

UT2018-10-18 VEGA observations. Isabelle, Denis, Michel & Olli

UT1h40: arrival in the control room but W's scopes have not been aligned on the correct beams. Judit will correct this rapidly.

V67 E1POP1B1-E2POP2B2 *Cons OPD +150 μ m*

Check star is HD176437, Cal is HD174481 for 3 targets (HD175740, HD181597, HD175884)

UT2h00: HD176437 as LABAO and check star for alignment. r0 around 7cm. Fringes immediately on VEGA during the CLIMB scan. CLIMB has difficulty to find the fringes...Olli restart the CLIMB computer. Already 30mn lost... and he has to start the South's for the ALOHA team. Chris is thinking to a problem with the dither mirror. We try to put E1 as reference to change the dither mirror. We decide to forget CLIMB and go back to VEGA only.

UT3h45: Fringes servo by VEGA. Offset =0.39mm. We go to the cal. HD174481. But this is too faint...We try again with CLIMB. Realign with the check. We try many things also with CLASSIC and finally the diagnosis is that the dither mirrors of CLIMB are not working. Chris will come up.

V70 E1POP1B1-E2POP2B2 *Cons OPD +150 μ m*

UT6h00: we try now with VEGA only on HD198578. Fringes ok at -2.1. r0 around 6 cm. We finally start recording. **HD198478.2018.10.18.06.03.** Good tracking by VEGA. r0 7cm.

UT06h14: now the calibrator HD 197392. Fringes ok at -2.1. **HD197392.2018.10.18.06.16.** r0 around 6cm. Isabelle, alias the tracking woman, is stabilizing the fringes with the VEGA real time processing.

UT06h29. Second target HD193237. Fringes at -2.05. **HD193237.2018.10.18.06.30.** r0=6.5. Good tracking.

UT06h41. Calibrator. Fringes found at -2.1. **HD197392.2018.10.18.06.42.** r0 6cm. Tracking manual every 30s but the offset is very stable.

UT06h54. We go to the calibrator of the next target. **HD202240.2018.10.18.06.56.** offset=-1.97. Nice fringes, r0=6cm.

UT07h07: now the target HD204172. Offset -1.97, **HD204172.2018.10.18.07.09.** r0=6cm. Fringes have moved as Chris started CLIMB again. After blocs 15.

UT07h20. Spectral calibration. **D_CMR656.2018.10.18.07.32.**

UT07h35: Chris is now going into the lab to check the situation of CLIMB. The problem is fixed, it was an electronic card behind the CLIMB rack that has been disconnected by accident during the afternoon probably because of too many groups in the lab. We have lost almost 4hours!

V01 E2POP2B2-W2POP5B3 *Cons OPD +150 μ m*

UT08h00: AO star HD16582, Check Star HD15318. r0 around 5 to 6cm, really not great. CLIMB alignment on the check but hard to find fringes. Very variable seeing, the conditions are slowly degrading in fact. r0 around 6cm, fringes found on E1E2, CLIMB is working but we still have no fringes (UT09h00) on E2W2... Finally we got them at +4 with HDD11037. Back to the check for cophasing now (UT09h30). Offset=4.3mm on CLIMB but impossible to get them on VEGA. Let's go to Be stars...

V66 E1POP1B1-E2POP2B2 *Cons OPD +150 μ m*

UT09h45: first target HD41335. $r_0=6\text{cm}$. CLIMB fringes at -1.5. Piston on CLIMB is awful, fringes did not appear on VEGA. We stay on this star to check frequently the situation.

UT11h00: the conditions seem better on CLIMB but still no fringes on VEGA. We try with HD34053 but no luck. After one hour we home the carts. But we have had an issue with the POP changing that has probably prevented us to get fringes. Again almost 3 hours lost because of seeing and technical errors. Around 12h30 we decide to go to gam Cas, as apparently the East telescopes are not working well in the South. Finally we got them. Offset -1980, BC1=3.21, BC2=1.22 after the cophasing.

UT12h50: we slew back to the target. Issue for aligning NIRO. Offset 160 μ m. B1=3.25, B2=1.22.

HD41335.2018.10.18.08.07. 40 blocs. Poor tracking by CLIMB (large oscillations in the waterfall), $r_0=6\text{cm}$. **D_CMR656.2018.10.18.08.07.**