Hour tags below are in Calern time

HD213558

8:11 :

Test of GD trheshold measurement out of coherence with opdc_gtk

GD+PD locked :

Raw dumps :

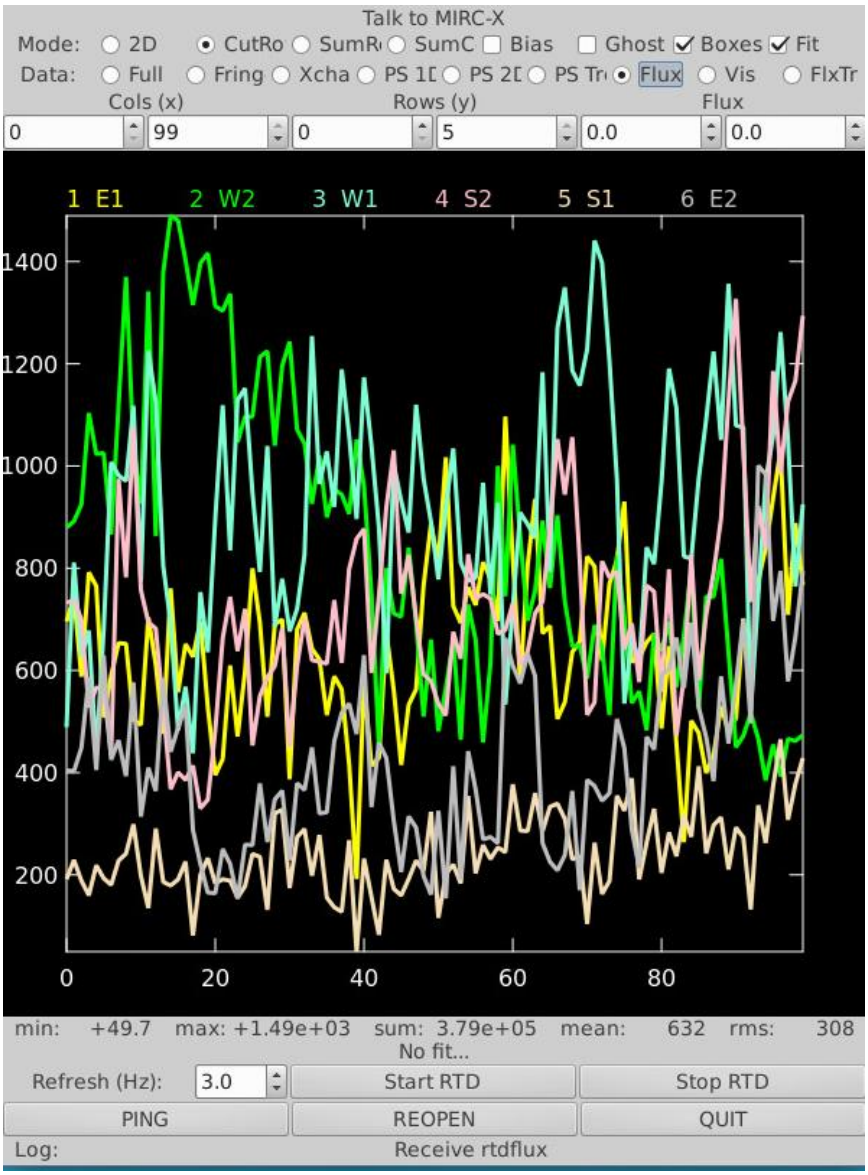
HD213558_Sun_Aug_14_23h16m49_2022.bin

hd213558GD004PD0626T_Sun_Aug_14_23h18m40_2022.bin

