

**OBSERVING LOG CHARA/VEGA 2019-06-17**  
**Observers:** Frédéric et Roxanne, live from Calern  
Olli on the mountain

**UT03h20:** We are here and we open.

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

Target = HD145570

Cal1 = HD145607

Cal2 = HD143459

**UT03h28:** we go to the LABAO star HD146051.

**UT03h42:** alignment done. We go to the target star for the checking.

**UT04h00:** done. Going to cal 1.

**UT04h03:** fringes are there. Recording.

**HD145607.2019.06.17.04.04**

E2=3050, W1=1050, CLIMB\_B1=7.73, CLIMB\_B2=4.80.

we see 3 peaks, r0-9cm.

**UT04h13:** we got to the target.

**HD145570.2019.06.17.04.16**

E2=3250, W1=920, CLIMB\_B1=7.73, CLIMB\_B2=4.80.

We see 3 peaks!

**UT04h26:** go to cal 2.

**HD143459.2019.06.17.04.27**

E2=2890, W1=830, CLIMB\_B1=7.73, CLIMB\_B2=4.80.

3 peaks, r0~8.5cm.

**UT04h36:** back to target.

**HD145570.2019.06.17.04.38**

E2=3150, W1=790, CLIMB\_B1=7.76, CLIMB\_B2=4.80.

We saw the 3rd peak! r0~10.5cm! Youhou!

**UT04h49:** back to cal 1.

**HD145607.2019.06.17.04.50**

E2=2800, W1=790, CLIMB\_B1=7.77, CLIMB\_B2=4.80.

Still 3 peaks and good conditions (r0~10.5 cm).

**UT40h59:** back to target.

**HD145570.2019.06.17.05.00**

E2=3050, W1=690, CLIMB\_B1=7.77, CLIMB\_B2=4.81.

We see 2 peaks. r0~10.5cm.

**UT05h10:** back to cal 2.

**HD143459.2019.06.17.05.12**

E2=2830, W1=640, CLIMB\_B1=7.80, CLIMB\_B2=4.82.

r0~11.5cm, ohala !-

**UT05h22:** back to target.

**HD145570.2019.06.17.05.23**

E2=3050, W1=600, CLIMB\_B1=7.80, CLIMB\_B2=4.82.

r0~9cm.

**UT05h32:** back to cal 1.

**HD145607.2019.06.17.05.33**

E2=2780, W1=680, CLIMB\_B1=7.80, CLIMB\_B2=4.82.

Spectral calibration: **R\_CMD.2016.06.17.05.44**

Target = HD149438

Cal1 = HD148605

Cal2 = HD146624

## Change of POP: E2-POP3 -> E2-POP1

**UT05h45:** we align on the target.

**UT05h56:** server trouble.

**UT06h13:** all set. We to cal 2. r0=14cm!!

**HD146624.2019.06.17.06.18**

E2=4130, W1=1390, CLIMB\_B1=7.82, CLIMB\_B2=4.84.

r0 dropped to 8cm.

**UT06h28:** we go to the target.

**HD149438.2019.06.17.06.29**

E2=4200, W1=1320, CLIMB\_B1=7.82, CLIMB\_B2=4.84.

r0=8cm. We see 2 peaks, and also the 3rd one even if it is weak.

NB: the beam 1 is not pretty.

**UT06h40:** we got to the cal 1.

**HD148605.2019.06.17.06.41**

E2=4140, W1=1150, CLIMB\_B1=7.86, CLIMB\_B2=4.85.

r0~9cm. 2 peaks.

**UT06h50:** we go to the target.

**HD149438.2019.06.17.06.52**

E2=4320, W1=1340, CLIMB\_B1=7.88, CLIMB\_B2=4.85.

r0~10 cm.

**UT07h01:** back to cal 2.

**UT07h17:** no fringes yet. Realignment.

**UT07h24:** we finally have something. Recording.

**HD146624.2019.06.17.07.23**

E2=4460, W1=1560, CLIMB\_B1=8.02, CLIMB\_B2=4.92.

r0~11-12cm. The fringes are a bit weak anyway, but they are here.

**UT07h32:** to target again.

**UT07h38:** tracker problem? No photon...

**UT07h41:** Fred starts the tracker again and it finally works, we have photons.

**HD149438.2019.06.17.07.42**

E2=4430, W1=1440, CLIMB\_B1=8.03, CLIMB\_B2=4.93.

r0=9cm. We see 3 peaks!

**UT07h51:** we go back to cal 1.

**HD148605.2019.06.17.07.54**

E2=4370, W1=1310, CLIMB\_B1=8.06, CLIMB\_B2=4.94.

r0~12 cm. Nice fringes. But they move on VEGA.

