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Engineering tests of CESAR + OPLE

UT3:15: Ready in the lab. HD143454 as first star (mV=2). Some issues to start S2. No stars in ACQ and no way to start the FINDER. Apparently the star was in fact faint… Now slewing to vega.
CESAR: Recording Dark and images on CESAR/ANDOR with and without tip/tilt, gain=200. Clearly looking at the max in the whole image generate huge jumps in the global image. Different tests are made and sequence of images with and without the tip/tilt are recorded on the star vega with the LABAO active.
OPLE: attempts to send messages to the OPLE/S1 (tracking mode) to check the transfer function of the servo loop by recording the status of the delay lines (F6 + F8/F9 to start and stop the record of the status). But some issues with the code (negative offset are badly recognized).

V65 S2P1B1-E2P3B2-W2P5B3-W1P3B4 OPD W1=+300μm (left), E2=-150, S2=-450

UT7:10: we start VEGA now. Changing POPs for the end of the night. LABAO on 181276. Check star HD192696. W1=1590, S2=-3000, E2=-1220. BC1=6.7695, BC2=4.5489
UT7h55: we slew to the cal. W1=2030. Hard to find again the E2 fringes. NIRO alignment again.
UT08h40: recording now. **HD177003.2018.07.02.08.00**. r0=8cm not so good. Poor tracking of W1 fringes. Better after block 20. And fringes are quite ok. E2 around -120, S2 -500
UT08h58: ready for the target. **HD185912.2018.07.02.09.01**. W1=2340. S2=-3250, E2=-2620. r0=8.5cm. Good fringes on CLIMB Fringes W1W2 ok on VEGA. After block 15 W1W2 fringes hard to see… Again hard time around block 20 for fringes W1W2… No tracking at all on this baseline. Nice tracking by CLIMB. Probably in place but faint.
UT09h23: back to cal. **HD177003.2018.07.02.09.25**. W1=3100. Nice tracking CLIMB and VEGA/W1. BC2=4.599 for a better positioning of the E2 fringes. r0=8.5cm. Fringes W1W2 not so nice around block 30. CLIMB is tracking well on B1B2B3. On the long integration the three fringes are seen.
UT09h47: target again. **HD185912.2018.07.02.09.49**. W1=2.89 (but hard to see). S2=-3510, E2=-3180. nice fringes on CLIMB. E2 fringes ok on VEGA. It seems that the S2 fringes also appear. The W1 are hard to see. Almost impossible to see them unfortunately. Attempt at offset 2.5 at block 16. These fringes seems very weak. E2 and W1 seem to appear on the long integration hopefully.
UT10h12: Alignment on the target and then calibrator again. **HD177003.2018.7.02.10.36**. W1=4000, S2=-3720, E2=-4300. r0 around 6.5cm now. Piston on the CLIMB fringes. Fringes W1 seen but hard to track in 4T mode. E2 fringes are seen on the VEGA RT computing but the W1W2 are really hard to identify in 4T mode. Probably close to their position but the contrast is strange. Seems to be ok on the long integration. Tracking on CLIMB is poor, especially on S2. E2 fringes are ok but S2 are very small and W1 are almost not seen.
UT10h55: spectral calibration. **D_CMR720.2017.02.10.57**

V73 S2P1B1-E2P1B2-W2P5B3-W1P3B4 OPD W1=+300μm (left), E2=-150, S2=-450

UT10:55: POP1 on E1. MR656. Then slew to HD190603, but long slew on E2.
HD190603.2018.07.02.11.21. Tracking CLIMB OK. Fringes W1W2 ok well in position and esay to track with VEGA. r0=7.5cm. W1=4.26 with a small positive drift. Fringes W1 are correctly tracked by VEGA and CLIMB is working well. Not sure that the S2 fringes are correctly seen on VEGA.
UT11h39. We stay on this star to check S2E2 fringes with VEGA. New alignment of B1B2 but fringes are really hard to see on S2E2. We should trust the cophasing. Nice tracking by CLIMB and VEGA. New recording **HD190603.2018.07.02.11.48**. r0=9cm. Fringes seem better now, more stable in CLIMB and easy to track with VEGA. W1=4490. S2=-229, E2=-2875. BC1=6.7695, BC2=4.5790. The three fringes seem to appear on the long integration on VEGA. Probably the better sequence of the

night. Block 20: W1 fringes lost (end of delay). We change the reference cart position. Everything is back at block 28. 60 blocks to conclude the program. Much better fringes. r0=12cm at the end. UT12h15: Spectral calibration. **D_CMR656.2017.02.12.15.**