

Log CHARA/VEGA 2019-08-19

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

UTC time:

02:40 Starting Observing Night

S2 POP5 B1, S1 POP4 B2 (ref)

V70 (R. Klement) – Deneb

OPD offset: +150 μ m (left)

Target is HD197345

HR 656nm

02:35 Start of observations

02:45 VEGA ready

03:02 Beginning of Civil night. We slew Deneb

03:15 Fringes on CLIMB

03:16 VEGA cophased

HD197345.2019.08.19.03.17

S2 = 1520 μ m

40 blocks

AH = -3h15

Very nice waterfall on CLIMB. Nice fringes on VEGA.

Seeing around 9 cm.

D_CHR656.2019.08.19.03.36

E2 POP2 B2, W2 POP5 B3 (ref)

V01 (R. Ligi) – HD189733

OPD offset: +150 μ m (left)

Target = HD 189733

cal1 = HD190993

cal2= HD196740

LABAO=HD195295

check = HD189849

03:45 We have again the same hole on the pupil of E2 than yesterday (see report). It seems that the “default flat” proposed by Norm improve a bit (but still, not perfect).

03:57 to check. On VEGA: 100 photons on B3 (no AO) for mV=4.7. Well... We have around two times more photons (a bit less) on B2 (E2 with LAB AO). We thus have a significant flux ratio.

04:03 scan of fringes on CLIMB. The fringes on CLIMB are not very stable. VEGA cophased.

04:06 to cal 1. LCD reach its limit 49 on E2...

HD190993.2019.08.19.04.11

E2 = -4000 μ m

CLIMB_B2=5.12

20 blocks

CLIMB waterfall weak and unstable. VEGA fringes are seen.

LDC on E2 is fine now.

HD189733.2019.08.19.04.23

E2 = -3880 μ m

40 blocks

The fringes are seen at the end of series of 40 blocks.

HD196740.2019.08.19.04.43

E2 = -3350 μ m

CLIMB_B2=5.12

Nice fringes

HD189733.2019.08.19.04.55

E2 = -3690 μm

40 blocks

The fringes are seen at the end of series of 40 blocks.

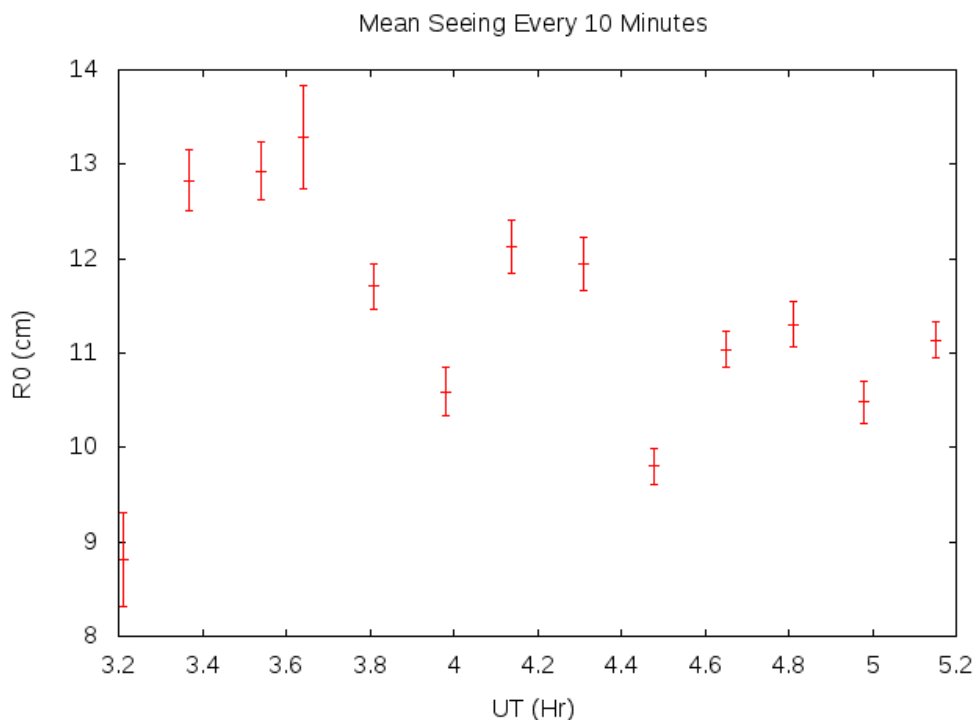
HD190993.2019.08.19.05.16

E2 = -3550 μm

CLIMB_B2=5.16

20 blocks

Discussion about next star. Message for Roxanne: the V2 on HD2094520 are around 0.8-0.9 on E2W2. Even as a second priority it appears a bit difficult, in particular to find good cal. By the way, the cal in common with HD189733 are too far (30deg), the other are really faint. Thus, we decide to stay on the same target, but to do a longer baseline E2W1 (as you proposed). The conditions seem fine for that. Conclusion: HD189733 on E2W2 too difficult. Your cal on HD189733 should be also revised.



