Observational log CHARA/VEGA 2015-12-04

Observers: Fredéric, Ulrike, and Nic **Instruments:** VEGA & CLIMB(tracking)

Configuration:

Telescope	Beam	PoP
S2	B1	P5
El	B1	P1
(E2)	B1	P2
S1	B2	P4
W2	B2	P5
W1	B3	P1

Beginning of the observation:

Programme: V66 (Be survey), PI: A. Meilland

- 01.30 Baseline S2S1 (reference S1).
- Pointing to HD191610 and aligning VEGA.
- 01.50 Technical issue with W1 on B3 (which is needed to align NIRO).
- <u>02.21</u> Problem fixed.
- 02.41 Technical issue with NIRO. Nic and Judit are working on it. Transparency is very poor.
- <u>03.05</u> Pointing to check star HD213998 for aligning.
- <u>03.26</u> Fringes found for HD213998 at S2 offset -625 μ m.
- 03.28 Pointing to science target HD212076 (brightest one, mainly for quality control).
- Spec Spectral calibration D_R2656.2015.12.04.11.09.

Programme: V67 (Red giants), Pls: D. Huber / O. Creevey

- 03.56 Baseline W2W1 (reference W2).
- <u>04.02</u> Aligning on science target HD26162. W1 offset $3680 \,\mu \text{m}$
- 04.06 Cloudy. Stand by ...
- 04.26 Almost clear. Reopening.
- 04.30 Pointing to HD26162. Fringes found on CLIMB, but not evident on VEGA.
- 04.56 Pointing to Call HD26793. Sky is clear.
- 05.13 Recording Cal1 HD26793 HD26162CAL1W2W1.2015.12.04.04.55, 40 blocks, fringe peak uncertain, CLIMB fringes unstable, better for last 20 blocks, seeing ≈ 4 cm, Offsets: W1 3490 μm, CLIMB-B1 −0.40 mm, CLIMB-B2 −0.40 mm, S/N = 3.1
- $\frac{06.09}{\text{CLIMB-B2} 0.38 \text{ mm}, \text{S/N} = 3.2}$ Recording Cal1 HD26793 HD26162CAL1W2W1.2015.12.04.05.55, 40 blocks, fringe peak visible, seeing $\approx 5 \text{ cm}$, Offsets: W1 2790 μ m, CLIMB-B1 0.38 mm, CLIMB-B2 0.38 mm, S/N = 3.2

- <u>07.41</u> Recording HD26162 HD26162W2W1.2015.12.04.07.28, 40 blocks, fringe peak not visible, seeing ≈ 5 cm, clouds in the vicinity, W1 offset 2080 μ m
- 07.58 Pointing to Call HD26793. Fringes on CLIMB but not on VEGA.
- 08.22 Lost delay. Recovering. Realigning.
- 08.43Recording Call HD26793 HD26162CAL1W2W1.2015.12.04.07.58, 40 blocks,
fringes assumed to be there on VEGA, fringes weak and unstable on CLIMB,
seeing ≈ 4 cm, no clouds, Offsets: W1 1880 μ m, CLIMB-B1 -0.41 mm, CLIMB-B2
-0.41 mm, S/N ≈ 3 , last block is bad (already moving to next target).
- <u>09.10</u> Recording HD26162 HD26162W2W1.2015.12.04.09.07, 40 blocks, fringe peak not visible, seeing $\approx 4 5$ cm, W1 offset 1940 μ m
- 09.30 Thin clouds appearing. Transparency too low to align. Stand by ...
- 09.41 Pointing to Call HD26793. Possible fringes found on CLIMB.
- $\frac{09.50}{\text{(because out of delay)}}$ Recording Call HD26793 HD26162CAL1W2W1.2015.12.04.09.28, 20 blocks, seeing $\approx 6 \text{ cm}$, thin clouds, Offsets: W1 1930 μ m, last few blocks may be bad (because out of delay).
- Spec Spectral calibration D_R2700.2015.12.04.11.02.

Programme: V66 (Be survey), PI: A. Meilland

- 10.00 Baseline W1W2 (reference W2).
- 10.19Recording HD37202 HD37202W1W2.2015.12.04.10.01, 40 blocks, fringe peak
visible, seeing ≈ 6 cm, observing through clouds, Offsets: W1 1800 μ m, CLIMB-
B1 -0.31 mm, CLIMB-B2 -0.31 mm
- Spec Spectral calibration D_R2656.2015.12.04.11.09.

Programme: V50 (Metal-poor benchmark stars), PI: O. Creevey

- <u>10.36</u> Baseline S2S1 (reference S1).
- <u>10.37</u> Aligning on Cal2 HD88960.
- <u>10.58</u> Cloudy. Stand by ...
- 11.07 Doing spectral calibrations.
- 12.10 Opening up again (still thin clouds).
- 12.31 Recording Cal2 HD88960 HD85503CAL2S1S2.2015.12.04.12.09, 29 blocks, fringes visible but weak, thin clouds, Offsets: S2 960 μ m, CLIMB-B1 -0.56 mm, CLIMB-B2 -0.31 mm, S/N ≈ 5
- $\frac{13.00}{13.00}$ Recording HD85503 HD85503S1S2.2015.12.04.12.43, 30 blocks, fringe peak visible, signal fluctuating a lot, observing through clouds, seeing $\approx 4 5$ cm, S2 offset 1650 μ m, S/N ≈ 4
- 13.13 Pointing to Cal2 HD88960.
- 13.23 Cloudy. Standby ...
- 13.39 Situation is not improving. Twilight approaching. Shutting down.
- Spec Spectral calibration D_R2700.2015.12.04.11.02.

End of the observation:

13.40 Finished observing night, run, and year.

Time is in UT+00.00, red.. science target, blue.. calibrator, green.. spectral calibration, gold.. additional information.