

LBT Observing Log for 2024 06 30 UT

Observers: Andrew Cardwell

Partner Observer: Marshall Johnson (remote)

Telescope Operator: Steve Allanson.

[PEPSI Log](#)

Plan:

Start w/ PEPSI because of intermittent clouds and predicted incoming inclement weather:

OSU_BHBinaries/2MJ1250+6933 (done), then other BHBinaries Band2/Band3 targets:

2MJ2126+8205 done
2MJ1618+4204 done
2MJ1633+2744 done
2MJ1627+2443 done
2MJ1754+4135 done
2MJ1759+2647 done
2MJ1722+0918 done
2MJ1352+1818 done

Not planning beyond that for now due to the likelihood of being shut down by incoming weather.

NOTE:

- We have the flat on DX, the DX adsec is unavailable.

Summary:

We got a little under 2 hours of PEPSI data at the beginning of night night, which was more than expected given the conditions! The remainder of the night was lost to monsoon conditions.

Issues:

Weather:

Monsoon conditions, with a brief break over the first ~2 hours of the night.

Overview (times are given in UT):

02:00 MODS are awake, simSnap running. It is currently clear enough to open.

02:05 Taking MODS biases. Enclosure is dark.

02:33 Reconfiguring to PEPsi. We have clouds forming overhead and a large system coming in from the east.

02:37 **Sunset.**

02:49 Opening the enclosure.

03:03 Preset to 2MASSJ12503035+6933196. Sky is still pretty bright, but it's not clear how much time we will get on-sky. Taking the exposure, we can repeat it if necessary.

03:10 Guiding is struggling, particularly on SX. Likely due to the high background. We will resend the preset and repeat it.

03:12 Cloud, we can no longer see our target to guide on it. Waiting

03:19 We have caught a gap in the cloud, starting science.

03:23 Exposures cut short, we keep losing our target due to clouds.

03:29 Giving up and closing, after several attempts.

03:35 **12 degree twilight.**

03:52 Opening again.

03:58 Preset to **2MASSJ12503035+6933196.**

03:59 Starting science.

04:06 Preset to **2MASSJ21262615+8205132.**

04:09 Starting science.

04:13 **18 degree twilight.**

04:15 Preset to **2MASSJ16180344+4204172.**

04:24 Preset to **2MASSJ16335840+2744396**.

04:27 Starting science.

04:34 Preset to **2MASSJ16273707+2443483**. S/N in the last target was a little low. Increasing the exp time from 5min to 7min.

04:44 Preset to **2MASSJ17543102+4135020**. Exp time increased from 3:20 to 5:30.

04:47 Starting science.

04:54 Preset to **2MASSJ17594485+2647517**. Increasing exp time from 6:40 to 10 mins.

04:56 Starting science.

05:07 Preset to **2MASSJ20303557+4048087**.

05:09 Multiple targets in field, and no target captured on DX. Pointing check.

05:11 Returning to target.

05:13 Cloud is thickening too quickly in this location. Trying to find a target in the west.

05:15 Preset to **2MASSJ17220213+0918116**. Exp time doubled.

05:19 Starting science.

05:30 Preset to 2MASSJ13525697+1818229. Clouds are coming in fast, this will be our last target.

05:33 Starting science.

05:45 End of exposure, closing up.

06:35 **We have rain at the telescope.**

09:05 The rain continues, the building is soaked. We have no chance of opening again in the remaining time tonight. Taking PEPSI calibrations.

09:08 Putting MODS to sleep, safing LUCI.

10:32 **18 degree twilight.**

11:10 **12 degree twilight.**

12:08 **Sunrise.**