

LBT Observing Log for 2023 Dec 8/9 (MST)

C19 Observer: Justin Rupert, Andrew Cardwell

Partner Observer(s): Mark Whittle (& Yifan Zhou for first few hours), both UVa.

Telescope Operator: Steve Allanson

[PEPSI Log](#)

Plan:

MODS for most of the night (May reconfigure to LUCI for a target in the middle of the night)

Feige 110, ND_SNR slit 4; ND_SNR_slit5; ND_M33 hm33-C; UVa_SN2023mut;

UVa_SN2023xgo; UM_XMD_0807; OSU_SCAT; ND_bluegals_0912...

At UT 4:00

Poor seeing – switch to PEPSI & OSU_BHBinaries:

Observed and completed:

MODS:

Feige 110,

ND_SNR slit 4;

ND_SNR_slit5.

At UT 4:00 the seeing steadily grew and passed the allowable limits for most of the MODS (and LUCI, and LBC) programs. So we changed to PEPSI. The only available program was OSU_BHBinaries. We took targets directly from the OSURC queue, constrained by the wind to be only in the west.

PEPSI: BHBinaries:

J0215+5228 done

J0215+5931 done

J0205+5011 done

J0238+6106 done

J0222+6124 done

J0252+4835 done

J0412+4627 done

J0445+3311 done

J0517+4256 done

J0519+4150 done

J0518+1737 done

J0613+2337 done

J0617+2137 done

J0625+4110 done
J0659+1934 done
J0704+7441 done
J0732+2339 done
J0737+2034 done
J0756+3719 done
J0758+2601 done
J0759+5039 done
J0801+3209 done
J0805+3159 done
J0808+3453 done
J0812+3337 done
J0816+2441 done
J0824+1128 done
J0840+1128 done
J0842+0149 done
J0858+5050 done
UT 9:50 closed due to high winds.

Summary:

Issues:

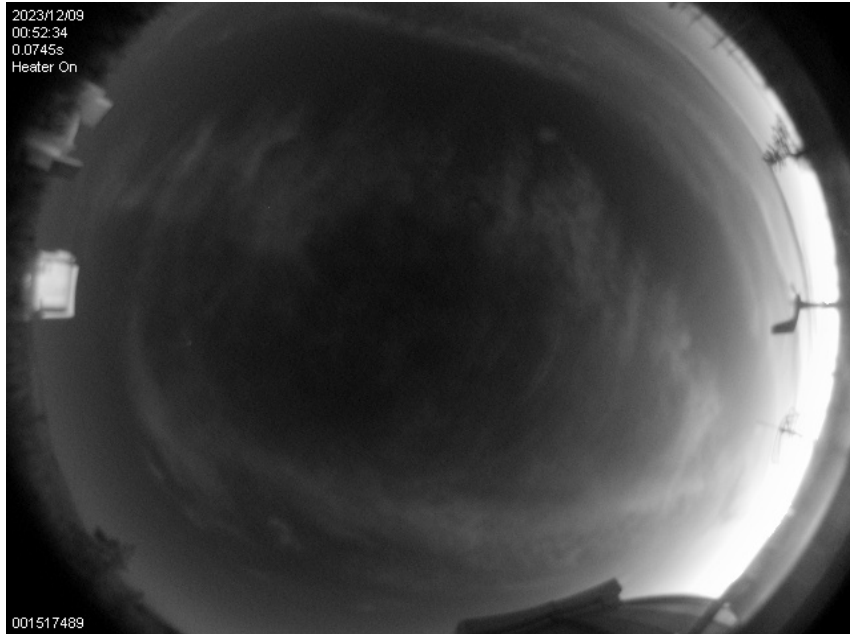
Overview (times are given in UT):

23:29 Running SimSnap on MODS

23:53 Taking a MODS bias sequence.

00:13 Opening the enclosure.

00:19 Sunset.



SpecPhot: Feige 110

00:53 Preset to Feige 110. We have some cloud, the satellite animation shows heavier cloud on the way. Guiders report around 1.3".

