# LBT Observing Log for 2024 05 20 UT

Observers: Andrew Cardwell

Partner Observer: Mark Whittle (UVa), Yifan Zhou (UVa)

Telescope Operator: Steve Allanson

**PEPSI** Log

### Plan:

ND\_PlanetHosts (HD110067) for 3.83 hours (23 x 10 min)...

UM\_TCrB third visit for this run, single CD pair, plus both calibrators.

OSU\_BHB medium and low priorities with some second & third epochs. .

## Summary:

ND\_PlanetHosts (HD110067) for 3.83 hours (23 x 10 min)...

UM\_TCrB third visit for this run, single CD pair. Plus both calibrators.

OSU\_BHB medium and low priorities ("new" means new batch uploaded today; "old" means taken from original program/readme).

J15562 (hi); (third epoch) done

J19095 (hi); (third epoch) done

J16330 (med); done

J16010 (low-old); done

J17512 (low-old); done

J19054 (low-old) done

J18131 (low-new) done

J18513 (low-new) done

J18372 (low-new) done

J18325 (low-new) done

J21080 (med) done

J22003 (med) done

J22014 (high) (second epoch) done

J21262 (med) done

J20313 (low-new) done

Ended with these (in the west, away from the rising sun).

J16183 (low-new) done J16273 (low-new) done J17222 (low-new) done J17405 (low-new) twilight? done J17411 (low-new) twilight? done

### Issues:

### Weather:

Clear all night, seeing 0.6 - 1.2. Bright moon.

# Overview (times are given in UT):

02:12 Enclosure open.

02:19 Sunset.

02:36 Preset to ND\_PlanetHosts (HD 110067). Guiders report 0.5". We are starting very early, but have added additional exposures. If the twilight ones are bad they can be junked.

02:39 Starting science.

S/N 348 red; 204 blue. Many absorption lines are visible.

03:14 4th 10 min exposure; 0.7" on the guiders.

23 exposures of 10 minutes, clear with seeing 0.5 - 0.7 arcsec. SNR ~200 blue 300 red.

07:04 Pointing Check for UM\_TCrB

07:08 Preset to UM\_TCrB

07:10 Starting Science: D200; CD3+5 for 20 min. Seeing 0.75 arcsec.

03:15 12 degree twilight.

03:34 ND2 filter added to the guider as we were reaching minimum exposure time there. Guiders report 0.5".

#### 03:50 18 degree twilight.

- 04:33 Observations continue smoothly. Seeing is excellent, about 0.5" from the guiders.
- 05:24 The DIMM is now running and reports 0.75", guiders report 0.5".
- 06:14 DIMM reports 1", guiders 0.6".
- 07:03 Preset to a pointing star near TCrb.
- 07:07 Preset to UM\_TCrb. CD3+CD5. (55 deg moon distance)
- 07:10 Starting science.
- 07:31 Preset to UM\_HR 5501. CD3+CD5. (24 deg moon distance).
- 07:32 No GS caught on DX. Correcting.
- 07:34 Starting science.
- 07:44 Preset to UM\_HD 134807. (78 deg moon distance)
- 07:47 Starting science.
- 07:56 Preset to OSU\_BHB J15562. High-priority, third epoch this run.
- 08:01 Starting science.
- 08:05 Preset to OSU\_BHB J19095. High-priority, third epoch this run.
- 08:08 Starting science.
- 08:15 Preset to OSU\_BHB J16330. Medium priority.
- 08:19 Starting science.
- 08:31 Preset to OSU\_BHB J16010. Low priority. (42 deg moon distance).
- 08:33 Starting science.
- 08:39 Guiders report 1.2".
- 08:42 Preset to OSU\_BHB J17512.

- 08:44 Pointing check required.
- 08:47 Preset back to science target.
- 08:48 Starting science.
- 09:01 Preset to OSU\_BHB J19054. Winds are starting to pick up. If this continues we may have to start avoiding the SW.
- 09:03 Starting science.
- 09:11 Preset to OSU\_BHB J18131.
- 09:14 Starting science.
- 09:18 Preset to OSU\_BHB J18513.
- 09:21 Starting science.
- 09:25 Preset to OSU\_BHB J18372.
- 09:27 Starting science.
- 09:33 Preset to OSU\_BHB J18325.
- 09:37 Starting science.
- 09:56 Preset to OSU\_BHB J21080 (medium)
- 09:59 Starting science.
- 10:15 Preset to OSU\_BHB J22003 (medium).
- 10:29 Preset to OSU\_BHB J22014 (high; second epoch this run).
- 10:31 Starting science.
- 10:35 Preset to OSU\_BHB J21262 (med).
- 10:38 Starting science. DIMM reports 1". Target is a binary, it is clearly visible on the guider.
- 10:42 18 degree twilight.
- 10:43 Preset to J20313.

- 10:46 Pointing check required, no GS found on DX.
- 10:50 Guider camera issue, Steve is restarting it.
- 10:54 Preset to science target, J20313.
- 10:56 Starting science.
- 11:01 Preset to OSU\_BHB J16180. Sticking with targets in the west from here to the end of the night.
- 11:05 Starting science.
- 11:10 Preset to OSU\_BHB J16273.
- 11:11 GS not found on DX, pointing check required.
- 11:12 Resending preset.
- 11:13 Starting science.
- 11:17 **12 degree twilight**.
- 11:20 Preset to OSU\_BHB J17220.
- 11:21 Starting science.
- 11:25 Preset to OSU\_BHB J17405.
- 11:27 Starting science.
- 11:33 Preset to OSU\_BHB J17411.
- 11:35 Starting science.
- 11:39 End of exposure, end of science. Closing up.
- 11:40 Starting PEPSI calibrations.
- 12:13 **Sunrise**.



