

**OBSERVING LOG CHARA/VEGA 2019-06-15**  
**Observers:** Frédéric et Roxanne, live from Calern  
Chris on the mountain

**UT03h23:** We open everything.

**UT03h08:** we start with the LABAO star HD141003.

**UT03h46:** alignement.

**UT03h50:** we search the fringed on the LABAO star. But it seems that W2 still has cart pb and cannot move properly.

**UT03h59:** we change the ref W1 -> W2.

**UT04h20:** we've got the fringes (using the LABAO star).

**Configuration W1-POP1-B2 W2-POP5-B3 E2-POP3/1-B1**  
**V38 - Salsi**

Target = HD148112

Cal1 = HD144874

Cal2 = HD152614

**UT04h21:** we go to cal 1.

**UT04h31:** fringes not easy to find. We find them but they are weak.

**HD144874.2019.06.15.04.32**

**UT04h35:** we see well W1W2 but barely W2E2...

E2=2700, W2=350, CLIMB\_B1 = 7.73, CLIMB\_B2 = 4.80

**UT04h43:** we go to the target HD148112. Fringes are there, bright and at the good place.

**HD148112.2019.06.15.04.47**

E2=2780, W2=280, CLIMB\_B1 = 7.73, CLIMB\_B2 = 4.80

**UT04h56:** we go to cal 2.

**UT05h07:** we see all fringes. The cal 1 might not be good.

**HD152614.2019.06.15.05.07**

E2=2810, W2=400, CLIMB\_B1 = 7.72, CLIMB\_B2 = 4.79

**UT05h16:** back to target.

**UT05h21:** recording. Nice fringes.

**HD148112.2019.06.15.05.22**

E2=2760, W2=150, CLIMB\_B1 = 7.75, CLIMB\_B2 = 4.80

R0 between 6 and 7.5 cm since the beginning of the night.

**UT05h32:** back to cal 2=HD152614. R0=6 cm.

**HD152614.2019.06.15.05.35**

E2=2800, W2=260, CLIMB\_B1 = 7.75, CLIMB\_B2 = 4.80

**UT05h44:** back to target HD148112.

**HD148112.2019.06.15.05.50**

E2=2740, W2=110, CLIMB\_B1 = 7.78, CLIMB\_B2 = 4.82

The r0 is dropping (~4.5 cm). We see 2 fringes but W2E2 is weak.

**UT05h55:** we lost W1 at block 12. So we add 5 blocs.

**UT06h02:** locked on cal 2.

**HD152614.2019.06.15.06.03**

E2=2750, W2=130, CLIMB\_B1 = 7.78, CLIMB\_B2 = 4.82

Spectral calibration: **D\_CM720\_2019.06.15.06.06.14**

Target = HD152107

Cal1 = HD144206

Cal2 = HD143584

**!!Attention!!** The 2 cal's given (HD149303 and HD150100) are binaries! So we had to change them

**UT06h30:** we align on HD147394.

**UT06h35:** we go to cal1 = HD144206. There are fluctuations on the flux. The r0 is low, ~6cm.

**UT06h49:** still searching for fringes...

**UT06h54:** we've got the fringes.

**HD144206.2019.06.15.06.06.55**

E2=3230, W2=-270, CLIMB\_B1 = 7.76, CLIMB\_B2 = 4.86

r0 = 5.5cm. Nice fringes anyway.

**UT07h07:** fringes. Recording.

**HD152107.2019.06.15.06.07.08**

E2=3260, W2=-270, CLIMB\_B1 = 7.76, CLIMB\_B2 = 4.86

**UT07h17:** we try the cal2 HD143584. r0 is rising! ~8cm. Some pb with ople and climb (crash).

**UT07h36:** fringes on CLIMB. R0 à 7.5 cm.

**HD143584.2019.06.15.06.07.36**

E2=3220, W2=-260, CLIMB\_B1 = 7.76, CLIMB\_B2 = 4.86

We see 2 peaks. At the end the r0 has dropped to 4.5 cm.

**UT07h46:** we slew to target.

**HD152107.2019.06.15.06.07.51**

E2=3250, W2=-260, CLIMB\_B1 = 7.76, CLIMB\_B2 = 4.86

r0 ~7.5 cm. There are fluctuations...clouds?