1:00 Received the following error when running modsAlign:

Traceback (most recent call last):

```
File "/lbt/lbto/mods/bin/modsAlign", line 2619, in <module>
    startDS9(mods1Disp,mods1Port)
```

```
File "/lbt/lbto/mods/bin/modsAlign", line 2163, in startDS9
    time.sleep(0.1)
```

NameError: name 'time' is not defined

Tried closing and reopening mods2Disp, logging into lbto and running it, logging into obs2 and running it, logging onto robs and running it, and running an align on an acquisition image from the previous night (which we did successfully at that time), all to no avail.

01:11 12 degree twilight.

01:21 It seems that someone edited modsAlign today...

01:24 Glen has resolved the issue. Moving forward with acquisition.

01:28 Starting science. Mods[1|2]b.20231209.0018-0020, mods[1|2]r.20231209.0020-0022.

01:37 Guiders report 1.6". In general the seeing appears to be poor, and highly variable on short timescales.

01:41 18 degree twilight.

ND_snr_slit 5

01:42 Preset to slit5.acq.

01:49 A pointing check was retired. Sending the preset again.

02:01 Reacquiring. Sent offset to wrong MODS

02:23 Starting science. Seeing ~1.6 on guiders

02:21 DIMM reports 2".

02:52 Seeing ~1.4 in the guider.

ND_snr_slit 4

03:02 Preset

03:18 Starting science. Seeing ~1.6 on guiders

04:00 Seeing has degraded to ~1.8 on the guiders. Will reconfigure to PEPSI after this target.

04:15 **Reconfigure to PEPSI**

OSU BHBinaries

04:39 Preset to J0215+5228/455180771469033856 (Gaia)

04:47 Preset to J0215+5931/507297180254126720

04:56 Preset to J0205+5011/358483499811719040

05:09 Preset to J0238+6106/465648435707765888. DIMM and guiders report 2" or worse. Exposure times increased to meet S/N requirements.

05:22 Preset to J0222+6124/513522580727032576

05:33 Preset to J0252+4835/437858962205844864

05:42 Doubled exposure for this object. Poor S/N.

05:50 Preset to J0219+5740/458673511897852544

06:00 Preset

06:03 Winds are too high here, finding a new target.

06:05 Preset to J0613+2337/3425254977116647040

06:14 Preset to J0617+2137/3376686834099301504

06:20 Preset to J0412+4627/233959173701350400

06:28 Preset to J0445+3311/161496439688382336

06:31 Pointing check.

06:34 Resent preset.

06:49 Preset to J0517+4256/207293229287136000

06:57 S/N too low in blue. Doubling exposure here.

07:05 Preset to J0519+4150/195112255361575552

07:16 Preset to J0518+1737/3394539634461265792

07:28 Preset to J0625+4110/958424430301397632 DIMM reading ~1.5

07:36 Preset to J0659+1934/3365140583320392704

07:45 Preset to J0704+7441/1115266259309309312

07:48 Pointing check.

07:49 Resending preset

07:55 Preset to J0732+2339/866647095218324224

08:07 Doubling exposure time.

08:15 Preset to J0737+2034/673032958811648384

08:22 Preset to J0756+3719/918939936954494208

08:24 Pointing check

8:27 Resending preset

08:36 Preset to J0758+2601/682109633457430016

08:43 Preset to J0759+5039/935731163137564416

08:51 Preset to J0801+3209/878156366324193408

08:59 Preset to J0805+3159/878103662782466944

09:05 Preset to J0808+3453/905866674980249344

09:12 Preset to J0812+3337/902691800796112768

09:18 Preset to J0816+2441/679297117073493760

09:25 Preset to J0824+1128/601184959177696896

09:32 Preset to J0840+1128/601887753265466496

09:38 Preset to J0842+0149/3078858924024876032

09:44 Preset to J0858+5050/1016112094557412224

09:48 Pointing check (many stars in field)

09:50 Resending preset

09:51 **Closing for high winds.**

10:43 Running MODS cals.

12:16 Running Pespi cals

12:42 18 degree twilight. **There is no sign of the wind dropping, giving up on the night.**

13:12 12 degree twilight.

14:04 Sunrise.