

## Log CHARA/VEGA 2019-08-20

Observers: Fred (VEGA), Nicolas (Report and CoffeeS)  
Olli (Mt Wilson)

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UTC time:

02:40 Starting Observing Night

~~E2 POP2 B1 W2 POP5 B2 W1 POP1 B3 (ref)~~  
E2 POP2 B1 W2 POP5 B2 (ref) W1 POP1 B3

V65 (D. Mourard) – V1143 Cyg

OPD offset: +150 $\mu$ m (left) -300 $\mu$ m (right)

**First target is HD185912**

**Cal1 = HD177003**

**LABAO = HD181276 ; check = HD192696**

E2 pupils is nice.

03:10 aligned VEGA and CLIMB

The flux on W1 is twice lower than other telescopes...

Seeing is good: around 12 cm.

*Norm: I'm getting no fringes +/- 1cm*

*Norm: OPLE server is not behaving, as it did at end of night*

*I will go to lab and check computer, clocks are stopped on NIRO*

*Technical Mail of Matt:*

*Good evening,*

*We are having some trouble with NIRO tonight. The NIRO time and sidereal time clocks are frozen in the CLIMB server. Norm says that this began happening near the end of last night but a reboot would fix the problem. Tonight it started up this way and a reboot does not help. I recall there being a bios setting that had to be correct for the clock card to work properly, but I do not remember exactly what it was. Any help would be appreciated.*

*Answer of Lazlo:*

*I spoke with Norm and hopefully things are good now.*

*The three LEDs (2 green, 1 yellow) has to be blinking on the clock receivers. The fast green shows that the 1kHz signal is present. The slow green is the same for the 1Hz signal. The yellow is blinking when a particular interrupt routine assigned to IRQ11 is running fine. When the interrupt is requested the yellow comes on when the interrupt routine has finished it goes off. IRQ11 has to be assigned to Legacy as opposed to PnP in the BIOS. It has been set to Legacy but sometimes, for some unknown reason, the assignment gets ignored. So assign IRQ11 to PnP then again to Legacy in the BIOS. Save it with F10 and let it boot. This should fix it.*

04:04 The problem seems to be fixed.

04:40 The problem is really fixed.

04:46: trying to cophase CLIMB and VEGA. *It looks like we cannot talk to ople with CLIMB Gui. Actually, Norm use B2 as a ref because W2 was not tracking, but we did not see it. We believed B3 was the ref. The new config is thus B2 as a ref.*

### **HD177003.2019.08.20.05.13**

E2 = -1880 $\mu$ m

W1= 1250  $\mu$ m

CLIMB\_B1=7.64

CLIMB\_B2=4.85

30 blocks

Excellent conditions! Nice fringes CLIMB and VEGA. Seeing of 10 cm.

### **HD185912.2019.08.20.05.30**

E2 = -2000 $\mu$ m

W1= -1340 $\mu$ m

Fringes VEGA 1-2 seen, not the others.

### **HD177003.2019.08.20.05.47**

E2 = -1830 $\mu$ m

W1= -1200 $\mu$ m

Nice fringes

### **HD185912.2019.08.20.06.05**

E2 = -1860 $\mu$ m

W1= -1260 $\mu$ m

CLIMB tracking is not very good.

**HD177003.2019.08.20.06.21**

E2 = -1710 $\mu$ m

W1= -1140 $\mu$ m

CLIMB\_B1=7.70

CLIMB\_B2=4.88

Nice fringes

Change of POP

**E2 POP2 B1 W2 POP5 B2 (ref) W1 POP2 B3**

**HD177003.2019.08.20.06.53**

E2 = -1610 $\mu$ m

W1= -1400 $\mu$ m

CLIMB\_B1=7.67

CLIMB\_B2=4.85

Nice fringes

**HD185912.2019.08.20.07.12**

E2 = -1700 $\mu$ m

W1= -1490 $\mu$ m

Nice 2-3 fringes. 1-2 are not seen.

**HD177003.2019.08.20.07.28**

E2 = -1490 $\mu$ m

W1= -1330 $\mu$ m

**HD185912.2019.08.20.07.44**

E2 = -1580 $\mu$ m

W1= -1440 $\mu$ m

2-3 is seen and perhaps 1-3

**HD177003.2019.08.20.08.01**

E2 = -1370 $\mu$ m

W1 = -1290 $\mu$ m

Block 28 we lost fringes (no delay). We stop at block 29. Nice fringes. Excellent conditions.

**D\_CM720.2019.08.19.08.16**

**W2 POP5 B2 (ref) W1 POP2 B3**

**V67 (O. Creevey)**

**OPD offset: +150 $\mu$ m (left)**

**target = HD182694**

**cal1=HD184171**

**cal2=HD183534**

**LABAO=HD184006**

**check CLIMB = target**

**check VEGA = cal 1**

08:40 NIRO issues

**HD184171.2019.08.20.08.51**

W1 -720

CLIMB B1 = 7.46

CLIMB B2 = 4.65

Nice fringes

**HD182694.2019.08.20.09.02**

W1 -950

To cal 2

*CLIMB issues, we are not able to move the fringes from the Gui. OPLE issues. NIRO issues. The fringes are found on CLIMB finally but weak. CLIMB waterfall is horrible. The seeing*

*is good, but the star is low in elevation. Problems with CLIMB, difficult to say.*

**HD183534.2019.08.20.09.41**

W1 -1670

**HD182694.2019.08.20.09.52**

W1 -860

CLIMB B1 = 7.50

CLIMB B2 = 4.68

**HD184171.2019.08.20.10.05**

W1 -660

CLIMB B1 = 7.54

CLIMB B2 = 4.76

Nice fringes

**HD182694.2019.08.20.10.16**

W1 -860

CLIMB B1 = 7.52

CLIMB B2 = 4.70

**HD183534.2019.08.20.10.28**

W1 -1070

CLIMB B1 = 7.58

CLIMB B2 = 4.66

**D\_CMR720.2019.08.20.10.38**

**S2 POP2 B1 W2 POP5 B2 (ref) W1 POP2 B3**  
**V38 (A. Salsi)**

**OPD offset: +150 $\mu$ m (left) -300 $\mu$ m (right)**

**Target=HD886**  
**cal 1 = HD1439**  
**cal 2 = HD560**  
**labao=check=target**

**HD560.2019.08.20.11.13**

S2 -660 um  
W1 -880 um  
CLIMB B1 = 7.46  
CLIMB B2 = 4.84

**HD886.2019.08.20.11.25**

S2 -600um  
W1 -900 um

**HD1439.2019.08.20.11.43**

S2 -520 um  
W1 -1100 um  
CLIMB tracking is tricky. VEGA fringes are weak.

**HD886.2019.08.20.11.56**

S2 -410um  
W1 -830um  
CLIMB B1 = 7.48  
CLIMB B2 = 4.85

***Restart OPLE***

**HD560.2019.08.20.12.19**

S2 -310 um  
W1 -800 um  
CLIMB B1 = 7.50  
CLIMB B2 = 4.87

**HD886.2019.08.20.12.33**

S2 -250um

W1 -850um

**HD560.2019.08.20.12.46**

S2 -380 um

W1 -740um

CLIMB B1 = 7.52

CLIMB B2 = 4.88

Very high seeing at the end of the night.

**D\_CMR720.2019.08.20.12.56**