OBSERVING LOG CHARA/VEGA 2018-08-14

Observers: Frédéric et Roxanne en direct de Calern Olli sur la montagne

UT02h44: Here we are.

UT02h57: all set.

Configuration W<u>1-POP1-B3</u> W2-POP5-B2 V52 Cepheids

UT03h08: We start with the LABAO star HD166014.

UT03h16: No flux on NIRO. Olli goes to the lab to check what happens.

UT03h24: Olli is back. Niro power cable was disconnected.

UT03h26: still not a lot of flux on NIRO. Going to HD187811 (cal 2, brighter).

UT03h53: fringes on CLIMB, and on VEGA!

UT03h55: Crash control...

UT03h56: We go to the cal 1 HD184171.

HD184171.2018.08.14.04.01

The TU doesn't work. Abort.

UT04h10: recording. 20 blocs.

W2=-2370, CLIMB B1 = 5.499.

HD184171.2018.08.14.04.09

UT04h18: We go to the target SV Vul/HD187921.

W2=-2450, CLIMB B1 = 5.499. r0 ~10-11 cm. Nice fringe.

HD187921.2018.08.14.04.21

UT04h33: back to cal1 HD184171. 20 blocs. Nice fringe.

W2=-2400, CLIMB B1 = 5.509. r0 ~10 cm.

HD184171.2018.08.14.04.33

UT04h44: back to target.

W2=-2460, CLIMB B1 = 5.499. r0 ~11 cm. Nice fringe.

HD187921.2018.08.14.04.55

UT04h54: back to cal1 HD184171. 20 blocs. Nice fringes, very stable.

W2=-2440, CLIMB_B1 = 5.519. r0 ~10 cm.

HD184171.2018.08.14.04.57

UT05h06: we go to cal 2 HD187811.

UT05h08: central control frozen. We have to re-launch.

UT05h08: recording. 20 blocs. Nice fringe. W2=-2500, CLIMB B1 = 5.499. r0 ~10 cm.

HD187811.2018.08.14.05.11

UT05h20: we go back to the cal 1. 20 blocs. W2=-2510, CLIMB B1 = 5.529. $r0 \sim 10$ cm.

HD184171.2018.08.14.05.23

UT05h32: back to the target.

W2=-2530, CLIMB_B1 = 5.499. r0 ~11 cm. Nice fringe.

HD187921.2018.08.14.05.35

UT05h44: we go to cal 2 because cal 1 is transiting thus is not observable.

UT05h45: recording. 20 blocs.

W2=-2570, CLIMB_B1 = 5.499. r0 ~11 cm. Nice fringe.

HD187811.2018.08.14.05.46

UT05h56: back to target. **UT05h57**: recording. 20 blocs.

W2=-2580, CLIMB B1 = 5.499. r0 \sim 8 cm. Nice fringe.

HD187921.2018.08.14.05.58

UT06h07: back to cal 1.

UT06h10: aligning on NIRO...

UT06h19: not possible to align on NIRO. **UT06h25**: aligned. Recording for 20 blocs.

W2=-2660, CLIMB_B1 = 5.599. HD184171.2018.08.14.06.25

Spectral calibration D_CMR720.2018.08.14.06.36

Configuration <u>E1-POP1-B1</u> E2-POP2-B2 V52 Cepheids

UT06h37: we start with the LABAO star HD166014.

UT06h56: aligned and fringes on both CLIMB and VEGA. Going to cal 1.

UT07h00: Recording. 20 blocs. r0 ~9 cm, but decreases to 7 cm.

E1=+310, $CLIMB_B1 = 6.700$, $CLIMB_B2 = 4.589$.

HD184171.2018.08.14.07.00

UT07h10: going to the target SV Vul. A bit difficult to find the fringes in CLIMB.

UT07h14: recording. 20 blocs. r0 ~8 cm.

E1=+420, $CLIMB_B1 = 6.700$, $CLIMB_B2 = 4.589$.

HD187921.2018.08.14.07.14

UT07h24: back to cal 1 HD184171.

UT07h26: recording. 20 blocs. Some piston but nice fringes anyway.

E1=+160, CLIMB B1=6.720, CLIMB B2=4.589.

HD184171.2018.08.14.07.26

UT07h36: back to target SV Vul.

UT07h38: recording. 20 blocs. r0 ~6 cm. Tracking in not very good.

E1=+270, $CLIMB_B1 = 6.700$, $CLIMB_B2 = 4.589$.

r0 increases to 8 cm.

HD187921.2018.08.14.07.38

UT07h48: aligning NIRO on the target.

UT07h54: back to cal 1 HD184171.

UT07h55: Recording. 20 blocs. r0 ~8 cm. Piston. E1=-30, CLIMB_B1 = 6.700, CLIMB_B2 = 4.589.

HD184171.2018.08.14.07.55

UT07h55: going to cal 2 HD187811.

UT07h56: Recording. 20 blocs. Fringes have moved by 100 μm, that's weird. A lot of piston.

E1=+90, $CLIMB_B1 = 6.620$, $CLIMB_B2 = 4.589$. $r0 \sim 6$ cm.

HD187811.2018.08.14.08.06

UT08h15: back to cal 1 HD184171.

UT08h16: recording. 20 blocs. r0 ~7 cm. Bad tracking. But we see the fringes on VEGA anyway.

