



BeSS report – September 2024

H-alpha monitoring

Data compiled by
Valérie Desnoux

Repository
<http://valerie.desnoux.free.fr/BeSS/>

141

Stars

305

Spectra

15

Observers

Observateur	Nb spec
Charbonnel Le Dû GARDE Mulato Petit	96
Stiewing	67
Buil	46
Leadbeater	38
Dupont	17
de Bruin	14
Fricker	6
Blais	6
Bryssinck	4
AUMENTE LEON	3
KREIDER MAETZ	2
WEIL	2
Lecomte	2
Charbonnel GARDE Le Dû Mulato Petit	1
DALBIN	1

Events of the month...

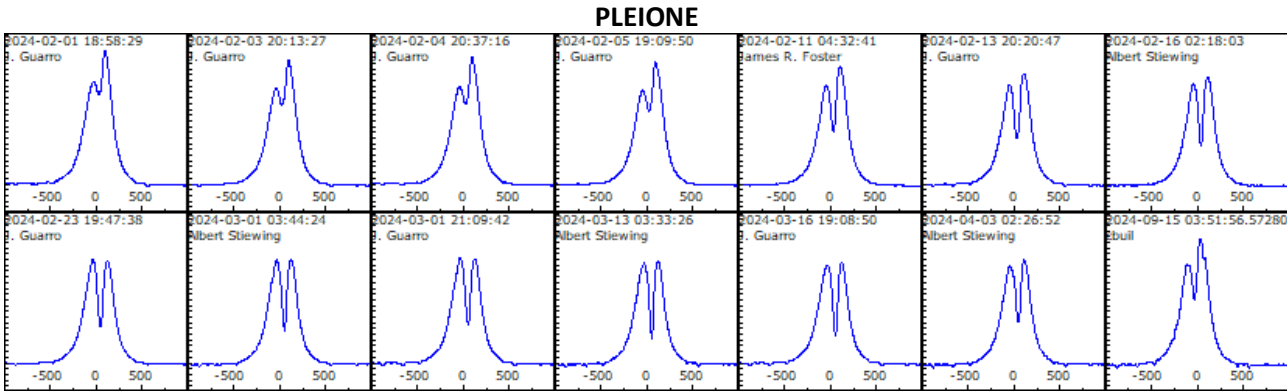
EE: Emission Event, ME: Moderate Events, DE: Decreasing Event

EE	ME	DE
PLEIONE	V415 Aur	V442 1nd
15 Mon	V409 Lac	V357 Lac
kap Aql	V1150 Tau	lam Eri
8 Lac B	V696 Mon	69 Ori
12 Vul	V864 Ara	CX Dra
V4024 Sgr	HD 43789	HD 22780
V787 Cas		alf Ara
12 Aur		V782 Cas
tet Cir		ome Ori
8 Lac A		25 Peg
HD 45995		V1075 Sco
25 Ori		HD 20340
HD 13669		43 Ori
eta Ori		RW Per
bet Mon A		HD 33599
AX Mon		HD 32358
V1153 Tau		HD 23982
HD 43544		FS CMa
LS Mus		V716 Cen
XY Per		V1371 Tau
V594 Cas		HD 44506
		EM* AS 521
		V3894 Sgr

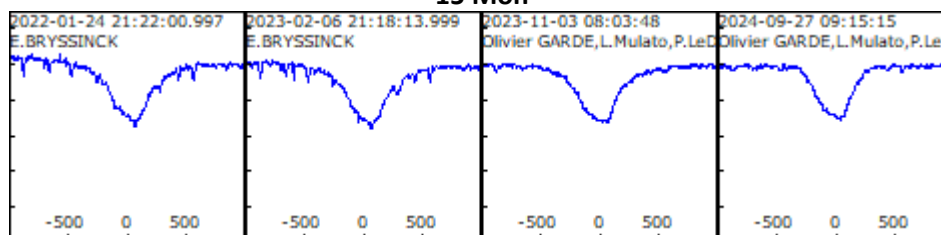
Objects observed

Classique							Herbig
V442 And	PLEIONE	pi Aqr	V357 Lac	gam Cas	28 Cyg	25 Cyg	XY Per
lam Eri	tet Ari	HD 206773	LQ And	31 Peg	V1339 Aql	228 Eri	WW Vul
2 Ori	HD 36408	QR Vul	69 Ori	omi And	lam Cyg	psi Per	V1409 Ori
V923 Aql	ALCYONE	CX Dra	HD 22780	EW Lac	alf Ara	nu Gem	?
HD 44783	15 Mon	kap Aql	8 Lac B	56 Eri	gam Ara	HD 194779	51 Oph
V2148 Cyg	59 Cyg	V782 Cas	HD 171780	12 Vul	V2119 Cyg	V4024 Sgr	B[e]
16 Peg	HD 169033	V787 Cas	12 Aur	6 Cep	V415 Aur	tet Cir	V594 Cas
HD 177648	V409 Lac	eps Cas	8 Lac A	ome Ori	HD 45995	4 Aql	I Pup
HD 194244	25 Peg	HD 149671	25 Ori	HD 157273	V1075 Sco	iot Ara	
HD 13669	V846 Ara	eta Ori	V1150 Tau	bet Mon A	HD 20340	V696 Mon	
AX Mon	HD 225095	V817 Cas	43 Ori	HD 44996	120 Tau	ACHERNAR	
RW Per	HD 237118	HD 33599	HD 42477	HD 30677	HD 14850	HD 32358	
BD+57 243	HD 23982	HD 53048	HD 47054	HD 42054	mu Pic	HD 43285	
V743 Mon	HD 344313	V864 Ara	HD 177427	VV PsA	V1153 Tau	FS CMa	
HD 43789	AN Col	HD 33453	HD 29557	V716 Cen	HD 43544	E Car	
V1371 Tau	gam Cir	IY CMa	HD 44506	HD 177015	EM* AS 521	BD+58 610	
HD 40193	V3894 Sgr	LS Mus	V828 Ara	V339 Pup	HD 32811	HD 29096	
			BD+50	EM* VES			
EM* GGA 90	BD+42 4162	HD 178920	3495	728	AG+64 187	CI* NGC 884 LAV 1649	
[SHM2002]							
4205	HD 35269	CAS GAM-1	V353 Per	HD 28543	HD 147320	UCAC4 643-020258	
HD 43122	BD+54 2887						

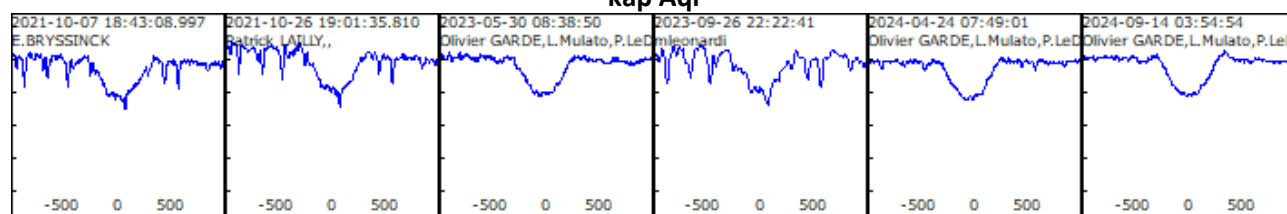
Emission increase since last observations