We lost E1 after a couple of minutes

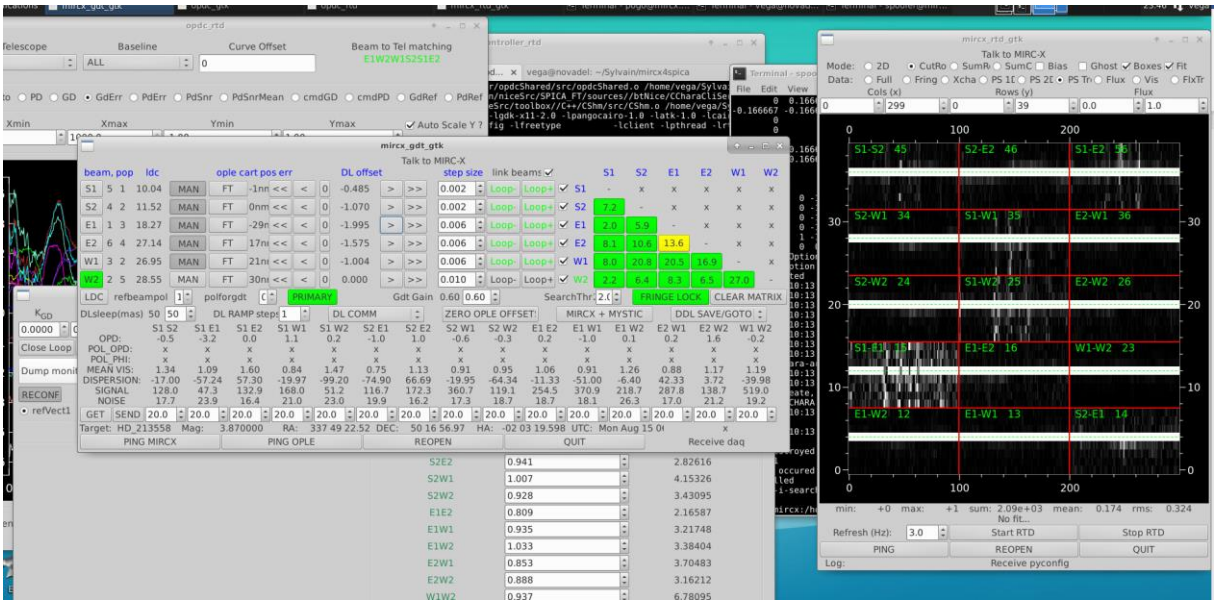
8:22

E1 gets lost even with mircx GD tracker where as we have good flux on it



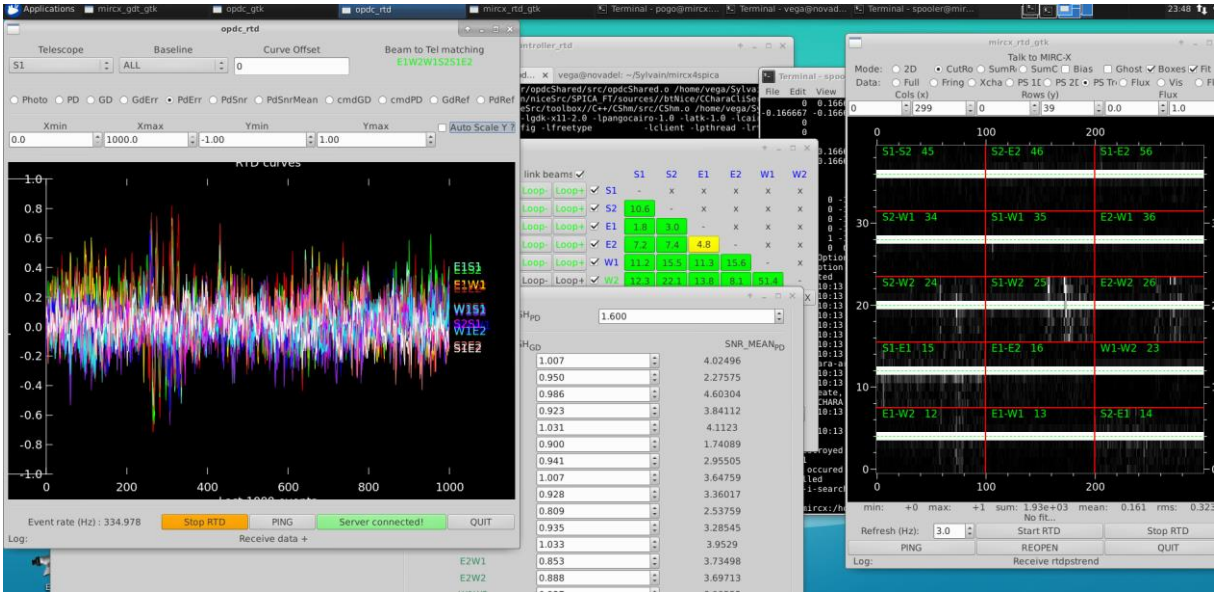
8:30 Pierre is looking for fringe.

8:38 => fringe ok

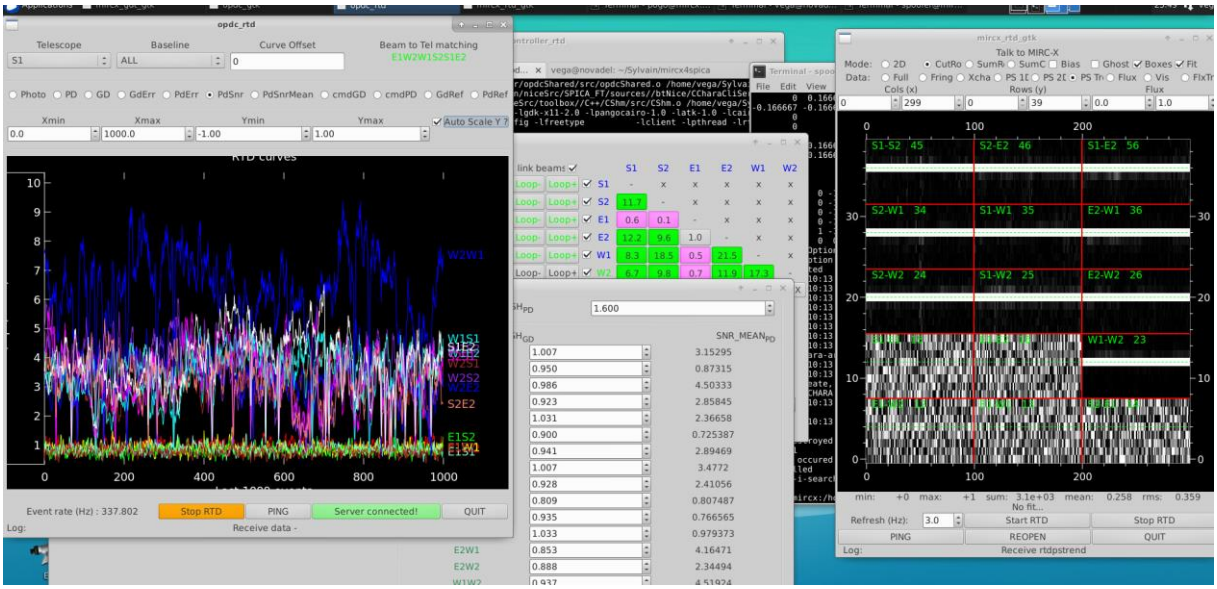


8:48 :

