

UT 2020-03-07, Norm, Fred, Denis

V72/Klement W1P1B2-W2P5B3

- UT1h45. The sky cleared up and humidity hasn't rose so good conditions for starting.
- Target=HD58715, cal1=HD58923, cal2=HD58187. From December we have BC2=4.65, W2=-2600.
- Many issues with the servers because of a reboot of ctrscrut. UT2h30: slew to the target. W1-DM is not responding (restart the server). W2 pupil looks nice but W1 not. AO ON on W1 but poor pupil image. W2 in tip/tilt mode. Scan but no fringes. Rehome the carts. W1 LABAO still decentered. We found the fringes with VEGA at -1300. Full realign of the beacon but always same situation on the pupil. Even the FLAT is not good. A new reconstructor is probably necessary. Norm, alias Gengi, scan and found!
- UT3h47... [HD58715.2020.03.07.03.48](#), W1=-1300, BC1=6.46, BC2=4.65 (as in December!). Tracking by CLIMB is good, not as good as yesterday but well centered waterfall. Nice peak on VEGA. Hour angle -20mn...30 blocks but strange behaviour after block 15. Poor tracking on CLIMB. We slow down the camera to improve the situation, maybe clouds or turbulence.
- UT4h02: ready for cal1. W2=-1360. [HD58923.2020.03.07.04.06](#). Fringes well tracked by CLIMB, nice peak on VEGA. Not so good towards the end.
- UT4h15: back to target. [HD58715.2020.03.07.04.21](#), W1=-1330. Less flux, probably due to thin clouds coming, as well as small strips. 30 blocks. Good tracking at start. Nice peak on VEGA. Contrails crossing the star → flux drop! Interesting to check whether spectrum changes! W1 misaligned again toward the second part of the recording. We check again the beacon/alignment. W1 star is way off on VEGA. Star locks off from center: something in troubles. In fact no AutoAlign and we were close to meridian so fast AZ motion. [HD58715.2020.03.07.04.46](#), W1=-1390. New record. Fringes are very stable on VEGA but poorly tracked by CLIMB?
- UT4h58. Final cal. With an alignment of NIRO first on the target. [HD58923.2020.03.07.05.12](#). W1=-1470. A lot more cirrus clouds and contrails. Nice tracking, nice peak.
- [D_CMR656.2020.03.07.05.25](#).

V38/Salsi E1P1B1-E2P2B2-W2P5B3

- Target=HD58142, cal1=HD60652, cal2=HD56963, Yesterday's offsets: E1=+800, E2=-800.
- UT5h20: ready to switch. Beacon alignment. Nice pupils on E1E2W2 after E1-DM power-off (high current warning). Fine tuning of the NIRO and VEGA alignment. Cloud's situation seems to improve, although still some thin clouds and contrails.
- UT5h59, we start recording on the target. [HD58142.2020.03.07.05.58](#). E1=+900, E2=-840. BC1=6.46, BC2=5.31. Tracking fine on CLIMB, Nice fringes on VEGA. Sky is clearing.
- UT6h07: ready to go to cal2. [HD56963.2020.03.07.06.15](#). E1=+700, E2=-950. Nice tracking, fringes ok on VEGA, still some clouds. It should be noted that a beacon alignment is done just before any slew to set the AUTO Align during the slew and preserve the alignment.
- UT6h24. Target again. [HD58142.2020.03.07.06.34](#). E1=+750, E2=-840. Large overhead due to realignment. So the new slew method generates at the end realignment of NIRO and VEGA! Good tracking and nice fringes.
- UT6h43. Cal1 now. [HD60652.2020.03.07.06.49](#) E1=717, E2=-850. CLIMB tracking not as good. Fringes VEGA ok.