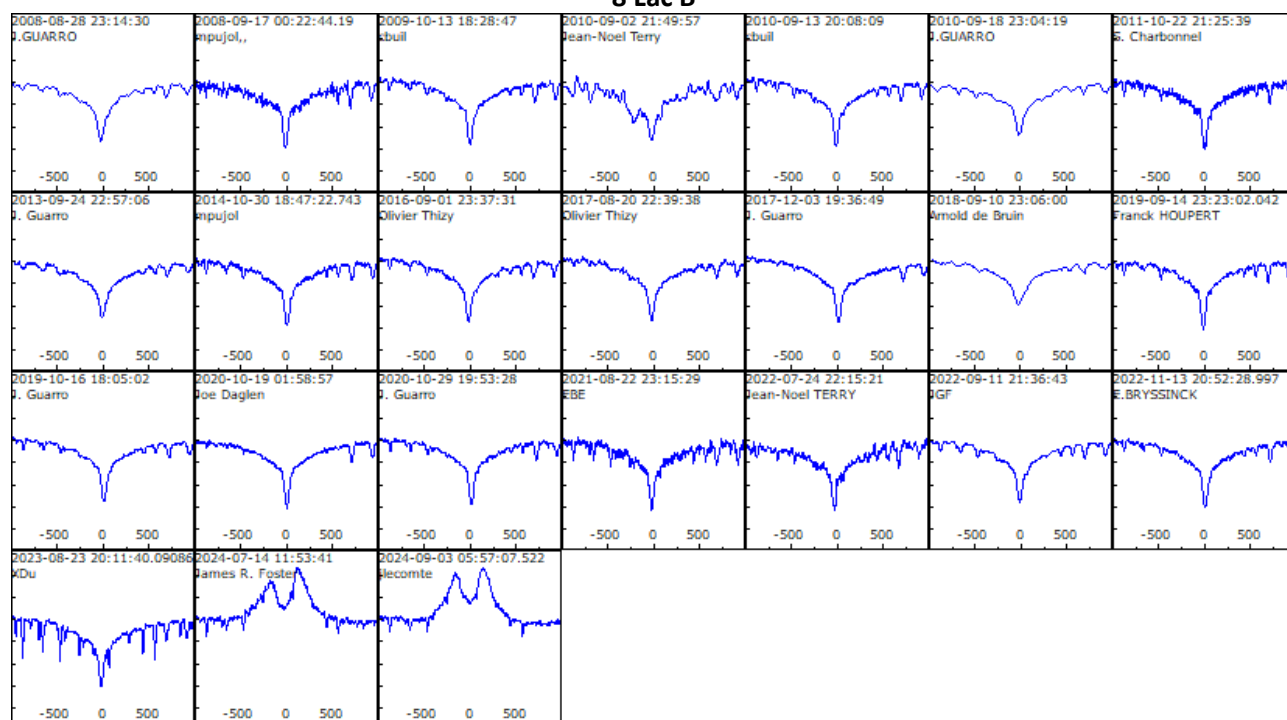
15 Mon



kap Aql



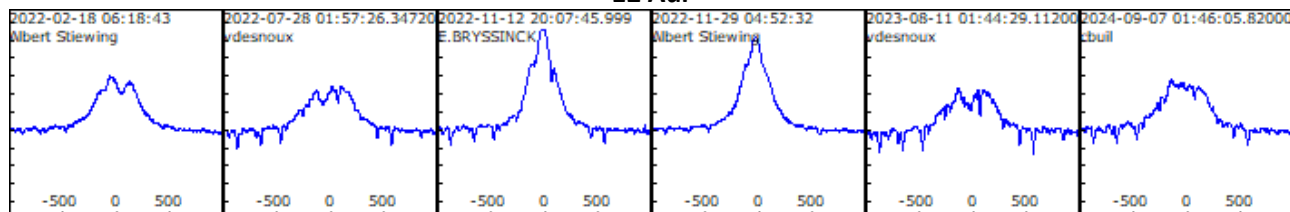
8 Lac B



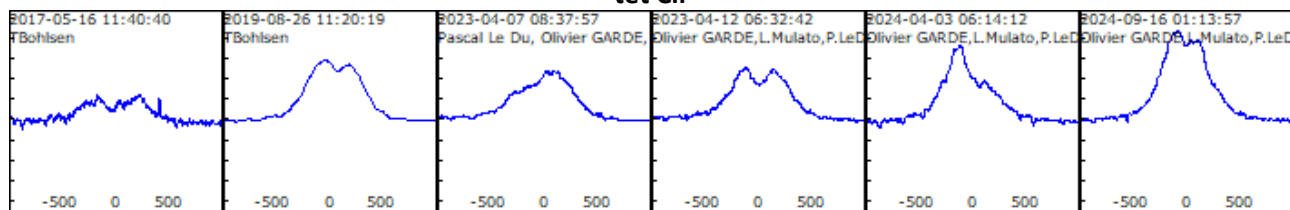
[illegible]

2001-06-12 01:39:21 J.Buill	2002-06-11 01:35:02 J.Buill	2003-05-30 01:03:21 J.Buill	2004-05-20 01:35:02 J.Buill	2008-08-29 20:00:52 J.GUARRO	2008-08-30 20:16:17 Olivier Thizy	2009-08-21 20:36:01 J.GUARRO
2010-08-23 20:10:08 J.GUARRO	2011-08-02 21:51:32 J.Desnoux	2011-08-02 22:24:27.99 Thierry Garrel	2012-07-29 23:25:17 J.favaro	2012-09-14 21:11:34 J.GUARRO	2012-09-15 19:53:50.671 Franck HOUPERT	2013-07-14 00:37:27 J.favaro
2013-09-03 03:30:47 Carl Sawicki	2013-09-23 02:55:52 Carl Sawicki	2013-09-29 03:25:37 Carl Sawicki	2014-07-30 21:05:15 J.Desnoux	2015-09-03 03:10:02 Carl Sawicki	2015-09-13 03:34:21 Carl Sawicki	2016-10-04 17:47:58 Olivier Garde
2016-10-22 01:47:00 Carl Sawicki	2016-10-24 02:11:48 Carl Sawicki	2017-07-27 04:08:07 Carl Sawicki	2017-09-13 02:44:13 Carl Sawicki	2018-07-29 21:15:33 Olivier Garde	2019-08-05 23:20:01 J.Desnoux	2020-06-09 10:14:19 James R. Foster
2020-06-13 06:22:29 Albert Stewing	2023-09-14 03:38:41 James R. Foster	2024-04-17 08:58:42 Olivier GARDE, L.Mulato, P.LeD	2024-09-08 04:24:50 Olivier GARDE, L.Mulato, P.LeD			