Start spicaFT @GD only kgd = 0.0487



E1 lost after 1 min



9:11 Start spicaFT @GD only kgd = 0.0487

9:14 : Lost

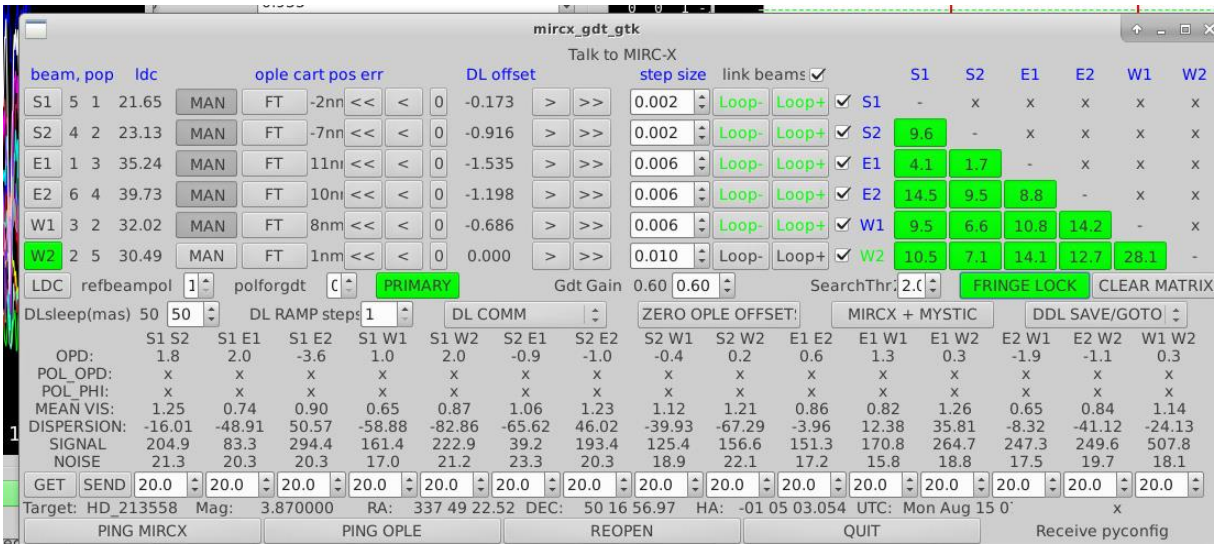
9:15 : refound

9:16 lost anew

Remark : E1 DL position: 8:38 E1@-1.995, 9:19 E1@-1.666

9:20 Realignment requested to Norm

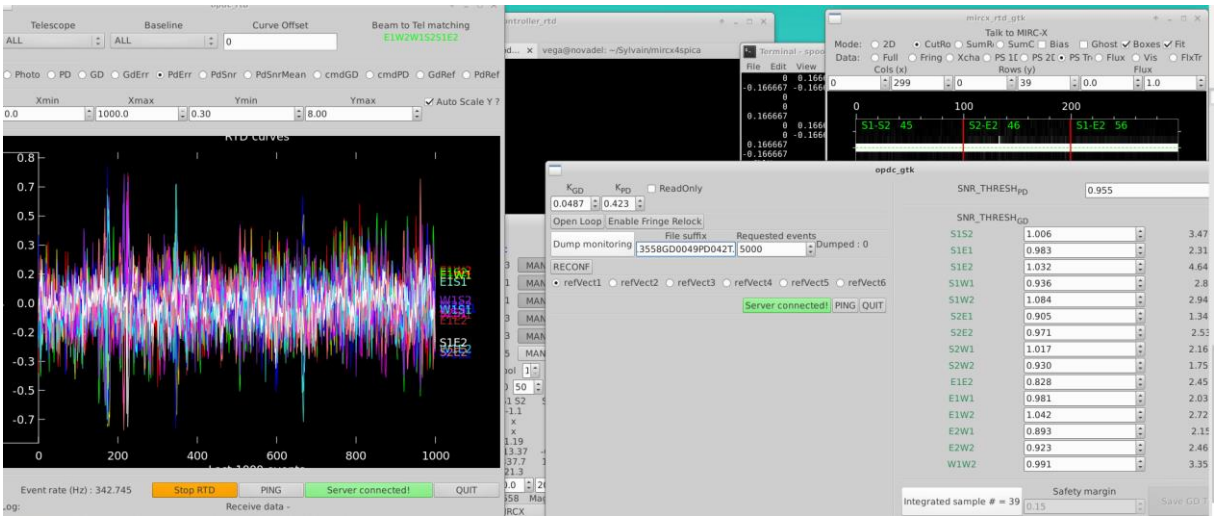
9:44 : realignment done, fringe found



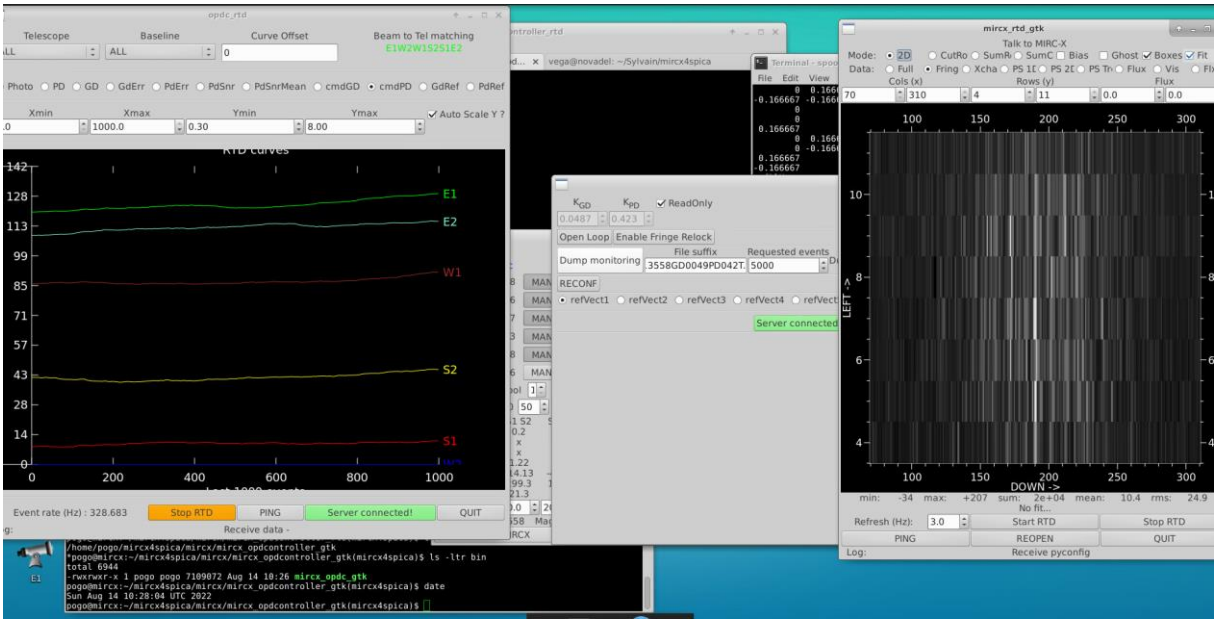
9:45 Start spicaFT @GD only kgd = 0.0487

