

Log CHARA/VEGA 2019-08-18

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

UTC time:

02:40 Starting Observing Night

S2 POP2 B1, S1 POP1 B2, W2 POP5 B3 (ref)

V65 (D. Mourard) – V1143 Cyg

OPD offset: +150 μ m (left), -300 μ m (right)

First target is HD185912

Cal1 = HD177003

LABAO = HD181276 ; check = HD192696

03:12 Slewing to LABAO. S1 wfs trouble fixed by Olli. Aligning CLIMB and VEGA. Red camera of VEGA needs to be restarted. VEGA alignment was difficult because of flux fluctuations (seeing of 4 for the first estimate).

03:33 Slewing to check. Cophasing CLIMB and VEGA. Seeing around 8 cm.

03:42 we slew to cal

HD181276.2019.08.18.03.46

[WARNING, BAD file name; it is HD177003]

S2 = -1460 μ m

S1 = -3390 μ m

CLIMB_B1 = 7.57

CLIMB_B2 = 4.58

30 blocks

The CLIMB fringes are not very nice, unstable, while VEGA fringes are clearly seen (the 3 peaks). Seeing around 11 cm.

Warning the name of the recorded file is not correct. Fred will make the corrections by hand afterwards.

HD185912.2019.08.18.04.02

S2 = -1480 μ m

S1 = -3600 μ m

30 blocks

The CLIMB tracking is correct but not wonderful. The 2 VEGA peaks (1-2, 1-3) are seen. We see perhaps the third.

HD177003.2019.08.18.04.20

S2 = -1360 μ m

S1 = -3320 μ m

30 blocks

The CLIMB tracking is unstable. VEGA fringes are fine (3 peaks)

HD185912.2019.08.18.04.36

S2 = -1380 μ m

S1 = -3460 μ m

30 blocks

First peak is seen, second is weak, third is not.

HD177003.2019.08.18.04.57

S2 = -1280 μ m

S1 = -3180 μ m

30 blocks

Tracking CLIMB is not exceptional, but we see the three peaks on VEGA. Seeing stable around 11 cm.

HD185912.2019.08.18.05.12

S2 = -1240 μ m

S1 = -3270 μ m

30 blocks

The CLIMB tracking is nice. The first peak is clear, second and third are almost not seen. Rather consistent with the model in aspro2.

HD177003.2019.08.18.05.29

S2 = -1130 μ m

S1 = -3030 μ m

30 blocks

CLIMB tracking not very nice. We have the three peaks on VEGA. Seeing stable.

We realign on the target.

05:47 OPLE issues. NIRO issues.

HD185912.2019.08.18.05.55

S2 = -1130 μ m

S1 = -3120 μ m

30 blocks

Peaks S1S2 is seen, not the others.

HD177003.2019.08.18.06.18

S2 = -930 μ m

S1 = -2880 μ m

30 blocks

CLIMB is not top tracking. VEGA peaks are here.

Delay is extremely short, but we try because seeing is excellent.

HD185912.2019.08.18.06.35

S2 = -990 μ m

S1 = -2990 μ m

Tracking is a bit difficult.

10 blocks. Last is bad.

We saw the two first peaks.

HD177003.2019.08.18.06.42

S2 = -810 μ m

S1 = -2800 μ m

16 blocks, but 2 last are bad

D_CMR720.2019.08.15.06.50

E2 POP2 B2, W2 POP5 B3 (ref)

V01 (R. Ligi) – HD189733

OPD offset: +150 μ m (left)