**UT08h03:** we go back to cal1=HD144206. Telescopes have to be turned around.

**UT08h12:** flux in the telescopes!

**UT08h16:** recording. Seeing at r0~4cm.

**HD144206.2019.06.15.06.08.16**

E2=3320, W2=-90, CLIMB\_B1 = 7.80, CLIMB\_B2 = 4.88

We see 3 peaks!

**UT08h25:** back to target.

**HD152107.2019.06.15.06.08.29**

E2=3320, W2=-150, CLIMB\_B1 = 7.76, CLIMB\_B2 = 4.86

r0~4-5 cm :( Anyway we see the 3 peaks!

**UT08h40:** back to cal 2 HD143584.

**HD143584.2019.06.15.06.08.43**

E2=3380, W2=0, CLIMB\_B1 = 7.82, CLIMB\_B2 = 4.90

Spectral Calibration: [D\\_CM720\\_2019.06.15.06.08.54](#)

### **Configuration [W1-POP1-B2](#) [W2-POP5-B3](#) [E2-POP1-B1](#) V65 - Mourard**

Target = [V1143CYG](#) = [HD185912](#)

Cal1 = [HD177003](#)

Cal2 = [HD194668](#)

**UT08h55:** we go to the labao star HD181276.

**UT09h04:** we go to the check star HD192696. But we had to wait for the delay (~2min).

**UT09h04:** we start with cal 1.

**HD177003.2019.06.15.06.09.26**

E2=3180, W2=-290, CLIMB\_B1 = 7.73, CLIMB\_B2 = 4.84

r0~5cm. Very stable, and 3 beautiful peaks.

**UT09h43:** We go to the target. W2 not tuning again.

**UT09h47:** recording on target.

**HD185912.2019.06.15.06.09.47**

E2=3140, W2=-260, CLIMB\_B1 = 7.73, CLIMB\_B2 = 4.84

r0 back to ~7cm (but fluctuations).

**UT10h00:** done. Back to cal 1. The cart is « being a pain » as says Chris.  
**UT10h07:** recording.  
**HD177003.2019.06.15.06.10.09**  
E2=3220, W2=-200, CLIMB\_B1 = 7.75, CLIMB\_B2 = 4.85  
r0 ~ 7.5 cm. We see 3 peaks!  
Spectral Calibration: **D\_CMR720\_2019.06.15.10.25**

**Configuration W1-POP1-B2 W2-POP5-B3  
V67 - Creevey**

Target = HD181597  
Cal1 = HD187235  
Cal2 = HD174481

**UT10h29:** we go to the LABAO star HD184006.  
**UT10h35:** we now go to the check star HD192514.  
**UT10h38:** we go to cal1 HD187235.  
**UT10h44:** recording. Beautiful fringes.  
**HD187235.2019.06.15.06.10.45**  
W1=60, CLIMB\_B2 = 4.63  
**UT10h54:** we go to the target.  
**UT11h05:** Fringes are there but cameras are saturating.  
**UT11h07:** recording.  
**HD181597.2019.06.15.06.11.07**  
W1=90, CLIMB\_B2 = 4.63  
r0 dropping to 5cm.  
**UT11h16:** we go to cal2.  
**UT11h22:** recording.  
**HD174481.2019.06.15.06.11.20**  
W1=210, CLIMB\_B2 = 4.70  
R0 around 6.5 cm. We see the fringe.  
**UT11h32:** we record on the target.  
**HD181597.2019.06.15.06.11.32**  
W1=130, CLIMB\_B2 = 4.70  
Nice fringe.  
**UT11h32:** we go back to cal1.  
**UT11h46:** realignment...  
**UT11h51:** recording.  
**HD187235.2019.06.15.06.11.50**  
W1=130, CLIMB\_B2 = 4.70  
Nice fringes despite the r0 at 5.5cm then rises to 7cm.  
**UT11h59:** we go back to the target.  
**HD181597.2019.06.15.06.12.04**  
W1=210, CLIMB\_B2 = 4.68  
r0=7cm. nice fringes.  
**UT12h12:** finished but the sun is rising...we try a last cal anyway.  
**UT12h14:** we go to cal 2 (with the sun).  
**HD174481.2019.06.15.06.12.18**  
W1=380, CLIMB\_B2 = 4.70  
**UT12h27:** done, with good fringes but the sun was already there...  
Spectral Calibration: **D\_CMR720\_2019.06.15.12.28**

**THE END OF THE NIGHT**