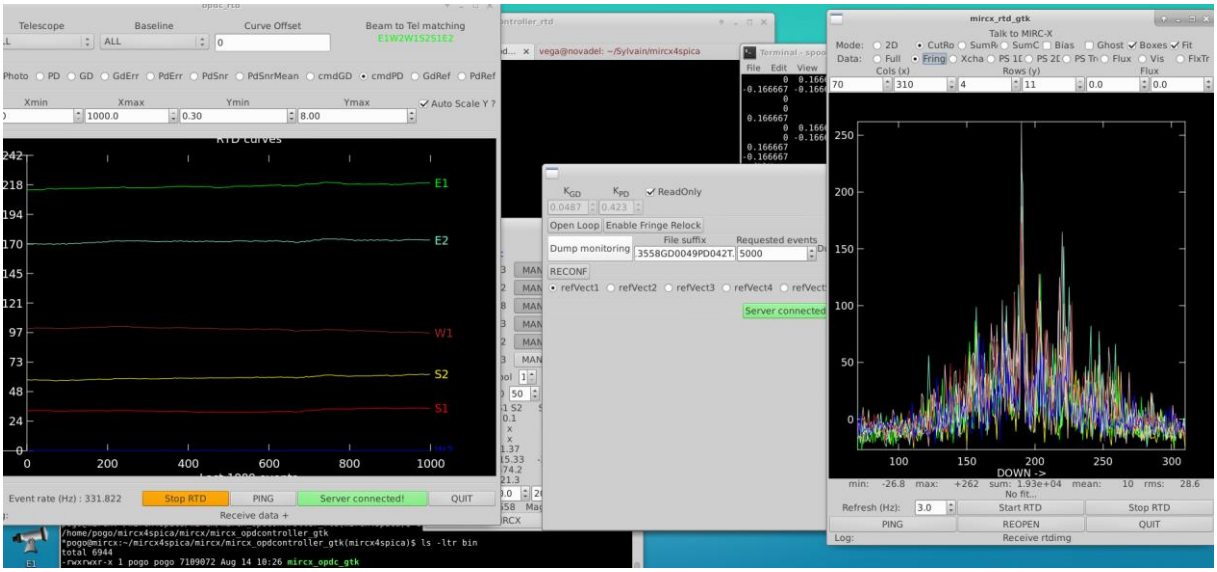
CmdGD in [0, 54µm] µm

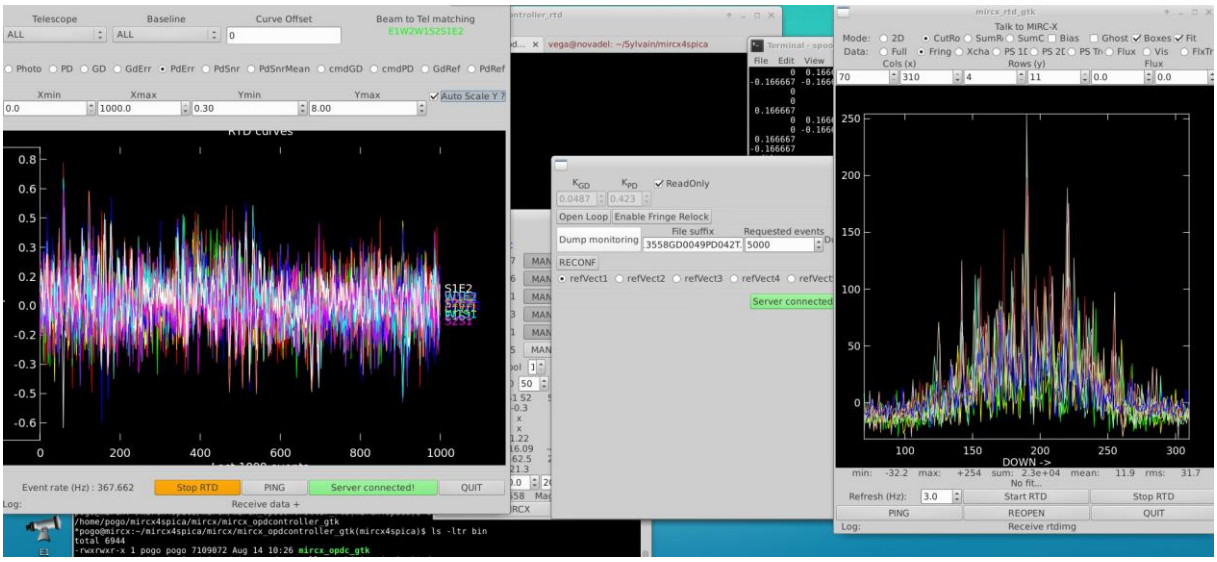
9:48 closing PD@0.423, cmdPD in [-17,20] µm