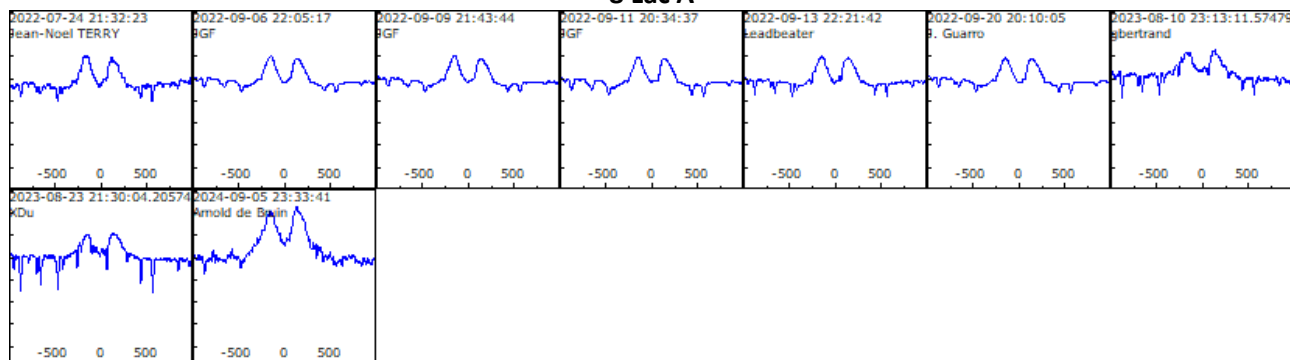
12 Aur



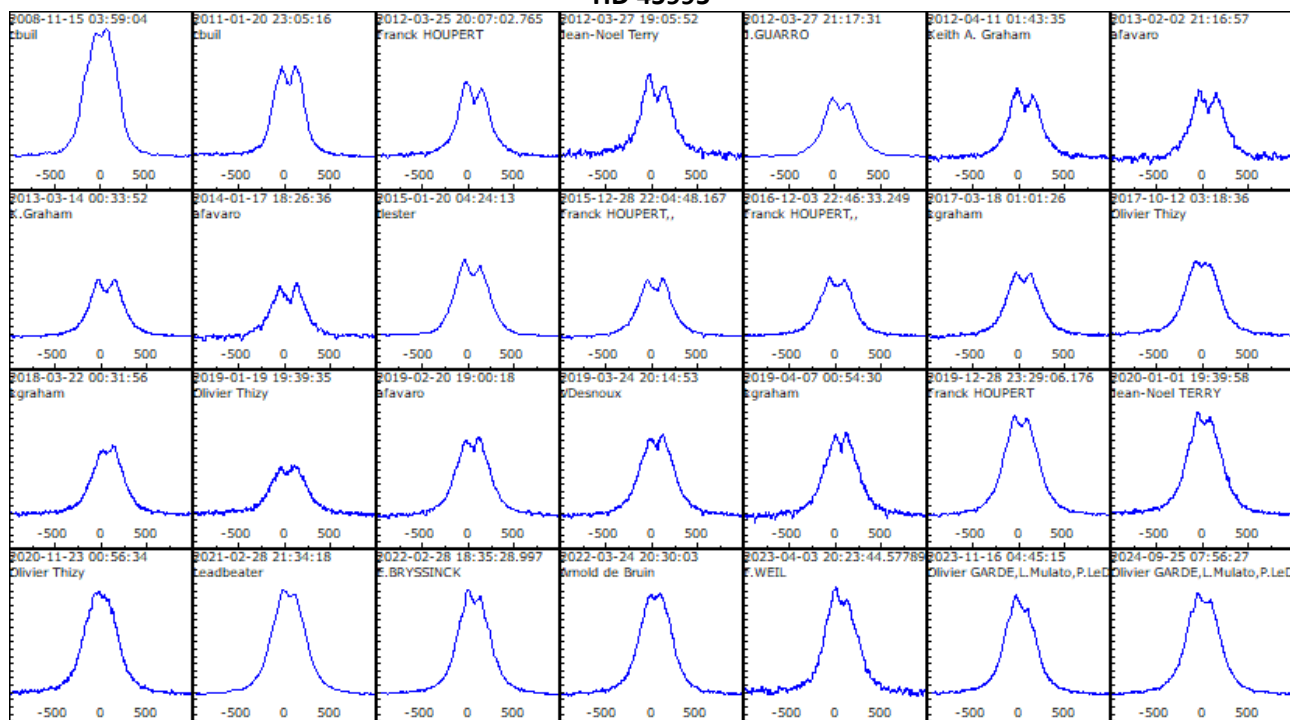
tet Cir



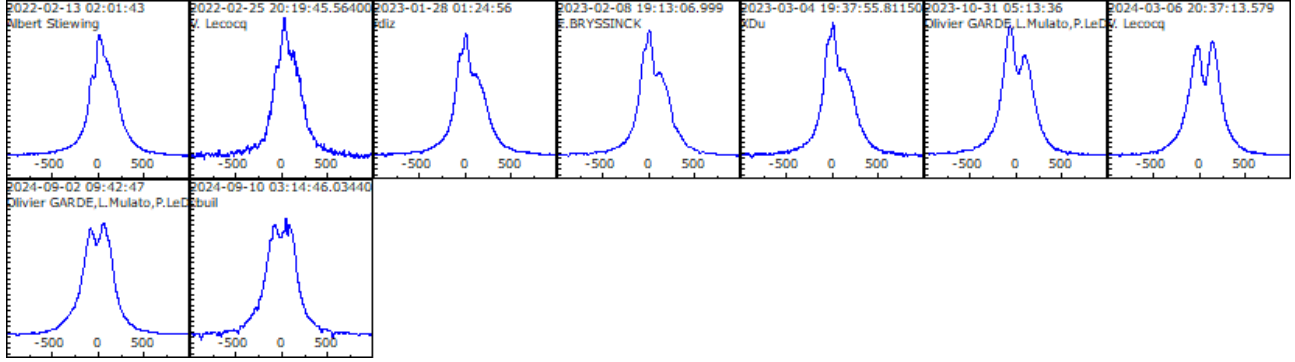
8 Lac A



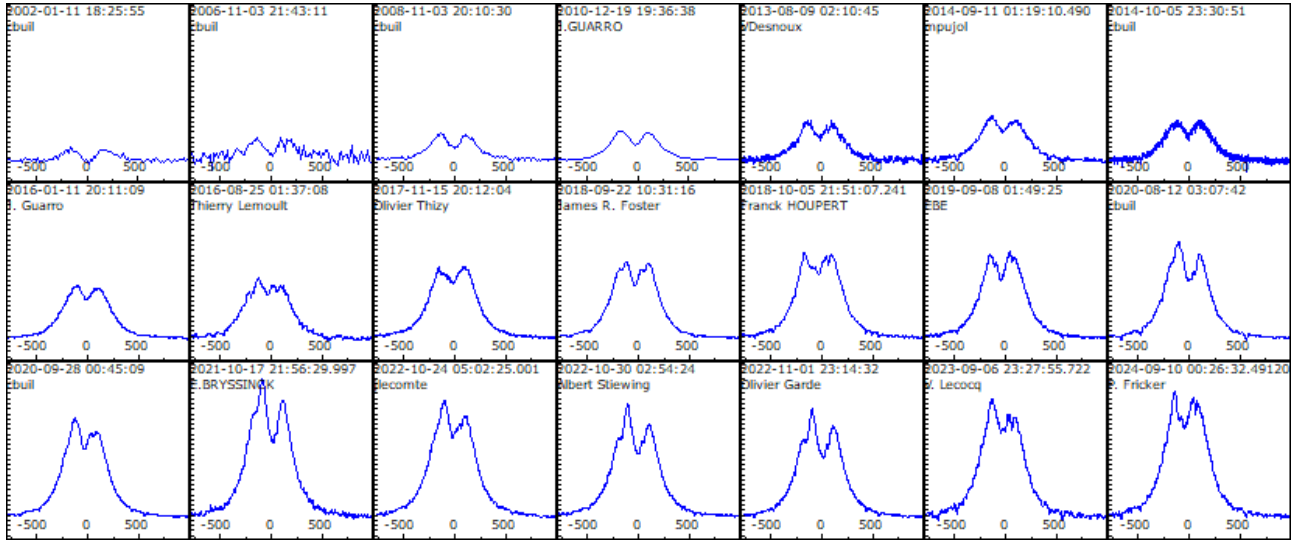
HD 45995



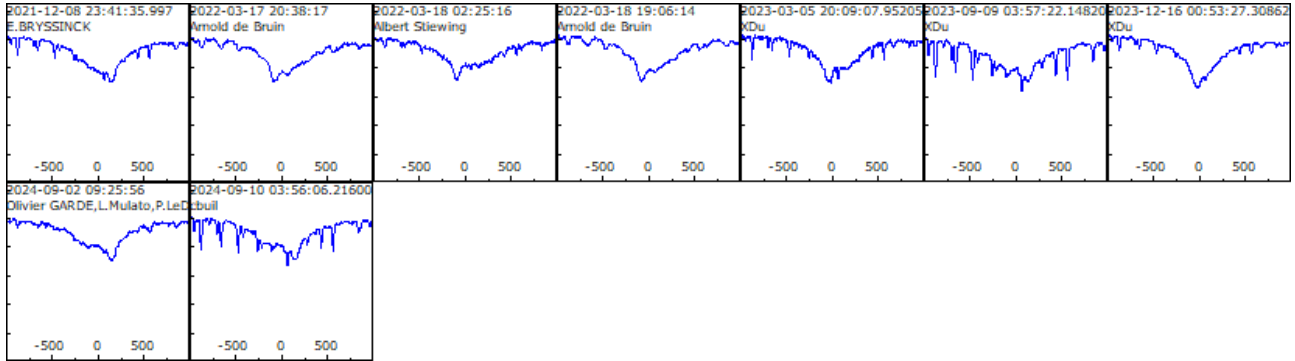
25 Ori



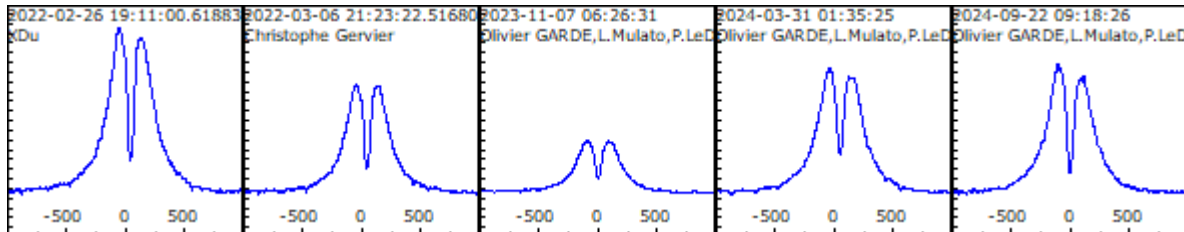
HD 13669



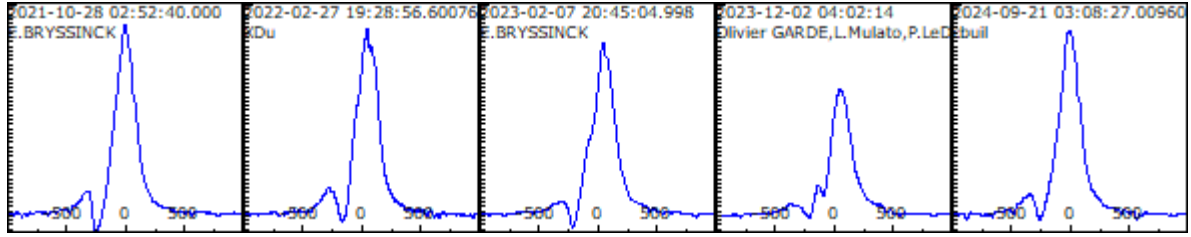
eta Ori



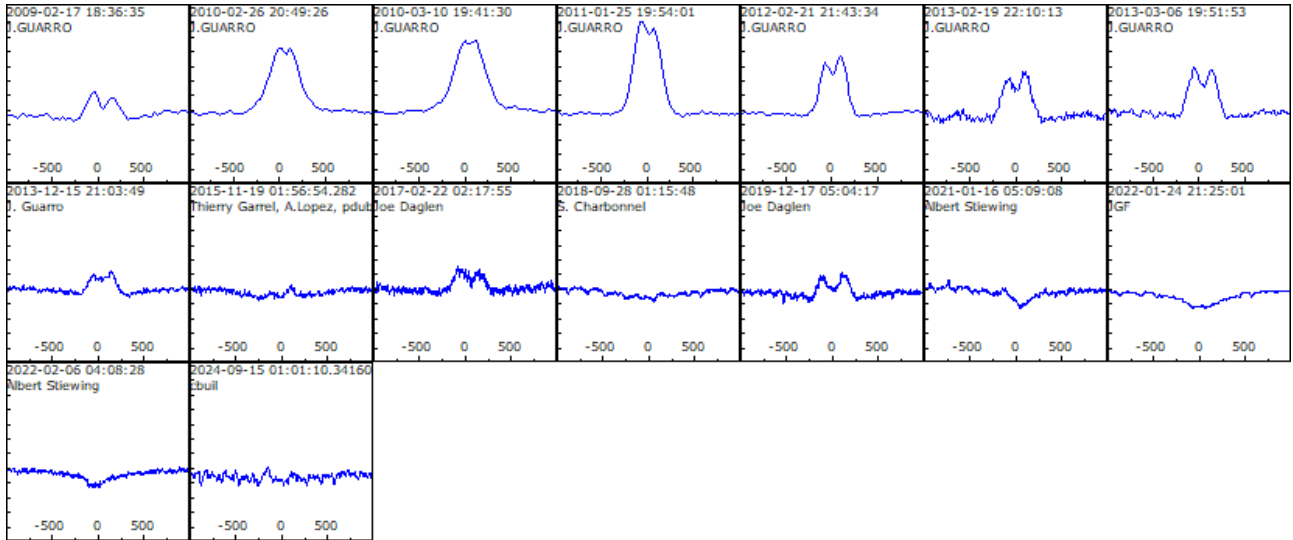
bet Mon A



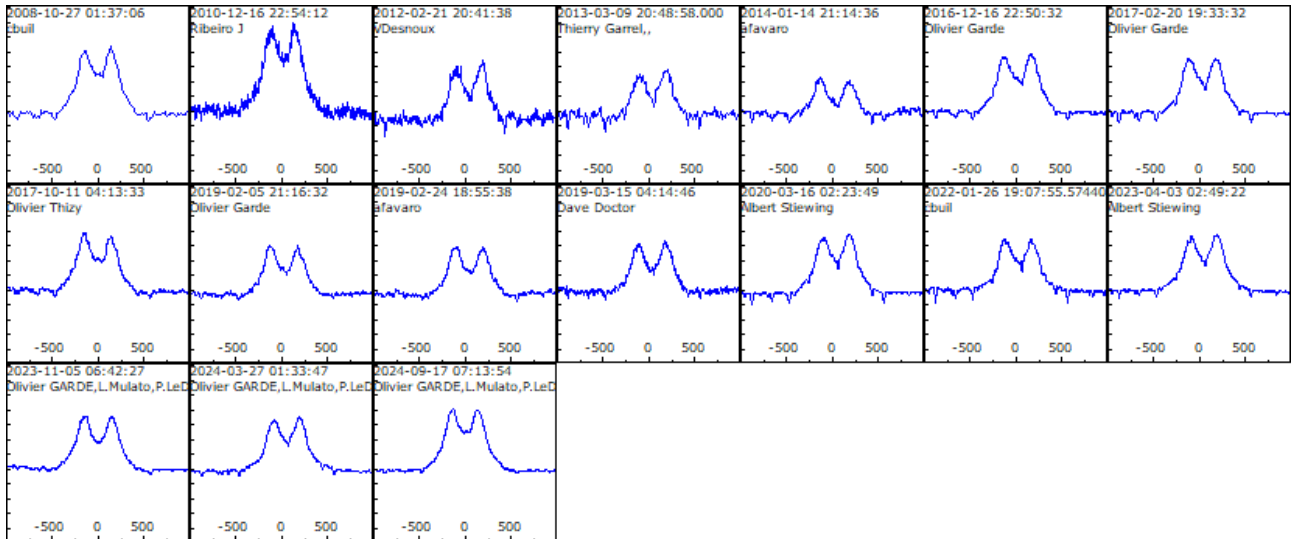
AX Mon



V1153 Tau



HD 43544



LS Mus

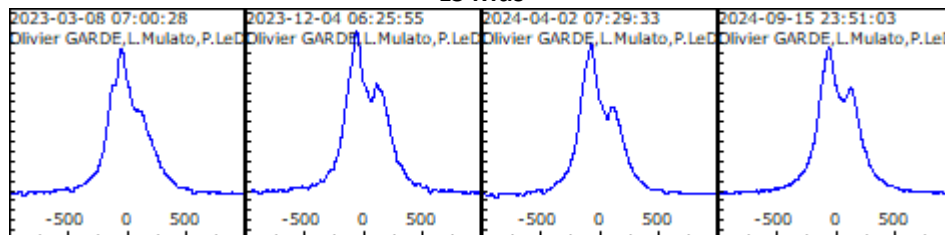
