LBT Observing Log for 2023 Nov 1/2

C19 Observer: Andrew Cardwell Partner Observer(s): Rick Pogge (OSU, remote) Telescope Operator: Josh Williams

PEPSI Log

Plan:

We will observe these targets with PEPSI, in order from twilight to dawn ND_ChemPec J2242 OSU_BHBinaries J2017 UVa_Multistar TIC322727163 ND_ChemPec J0010 OSU_FGKHosts NLTT1011 and 54 Psc UVa_Multistar TIC427092089, TIC375325607, TIC283940788, TIC307119043, TIC470710327, TIC389836747 UM_HSTCAL G191B2b, GD71 OSU_BHBinaries J0521, J0656, J0628, J0611, J0720, J0602, J0741, J0830 OSU_FGKHosts HD253662, LSPMJ0632 UVa_Multistar TIC78568780, TIC438226195, TIC336882813,TIC200094011,TIC266771301, TIC367448265, TIC348651800

Observed and completed:

ND_ChemPec J2242, J0010 OSU_FGKHosts NLTT1011, 54 PSc, HD253662, LSPMJ0632 UVa_Multistar TIC322727163, TIC427092089, TIC375325607, TIC283940788, TIC307119043, TIC470710327, TIC389836747, TIC785687780,TIC438226195, TIC336882813, TIC200094011, TIC266771301, TIC367448265, TIC348651800 OSU_BHBinaries J2017, J0521, J0656, J0628, J0611, J0720, J0602, J0741, J0830 UM_HSTCAL G191B2b, GD71

Summary:

Ran through our bright-time PEPSI program, only a couple of targets were badly placed (too close to the Moon) and not observed.

Issues:

DX side pointing needed frequent resetting during the night. Mountain staff will file an IT.

Overview (times are given in UT):

22:30 Daily telescope planning meeting / Handover.

00:25 We have thin clouds (at least!) over the whole sky.



00:35 Sunset.

00:3 Opening up.

00:49 Pointing corrections and initial collimation.

00:51 Spiraling for the target on DX.

01:09 Preset to ND_ChemPec J2242.

01:12 Starting science. Some thin clouds persist, the satellite animation suggests it will get worse in a few hours. Guiders report 0.7".

01:24 12 degree twilight.

01:53 18 degree twilight.

02:01 Good S/N in the initial exposures, 105 in blue and 144 in red. Guiders report 0.5".

02:13 Preset to OSU_BHBinaries J2017. Long slew in Az.

02:17 Starting science.

02:20 Preset to UVa_Multistar TIC322727163.

02:23 Starting science.

02:26 Preset to ND_ChemPec J0010. Long slew in Az.

02:30 Starting science. Guiders report 0.5".

03:23 Moonrise, lighting up thin clouds around the sky

03:33 We are getting more hazy clouds, which explains the slight drop in S/N between the first and second exposures. Guiders report 0.5".

04:03 Preset to OSU_FGKHosts NLTT1011.

04:06 Starting science.

04:42 Preset to OSU_FGKHosts 54 Psc.

04:45 Pointing check required on DX.

04:50 Returning to science target.

04:54 Repeating science target with a 30s exp time. S/N was below requirements in the initial 4s exposure.

04:58 Preset to UVa_Multistar TIC427092089. Still thin clouds around.

05:02 GS not found on DX, Josh is making a pointing correction.

05:05 Returning to the science target.

05:08 We hit collimation limits on SX. Josh is working on it.

05:11 Problem resolved for now. Starting science.

05:16 Preset to UVa_Multistar TIC375325607.

05:19 Starting science.

05:25 Preset to UVa_Multistar TIC283940788.

05:27 Once again we missed the GS on DX. Josh is correcting pointing.

05:31 Sending the preset again.

05:33 Starting science.

05:37 Preset to UVa_Multistar TIC307119043.

05:39 Starting science.

05:41 Preset to UVa_Multistar TIC470710327.

05:44 Starting science.

05:46 Preset to UVa_Multistar TIC389836747.

05:48 Starting science.

05:50 Preset to UM_HSTCAL G191B2B.

05:53 As we will be on this target for an hour we will err on the side of caution and make a pointing correction nearby. There are two bright stars in the field.

05:56 Returning to science target.

05:57 Starting science.

06:52 No change in clouds, seeing is around 0.6".

07:00 Preset to **UM_HSTCAL GD71**. This will be a very long slew, about 300 degrees.

07:06 Starting science.

07:48 We did not meet required / expected S/N for CD2 in the CD 2 / CD 5 configuration. S/N is fine, I misread the readme file.

08:11 Preset to OSU_BHBinaries J0521.

08:18 Starting science. All users were disconnected from the polycom.

08:21 Aborting and restarting. The wrong fiber was in use.

08:34 Preset to OSU_BHBinaries J0656.

08:36 Starting science.

08:44 Preset to OSU_BHBinaries J0628.

08:46 Starting science.

08:55 Preset to OSU_BHBinaries J0611.

08:56 No GS on DX. Josh is performing a pointing correction.

08:59 Returning to the science target.

09:04 Starting science.

09:13 Preset to OSU_BHBinaries J0720.

09:16 Starting science.

09:24 Preset to OSU_BHBinaries J0602.

09:26 No GS found on either side. Josh is making a pointing correction.

09:29 Returning to the science target.

09:31 Starting science.

09:43 Preset to OSU_BHBinaries J0741.

09:44 GS not found on DX. Josh is correcting the pointing.

09:48 Returning to the science target.

09:50 Starting science.

09:54 Preset to OSU_BHBinaries J0830.

09:56 Starting science.

10:12 Preset to **FGKHosts HD253662**.

10:15 Starting science.

10:27 Preset to FGKHosts LSPMJ0632.

10:32 Starting science.

10:42 Preset to UVa_Multistar TIC78568780.

10:45 GS not found on DX. Josh is correcting the pointing.

10:48 Returning to science target.

10:50 Starting science.

10:54 Preset to UVa_Multistar TIC438226195.

10:56 Different target acquired on each side. Josh is canceling the preset and making a pointing correction.

10:59 Returning to the science target.

11:01 Starting science.

11:08 Preset to UVa_Multistar TIC366882813.

11:10 Starting science.

11:13 Preset to UVa_Multistar TIC200094011.

11:15 Starting science.

11:20 Preset to UVa_Multistar TIC266771301.

11:24 Starting science.

11:27 Preset to UVa_Multistar TIC367448265.

11:31 Performing a pointing correction to ensure we have the same target on both sides.

11:34 Returning to science target.

11:34 DX GS not found. Repeating pointing correction.

11:39 No correction was required! Returning to target.

11:41 Starting science.

11:44 Preset to UVa_Multistar TIC348651800.

11:48 The wrong star was pulled in on SX. Performing a pointing correction.

- 11:54 Recovered. Starting science.
- 11:56 Out of targets. Closing up.
- 11:57 Starting calibrations.
- 12:14 18 degree twilight.
- 12:39 Calibrations complete.
- 12:43 12 degree twilight.
- 13:32 Sunrise.