E1=-190, CLIMB_B1 = 6.620, CLIMB_B2 = 4.589. r0 ~7 cm. Bad tracking.

HD184171.2018.08.14.08.18

UT08h27: back to target SV Vul. UT08h30: crash of central control.

HD187921.2018.08.14.08.29

UT08h32: recording. 20 blocs. r0 ~6 cm.

E1=-60, $CLIMB_B1 = 6.610$, $CLIMB_B2 = 4.589$.

HD187921.2018.08.14.08.32

UT08h41: back to cal 1 HD184171.

UT08h44: recording for 20 blocs.

E1=-290, CLIMB_B1 = 6.610. r0 ~7 cm. A lot of piston, bad tracking.

r0 decreases to 5 cm.

HD184171.2018.08.14.08.44

UT08h54: back to target.

UT08h55: recording. 20 blocs. Nice fringes but r0 ~4 cm. Good tracking.

E1=-190, CLIMB B1 = 6.610, CLIMB B2 = 4.589.

HD187921.2018.08.14.08.56

UT09h05: back to cal 1 HD184171.

E1=-320, CLIMB_B1 = 6.610. r0 ~5 cm. Nice fringe but a lot of piston.

Fringes very weak at bloc 13. **HD184171.2018.08.14.09.08**

Spectral calibration **D_CMR720.2018.08.14.09.19**

Configuration <u>E1-POP1-B1</u> E2-POP2-B2 V74 Chiavassa

UT09h19: we start with HD192425 to align NIRO.

UT09h27: going to cal 1 HD189090.

E1=+20, CLIMB_B1 = 6.630. Very bad tracking, difficult to see the fringes on CLIMB. But we see

them well on VEGA. 20 blocs. **HD189090.2018.08.14.09.30**

UT09h39: we go to the target HD190658.

UT09h41: recording. 20 blocs. Fringes are there right away. E1=+60, CLIMB_B1 = 6.630. r0 ~6 cm but tracking is ok.

HD190658.2018.08.14.09.41

UT09h50: now we go to cal 2 HD190993.

UT09h52: recording, 20 blocs. r0 ~6 cm. Bad tracking but we clearly see the fringes on VEGA.

E1=-120, CLIMB_B1 = 6.620. HD190993.2018.08.14.09.52

UT10h01: back to target SV Vul.

UT10h02: recording for 20 blocs. r0 ~6 cm. Good fringe.

E1=+80, CLIMB_B1 = 6.620. HD190658.2018.08.14.10.03

UT10h12: we go back to cal 1 HD189090.

UT10h12: recording. 20 blocs. r0 ~5 cm. A lot of piston, but we see the fringe on VEGA.

E1=-100, CLIMB_B1 = 6.620. HD189090.2018.08.14.10.18

UT10h28: back to target HD190658 for the last time. 20 blocs. r0 ~6 cm.

E1=+160, $CLIMB_B1 = 6.620$.

HD190658.2018.08.14.10.29

UT10h38: back to cal 2 HD190993. **UT10h41**: recording. 20 blocs. r0 ~ 7cm.

E1=-20, CLIMB B1 = 6.620. CLIMB fringes move a lot, but they are well visible on VEGA.

HD190993.2018.08.14.10.41

Spectral calibration D CMR720.2018.08.14.10.51

Configuration <u>W1-POP1-B3</u> W2-POP5-B2 S2-POP4-B1 V67 Asteroseismic targets

UT10h52: we go to the check star HD15318 to do the LABAO + alignement.

UT11h13: we have the fringes on VEGA and on CLIMB. All set on CLIMB but VEGA tracker is

frozen.

UT11h16: Crach of the central control.

UT11h17: we go to the first cal HD560. But we are still in S2-POP5 so we have to change the POP.

UT11h33: VEGA control frozen again. Re-opening...

UT11h36: no flux on VEGA. The cal 1 will lose delay, so we switch and we go to HD6530.

UT11h39: red camera interface frozen.

UT11h46: looking for fringes...

UT11h56: still no fringes...

UT12h03: we try on the cal HD10982.

UT12h08: W1S2 are there but not W1W2...

UT12h11: finally we've got all fringes on CLIMB.

UT12h12: finally recording on HD10982.

S2=-2950, W2=-2460, CLIMB_B1=7.400, CLIMB_B2=5.759.

TU frozen.

HD10982.2018.08.14.11.37 mais TU=12.13

We see 2 nice fringes on VEGA, weak fringes on CLIMB.. r0 ~9 cm.

UT12h23: we go to the target HD5654. The sun is slowly rising...

20 blocs.

S2=-3220, W2=-2930, CLIMB B1=7.400, CLIMB B2=5.759.

HD5654.2018.08.14.12.26

No S2 anymore at bloc 10, back at bloc 14. We add 5 blocs, so 25 in total.

UT12h38: back to cal2 HD10982. $r0 \sim 9$ cm. 20 blocs. It's almost daylight... We see 2 peaks on VEGA, and maybe a 3rd peak.

S2=-3000, W2=-2600, CLIMB B1=7.400, CLIMB B2=5.759.

Weak fringes on CLIMB.

HD10982.2018.08.14.12.42

Spectral calibration D_CMR720.2018.08.14.12.52

- END OF THE NIGHT -- END OF THE RUN -