Target = HD 189733

cal1 = HD190933

cal2= HD196740

LABAO=HD195295

check = HD189849

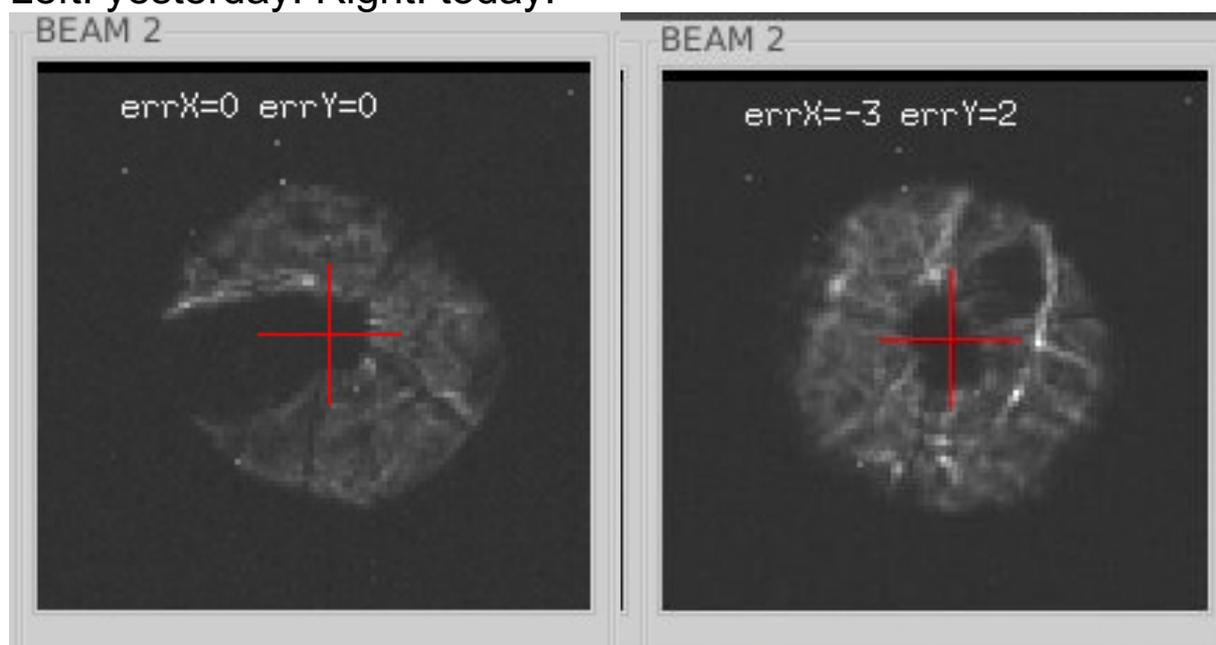
07:00 We check the E2 pupil. Matt is here with Olli. They check different flats and it changes what we see (big black ellipse in the upper part of the pupils, or the same but less intense).

07:36 Matt is still trying to fix the problem.

07:51 The pupils is better now.

08:09 The pupils E2 on the check is rather nice.

Left: yesterday. Right: today.



08:24 Check. Fringes on CLIMB. No obvious fringes on VEGA.
We scan. The seeing dropped dramatically to 4-6 cm.
This is too difficult for V01, and no more delay. We move to V70
with brighter stars.

E2 POP2 B2, W2 POP5 B3 (ref)

V70 (R. Klement)

OPD offset: +150 (left)

