## :2022-08-16 FA, PG, FM - Norm

## E1W2W1S2S1E2

- E1 Pop3 B1
- W2 Pop5 B2
- W1 Pop2 B3
- S2 Pop2 B4
- S1 Pop1 B5
- E2 PoP4 B6
- UT3h10 Starting with STS, no flux on MR, fringes appeared on SPICA. DL offsets (LR) : DL2: 23659
  DL3: 17976

DL4: 13286 DL5: 10334 DL6: 6130

Beams references: B1: 152.0 - 20.6 B2: 193.3 - 21.9 B3: 232.7 - 22.6 B4: 270.4 - 21.2 B5: 312.0 - 21.2 B6: 350.3 - 21.6

- No flux on MR. Change the HDG center to MR 750. Nothing better. STS spots visible on Control Camera but problem with Science Camera.
- UT4h35 slewing to HD180163 but no LABAO
- UT4h45 use of neon lamp to check spectrum on spicavis\_RTD. Conclusion: No optical shift, everything seems to be calibrated
- UT5h07 Fringes on MIRCX HD180163: no success, CHARA's group operated server corrections. DL offsets have shifted
- Difficulty to find fringes. The star is end of delay.
- UT5h40 Change star. Go to HD213558 now.
- UT5h57 Try find fringes on MIRCX
- UT6h14 No flux on S2.
- UT7h00 No result. Put FT OFF and try find fringes only using MAN. After a search with FRINGE LOCK on MIRCX, not all fringes have been found. Decide to switch on Spica\_ft fringe tracker to progress.
- UT8h33 Issues concerning the FRINGE LOCK. Fringes were unstable and oscillating when they were locked. Reopening process...
- UT8h35 Discussion with CHARA to find fringes at the same offset as yesterday. Aim is to figure out what happened to the fringes.
- UT8h48 OPLE Restart, it was probably the OPLE. Reconnect and restart all servers from MIRCX

• UT8h56 Find fringes at new positions :

HD_213558 UT 08:50		
TELESCOPE	DL Offset (mm)	
S1	0.18	
S2	-0.57	
E1	-0.99	
E2	-0.67	
W1	-0.30	

- UT9h00 Try Spica\_ft process to lock fringes without MIRCX
- UT9h19 Slewing to HD\_3360
- UT9h27 Locked on star
- UT9h58, fringes appeared on MIRCX with FT OFF only with MAN. DL offsets:

HD 3360 UT 09:58	
TELESCOPE	DL Offset (mm)
S1	-0.21
S2	-0.85
E1	-1.55
E2	-1.10
W1	-0.65

- UT10h39 Problem of oscillation appeared again, decide to restart the servers. Best short-term option.
- UT11h06 Finding again the fringes. Decide to apply Sylvain's procedure from spica\_FT
- UT11h18 Fringes stabilized with fringe tracker of spica\_FT  $K_{GD}{=}0.0474~K_{PD}{=}0.520$
- UT11h33 Last Star HD\_17573
- UT12h00 Fringes on star:

HD_17573 UT 12:00		
TELESCOPE	DL Offset (mm)	
S1	-0.33	
S2	-0.77	
E1	-1.43	
E2	-1.19	
W1	-0.22	

• UT12h26 Spica\_ft tracking but only 4T (S1S2E1W2). Record fringes Base S1S2 with Spica\_vis DIT=200ms, GAIN=1000, MR. 2 files.

DL on sky (Configuration changed only for DL4 and DL5) :

DL2: 24400 DL3: 17976 DL4: 13396 DL5: 10214 DL6: 6130

- UT12h28 Record MIRCX with spica\_ft tracking file from 00.fits to 77.fits One 300s with S1, followed by the "Shutters" sequence... files 78–252.fits
- UT12h30 Loop parameter spica\_FT K<sub>GD</sub>=0.0474 K<sub>PD</sub>=0.428
- UT12h34 Spica\_vis Record Foreground for base S1S2
- UT12h39 Spica\_vis Record Dark
- UT12h54 STS Re-alignment with DL\_STS offset
- UT13h09 Everything is ok with STS