#### **OBSERVING LOG CHARA/VEGA 2019-06-16**

**Observers**: Frédéric et Roxanne, live from Calern Chris on the mountain

UT03h20: We open here and we open.

**UT03h25**: We start with the LABAO star HD135742. **UT03h37**: some electronic issues on the CHARA side.

UT03h47: We check the pupils. S1 is rather good. However we notice some inhomogeneities,

maybe a bit more that on E1 but it is difficult to say.

UT04h03: small camera issue on VEGA.

# Configuration <u>S1-POP5-B2</u> E1-POP1-B1 V01 - Ligi

Target = HD133112/HR5599

Cal1 = HD129956 Cal2 = HD132953

**UT04h10**: going to check star/cal1 = HD129956.

UT04h13: fringes on CLIMB. r0~8.5 cm.

UT04h26: it was a bit difficult but we have the fringes on VEGA.

HD129956.2019.06.16.04.27

r0~8.5cm. 30 blocs. r0=9cm at the end of the 30 blocs.

E1 = 4690, CLIMB\_B1=6.83, ClimB\_B2=4.66.

UT04h41: we go to the target.

UT04h44: pupil S1 pretty ugly, and almost no flux. But fringes on CLIMB.

**UT04h45**: we record (blindly). **HD133112.2019.06.16.04.45** 

E1 = 4740, CLIMB B1=6.83, ClimB B2=4.66.

40 blocs. r0~10-11cm.

The fringes are very weak on CLIMB. We finally see the peak after 20 blocs and it is very weak.

The tracking is not good. At the end we kind of see the peak but very weak.

UT05h03: back to cal1 (higher than cal2).

**UT05h03**: S1 pupil is degrading. Chris re-does the alignement of NIRO + pupil with the LABAO star.

UT05h16: no delay on the cal1?! Actually we were on POP4 on S1. So we switch to POP5.

**UT05h23**: pupil S1 is better. **UT05h23**: back to cal1.

UT05h34: got the fringes. They are weak, tracking not very good.

HD129956.2019.06.16.05.34

E1 = 5040, CLIMB B1=6.83, ClimB B2=4.66.

We see the peak but weak...tracking not very good...30 blocs. r0~8cm.

UT05h48: done. Back to target.

HD133112.2019.06.16.05.51

E1 = 5120, CLIMB B1=6.83, ClimB B2=4.66.

Block ~8 fringes lost. R0~8.5cm.

Zut, the setting was 20 blocs! We do it again with 40 blocs.

HD133112.2019.06.16.06.02

E1 = 5160, CLIMB B1=6.83, ClimB B2=4.66.

Not sure that there are fringes...even on climb fringes are weak and moving fast...  $r0\sim7.5$  cm.

UT06h20: finished. Back to cal1...

HD129956.2019.06.16.06.24

E1 = 5020, CLIMB\_B1=6.83, ClimB\_B2=4.66. We see the peak...waterfall moving fast... Spectral calibration: D CMR2019.06.16.06.39

## Configuration S2-POP2-B1 S1-POP1-B2 <u>W2-POP5-B3</u> V65 - Mourard

Target = HD185912/V1143CYG

Cal1 = HD177003 Cal2 = HD194668

**UT06h40**: we begin with the LABAO HD181276 and then check star = HD192696.

UT07h05: pb with ople and climb...

UT07h15: fringes on climb.

UT07h28: cophased with vega. 30 blocs. Difficult to find fringes S1S2!

HD177003.2016.06.16.07.37

S2 = 420, S1 = -2570,  $CLIMB_B1 = 7.63$ ,  $CLIMB_B2 = 4.49$ .  $r0 \sim 7.5$ cm. We see the fringes although they move a little.

UT07h28: target.

HD185912.2016.06.16.07.56

S2 = 460, S1=-2560, CLIMB B1=7.63, CLIMB B2=4.49. 30 blocs. r0~7cm.

UT08h10: back to cal1.

**UT08h16**: recording. 30 blocs. **HD177003.2016.06.16.08.16** 

S2 = 520, S1=-2390, CLIMB\_B1=7.65, CLIMB\_B2=4.51. r0~6.5cm.

We see 2 peaks on vega, and fringes on climb are pretty weak.

Spectral calibration: D\_CMR2019.06.16.08.31

## Configuration E1-POP1-B1 E2-POP2-B2 <u>W2-POP5-B3</u> V52 - Nardetto

Target = TVul = HD198726

Cal1 = HD190993

Cal2 = HD196740

Cal3 = HD204414

UT08h29: we start with the LABAO star HD202109 (and not HD200209!).

**UT08h53**: going to trull to find the fringes on climb.

UT09h00: the r0 dropped to 3.5 cm:-S

**UT09h02**: we have the fringes on both climb and vega. **UT09h07**: locked on fringes. Recording. 20 blocs.

HD190993.2016.06.16.09.09

E1=4430, E2=2400, CLIMB\_B1=6.63, CLIMB\_B2=5.36

The r0 is back to 6.5cm. We see 2 peaks.

**UT09h19**: we go to the target. **HD198726.2016.06.16.09.23** 

E1=4320, E2=1350, CLIMB B1=6.63, CLIMB B2=5.36

r0=7cm. Getting better. 2 peaks visible.

UT09h34: we go to cal2. 20 blocs.

HD196740.2016.06.16.09.36

E1=4000, E2=1390, CLIMB\_B1=6.63, CLIMB\_B2=5.36

3 peaks visible!

UT09h45: back to target.

#### HD198726.2016.06.16.09.50

E1=4440, E2=1370, CLIMB\_B1=6.63, CLIMB\_B2=5.36

We see 2 peaks, the 2nd one is weak. r0=8cm.

UT09h59: we go back to cal1.

**UT10h02**: fringes pretty weak on climb, but we have r0~9cm. **UT10h11**: we start recording but actually Chris is realigning.

#### HD190993.2016.06.16.10.11

**UT10h23**: we finally have the fringes but they are weak.

### HD198726.2016.06.16.10.23 !! ATTENTION IL S'AGIT BIEN DU CAL HD1900993 !!

E2=4780, E1=1480, CLIMB\_B1=6.67, CLIMB\_B2=5.38

We suspect that there have been some clouds since~UT9h45. r0 has dropped to 6cm.

**UT10h35**: We go to the target. r0~7cm.

#### HD198726.2016.06.16.10.42

E1=4810, E2=1510, CLIMB\_B1=6.67, CLIMB\_B2=5.38

Fringes not bad.

**UT10h51**: we go to cal2. **HD196740.2016.06.16.10.59** 

E1=4800, E2=1520, CLIMB\_B1=6.67, CLIMB\_B2=5.38

r0~6.5 cm. Fringes disappear some times...

UT11h08: we go to the target.

UT11h18: Chris is struggling to find the fringes on climb...

**UT11h25**: r0 dropped to 6cm...

UT11h25: problems with ople and climb.

**UT11h45**: we finally got something...but not sure on vega.

## HD198726.2016.06.16.11.45

E1=5000, E2=1480, CLIMB\_B1=6.67, CLIMB\_B2=5.38

We might see one peak but « it is pourrave ».

UT11h55: we try to go to cal3 to finish. But the wind picked up so it is complicated...

UT12h00: fringes on CLIMB, searching on VEGA.

UT12h02: we record, blindly...

HD204414.2016.06.16.12.02

E1=4600, E2=14570, CLIMB\_B1=6.67, CLIMB\_B2=5.38

r0 still around 6cm. But fringes seem to improve.

The end of the night wasn't good.

Spectral calibration: **D\_CMR2019.06.16.12.12** 

THE END!