

2020.11.21
Frédéric, Isa (Calern) & Olli (CHARA)

initial config.

UT time - reference telescope underlined>

B1	B2	B3
E1P1	E2P2	W2P5
S2P5	S1P4	
	W1P2	

Summary of the night's acquisitions

Program	Target	Config.	#calibrated or #pts	mean r0 (cm)
V66	HD5394	S1S2	1 at HA~00:	11cm (S1)
	HD10516	S1S2	1 at HA~+03:00	11cm
V27	HD31964	S1S2	1 at HA~00:	10cm
V66	HD37202	S1S2	1 at HA~00:20:	10cm
	HD58715	S1S2	1 at HA~-01:10	12cm
V66	HD10516	E1E2	1 at HA~+05:30	6cm (E1)
	HD5394	E1E2	1 at HA~+06:30	5cm
	HD37202	E1E2	1 at HA~+02:20	9cm
	HD58715	E1E2	1 at HA~+00:45	6cm
V27	HD31964	S1S2	1 at HA~+03:50	10cm (S1)
V66	HD37202	S1S2	1 at HA~+03:45	14cm
	HD58715	S1S2	1 at HA~+02:20	13cm

Conclusion :

V27_Mourard - HR656 eps Aur S1S2x2 (at the transit & at +03:50)

V66_Wysocki - MR656:

gam Cas S1S2x1 at the transit, E1E2x1 at +06:30
 phi Per S1S2x1 at +03:00, E1E2x1 at +05:30
 bet CMi S1S2x2 at -01:10 & +02:20, E1E2x1 at +00:45
 zet Tau S1S2x2 at +00:20 & 03:45, E1E2x1 at +02:20

0:40 arrival to the VEGA control room. Olli is on site: "It's pretty cloudy so that can be a problem tonight". Judit is finishing set up. Fred needs to reboot the PC of the red detector.

01:50 " The lab is ready now. It's cloudy, only the Moon and occasionally Jupiter are visible, but not a single star" so ready to wait with somme coffee.

03:10 some bright stars visible ==> it's worth to try

03:30 50 photons on the RedDet, The TT lets go. We've tried but again, stand by.

04:20 try again. ~2000 ph but Climb issues

V66- PI Wysocki S2 S1 MR656

04:45 offset-S2 1690µm CLIMB_B1: 7.90 CLIMB_B2: 4.91
 acquisition on gam Cas - no calibrator (differential visibilities for this program).

HD5394.2020.11.21.04.47 HA~0

Climb tracking OK - Flux on Det ~2000 ph
 20blks

HD5394.2020.11.21.05.00 HA 0:20

with neutral density 0.3- Flux on Det ~700 ph
 Flux is decreasing. Climb tracking fairly average.
 at blk 17, flux low 200 ph. no more Climb tracking, but still VEGA fringes

05:30 We are on phi Per, second target of the program but flux too low (~100 ph). stand by, even if fringes are here on VEGA, but not lockable by Climb.

05:45 Full cloud cover. Olli'll stow the scopes.

08:10 clearer now. we try phi Per again.

08:30 offset-S2 1650 μ m CLIMB_B1: 7.90 CLIMB_B2: 4.91

HD10516.2020.11.21.08.30 HA+03:00

Climb tracking OK - Flux on Det ~900 ph

40blks - r0(S1)~11cm SNR >40

D_CMR656.2020.11.21.08.49

V27- PI Mourard S2 S1 HR656

08:55 offset-S2 1160 μ m CLIMB_B1: 7.57 CLIMB_B2: 4.91

HD31964.2020.11.21.09.00 HA+00:10

Climb tracking OK - Flux on Det ~250 ph

40blks r0(S1)~10cm SNR~10 at blk25

D_CHR656.2020.11.21.09.19

V66- PI Wysocki S2 S1 MR656

issues with Niro server and then some time until a new acquisition:

09:40 offset-S2 1700 μ m CLIMB_B1: 7.93 CLIMB_B2: 4.91

HD37202.2020.11.21.09.41 HA+00:20

Climb tracking OK - Flux on Det ~650ph to 900 at the end of the record.

from blk~6 to 9 flux lower - no Climb tracking

from blk~12 to 14 one beam missing

Olli: "looks like it was some kind of TT problem".

