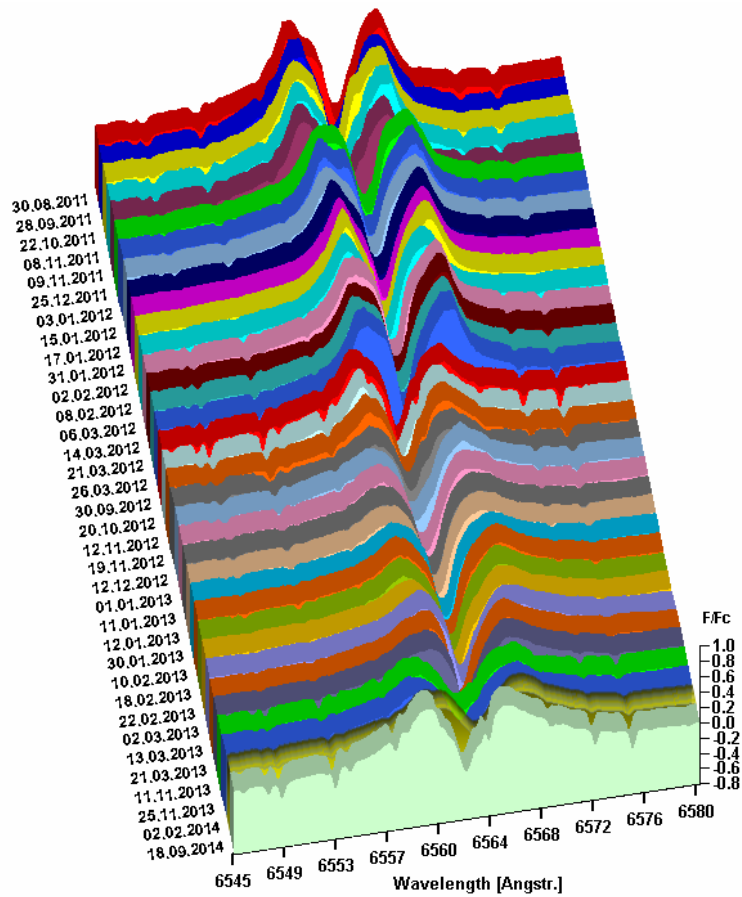
## ζ Tau is developing back in the Be phase



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

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

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



## Be phase

### Authors

**Valérie Desnoux**

[Valerie.desnoux@free.fr](mailto:Valerie.desnoux@free.fr)

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

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

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

**Ernst Pollmann**

[ernst-pollmann@t-online.de](mailto:ernst-pollmann@t-online.de)

International Working Group ASPA

Active Spectroscopy in Astronomy

<http://www.astrospectroscopy.de>

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