Log CHARA/VEGA 2020-06-16

Observers: Fred, Orlagh (VEGA), Chris (Mt Wilson)

Summary: Many issues with the VEGA camera. There were often pauses during recording. Sometimes we lost control of VEGA. We eventually lost all control and spent the rest of the night seeing if we could repair/replace a disk (Well Chris and Fred did). Conclusion: we will use the blue camera tomorrow, which has been tested by Fred.

• V01 : 1 X S1W1 (bof!)

• V70: 0.5 X S1S2

• V70: 1 X S1S2 Densite 0.3

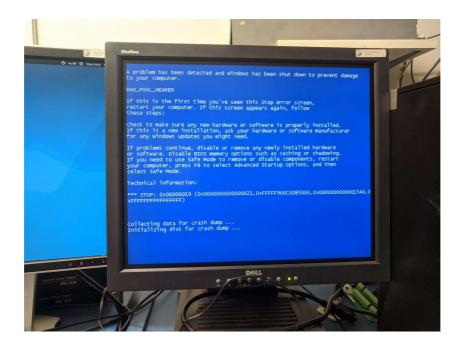
• 2 spectral calibration <u>MR@720nm</u>, <u>MR@656nm</u>

Problems with beam on Niro have been fixed.

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UTC TIME:

03:00 Set-up. Chris had to reboot VEGA red detector computer. Connection problems here – very slow at the beginning. VEGA is ready at 03.40. Ready to start observing at 03:50.



S1 Pop 4 B2 – W1 Pop 4 B3 (B1-ref) V01 (R. Ligi) – HD133112 (HR5599)

Target = HD133112

Cal1 = HD132953

Cal2 = HD154445

Cal3 = HD124988

Align = **HD132052** (low V2 so use different star for check)

Check = HD129956

04:00: aligning and check

05:00: Recording 30 blocks on CAL1 HD132953. Climb fringes good, but we do not see fringes on VEGA. **HD132953.2020.07.16.05.08** S1:-2420 micron, Climb-B2: 4.25 mm.

It seems that the camera gets stuck sometimes at the end of every Nth block, where N is 1,2, or more.

Restart server and electronics. Connection or PC still too slow.

06:00: Recording 40 blocks on target HD133112: **HD133112.2020.07.16.05.47** S1: -2130 micron. Stopped at **block 35**. Lost fringes on CLIMB, had to unlock the star to get them back. Saw fringes at -80 micron.

The camera is still posing problems, but not to the same extent it seems. We think it may be that the access to the disk might be slow (?).

05:00: Recording 30 blocks on CAL2 HD154445. Climb fringes good, but we do not see fringes on VEGA. **HD154445.2020.07.16.06.22** S1:-2460 micron, Climb-B2: 4.20 mm. We see fringes on VEGA.

D CMR720.2020.07.16.06.38. Spectral calibration @ 720 nm

S1 Pop 4 B1 – S2 Pop 5 B2 (B2-ref) V70 (R. Klement) – HD193237 (P Cygni)

Target = HD193237 (P Cygni)

Cal1 = HD191243

Cal2 = HD197392

Align = Target

Check = Target

06:45: Slew to P Cygni for check and align. Recording. **HD193237.2020.07.16.06.55** S2:-1250 micron; Climb B1 7.91 mm B2 4.91 mm. 20 blocks

07:10 CAL1 HD191243. **HD191243.2020.07.16.07.14** S2: -1140 micron. 20 blocks.

07:20: Target **HD193237.2020.07.16.07.34** S2:-1080 micron. 20 blocks.

07:45: Target **HD193237.2020.07.16.07.48** S2:-1000 micron, Density = 0.3. 20 blocks.

Problems again with camera. In the end we asked Chris to go back to lab and restart VEGA. He powered it off directly, but the shutdown window took a long time to come up. Everything is really slow.

Chris did a disk repair, but this did not solve the problem.

Conclusions: we will use blue camera tomorrow and will try to make a copy of the disk to replace the red camera disk. Fred has tested the blue cam and this looks good.

D_CMR656.2020.07.16.11.26. Spectral calibration @ 656 nm medium res. (redcam)

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