9:54 : still GD+PD locked, CmdGD in [0, 90µm] µm, cmdPD in [0,90] µm

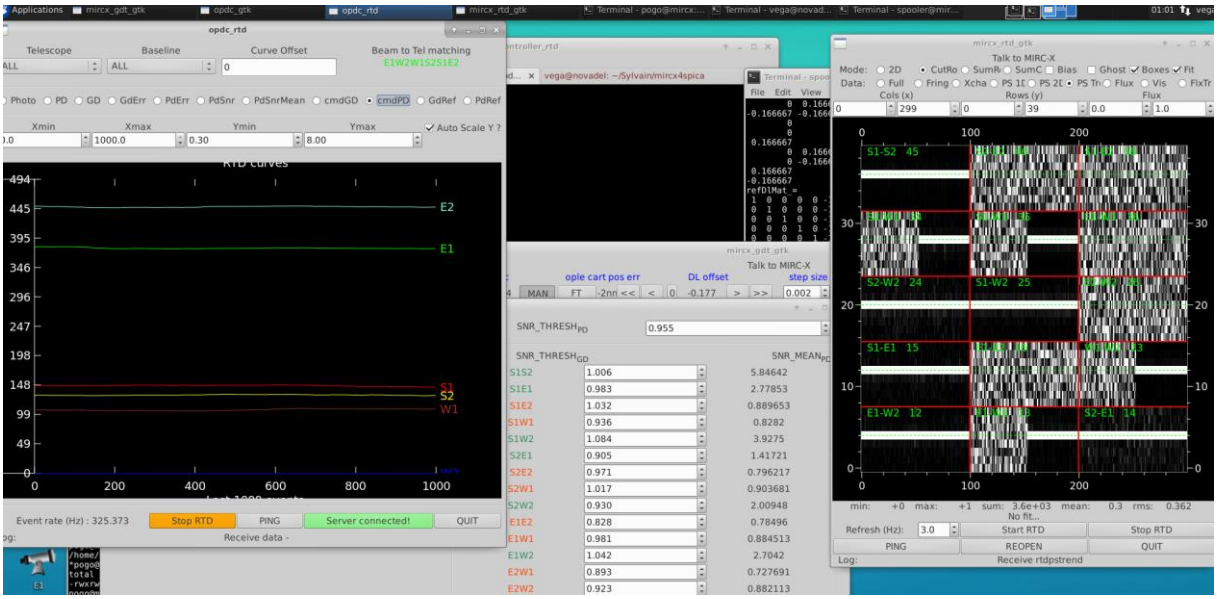


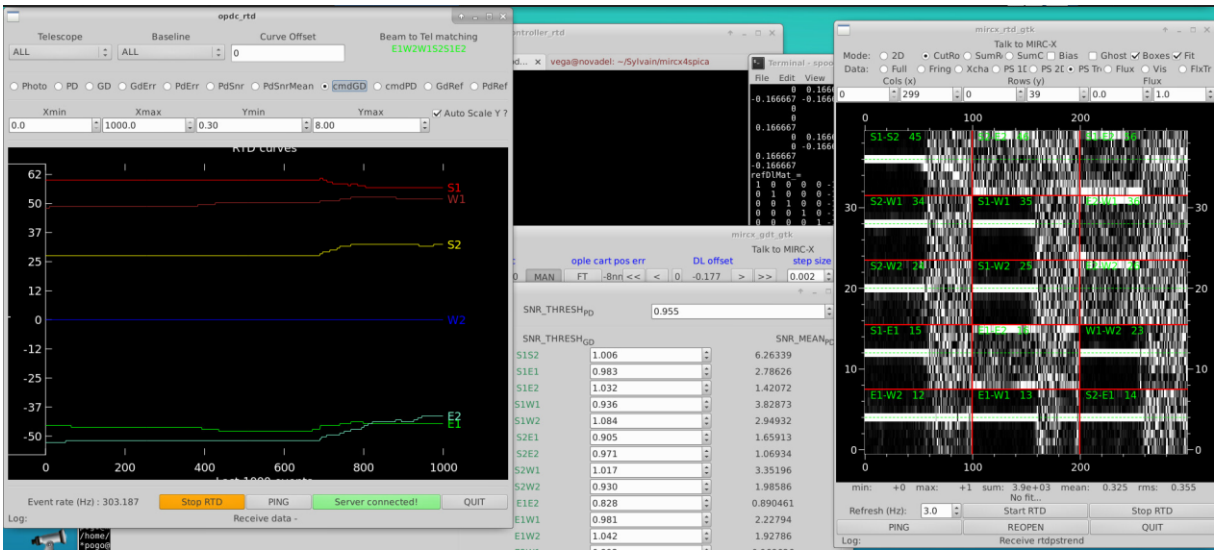




9:54 : still GD+PD locked, CmdGD in [0, 90µm] µm, cmdPD in [0,90] µm

10:00 : we lost E2, PD cmd on E1/E2 got crazy, GdCMD still consistent



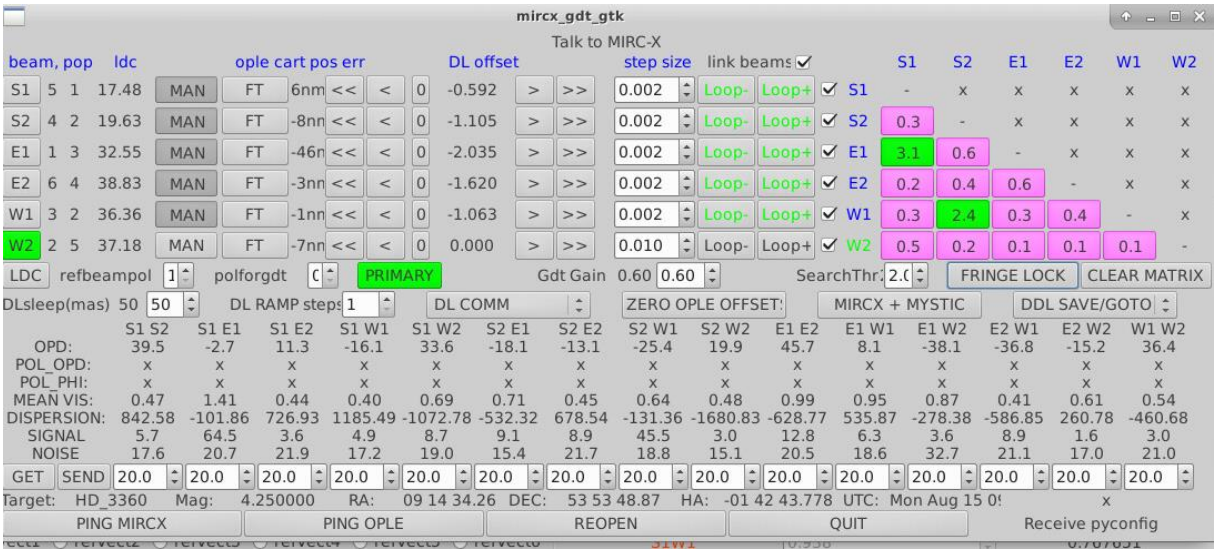


10:05: looking for fringes with Mircx

Recording Mircx data