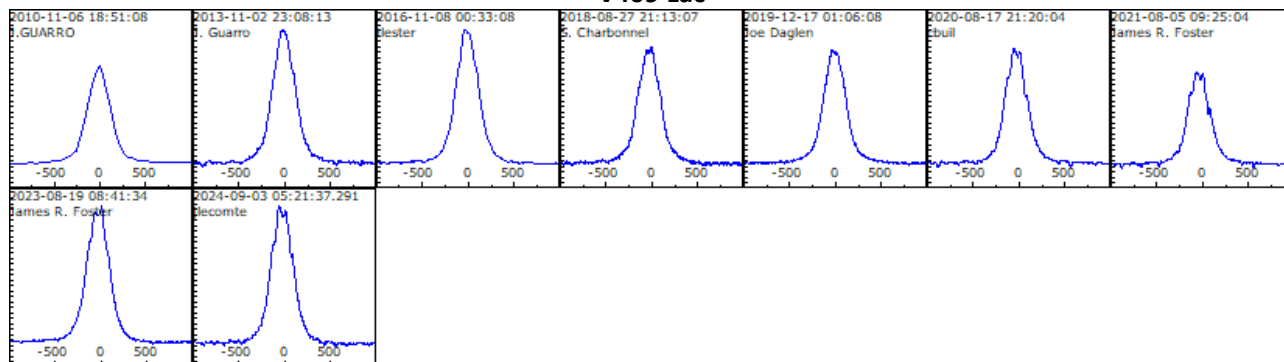
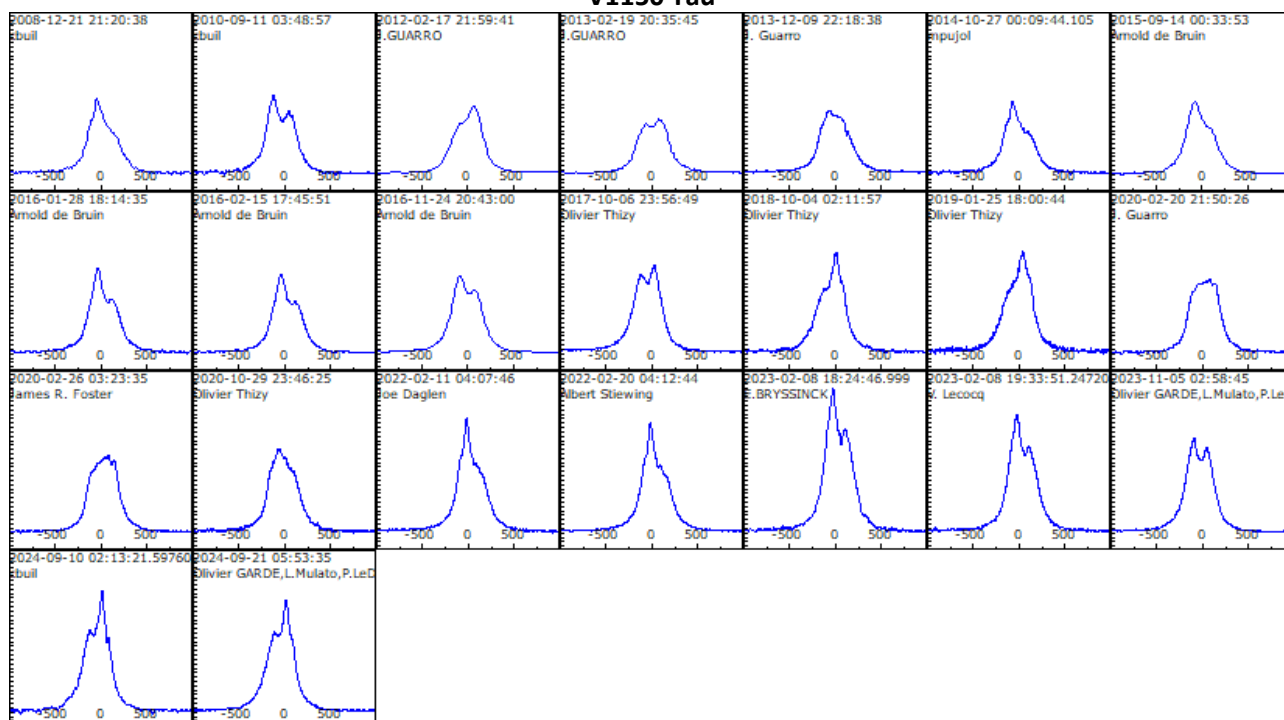


Figure 1 displays 28 plots arranged in a 4x7 grid, showing the evolution of the 100% confidence interval for the time of the last common ancestor (T_LCA). Each plot contains a blue curve representing the confidence interval against a time scale from -500 to 500. The plots are labeled with a date, time, and the name of the individual or group. The curves show a peak at T_LCA, which varies across the plots, indicating the time of the last common ancestor for each individual or group.

