LBT Observing Log for 2024 09 19 UT

Observers: Andrew Cardwell
Partner Observer: Marshall Johnson (remote)
Telescope Operator: Josh Williams.

PEPSI Log

Plan:

PEPSI DX all night!

- [x] ~~PEPSI checkout/standard star~~
- [x] ~~OSU_LiDwarf/2MJ1910+4944~~
- [x] ~~OSU_LiDwarf/2MJ1938+4708~~
- [x] ~~OSU_BHBinaries/2MJ1909+4025~~
- [ ] OSU_BHBinaries/2MJ1931+1952
- [ ] OSU_BHBinaries/2MJ2020+2758
- [ ] OSU_BHBinaries/2MJ2156+2510
- [ ] TOI-1518 starting around 03:50
- [ ] OSU_LiDwarf/2MJ0413+2305

NOTE:

- **We have the flat on DX, the SX adsec is unavailable.**
- **The humidity sensor at the telescope is broken. Using sensors from VATT & SMT.**

Summary:

We had to close due to cloud soon after 18 degree twilight. We got a few PEPSI targets before then, but with increasing cloud cover.

Issues:

Weather:

Cloudy and high humidity from about 18 degree twilight onwards.

Overview (times are given in UT):

01:23 Opening.

01:27 Sunset.

01:50 We are pointed and collimated. Preset to Standard, HR7950.

02:13 Preset to OSU_LiDwarf/2MJ1910+4944.

02:15 12 degree twilight.

02:16 Pointing check required, no GS found.

02:20 Resending the science preset.

02:21 Starting science.

02:22 Preset to OSU_LiDwarf/2MJ1938+4708.

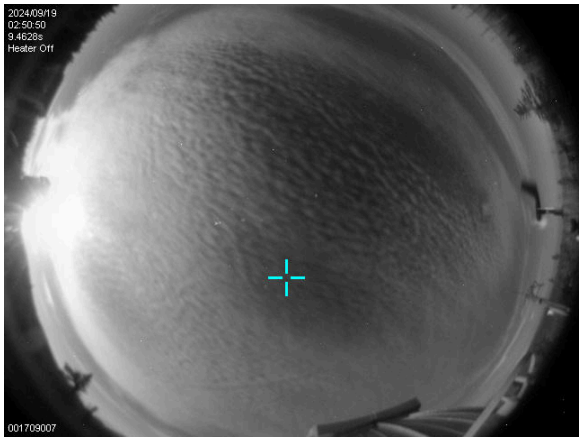
02:24 Starting science.

02:28 Preset to OSU_BHBinaries/2MJ1909+4025.

02:35 Thin cloud is moving in, I have doubled the exp time on this target.

02:45 18 degree twilight. Preset to OSU_BHBinaries/2MJ1931+1952. On the last target doubling the exposure time still brought us in just short of the S/N requirement. Increasing exp time by a factor of 2.5.

02:51 Starting science. Cloud is thickening rapidly, and the humidity is slowly creeping up.



03:05 Reading out the target early and closing up. The cloud has thickened fast, we were losing our target.

05:00 The clouds have persisted, and the humidity continues to creep up. The value from the SMT is currently 82.3%.

10:08 Cloud has persisted, 96.4% humidity at the SMT.

10:54 There is clear condensation on the allsky camera, and no sign of any improvement in the conditions. **We are calling the night**.

11:43 18 degree twilight.

12:12 12 degree twilight.

13:00 Sunrise.