HD189733.2019.08.19.05.27

E2 = -3460 μm

40 blocks

The fringes are seen (in negative)

HD196740.2019.08.19.05.47

E2 = -3510 μm

20 blocks

D_CM720.2019.08.19.05.58

E2 POP1 B2, W1 POP3 B3 (ref)

Target = HD 189733

cal1 = HD190933

cal2= HD196740

LABAO=HD189319

check = HD189849

06:08 we check E2 pupil on check (mV=3.5). Techcam issues.
The pupil is not too bad now. We still see the hole, but it is small. CLIMB and VEGA alignment done.

06:30 to check. CLIMB and VEGA cophased

06:37 to cal 1.

HD190993.2019.08.19.06.39

E2 = -1180 μm

CLIMB_B2=5.05

Seeing around 11 cm. CLIMB fringes stables and very nice fringes on VEGA.

HD189733.2019.08.19.06.51

E2 = -1210 μm

The CLIMB fringes are rather stable. The VEGA are -perhaps- seen after 40 blocks. Data reduction is necessary. Pupil E2 was fine. 40 blocks

HD196740.2019.08.19.07.12

E2 = -1160 μm

Seeing of 13 cm. CLIMB is extremely stable and VEGA fringes are extremely strong.

HD189733.2019.08.19.07.26

E2 = -1150 μm

Seeing of 13 cm. CLIMB fringes not so stable.

We have 100 photons in total.

40 blocks

The peak is hardly seen at the end of the integration.

HD190993.2019.08.19.07.49

E2 = -1040 μm

CLIMB_B2=5.11

To target.

Problem with OPLE. Fringe is not servoing. OPLE restart.

HD189733.2019.08.19.08.29

E2 = -870 μm

Seeing is good (14 cm). CLIMB tracking is not so good, but we believe to see the fringes...

HD196740.2019.08.19.08.51

E2 = -900 μm

CLIMB_B2=5.13

D_CM720.2019.08.19.09.01

E2 POP2 B2, W2 POP5 B3 (ref)
V67 (O. Creevey)

OPD offset: +150 μ m (left)

target = HD182694
cal1=HD184171
cal2=HD183534
LABAO=HD184006
check CLIMB = target
check VEGA = cal 1

Issues with E2 slewing...

*Note to Orlagh: many cal's have their K magnitude around 6.5
(we need $K < 5.5$ in principle)*

HD184171.2019.08.19.09.36

E2 = -1990 μ m
CLIMB_B2=5.23
Nice fringes. Seeing is 8 cm. VEGA fringes are seen.

HD182694.2019.08.19.09.49

E2 = -1945 μ m
Very nice fringes on CLIMB and VEGA.

HD183534.2019.08.19.10.02

E2 = -2010 μ m
CLIMB_B2=5.19

HD182694.2019.08.19.10.14

E2 = -1945 μ m
Very nice fringes on CLIMB and VEGA.

HD184171.2019.08.19.10.25

E2 = -1630 μ m

CLIMB_B2=5.22

CLIMB tracking average, nice VEGA fringes. Seeing of 8 cm.

HD182694.2019.08.19.10.37

E2 = -1650 μ m

CLIMB_B2=5.21

HD183534.2019.08.19.10.51

E2 = -1760 μ m

CLIMB_B2=5.19

D_CM720.2019.08.19.11.01

E2 POP2 B2, W2 POP5 B3 (ref)

V70 (R. Klement)

OPD offset: +150 μ m (left)

target = HD198478

cal1 = HD197392

cal2 = HD201834

labao=HD194093

check=HD198639

The seeing decreased to 6 cm

HD197392.2019.08.19.11.16

E2 = -1040 μ m

CLIMB_B1=5.22

Very nice fringes on CLIMB and VEGA

HD198478.2019.08.19.11.27

E2 = -1080 μm

CLIMB_B1=5.21

To cal 2. **OPLE issue.**

HD201834.2019.08.11.56

E2 = -1930 μm

HD198478.2019.08.19.12.07

E2 = -1660 μm

Nice fringes.

CLIMB Gui crashed; we do not know if the fringes are tracked.

Anyway, the VEGA fringes are stable.

HD201834.2019.08.19.12.23

Rebooting NIRO. **Crash of CLIMB...**

E2 = -1840 μm

CLIMB_B1=5.19

HD198478.2019.08.19.12.46

Crash of CLIMB...

E2 = -1370 μm

AH=6h

Block ≥ 11 **CLIMB crashed.** No tracking.

D_CMR656.2019.08.19.12.57