10 blks added ==> 30 blks recorded with sequence 6-14 bad

r0~10cm

10:00 offset-S2 1950 μ m CLIMB_B1: 7.93 CLIMB_B2: 4.91

HD58715.2020.11.21.10.02 HA-01:10

Climb tracking OK - Flux on Det ~2000ph

20blks r0(S1)~12cm (at blk15 SNR~30)

D_CMR656.2020.11.21.10.13

V66- PI Wysocki E1 E2 MR656

Phi Per is slewed first because of its observability (<UT11:05) lower than gam Cas

The change of config takes time (here ~30mn) but no choice regarding the programs and priorities.

10:45 offset-E1 1020 μ m CLIMB_B1: 6.08 CLIMB_B2: 4.91

HD10516.2020.11.21.10.46 HA~+5:20

Climb tracking OK - Flux on Det ~700ph

r0(E1) ~6cm

at blk10 SNR~14
40 blks

11:15 offset-E1 1230 μ m CLIMB_B1: 6.06 CLIMB_B2: 4.91

HD5394.2020.11.21.11.15 HA~+6:35

Climb tracking relatively OK regarding the low elevation - Flux on Det ~2500ph
at blk10 SNR~7.5 r0(E2)~5cm
at the end SNR~9

we slew to zet Tau

issues with M6 control (Error socket connexion), which implies to reboot. B2 would need a slight adjustment (in Y on the slit), B1 is Ok, so choice is made to record like that.

11:40 offset-E1 1570 μ m CLIMB_B1: 6.09 CLIMB_B2: 4.91

HD37202.2020.11.21.11.40 HA~+2:20

Climb tracking OK - Flux on Det ~2500ph
at blk10 SNR~44 r0(E2) ~9cm

we slew to bet CMi, hoping that the alignment is OK.

11:56 offset-E1 2320 μ m CLIMB_B1: 6.09 CLIMB_B2: 4.91

HD58715.2020.11.21.11.56 HA~+00:45

Climb tracking OK to very good at the end- Flux on Det ~2600ph
at blk10 SNR~40 r0(E2) ~6cm

D_CMR656.2020.11.21.12.06

We come back to the config S1S2. During the change, ON/OFF made on the M6 control (for sake of precaution, ICS has been closed and then re-init). After ICS relaunch, it seems OK again. Bravo Fred!
At the same time, one of the niro spots had drifted and got lost, but Olli got it without going to the lab. So we're lucky!

V27- PI Mourard S2 S1 HR656

12:40 offset-S2 1300 μ m CLIMB_B1: 7.47 CLIMB_B2: 4.91

HD31964.2020.11.21.12.40 HA+03:50

Climb tracking OK, much better than at UT9 - Flux on Det ~300 ph
40blks r0(S1)~10cm SNR~25 at blk15

D_CHR656.2020.11.21.13.00

V66- PI Wysocki S2 S1 MR656

13:08 offset-S2 1600 μ m CLIMB_B1: 7.85 CLIMB_B2: 4.91

HD37202.2020.11.21.13.08 HA~+03:45

Climb tracking OK very stable - Flux on Det ~1600ph r0(S1) ~14cm
at blk20 SNR~23
40 blks

13:36 offset-S2 1960 μ m

CLIMB_B1: 7.90

CLIMB_B2: 4.91

HD58715.2020.11.21.13.36 HA~+02:20

Climb tracking OK very stable - Flux on Det ~2200ph r0(S1)~13cm
at blk10 SNR~45
40 blks

D_CMR656.2020.11.21.13.58

seeing evolution during the night on S1:

