## 2022-08-18 FM, NN, CP - Olli E1W2W1S2S1E2

UT03:00 Start. CHARA engineering UT06.32 Start. We slew to HD180163

S1(1) S2(2) W1(2) W2(5) E1(3) E2(4)

UT06.32 STS start.

UT06.44 STS done. Check LR and MR. Fiber explorer B2 not so nice again (because of spot).

UT07.47 Slewing. Wind. Seeing rather bad. Aligment on star with SPICA done.

UT08.17 W1S2 Fringes on mircx. Check on SPICA-VIS. INIT of DL. Restart TT. Seeing very bad.

UT08.53 Slew to HD3360. Seeing still very bad (Olli says about 5 cm). We restarted the server mircx twice because of difficulties to find and also track fringes.

UT09.20 S1S2 fringes (and several others) on MIRC-X. We start to find fringes on SPICA-VIS using LR. Seeing around 8 cm, but images are not very compact.

UT09:27 All fringes found on MIRC-X: -0.30/-0.93/-1.72/-1.24/-0.83. Before trying SPICA-FT, we want to verify that we find S1S2 on SPICA\_VIS (LR). Scan from +/- 400 of the position. We restarted TT. Fringes are unstable on MIRC-X. No fringes SPICA at the nominal position. MIRC-X position: -0.18/-0.86/-1.55/-1.06/-0.67.

We move to MR. Nothing around the position, but seeing extremely bad, almost no flux injected. We scan 0/+1000um around position.

UT10:15: Fringes positions on MIRCx: -0.05/-0.73/-1.36/-0.93/-0.57. We realign.

UT10.45 New positions of MIRX 0.00/-0.66/-1.20/-0.76/-0.47. We scan S1S2 MR between -1000 to +1000um. Then TT restart + foreground. Nominal position. Still no SPICA fringes. We have 300 and 400 in box mean fluxes... We try to stabilize the camera to -60 (instead of -68) to avoid "drifting".

UT11.09 **We record two files S1S2** only in blind: no S1S2 fringes seen on SPICA at the nominal position: 24200 22720 17346 14120 10565.

DIT=40ms

MIRC-X fringes are stable and nice (without SPICA-FT).

Flux in SPICA mean boxes: B4 (300) and B5 (500). But images are spread. Seeing around 5 cm.

Record of a foreground.

Record of a dark

Realigment of E2.

UT11.19 **Record with all telescopes, all fringes with MIRC-X.** DIT=20ms. 2000 frames. No fringes seen on SPICA (blind) We lost delay on W1, E1... lost of fringes on MIRC-X Record of foreground Record of dark

## UT11.42 We slew to HD17573

S1(1) S2(2) W1(2) W2(5) E1(1) E2(2)

UT12.00 Aligment of SPICA. All the night, strange behavior of E2. Need to realign the pupil...

UT12:02 All fringes with MIRCX 0.37/-0.74/-1.24/-1.23/-0.23

In mean boxes 400 and 500, but it seems rather no flux injected... NO FRINGES !

UT12.10 "All" displays of SPICA vnc frozen... grrr. (vnc:1) ! We quit and connect again and nothing, still a black screen. Email sent to Jeremy Jones. We then use the vega channel (:5) for controling SPICA...

UT12.10 On the other vnc (:6), we start SPICA-FT. With Kgd=0.02, all fringes are lost, like last night. There is still a problem (RECONF problem ?). Only one fringe: it works. With several fringes: we lost the fringe (even with gain to zero). New test with one fringe, it does not work again... We followed the procedure written in UserManual. Maybe a problem with the MAN and FT buttons ?

UT13.06 STS... but need to use vega vnc. Difficult, the pupil server is down !? We cannot move the pupils at all !

UT13.42 Solved.

It was hard hard night, we have been working like dogs !