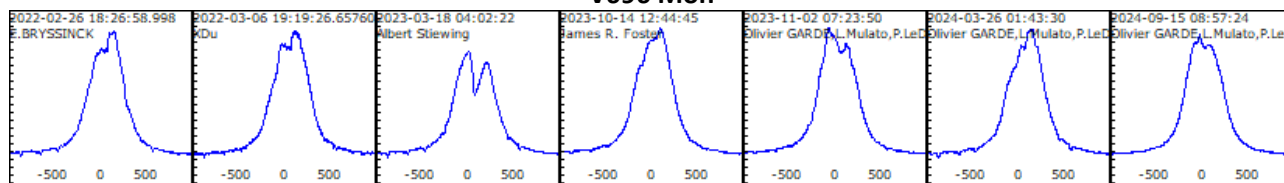
V409 Lac



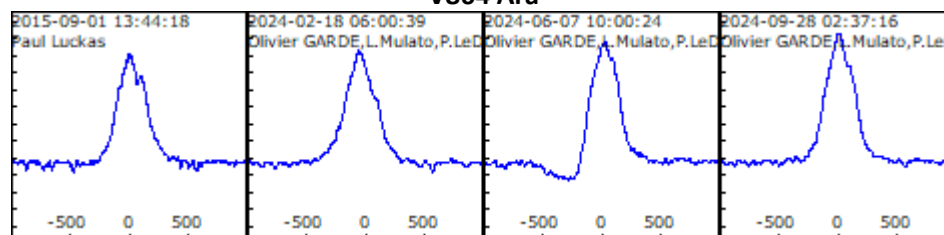
V1150 Tau



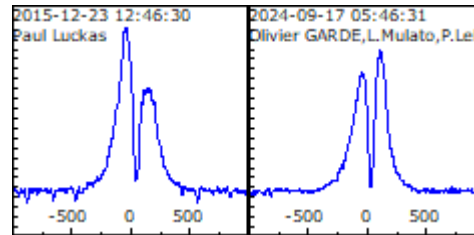
V696 Mon



V864 Ara

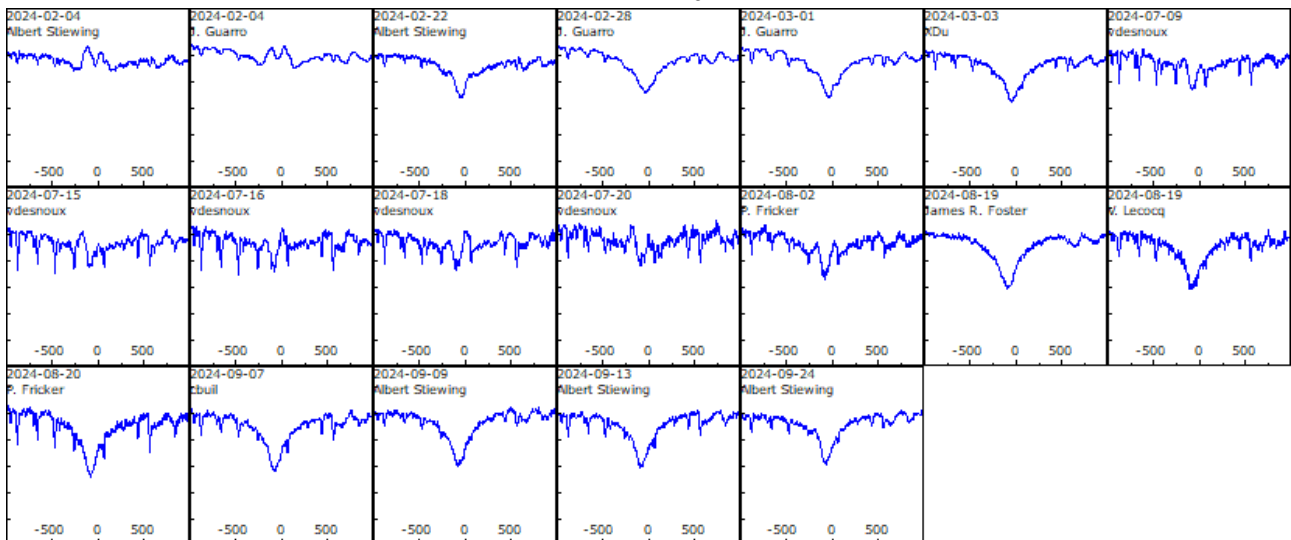


HD 43789

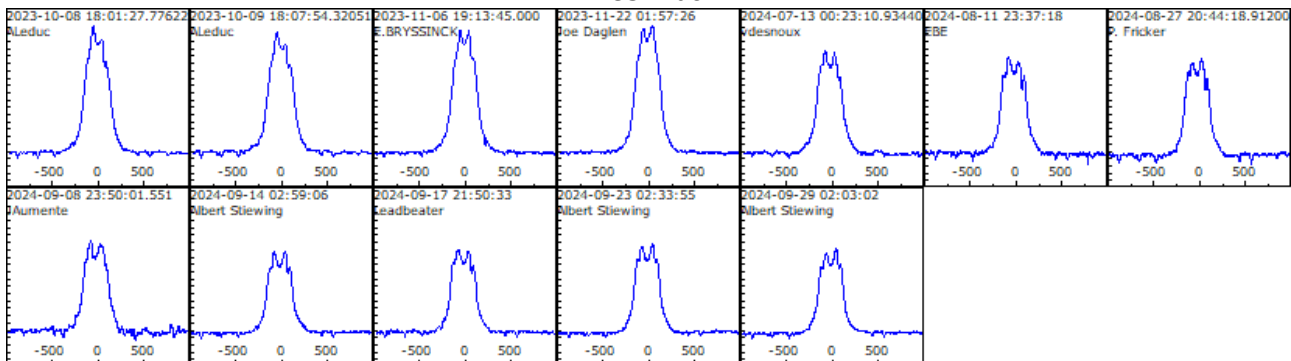


Emission decrease of H-alpha line

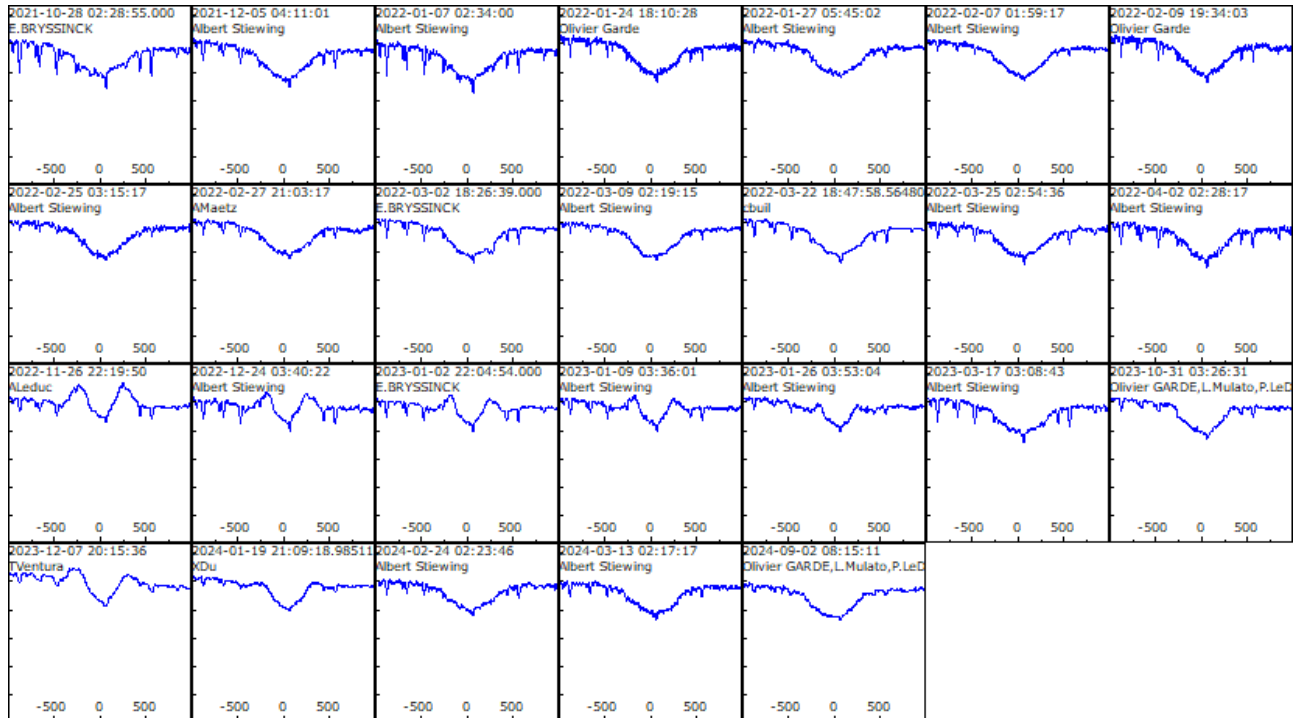
V442 And



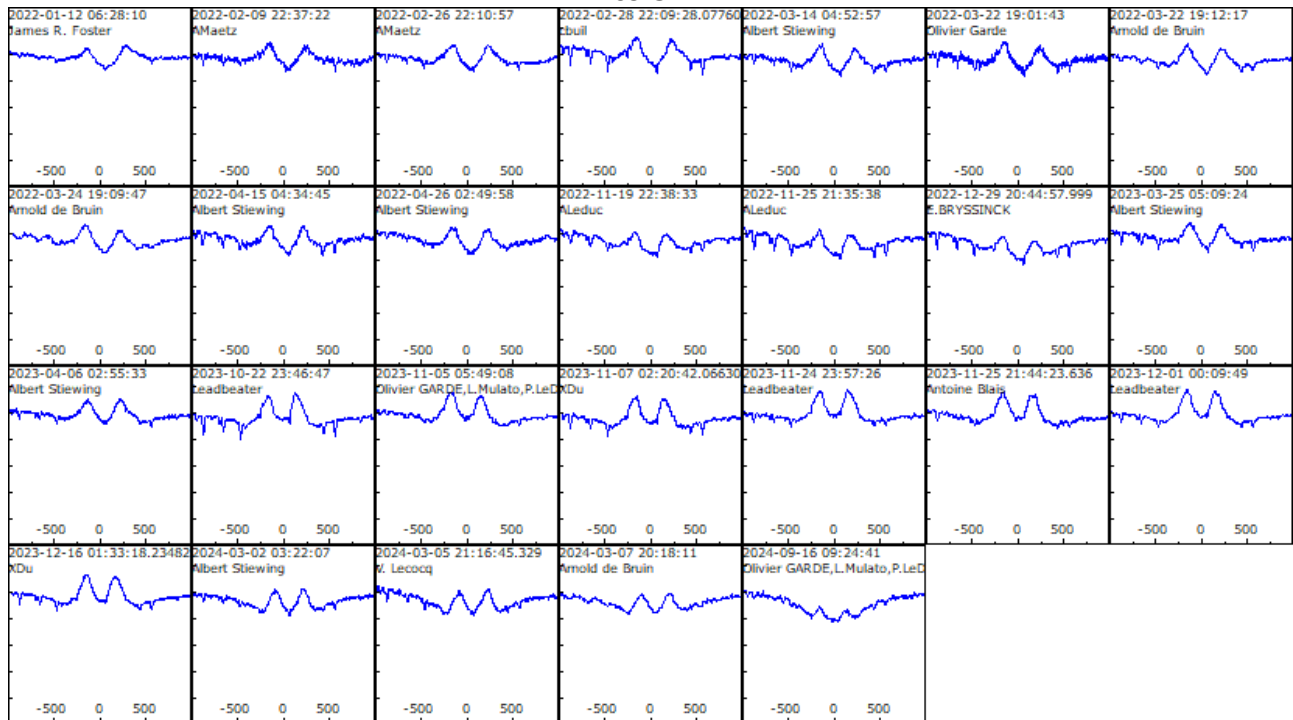
V357 Lac



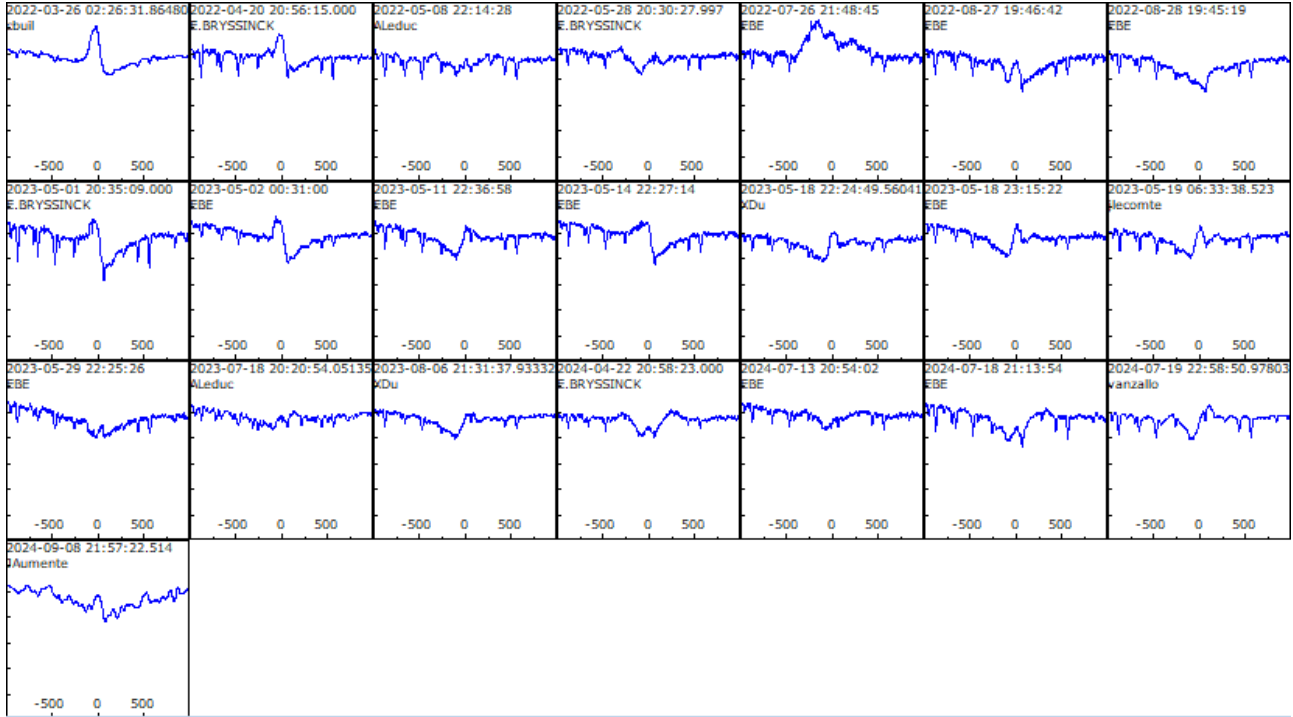
Iam Eri



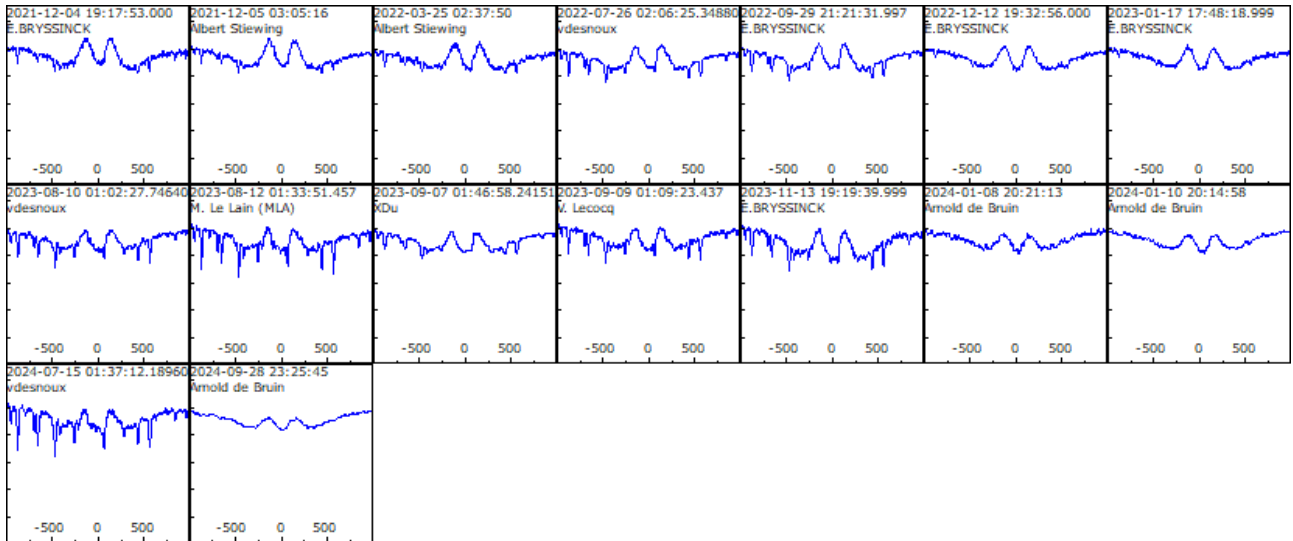
69 Ori



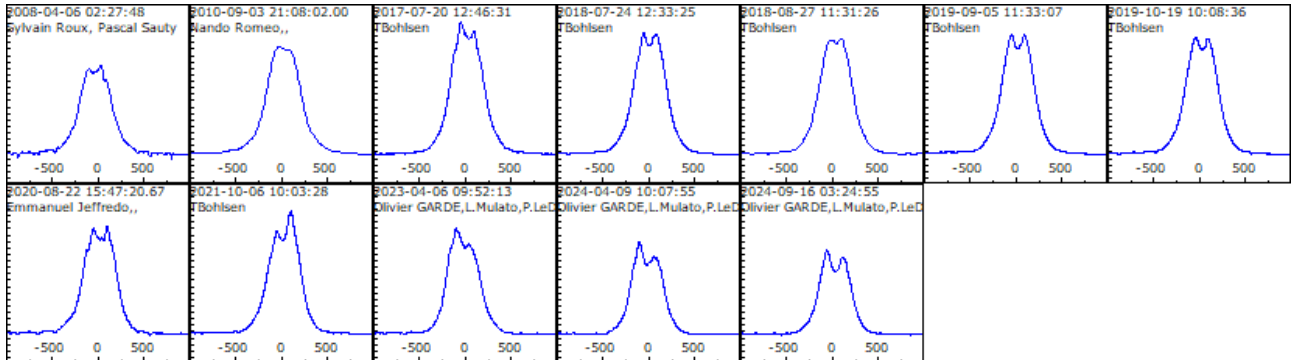
CX Dra



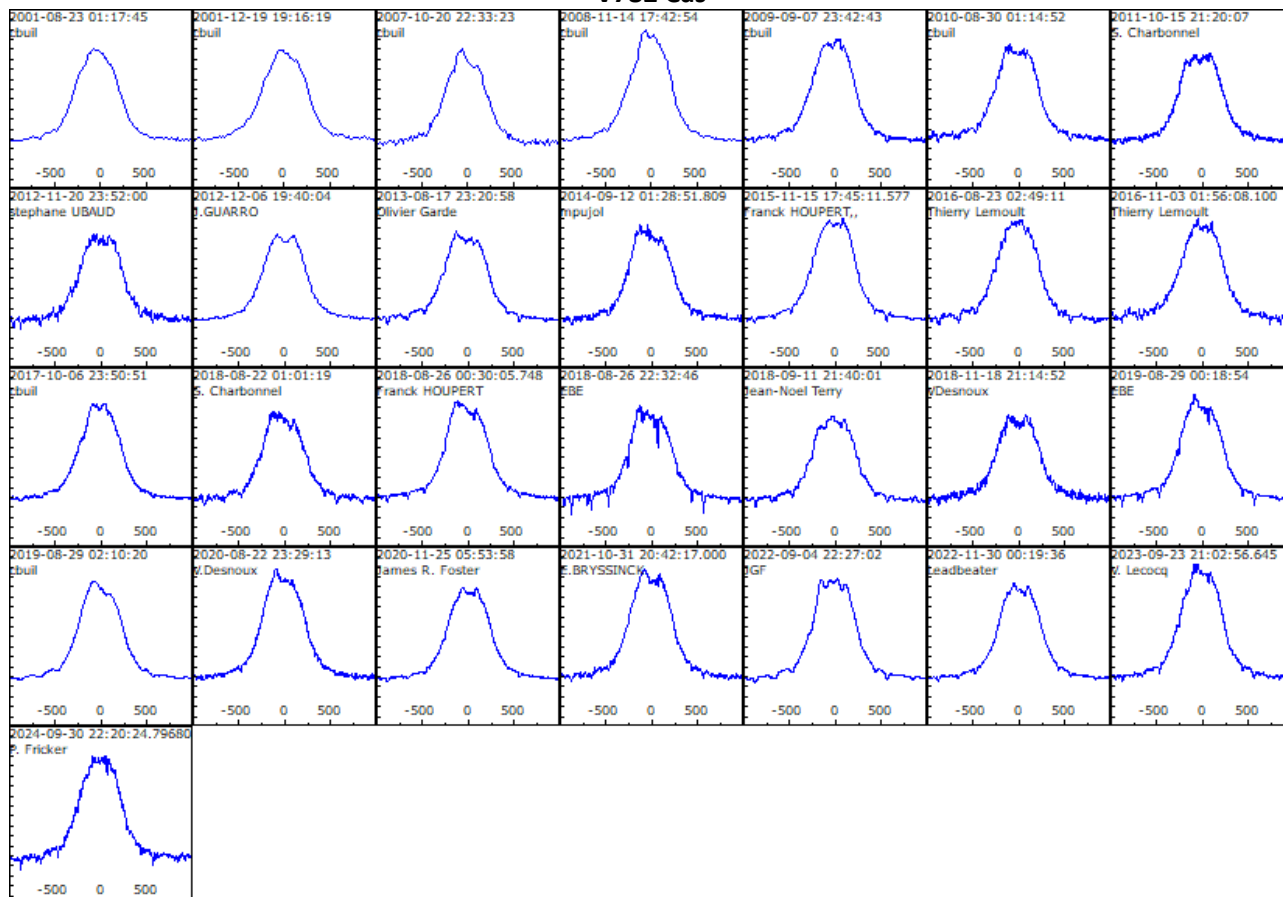
HD 22780



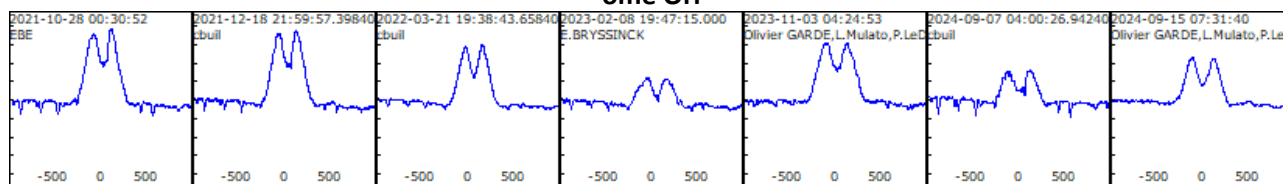