**UT08h04:** back to target.

**HD149438.2019.06.17.08.07**

E2=4540, W1=1550, CLIMB\_B1=8.11, CLIMB\_B2=4.97.

Lost fringes at the end of the target.

No delay on the calcs. No fringes W1W2 at bloc 10.

Spectral calibration: **R\_CMD.2016.06.17.08.23**

The fringes move a lot...LDCs on?

Target = [HD160762](#)

Cal1 = [HD162579](#)

Cal2 = [HD161693](#)

**UT08h21:** we change the target. We use it as LABAO and check star.

**UT08h39:** fringes are very far away on VEGA.

**UT08h49:** we finally have the fringes. We go to the cal 1.

**HD162579.2019.06.17.08.48**

E2=3850, W1=-610, CLIMB\_B1=7.73, CLIMB\_B2=4.91.

The r0 drops to ~6cm.

**UT08h57:** to target.

**HD160762.2019.06.17.08.59**

E2=3900, W1=-530, CLIMB\_B1=7.80, CLIMB\_B2=4.93.

Nice fringes.

**UT09h10:** we go to cal 2.

**HD161693.2019.06.17.09.11**

E2=3910, W1=-530, CLIMB\_B1=7.77, CLIMB\_B2=4.93.

The r0 has dropped considerably, ~5cm now. Despite this, good fringes.

**UT09h20:** to target.

**HD160762.2019.06.17.09.23**

E2=3920, W1=-490, CLIMB\_B1=7.84, CLIMB\_B2=4.95

**UT09h32:** back to cal 1.

**HD162579.2019.06.17.09.34**

E2=3830, W1=-520, CLIMB\_B1=7.81, CLIMB\_B2=4.95.

The r0 is still low, ~5cm.

**UT09h44:** back to target.

**HD160762.2019.06.17.09.46**

E2=3920, W1=-440, CLIMB\_B1=7.89, CLIMB\_B2=4.98

3 peaks. R0~5cm.

**UT09h56:** we go to cal 2.

**HD161693.2019.06.17.09.58**

E2=3970, W1=-420, CLIMB\_B1=7.89, CLIMB\_B2=4.98.

Nice fringes, r0~5cm.

**UT10h08:** back to target.

**HD160762.2019.06.17.10.09**

E2=3970, W1=-380, CLIMB\_B1=7.94, CLIMB\_B2=5.00.

**UT10h18:** we go to cal 1.

**HD162579.2019.06.17.10.21**

E2=3900, W1=-390, CLIMB\_B1=7.90, CLIMB\_B2=5.00.

Spectral calibration: [R\\_CMD.2016.06.17.10.32](#)

### **Configuration E2-POP1-B1 W2-POP5-B2 V67 - Creevey**

Target = [HD185264](#)

Cal1 = [HD178207](#)

Cal2 = [HD183534](#)

**UT10h34:** we start with the LABAO=[HD182564](#).

**UT10h40:** OPLE issue.

**UT10h47:** we go to cal 1.

**UT10h52:** difficult to see the fringes on VEGA. R0~8cm.

**HD178207.2019.06.17.10.52**

E2=3800, CLIMB\_B1=7.75, CLIMB\_B2=5.00.

The fringes are 100 micron on the left.

We do 30 blocs because it's hard to see the fringes.

**UT11h04:** we have noticed that the fringes on VEGA have been moving a lot, since the middle on the night (~UT6h). Olli says: « it says they are on but indeed they don't seem to be moving », « I wonder if it's because the way we're running the ref cart ». Then Olli checked that: « Now that I put in a ref cart position they moved ». Problem solved!

**UT11h11:** We go back to the check star then.

**UT11h16:** we go to the target. r0~4.5cm :-S

**HD185264.2019.06.17.11.25**

E2=3320, CLIMB\_B1=7.89, CLIMB\_B2=5.00.

Fringes very bright and stable on CLIMB. We see the peak on VEGA after 10 blocs! But we record during 30 blocs anyway, and  $r_0 \sim 4\text{cm}$ .

**UT11h38:** we go to cal 2.

**HD183534.2019.06.17.11.40**

E2=3290, CLIMB\_B1=7.89, CLIMB\_B2=5.00.

Fringes are moving and are weak.

**UT11h53:** back target.

**HD185264.2019.06.17.11.55**

E2=3260, CLIMB\_B1=7.89, CLIMB\_B2=5.00.

**UT12h08:** back to cal 1.  $R_0 \sim 4\text{cm}$  (we would have preferred cal 2).

**UT12h21:** still no fringes.

**UT12h21:** Too late now, we close.

Spectral calibration: **D\_CMR.2016.06.17.12.23**

**END OF THE NIGHT, END OF THE RUN**