10:45 : moving to HD3360

11:12 : fringes found



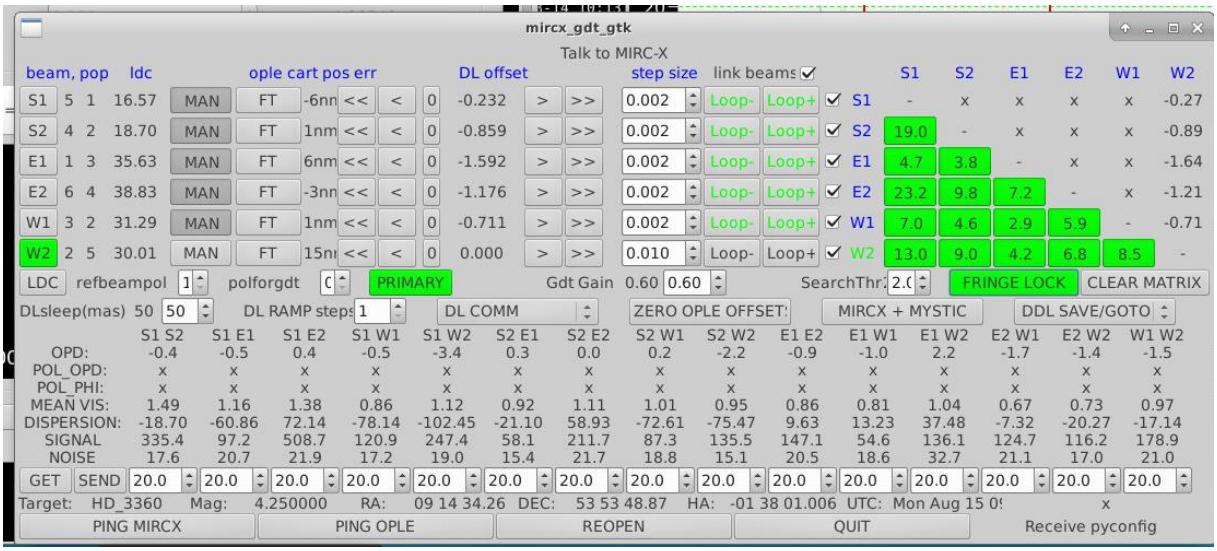
11:13 : spicaFT@GD started => fringe lost instantaneously

Struggling to find fringes.

11:25 : Norm tells us that the Ople server crashed, Norm restarts it.

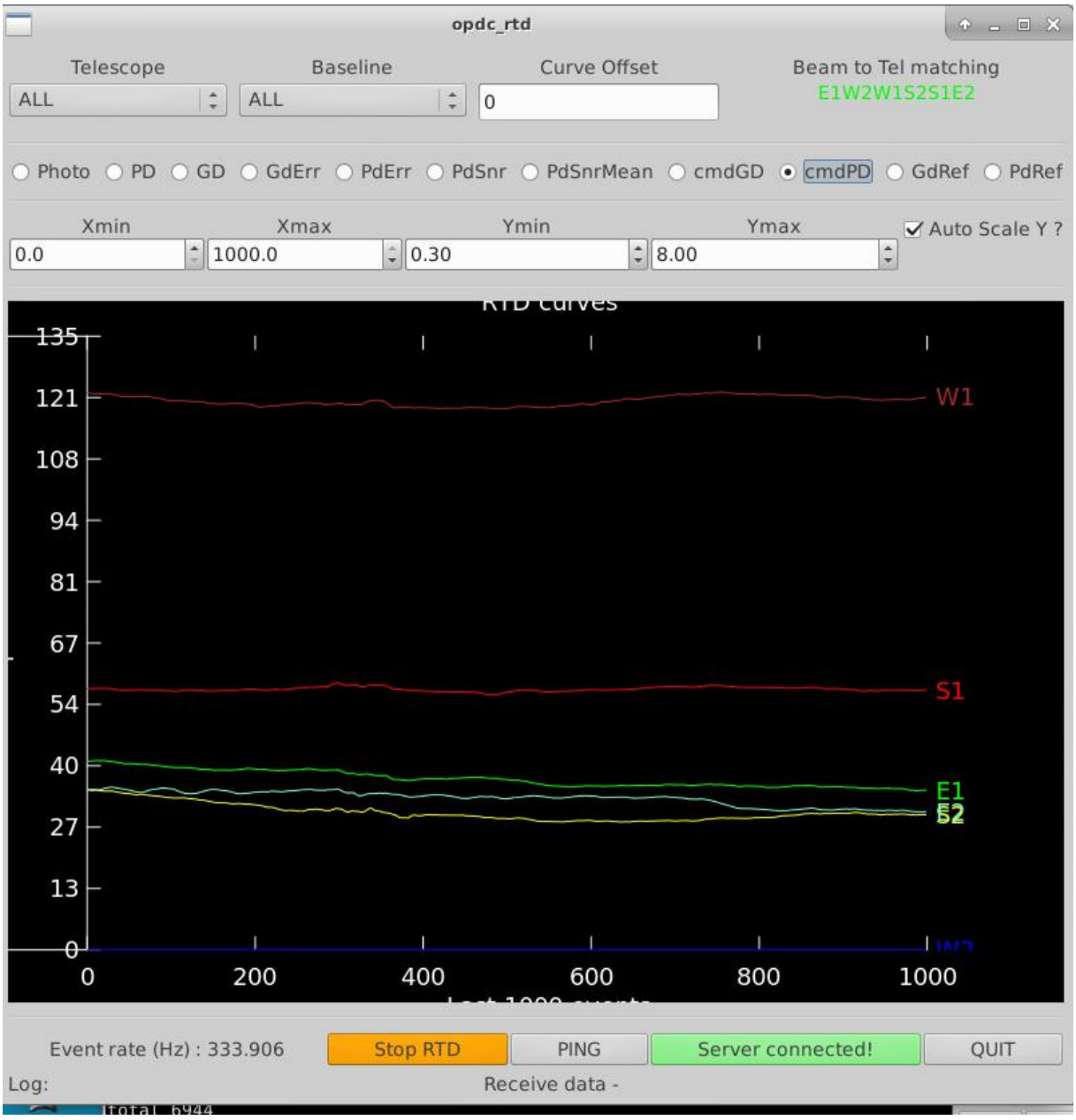
11:35: cannot ping ople server from mircx_gdt_gtk, forgot to hit reopen/ reconnect on mircx_server_gtk

