LBT Observing Log for 2024 09 21 UT

Observers: Andrew Cardwell

Partner Observer: Mark Whittle & Yifan Zhou (remote)

Telescope Operator: Josh Williams.

PEPSI Log

Plan:

PEPSI DX, likely all night.
✓ ND_RPED9
☑ ND_RPED5 (about half completed before closed due to humidity)
☐ OSU_BHB_J1931
☐ UVa_TIC_4707
☐ OSU_BHB_J2359
☐ OSU_BHB_J2339
☐ OSU_LiDwarf0106
☐ OSU_LiDwarf0108
☐ OSU_LiDwarf0123
□ OSU LiDwarf0124

NOTE:

- We have the flat on DX, the SX adsec is unavailable.
- The humidity sensor at the telescope is working again.

Summary:

After observing several PEPSI targets the humidity came up and remained so for the rest of the night.

Issues:

Weather:

After the first few hours of the night we had high humidity, and later 100% cloud cover.

(times are given in UT):

01:24 Sunset. Opening the enclosure.

02:01 Preset to ND_RPED9.

02:03 Starting science.

02:13 12 degree twilight.

02:46 The first set of exposures had S/N of 62 in CD1, and 117 in CD3. Exposure times were doubled to compensate for monocular operation. DIMM reports 1.4*. Humidity is 70%, a 20 % increase since sunset.

02:42 18 degree twilight.

03:20 Preset to ND_RPED5.

03:25 There are several targets in the field, performing a pointing correction nearby.

03:27 Returning to the science target.

03:28 Starting science.

03:43 DIMM reports 1.3". 82.3% humidity,

04:10 DIMM reports 1.6", humidity is 89.9%.

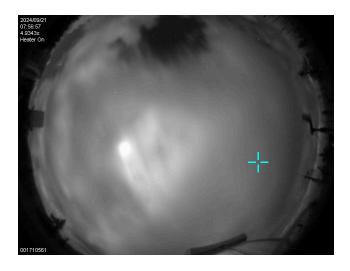
04:30 Closing up due to high humidity. 26 of 35 mins observed in the CD 1 / CD5 setup. CD1 / CD4 was completed, CD1/CD6 is still pending.

04:32 95.5% humidity and rising.

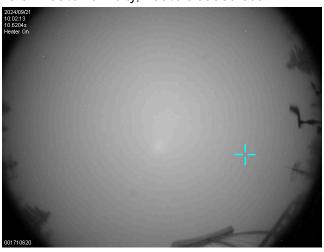
05:59 97.4% humidity.

06:47 Clouds have arrived.

07:55 100% humidity, thick clouds.



10:04 100% humidity, 100% clouded out.



10:24 Taking PEPSI cals.

11:44 18 degree twilight.

12:13 12 degree twilight.

13:02 Sunrise.