

2022-08-19 FM, NN, CP - Olli
E1W2W1S2S1E2

UT02:45 Start. STS SPICA and MIRC-X. Spot B2 elongated.

B2 done by hand: X=193.75; Y=20.75

Need to re-INIT DL2 to find fringes.

All fringes are seen.

STS:

DL2=23659

DL3=17976

DL4=13286

DL5=10334

DL6=6130

UT03.49 We slew to HD180163

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

Olli: "So W2 cart has no signal at the moment. The other 5 carts are tracking normally"

"The cart tracking can't be fixed until the daytime 🙄"

We take S1 as a ref.

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

UT04.42 Fringes with MIRCX 0/-1.20/-1.41/-1.22/-0.71

UT04.42 We tried to find fringes on S1S2 with SPICA, but nothing. In LR, scan +/-200um around nominal sky positions. Injected flux is ok even if seeing is bad (5-8 cm) and images very fragmented. No fringes. Try in MR, little flux injected. Scan around the nominal position. We try to change camera temperature settings, We try to REINIT the internal Delay Lines, and also the TT. Nothing. No S1S2 Fringes on SPICA.

UT06:00

We slew to HD213558

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

We restart the server and all internal DL.

UT06:17. Fringes found at 0 / -0.59 / -1.58 / -1.09 / -0.54

We scan in LR +/- 200um. Much more flux injected even if the images are so fragmented that light goes outside the boxes ! We scan in MR +/-4000um. Without SPICA-FT (problem, even following the procedure). We checked VLDC values were correct. Then we tried to resend the VLDC values. Check in MR and LR. Nothing. Seeing still low. Even MIRCX has low S/N.

UT8.40. We slew to HD3360.

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

Before locking the star, we do STS SPICA and MIRCX. We have some doubts about potential differential OPD due to internal MIRCX delay lines.

STS SPICA and MIRCX. The internal DL of MIRCX are zero. On SPICA STS we get the fringes but we add to change the DL2 position by 120um compared to this morning.

We use the following values for sky DLs: 24200/22720/17346/14120/10565

We scan S1S2 in LR wo TT. We have flux injected in fibers. Patchy clouds ! Clouds !

Hole in clouds. We continue scanning in LR. Now the camera is drifting (-50°C), mean flux with shutter closed 700 photons.

UT10:56 we slew to HD5394

We use S1S2 only

A lot of photons. The S1S2 fringes are at the right position !

We come back on HD3360 on S1S2 to verify

HD3360

The fringes are here but extremely weak. We see them because we know they are here... If PS coadd is too large (500) we do not see them. 300 is good with DIT=40ms. DIT=20ms is fine with coadd (600). Better to use DIT=40ms. Flux of images is 700/800 in boxes. Seeing is between 5.5-7.5 cm. In any case fringes are hard to see... mV=3.66 on this star. The camera has a lot of photons with shutter closed: max around 700/800....

HD5394

S1(1) S2(2) E1(2) E2(4)

We have fringes S1S2 (good) on SPICA. S1S2 (good) and E1E2 (average) on MIRC-X.

In LR.

2 recordings on S1S2E1E2 with TT. At nominal positions: 24200/22720/17346/14140/10565

Foreground recording

Dark recording

We try SPICA-FT on S1S2, but it does not work.

We test with MR.

DIT 40ms. Coadd 300.

We do not see any of the SPICA the fringes.

We record 2 files in blind (same delay lines as previous record, with TT). MIRC-X fringes are very weak.

Record of the foreground

Record of the dark

UT12:53 STS-VIS OK.

Update software MIRC-X. STS MIRCX OK. Discussion with Sylvain. Not sure we use OPLEMAN button properly for SPICA-FT.