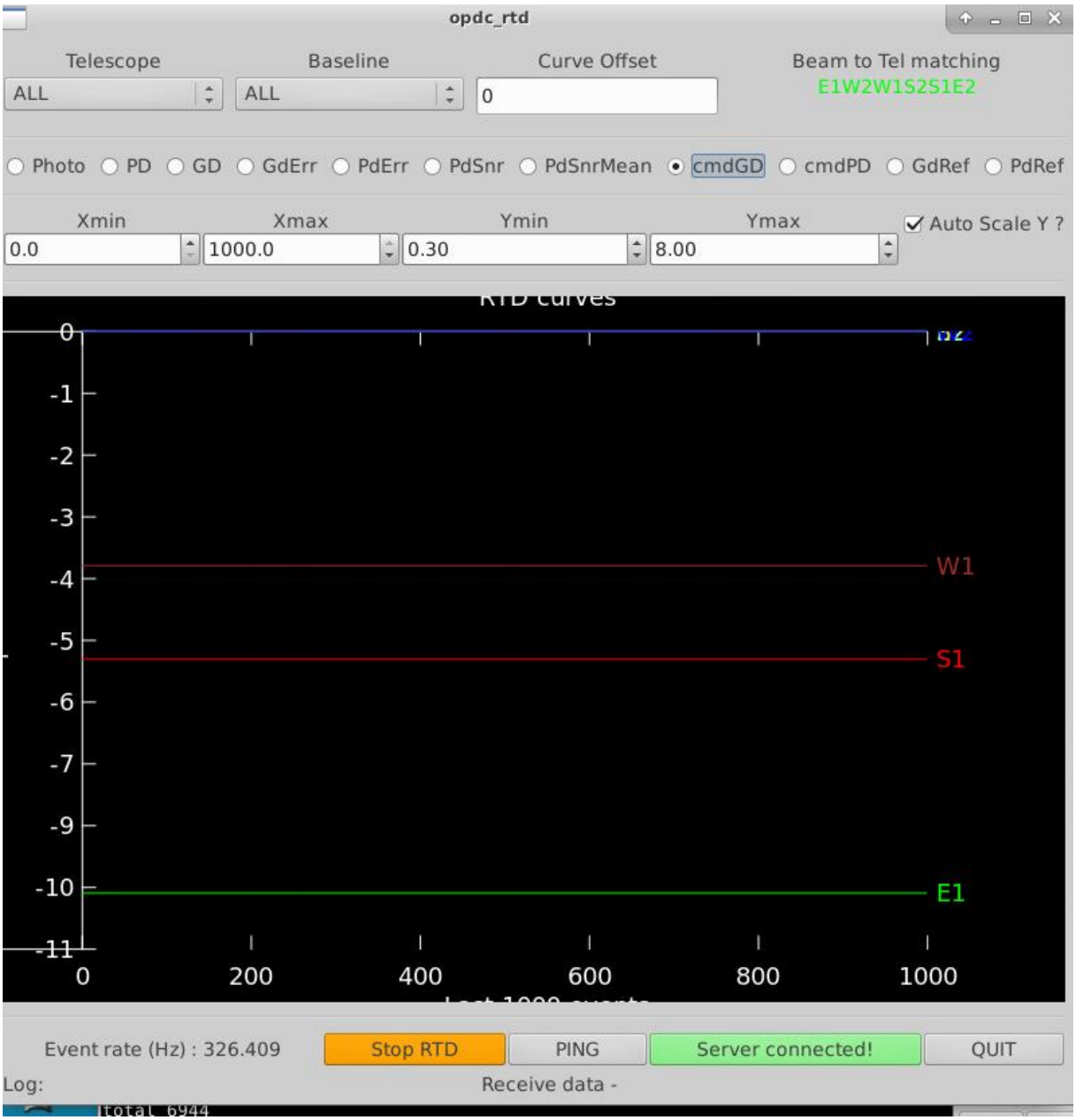
11:53: Norm found back the fringes on mircx



