

2018-06-26, Fred, Denis, Norm

### V16 E2P1V2-W2P5B3 OPD E2=+150 $\mu$ m (left)

UT3:15: we start everything, using the new VNC connection to Atlanta with two sessions on the two computers in Calern. After some issues, it works fine.

UT3h25: Slew to the AO target HD138905. FLAT ok on E2 but barely better on W2.

UT3h59: Then slew on the check star 134759. Alignment NIRO. r0 close to 12cm. Scan for fringes on CLIMB. No fringes on first try. New alignment for NIRO and new try. Finally we decided to go on the target itself

UT4:20: slew to the target HD148898. The star is very low, hard to find fringes. Norm decides to go to a higher target to find the fringes. HD147449, mag4, diam=0.57mas. Sounds ok. Offset -2320. BC1=4.4789, BC2=4.3780. We slew to the cal now but Norm prefer to align on the object...

UT04h45: slew to the target HD148898. Abort on the control and crash. New pupil alignment. E2=5000ph, W2=3000ph typically on the tip/tilt. r0 around 7cm but we are low (dec=-21°). E2 cart stuck around 27m. New scan -12 to +8mm. Finally found at the same position. offset = -2100, BC1=4.4789, BC2=4.3981. 20 blocks on the target. [HD148898.2018.06.26.05.13](#). r0=6cm. Good tracking by CLIMB, well focused waterfall. Good snr on VEGA. Offset at the end -2140

UT05h22: slew to the cal. HD145607. Offset=-2450. BC2=4.4081. [HD145607.2018.06.26.05.26](#). r0=11cm? Probably strange values on the target. Nice waterfall well concentrated in the middle (1/6 of the width). Nice fringes on VEGA, with 400 photons. More piston at the end (block 30) but better soon after. r0 around 13cm at the end, offset -2500.

UT05h44: back to the target. Realignment of NIRO. offset=-2140. BC2=4.4181. More piston on this star than on the cal. [HD148898.2018.06.26.05.50](#). r0=6cm (lower declination). Fringes ok on VEGA. CLIMB waterfall not well contrasted.

UT05h59: back to cal. offset=-2410. BC2=4.4281. [HD145607.2018.06.26.06.02](#). r0=9. Jumpy fringes in CLIMB. Fringes present on VEGA. Sequence not really excellent in terms of coherencing.

UT06h20: back to the target but Norm needs to change the position of the reference cart. offset=-2180, BC2=4.4281. [HD148898.2018.06.26.06.31](#). r0 reported as 5.5cm. Coherencing ok but variable contrast. Fringes ok on VEGA.

UT06h40: back to the cal. [HD145607.2018.06.26.06.43](#). Offset=-2440. BC2=4.4481. r0 around 6cm, not as good as before. Tracking CLIMB not good, fringes barely present. They are ok on VEGA but really poor tracking on CLIMB.

UT07:00 Spectral calibration. [D\\_CMR720.2018.06.26.07.03](#).

### V65 S2P2V1-E2P4V2-W2P5B3-W1P2V4 OPD S2=-450 E2=-150, W1=+300 (left)

UT07h01: Norm changes the POP and prepare the new setting in 4T mode. 7h20, slewing to the LABAO star: HD181276. Flux on tip/tilt: S2=11000, E2=16000, W2=10000, W1=7500. LABAO locked and FLAT set. VEGA pupils aligned. UT7h30: we slew to the check star HD192696 for fringes. Realignment NIRO and alignment of VEGA in the image plane. Offset S2=-4570, Offset E2=-2000. BC1=4.0789, BC2=4.5583. Finally Offset W1=+3410 on VEGA

UT08h20: We slew to the cal. HD177003. New NIRO alignment and check for fringes everywhere. r0 around 13cm. [HD177003.2018.06.26.08.36](#). Offset S2=-4500, E2=-2010, W1=+3300. BC1=4.1089, BC2=4.6083. Servo ok sur VEGA on B3B4. Fringes B1B2B3 ok in CLIMB. Fringes E2S2 hard to see unfortunately and we are not completely sure of the cophasing. r0 around 15cm.

UT08h46: slew to the target, HD185912. [HD185912.2018.06.26.08.55](#). Offset S2=-4500, E2=-1820. W1=+3300. Fringes W1W2 are faint and they seem hard to control. Hopefully the baseline solution is good enough. Finally they appear at the right position. The fringes 12 (E2S2) appear on VEGA. But still hard to servo the W2W1.

UT09h13: S2POP1, E2POP2, W1POP3, W2POP5 for going up to the end of the night; Slew to the calibrator. Pupil alignment on VEGA after the POP changes. [HD177003.2018.06.26.09.41](#). S2=-4440, E2=-2150, W2=3200. Nice fringes on CLIMB and VEGA. r0=14cm.

UT09h50: slew to the target. [HD185912.2018.06.26.09.54](#). r0=13cm. S2=-4470, E2=-2130, W1=3120. E2 fringes are faint on CLIMB but cross fringes and S2 fringes are ok. E2 cart is oscillating apparently.

UT10h15: slew to the cal to conclude the sequence. [HD177003.2018.06.26.10.22](#). S2=-4370, E2=-2170, W1=3210. r0=13cm. Nice fringes everywhere.

UT10h32: Spectral calibration. [D\\_CMR720.2018.06.26.10.33](#).

### **V73 S2P1V1-E2P2V2-W2P5B3-W1P3V4 OPD S2=-450 E2=-150, W1=+300 (left)**

UT10:31: ready to slew to the first target HD190603. MR656 now. NIRO alignment, Pupils alignment. Fringes on CLIMB. r0=15cm. [HD190603.2018.06.26.10.46](#). 40 blocks. Nice tracking by CLIMB and by VEGA. S2=-4350, E2=-2140, W1=3240. BC1=4.108, BC2=4.608.

UT11:05: HD187982. But this is not the correct number. The good one is HD187983. W1=3290, S2=-4230, E2=-2220. [HD187983.2018.06.26.11.13](#). Good tracking but we have lost the connection with the VEGA tracker. W1 fringes are not tracked. Stop after 20 blocks. [HD187983.2018.06.26.11.33](#).

Good tracking again but issues with the configuration on the tracker. **We should check the info file before the archiving.** W2-LDC is maxed out at 49. r0 around 16cm.

UT11:45: HD193237 as the third target of this program. S2=-4300, E2=-2165, W1=3300. R0=17cm. [HD193237.2018.06.26.11.49](#). Nice tracking everywhere. 60 blocks before the birds. Crash of control central. **Logobs to check.**

UT12h16: spectral calibration. [D\\_CMR656.2018.06.26.12.19](#).

UT12h20: The Western Wood-pewee is the first to call tonight and the bluebirds start chirping. It's the end of night, clearly!