alf Ara



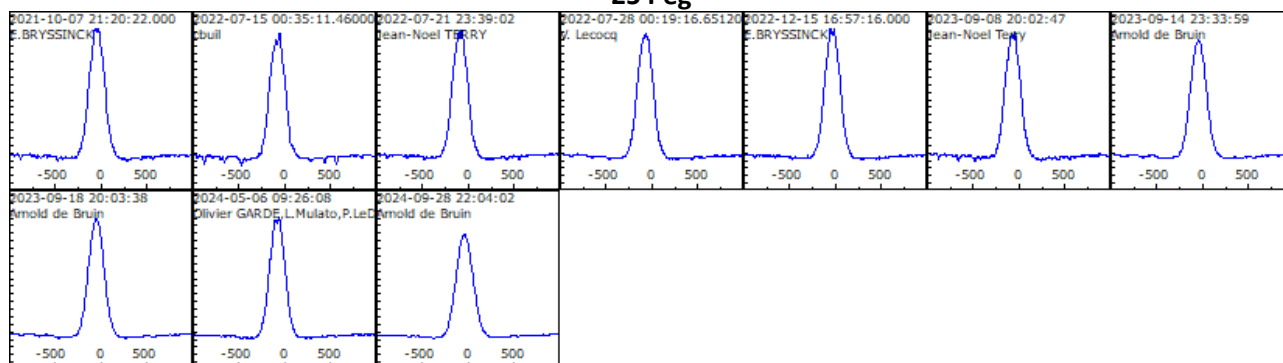
V782 Cas



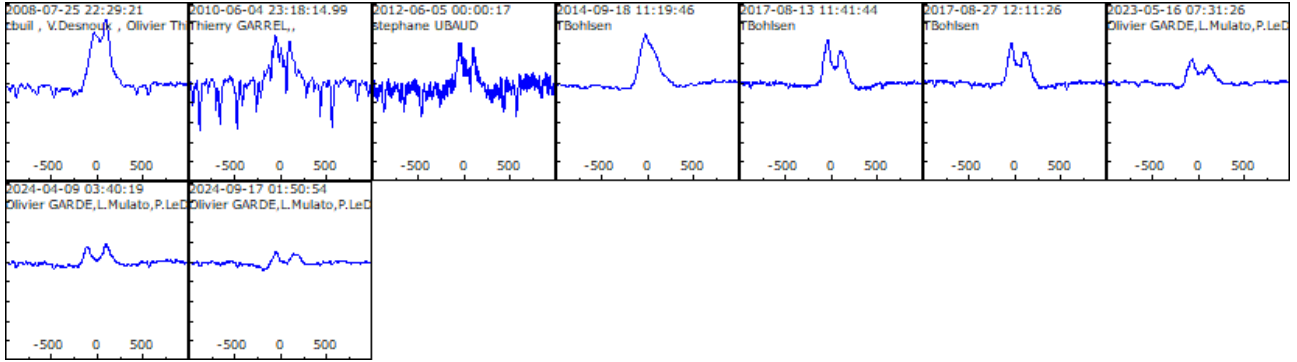
ome Ori



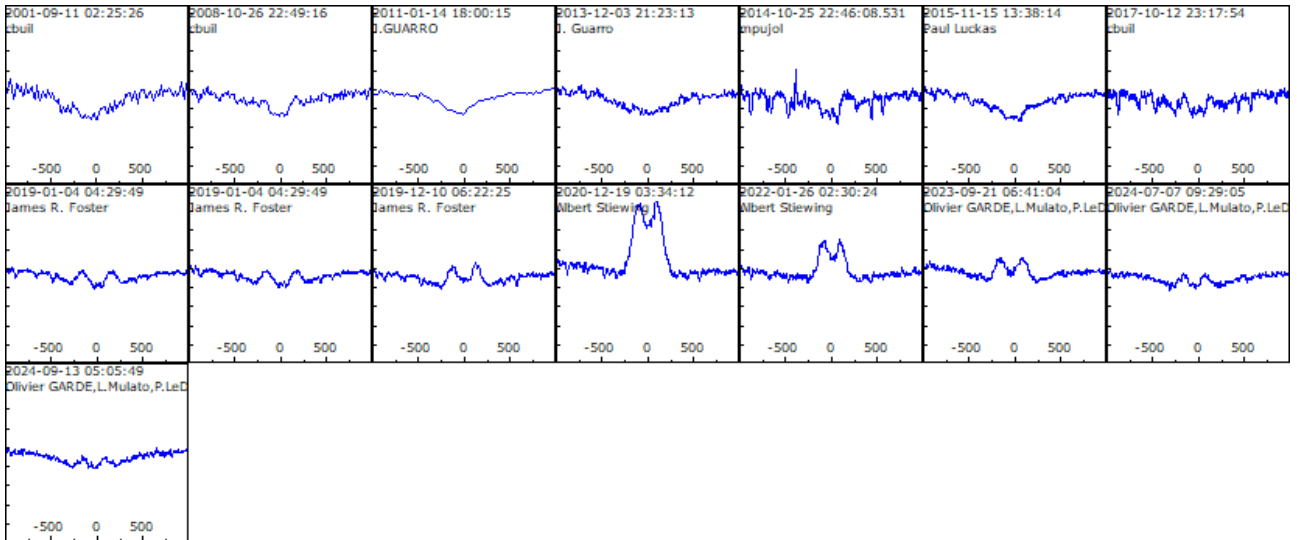
25 Peg



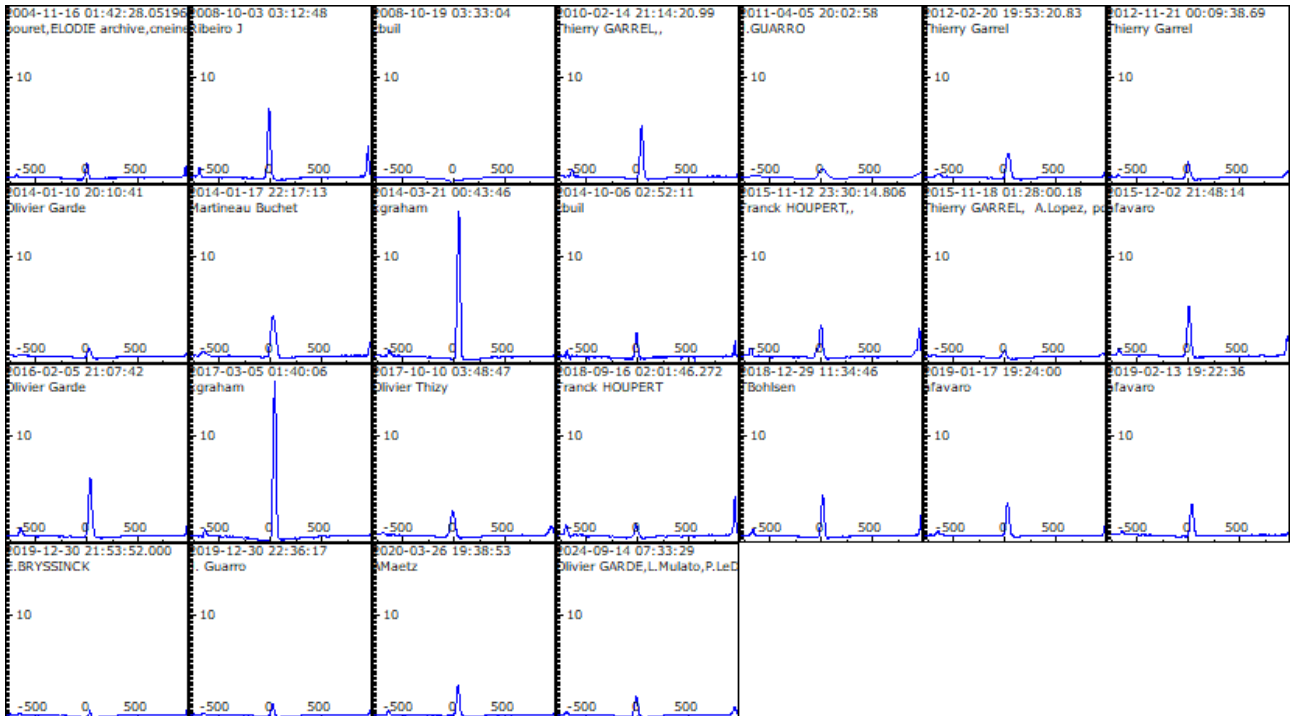
V1075 Sco



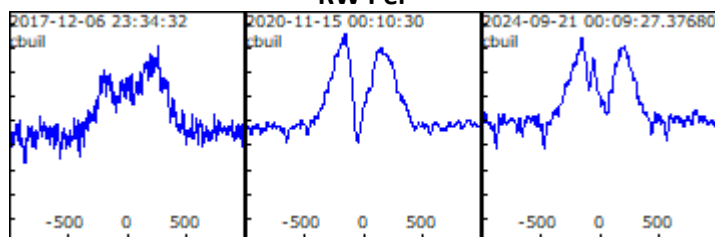
HD 20340



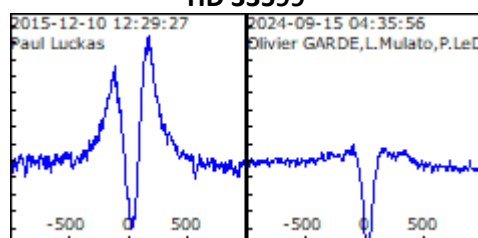
43 Ori



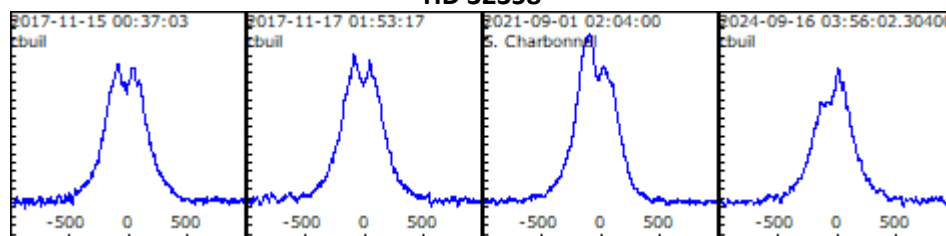
RW Per



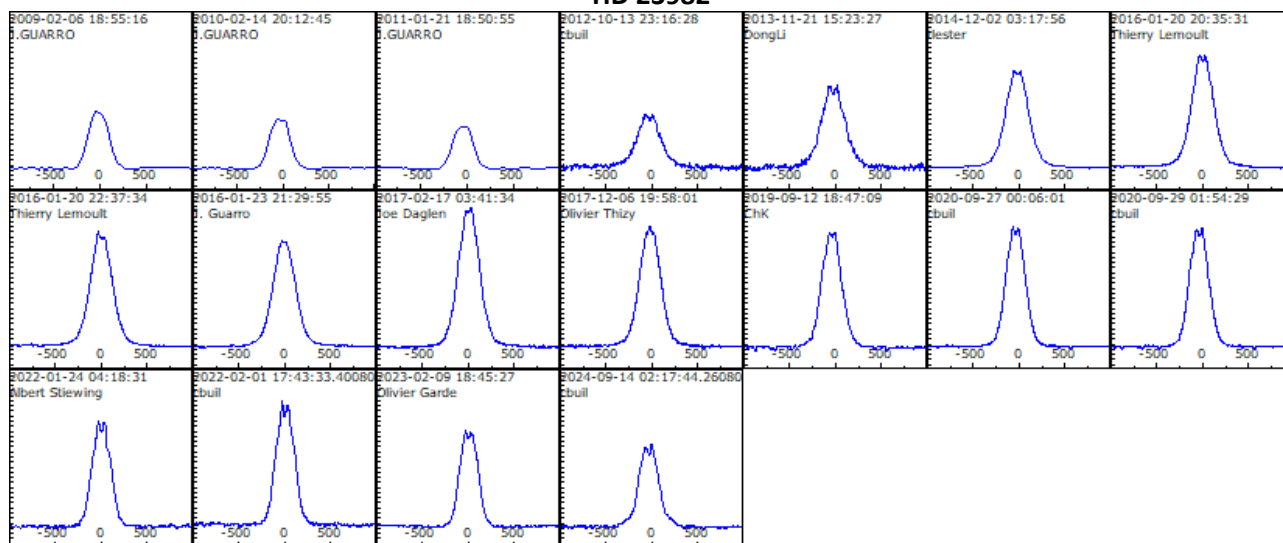
HD 33599



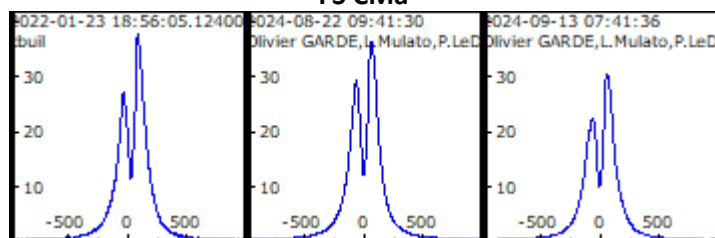
HD 32358



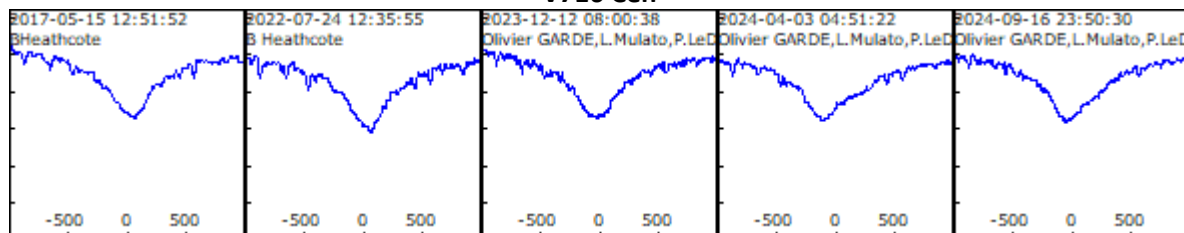
HD 23982



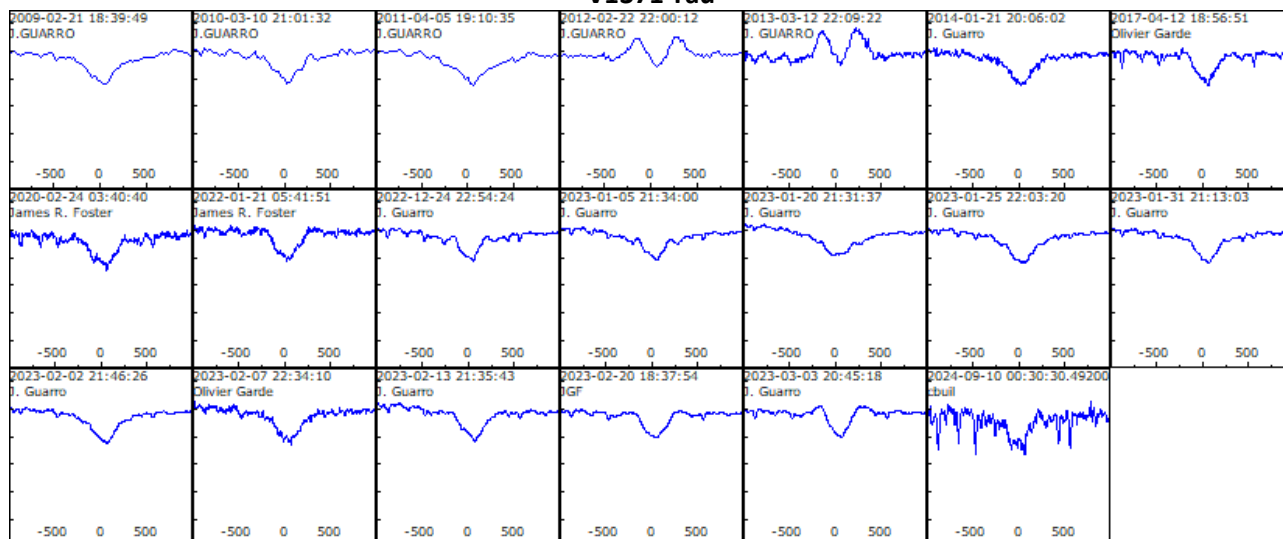
FS CMa



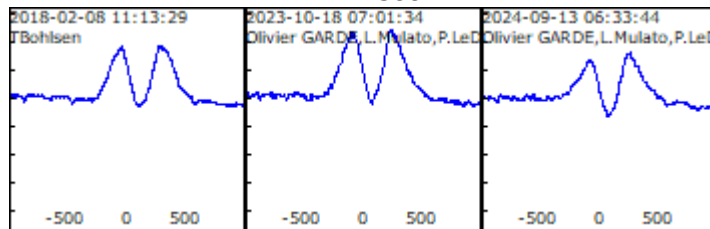
V716 Cen