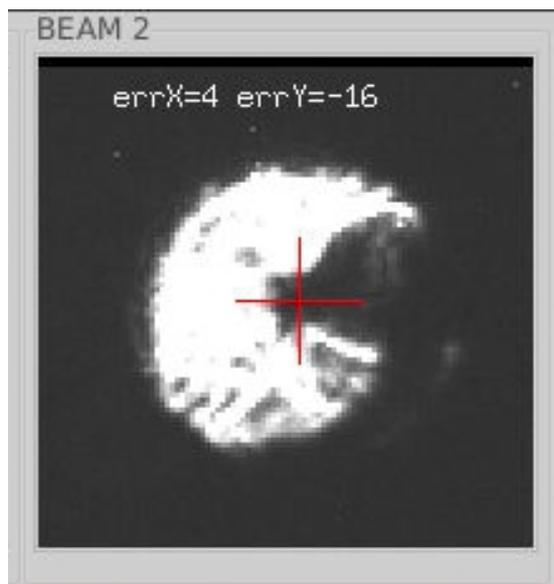
target=HD190603

cal1=HD191243

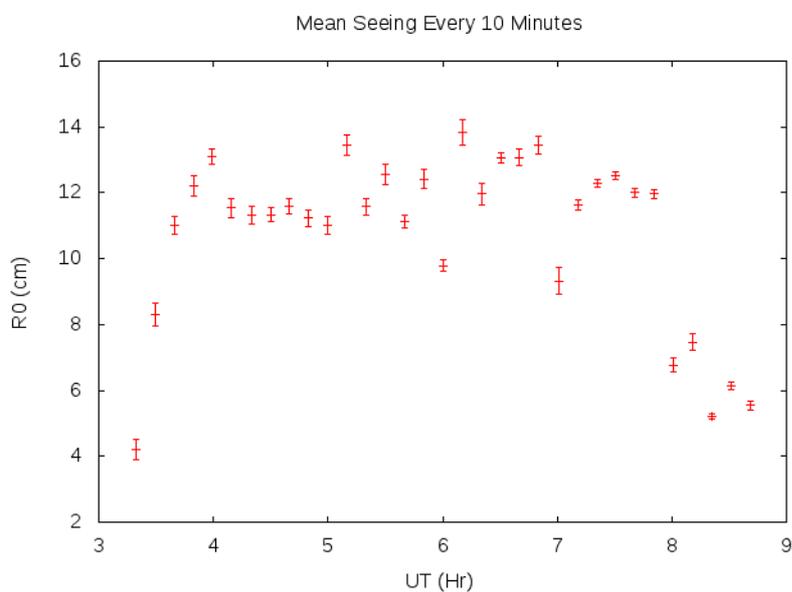
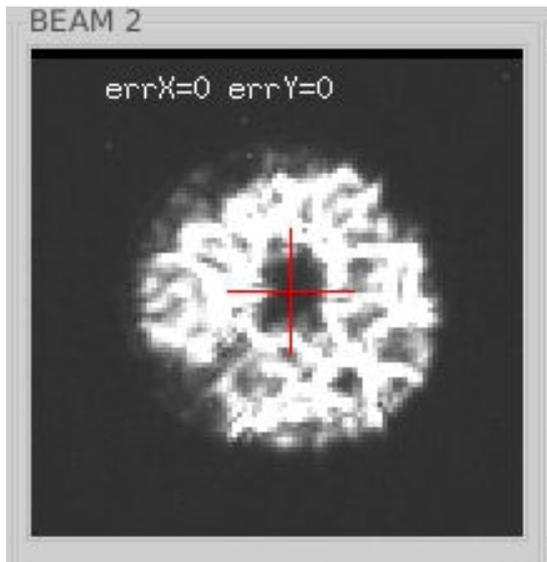
LABAO=HD194093

check= HD184171

On LABAO. Again, problem with E2, big vignettage



The problem is corrected by Olli and Matt. The E2 pupil is nice now.



07:00 We understand that E2 is misaligned, because of DM correction made by Matt; this is why we did not find fringes on the check of V01.

07:06 the seeing go up to 9 cm again !

07:08 to the check.

07:18 Cophasing done.

HD191243.2019.08.18.09.23

E2 -1370

CLIMB_B2 5.23

Nice CLIMB and VEGA fringes

HD190603.2019.08.18.09.34

E2 -2290

Wonderful fringes.

HD191243.2019.08.18.09.46

E2 -2280

Seeing is again low, around 5 cm! CLIMB is unstable. VEGA fringes are seen.

HD190603.2019.08.18.09.58

E2 -2190

Seeing is low, but CLIMB waterfall is very stable. VEGA fringes are strong.

HD191243.2019.08.18.10.09

E2 -2130

CLIMB tracking is not so good.

D_CM656. 2019.08.18.10.19

E1 POP1 B1, E2 POP2 B2 (ref)

V27 (D. Mourard)

OPD offset: +150 μ m (left)

Target is HD 31964

cal = HD32630

Target is fine for LABAO and Check

This is the best ever E2 pupils we have seen so far during this night !

HD32630.2019.08.18.10.44

E1 2680

CLIMB_B1 = 6.25

CLIMB_B2 = 5.33

Seeing increase again to 9cm

HD31964.2019.08.18.10.57

Density of 0.3 (otherwise 3000 photons)

E1 2570

CLIMB_B1 = 6.28

CLIMB_B2 = 5.33

Seeing around 9cm. Waterfall of CLIMB is perfect. VEGA peak is strong. AH=-4h.

HD32630.2019.08.18.11.08

E1 2580

CLIMB_B1 = 6.27

Nice fringes

HD31964.2019.08.18.11.20

E1 2500

CLIMB_B1 = 6.29

Very nice CLIMB and VEGA fringes.

HD32630.2019.08.18.11.31

E1 2500

D_CM656. 2019.08.18.11.41

E2 POP2 B2, W2 POP5 B3 (ref)

V70 (R. Klement)

OPD offset: +150 (left)

Target = HD 204172

cal 1= HD 202240

cal 2 = HD 207673

Labao=HD205435

Check=HD213558

11:59 OPLE crash during check

HD202240.2019.08.18.12.12

E2 -1750

CLIMB_B1 = 5.22

Very nice CLIMB and VEGA fringes.

HD204172.2019.08.18.12.23

E2 -1770

Nice fringes on CLIMB and VEGA

HD207673.2019.08.18.12.35

E2 -1890

Nice fringes on CLIMB and VEGA

D_CM656. 2019.08.18.12.46