OBSERVING LOG CHARA/VEGA 2018-08-11

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

UT02h50 : We are ready...and still ash in the air! Standby.



UT04h00: it seems that there is less ash in the sky. Norm opens the domes.

Configuration <u>W2-POP3-B3</u> E2-POP2-B2 E1-POP1-B1 V52 Cepheids

UT04h00: we do the LABAO with HD202109.

UT04h12: we go to the first cal HD190993.

UT04h24: the PICO6 doesn't seem to work. Norm goes to the lab to check...and there it works. The box was off.

UT04h26: no flux on the blue camera. We can't access the low-level (*bas niveau*). We align on the red camera anyway.

UT04h38: we look for the fringes. The E2W2 fringes are there straightaway. But the blue camera is still out.

UT04h46: the connexion is back!

UT04h52: we record. 20 blocs. The peak 1 is very bright, peak 2 much fainter. r0 ~9 cm. E1=-2390, E2=-3130, CLIMB_B1=6.619, CLIMB_B2=4.639.

HD190993.2018.08.11.04.51

UT05h02: we go to the target T Vul/HD198726. UT05h02: recording. 20 blocs. We see 2 peaks. E1=-2570, E2=-3270, CLIMB_B1=6.619, CLIMB_B2=4.639. r0 ~9 cm. HD198726.2018.08.11.05.07 UT05h17: we go to the cal 2 HD196740. 20 blocs. At block 12 we guess the peak 3. E1=-2370, E2=-3120, CLIMB_B1=6.619, CLIMB_B2=4.639. HD196740.2018.08.11.05.20 UT05h17: back to the target T Vul/HD198726. 20 blocs. E1=-2500, E2=-3190, CLIMB_B1=6.619, CLIMB_B2=4.639. r0 ~9 cm.

HD198726.2018.08.11.05.32

UT05h42: back to cal 2 HD196740. 20 blocs.

E1=-2340, E2=-3060, CLIMB_B1=6.639, CLIMB_B2=4.649. r0 ~8 cm.

HD196740.2018.08.11.05.45

UT05h54: back to target. Tracking is not very good, we don't see the fringes on VEGA. **UT06h00**: we record anyway. We see the peak 1 but not really the peak 2. There is piston. 20 blocs.

E1=-2350, E2=-3020, CLIMB_B1=6.639, CLIMB_B2=4.649. r0 ~7 cm. HD198726.2018.08.11.06.00

UT06h10: we go back to cal 2 HD196740. 20 blocs. 2 peaks visible.

E1=-2110, E2=-2900, CLIMB_B1=6.699, CLIMB_B2=4.669. r0 ~7 cm.

HD196740.2018.08.11.06.13

UT06h23: change of POP for W2 to have more delay: we go from W2-POP3 \rightarrow W2-POP5 **UT06h27**: we go back to cal 1 HD190993.

UT06h43: no fringes on CLIMB...

UT06h50: realigning. The r0 decreases: 5 cm.

UT06h56: we change cal, going to cal 2 HD196740.

UT07h07: well well well... r0 ~4.8 cm.

UT07h10: we go to the object (brighter in K) to find the fringes, but fail. :-(

UT07h35: still no fringes.

UT07h40: Norm: « the seeing has dropped as the breeze came up ». r0 is below 5 cm.

UT07h44: we try the check star HD210027/iota Peg to find the fringes in CLIMB (too much resolved for VEGA).

UT07h53: we find fringes on this check star, not far from last position. Thus we slew to cal 3 HD208057.

UT08h07: it seems that we have fringes on CLIMB!

UT08h15: start recording. It will be difficult to record the target before the end of its observability... 20 blocs. r0 ~6 cm. At block ~12 we see the peak 3.

E1=-1790, E2=-2570, CLIMB_B1=6.619, CLIMB_B2=4.609.

HD208057.2018.08.11.08.15

UT08h25: done. We try to go to the target before the end of observability.

UT08h31: difficulties to find the fringes...

UT08h34: we finally got the fringes but we lost delay. Sorry Nicolas, we've tried...

UT08h35: spectral calibration.

D_CMR720_2018.08.11.08.39

Configuration <u>W2-POP5-B3</u> E2-POP2-B2 E1-POP1-B1 V65 Hierarchical systems

UT08h42: we start with the LABAO HD181276. The r0 finally increases, ~9 cm! but rapidly decreases.

UT08h54: we go to the check star HD192696. There is a lot of fluctuations in the seeing. **UT09h09**: no fringes...

UT09h11: RH seems to increase (72%). Norm: « can't go too high with ash also present » UT09h14: finally fringes on the check star!!

UT09h16: we go to cal 1 HD177003. **UT09h26**: still no fringes. r0~4 cm. **UT09h42**: the humidity rises and with the ash we decide to close. Standby.

Configuration <u>W2-POP5-B3</u> E2-POP2-B2 E1-POP1-B1 V67 asteroseismic targets

UT10h22: the humidity has dropped so we reopen. We start with the LABAO star HD9270. UT10h44: done on CLIMB. We align on VEGA. UT10h54: we go to the target to find the fringes. UT11h02: we go to cal 2 HD14191. UT11h11: fringes in CLIMB. But no flux on VEGA...weird. UT11h17: flux is back. We record! 20 blocs. We see 2 peaks. r0 ~7 cm. E1=-2270, E2=-3020, CLIMB_B1=6.619, CLIMB_B2=4.619. HD14191.2018.08.11.11.17 UT11h28: we go to the target HD8723. r0 ~4.5 cm :-S But nice fringes. It seems that we see a faint 3rd peak. 20 blocs. E1=-2090, E2=-2840, CLIMB_B1=6.619, CLIMB_B2=4.629. HD8723.2018.08.11.11.34 **UT11h43**: we go to the cal 1 HD10982. UT11h50: Fringes on VEGA. At the same time crash of the control so no recording. UT11h52: it's back. Recording. 20 blocs. r0 ~6 cm. E1=-2120, E2=-2910, CLIMB_B1=6.619, CLIMB_B2=4.609. HD10982.2018.08.11.11.53 **UT12h02**: we lost the tracking at the last block. UT12h05: we go to the target HD8723. 20 blocs. r0 ~5 cm. Nice fringes. E1=-2100, E2=-2740, CLIMB_B1=6.639, CLIMB_B2=4.639. HD8723.2018.08.11.12.09 UT12h19: we go to the cal 2 HD14191. UT12h19: fringes locked on CLIMB. We record. 20 blocs. Fluctuations on CLIMB, we hardly see the fringes on VEGA. E1=-2180, E2=-2880, CLIMB B1=6.639, CLIMB B2=4.639. HD14191.2018.08.11.12.26 **UT12h30**: block 8 we see the fringes now on VEGA. Humidity is rising up. UT12h36: spectral calibration. D_CMR720_2018.08.11.12.37 END OF THE NIGHT