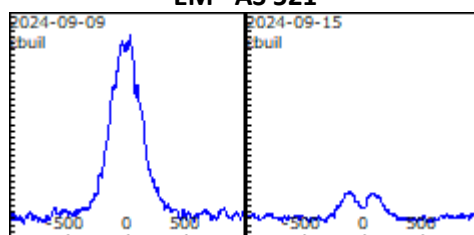
V1371 Tau



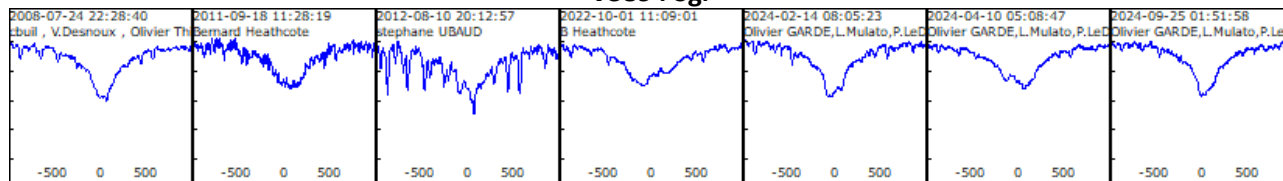
HD 44506



EM* AS 521



V3894 Sgr



BeSS report Materiel & Method

For each star having a spectrum loaded in BeSS database for the monthly report the last six spectra in BeSS are displayed. A visual check is performed to detect any change in the H-alpha profile. Sometimes a copy/paste is needed for subtle evolutions.

For each star, which exhibits a change, the above series are generated with the following steps. Each spectrum is zoomed on the H-alpha line. Each profile is scaled on the continuum in the area of 6580 angströms. The x-axis is converted into Doppler velocity centered on H-alpha.

If too many spectra of the object are available, only a shorter period of observation is displayed.

All data are processed with Visual Spec with dedicated function to automatically load BeSS spectra and automatize most of the above processing and report images generation.

To be noted: Shelyak, as a complex variable star is excluded from the study.

Author

Valérie Desnoux

Valerie.desnoux@free.fr

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

BeSS monthly report repository at <http://valerie.desnoux.free.fr/BeSS/>

ArasBeAM portal for Be Stars observations status at <http://arasbeam.free.fr/>