11:55: spicaFT@GD0.048+PD0.459 started

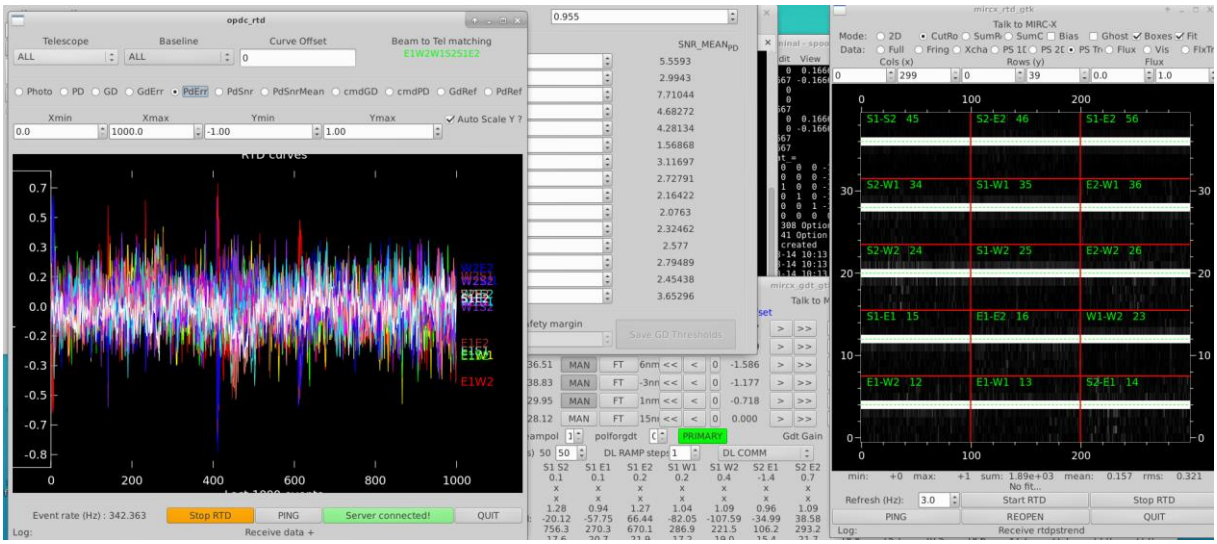
12:01 : Below the spica-ft commands , sounds like PD loop absorbs all the drifts, GD loop too slow, it doesn't see the opd drifts since they are already corrected by PD loop :


opdc_rtd
Telescope
ALL
Baseline
ALL
Curve Offset
0
Beam to Tel matching
E1W2W1S2S1E2
Photo
PD
GD
GdErr
PdErr
PdSnr
PdSnrMean
cmdGD
cmdPD
GdRef
PdRef
Xmin
0.0
Xmax
1000.0
Ymin
0.30
Ymax
8.00
Auto Scale Y ?
RTD curves
135
121
108
94
81
67
54
40
27
13
0
0
200
400
600
800
1000
W1
S1
E1
S2
Event rate (Hz) : 333.906
Stop RTD
PING
Server connected!
QUIT
Log:
Receive data -



12:05 : fiber explorer, spica-FT tracking still alive

Very low PDerr, around 200nm !:



12:08 : 5000 events recorded hd3360GD0047PD0459T.bin

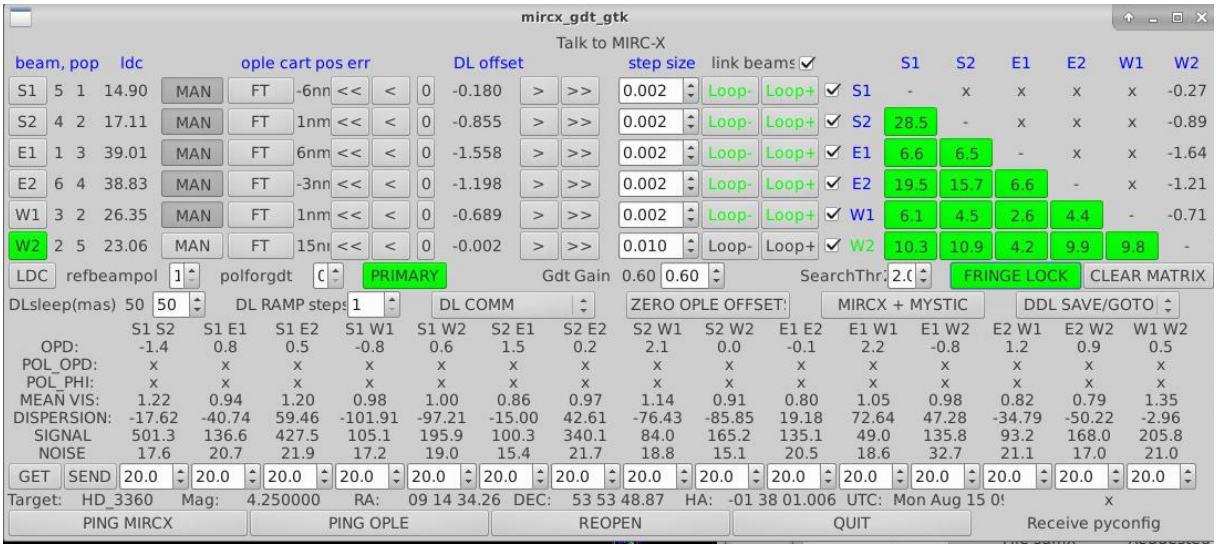
12:18 : still running, take a new dump, 10000 events

12: 25 : we lost W2, then recovered by spicaFT by its own

12: 29 : we lost S1, then E2 lost, releasing PD loop, E2 recovered

12:32 E2 lost, stop spica-FT

12:36 : fringe recovered with mircx :



12:48: spicaFT@GD0.046+PD0.506 started

12:53 : Test of fringe search : +200µm on S2, failed to recover.

12 : 57 Switch with mircx manual fringe search, DL out of delay

END OF operation log

Comments :

- Fringe search failure : probably due to a mislead in the CHARA DL operation understanding. Imagine we lost T1.

spicaFS performs a first move of +L sending n commands of L/n on T1 starting from the current position (let's call it start_pos = zero for sake of simplicity). It should actually accumulate the n steps of L/n in its fringe search commands running through [0, L/n, 2L/n, …., L] rather than sending n commands of L/n.
Same thing when starting the second slope, it should accumulate the homing command (-L) to move back to start_pos , then send the fringe search commands running through **-L +** [0, -L/n, -2L/n, …., -L] to achieve the second slew slope.
Third slope will consist in sending fringe search commands running through -**2L +** [0, L/n, 2L/n, …., L], and so on….

- spicaFT opdc server never restarted during the night, never crashed.