LBT Observing Log for 2023 Nov 7/8 (MST)

C19 Observer: Alex Becker
Partner Observer(s): Brian Healy
Telescope Operator: Steve Allanson

Plan:

MODS: ND_foaqr, standard star
PEPSI: OSU_BHBinaries and FGKHosts
If good seeing towards the end of night, back to MODS for ND_bluegals?

Observed and completed:

Summary:

Unable to open until ~09:30 due to wind. Once open, we completed OSU_BHBinaries targets w/PEPSI that were not in the wind direction, followed by OSU_monitor targets with LBC after deciding seeing was not good enough for MODS.

PEPSI log: https://drive.google.com/file/d/1e3_YMu18NuKOfFUaxWRI7GH6OUehzK4w

http://people.lbto.org/~cveillet/Chris/lbcIQ_500nm_Zenith/lbcIQ500z_20231108.png

Issues:

LBC issue from last night (IT 9001) has been resolved.

name resolver for alpha.pepsi.lbto.org not working if outside the mountain network. It works from obs1, but not from rm507-1 or when connected to the tucson VPN

Date on LBCr data computer was wrong. 2000-11-08 with MST time. Steve fixed it by setting the correct date.

Overview (times are given in UT):

23:45 Winds are above the limit (gusts up to 29m/s) and are probably an issue for the entire night. Particle counts are at the warning threshold.

23:50 modsSimSnap bino
all good

00:00 Steve is doing his test preset.

Calibs

00:45 LBC 10 bias bino checkout
00:48 MODS bias 3k
00:53 LBC 25 bias bino
00:56 MODS u,g,r,i imaging flats
u-flats are totally saturated (QTH2 was used instead of VFlat). Counts for g-flats are also way too high.

Ignore mods1b 0008-0013 and mods2b 0008-0015

I will create new scripts from the OT template

01:12 **MODS u,g,r,i,z imaging flats: take 2**
01:45 MODS bias 8k
02:05 MODS DG 0.8” slit flat
02:35 MODS DG comparison lamps

… high winds …

09:15 **Reconfig to PEPSI**

09:26 We can probably open soon. The winds have died down a bit

PEPSI

Gaia DR3 9849421 = J0147

98494217256437632 J0147+2303 01:47:55.90 23:03:39.3 12.3 F5V D300/CD3/CD5 100 Low 1 50 -4:15 -- 4:45 0.082 -3.389

09:43 Preset
09:45 Starting exposure

Gaia DR3 212658 = J0254+0953

21265860551494016 J0254+0953 02:54:35.98 09:53:33.9 12.5 F9V D300/CD3/CD5 200 Low 1 50 -4:15 -- 3:45 18.116 2.121

09:47 Preset
Too far into the wind - **had to abort**

Gaia DR3 3360244 = J0707+1647

3360244389321377664 J0707+1647 07:07:10.43 16:47:23.7 12.6 F5V D300/CD3/CD5 200 Low 1 50 -4:15 -- 1:30 0.591 -5.818

02:48 Preset
We will need another pointing check
09:54 Preset
09:56 Starting science integration

Gaia DR3 3101322 = J0701-0534

3101322118388253568 J0701-0534 07:01:34.74 -05:34:56.8 12.0 F2V D300/CD3/CD5 100 Low 1 50 -3:15 -- 1:30 -3.519 -2.477

09:59 Preset
We missed the guide star on the right side.
10:02 Resending preset
10:03 Starting science integration

Gaia DR3 31057 = J0643-0307

3105729712605009408 J0643-0307 06:43:32.60 -03:07:32.1 12.7 F2V D300/CD3/CD5 200 Low 1 50 -3:15 -- 1:45 -1.624 -1.668

10:05 Preset
10:07 Starting science integration

Gaia DR3 3104585 = J0628-0414

3104585468895756928 J0628-0414 06:28:32.00 -04:14:15.9 11.7 F8V D300/CD3/CD5 100 Low 1 50 -3:00 -- 2:00 -5.29 0.553

10:10 Preset
10:12 Starting science integration

Going further to earlier RAs would point us into the wind, except if they are in the north

Gaia DR3 19018 = J0545+3931

190187169120598912 J0545+3931 05:45:18.44 39:31:08.2 12.6 F3V D300/CD3/CD5 200 Low 1 50 -5:00 -- 2:45 -3.674 -11.572

10:14 Preset
We will need another pointing check
10:18 Preset
10:20 Starting science integration

Gaia DR3 207293 = J0517+4256

207293229287136000 J0517+4256 05:17:00.79 42:56:45.6 12.3 F0V D300/CD3/CD5 100 Low 1 50 -4:45 -- 3:15 -2.617 -5.687

10:24 Preset
10:26 Starting science integration

Gaia DR3 2861828 = J0539+6205

286182883640274560 J0539+6205 05:39:16.94 62:05:30.0 12.7 F0V D300/CD3/CD5 200 Low 1 50 -6:00 -- 3:00 0.444 1.362

10:29 Preset
10:31 Starting science integration

10:35 **Reconfig LBC**

LBC

N2403

10:58 Preset to focus field
10:59 dohybrid
LBCR file not found … time and date on LBCr Sci Comp wrong
11:07 dohybrid
11:15 lbcrangebal
11:18 Starting science script
IQ on first exp ~0.9”
PSF on the last exposure of LBCB doesn’t look very round. IQ ~1.2

M81

11:28 Preset
11:29 dofpia
11:36 lbcrangebal
11:40 Starting science script
LBCB still hasn’t the nicest PSF, but IQ still good ~0.9

M82

Target is close by and it has only been 15 minutes since last collimation. We just go for it

11:51 Preset
PSF on LBCB still pretty ugly. IQ ~1.4
LBCR IQ ~1.1

As we are out of targets and the image quality on LBCB was fairly bad, we will recollimate and redo the exposures.

12:04 dofpia
12:08 Wind is picking up again….
12:11 Preset to science target

Finally some nice PSF on the blue side

12:29 Taking skyflats
V+R, PA 0+180

12:45 wiki is down again. So, I am not entirely sure when we last took skyflats for the other filters, but I think at some point in October

12:57 B+r, PA 180+0

13:13 We are done for tonight!

Turning LBCs off, putting MODS to sleep