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- check=HD107259, target=HD114330, cal1=HD112846, cal2=HD116831
- UT7h01: slew to the check. A lot of big contrails and some thin cirrus clouds. E1=780, -2170. BC1=6.40, BC2=5.26. Full AO and beacon tracking on E1E2, TT on W2.
- UT7h16: slew to cal1. **HD112846.2020.03.07.07.39**. E1=+1090, E2=-2080. Tracking E2W2 ok but E1E2 is more difficult. Fringes ok on VEGA. Plenty of thin clouds. Probably loss of flux. E1 DM was OFF. It comes back at block 10. So 30 blocks to have 20 good ones.
- UT07h52. Target now. **HD114330.2020.03.07.08.04**. E1=860, E2=-2270. Nice fringes at beginning. Sky almost clear, fringes are not really nice however. CLIMB had hard time. Flux lost around block 15. Really not nice sequence unfortunately.
- UT08h12. Cal1 again. **HD112846.2020.03.07.08.20**. E1=+920, E2=-2100. Fringes on CLIMB ok this time. Weak fringes on VEGA. E2W2 is fine on VEGA but E1E2 does not appear very well. 300 photons only. Fringes are at their correct locations but faint signal. E1 DM Off at the end
- UT8h29 Target again. **HD114330.2020.03.07.08.35**. E1=680, E2=-2300. Good start for fringes, 750 photons on VEGA. Tracking ok.
- UT8h45 Cal2. CLIMB/OPLE issues, we need to restart them. **HD116831.2020.03.07.09.04**. E1=+670, E2=-2200. 200 photons on VEGA, this is quite faint and fringes take a lot of time. Correct tracking by CLIMB. But overall poor quality...
- UT9h13: Target again. More and more clouds are covering the sky. E1=480, E2=-2320 **HD114330.2020.03.07.09.25**. 700 photons but photometric variations due to clouds. Nice E1E2 fringes on VEGA. E2W2 also present but less obvious. Tracking reasonable. Good signal at the end finally. Almost 1000 photons at the end. Clouds situation has a little bit improved.
- UT9h34 cal2 again. Beacon alignment, clouds. The scan is difficult, new alignment to improve the situation. A lot of cirrus. **HD116831.2020.03.07.09.49**. E1=+510, E2=-2200. Strong photometric variations. Down to 50 photons... RH is rising up rapidly. 160 photons. Intermittent tracking, fringes are however very stable on VEGA so long integration may give something.
- **D_CMR720.2020.03.07.09.59**.

V01/Ligi S1P1B2-W2P5B3

- check=HD95608, target=HD97658, cal1=HD107168, cal2=HD96738
- UT10h00: ready to switch and to slew on AO star HD97603, at least to follow the evolution.
- Fringes found on the AO star then UT10h30 slew to the check. S1=-2270.
- UT10h36: cal2 **HD96738.2020.03.07.10.48** S1=-2160. Tracking OK with CLIMB in ND mode. Fringes ok on VEGA but integration needed because 160 photons.
- UT10h57: target. **HD97658.2020.03.07.11.04** S1=-2150. 60 photons, so less than previous day of course because of clouds. Good tracking on CLIMB. Full AO with beacon track on S1, TT on W2. Quite correct tracking (block15). Not really fringes seen on VEGA... Well maybe something towards the end of the sequence.
- UT11h20 back to cal1. 120 photons now instead of 160 photons previously, so clearly clouds are here. **HD96738.2020.03.07.11.29** S1=-2080. Tracking CLIMB ok but not very good. Fringes stay in the window but tracking is intermittent. Faint signal seen after block 4 on VEGA. Well poor quality and probably not a usable bracket.
- **D_CMR720.2020.03.07.11.39**

V38/Salsi with S2P5B1-E2P2B2-W2P5B3

- check star HD156928, target=HD149438, cal1=HD148605, cal2=HD146624
- UT11h40: we start the new configuration and slew to the check; S2=-330, E2=-2370
- UT12h08: cal1. 12h16 star is totally behind clouds.
- UT12h40 the clouds prevent us to even close the TT and to align. So we decide to close here.