

## Log CHARA/VEGA 2014-07-03

Observers : Nicolas, Nic (on site)

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### Configuration: E1B1P1-E2B2P3-W2B3P4 (+CLIMB)

3:30UTC. Check star: HD 159975

The seeing is quite bad, but telescopes are still hot.

3:40UTC. Nic goes to the lab. The star is acquired.

3:50UTC: VEGA is aligned. The pupils are extremely faint again ('les caméras vieillissent?').

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### V01 (Simon Borgniet)

3:55UTC: we slew to CAL3 of V01 HD 98772.

4:05UTC: CLIMB is re-aligned. The star is high but faint K=5.8. CLIMB has the fringes: 12=-4700um ; 23=700um

4:10UTC fringes on VEGA. 12=100um left: 23=160um right.

23 should be at 200um (right) but they are faint and might be difficult to rectify them easily (seeing around 4-5cm)... Difficult for CLIMB and VEGA. I do not optimize, and keep this position. I remove the tracker.

Same values for BC1 as yesterday.

1-2 = -4700um

2-3 = 700um  $\mu$ m

Climb\_B1 = -0.43

Climb\_B2 = -0.13

### **HD113337CAL3E2E1W2.2014.07.03.04.16**

30 blocs all good in principle.

### **HD113337E2E1W2.2014.07.03.04.32**

I check images and pupils quickly (mv=6). They are very faint, even you cannot see the pupil at all ! Recording without tracking. Number of photons of about 300. The seeing is from 10 to 2 depending on the telescope. Let's say 5-6cm. At least the CLIMB fringes are very stable during the recording. 30 blocs all good in principle. We observe some flashes on the blue camera.

### **HD113337CAL3E2E1W2.2014.07.03.04.52**

5 first blocs the tracker is on to check the fringes position: 12 at 100um (left), 23 at 160um right. I see the third peak (close to aigrette). CLIMB fringes are still stable.

**D\_R2700.2014.07.03.05.10**

## **V16 (Karine Perraut)**

Slew to cal HD 171130. As Nic has some difficulties, abort to check pupils (without touching). **05.16 to remove.**

### **HD163296Cal1E2E1.2014.07.03.05.28 – HD 171130**

The seeing is getting better. 3-4 on E2, 12-14 on E1... CLIMB fringes very stable. We remove VEGA fringe tracker for safety. Quick check, the fringes are here. Perfect position. Best seeing recorded 15 cm. Average?

### **HD163296E2E1.2014.07.03.05.47**

About 100 photons on the red, 40 photons on the blue ! The fringes are here: -115um, perfect position. I remove the tracker to avoid interaction. 90 blocs recorded. CLIMB fringes are stable. Best seeing recorded 14cm. Average should be 8 cm.

6:15UTC, les franges sur CLIMB vont de petits zigzag.. Comment on dit zigzag en Anglais, hein ? Et ben zigzag !

### **HD163296Cal2E2E1.2014.07.03.06.40 – HD 170296**

20 blocs

**On HD170296, fringes recorded by CLIMB**

**On the target CLIMB has difficulties... We go back to cal. We find them at the right position. Go back to target, we find them but they are very weak (target resolved).**

**7:30UTC CLIMB is recording on the Target (100 sequences should be good). No time to close the bracket. I prefer to record on VEGA because the seeing is getting even better.**

**Spectral calibration to remove 06.55**

**Density of 2 on the two cameras.**

**D\_R2656.2014.07.03.07.04**

**HD163296E2E1.2014.07.03.07.25**

The first three blocks (no climb tracking). CLIMB fringes. 60 photons on the red (less than before), 50 on the blue. The seeing has decreased (6-7cm). The fringes are seen on VEGA (-140um; a bit far from the consign). I removed the tracker at block 16. The seeing is decreasing.

**HD163296CAL1E2E1.2014.07.03.08.25**

I reduce to 22 blocs (instead of 30)...

## V52 (Nicolas Nardetto)

8:40UTC, slew to cal 2 HD 208057 at 700 nm

CAL2 is HD 208565

**HD198726CAL2E2E1W2.2014.07.03.08.41**

Very nice fringes on CLIMB & VEGA. 10 blocks.

**HD198726E2E1W2.2014.07.03.08.59**

First 7 blocs, missing B3 ! 27 blocks.

**HD198726CAL2E2E1W2.2014.07.03.09.12**

10 blocks.

**HD198726E2E1W2.2014.07.03.09.21**

20 blocks

**HD198726CAL2E2E1W2.2014.07.03.09.35**

10 blocks

**D\_R2700.2014.07.03.10.31**

J'ai refait la calibration à 700nm car pour la première, je crois que j'ai oublié de fermer les shutter. En principe, l'étoile n'était pas acquise, mais j'ai préféré la refaire.

CAL2 is HD 208565 at 600nm.

**HD198726CAL1E2E1W2.2014.07.03.09.43**

15 blocs (because low level of photons on the blue)

**HD198726E2E1W2.2014.07.03.09.53**

400 photons on the red, 30 on the blue. The blue should have been stopped actually. Peak is 12 is fine, 23 is faint.

30 blocs in case.

HD198726CAL1E2E1W2.2014.07.03.10.12

D\_R2600.2014.07.03.10.25

**V62 (Anthony Meilland)**

HD209409E2E1.2014.07.03.10.36

90 blocks – seeing about 7/8 cm

HD209409E2E1.2014.07.03.11.22

90 blocks – seeing about 7/8 cm

*Utiliser D\_R2656.2014.07.03.06.55 ci-dessous*