

C19 Observer: Andrew Cardwell (From obs1, x2go session 51)

Partner Observer(s): Jack Neustadt

Telescope Operator: Josh Williams

Plan:

Stick with PEPSI all night.

Summary:

Closed due to high winds for 7 hours, 4 hours at start, 3 hours at end. When opened observed with PEPSI through variable seeing (1-2.5 arcsec) and clouds.

Issues:

Weather: First 4 hours, and last 3 hours, of the night lost to high winds.

[PEPSI LOG](#)

Overview (times are given in UT):

00:26 Setting up PEPSI. Winds are high, it seems unlikely that we will open at sunset.

01:00 Sunset Remaining closed due to high winds.

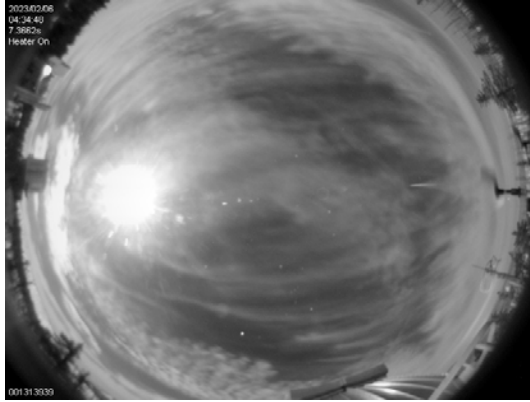
01:46 Wind gusts up to 27 m/s within the last 10 mins.

01:50 12 degree twilight.

03:11 Wind remains over the shutdown limit, clouds are coming in. Gusts up to 25.8 m/s within the last 10 mins.

02:19 18 degree twilight.

04:38 The cloud continues to thicken. The wind has dropped a little, but still not enough to open.



05:15 Enclosure open! Winds have dropped enough to try to observe.

05:48 Initial pointing correction has been difficult...

05:55 Moving on to initial collimation.

05:58 Preset to 2MASS J07565492+4746230, Rowan.

06:00 Starting science!

06:17 Guiders report about 1.2". Wind has been increasing again, with gusts up to 19.8 m/s.

06:18 Seeing bubble! Spike up to 2.5" on the DIMM.

S/N of 75 in the blue and 160 in the red. Wind gust of 21.4 m/s just after readout!

06:22 Preset to 2MASS J05322831+4231599, Rowan.

06:24 GS not found on DX, pointing check required.

06:27 Resending preset.

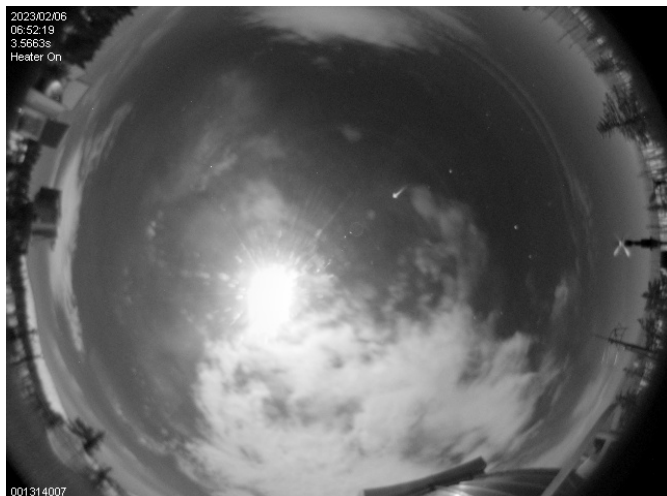
06:30 Starting science, no GS issues this time.

06:33 DIMM reports 1.8".

S/N of 46 in the blue and 122 in the red.

06:48 Preset to 2MASS J11374871+5720271.

06:53 Starting science. Cloud may become an issue soon.



S/N of 59 in the blue and 84 in the red.

07:19 Preset to 2MASS J08275797+3924219.

S/N of 69 in the blue and 85 in the red.

07:22 Starting science.

07:41 Preset to 2MASS J05202542+6117260.

07:43 Starting science. Guiders report 1.3".

S/N of 45 in the blue and 94 in the red.

07:56 Preset to 2MASS J09330083+3417090.

07:58 GS not found on SX, pointing check. The target is pretty close to the moon, about 15 degrees, but the GS on DX looked good. The sky is somewhat clearer now, and the stream of cloud appears to be shifting south and away from us.

08:03 Resending science preset.

08:05 Starting science. Guiders report 1".

08:23 SX adsec RIPed. Reading out and moving out of the wind to recover. However we have achieved, and exceeded the S/N requirements for the target.

S/N of 66 in the blue and 118 in the red.

08:35 adsec recovered. Preset to 2MASS J14092552+5126539.

08:37 No GS found on DX. Performing pointing correction.

08:42 Preset to science target again.

08:44 Starting science.

S/N of 66 in the blue and 118 in the red.

09:11 Preset to 2MASS J13440694+1601387.

09:13 Starting science. Winds remain high from the SW which is very much restricting our target selection. Guiders report 1.2".

S/N of 57 in the blue and 100 in the red.

09:30 Preset to 2MASS J15494343+5723409. Wind has increased a little.

S/N of 58 in the blue and 120 in the red.

09:42 Preset to 2MASS J15522891+2450436.

09:45 We are having PCS/PSF issues. A restart of one or both of those systems may be required.

09:50 PSF left was restarted, that seems to have helped. However pointing on SX is now off, performing a pointing correction.

09:52 Ah! We see the brighter star. Restarting PSF changed the optics, the last target was too dim to see as it was defocused.

09:53 Preset to science target.

09:56 More issues, working on it.

10:00 Taking the telescope to a higher elevation to clear the optics.

10:08 That seemed to do the trick, however we got a 23.1 m/s wind gust. Closing down.

NOTE: 2MASS J15522891+2450436 WAS NOT OBSERVED.

10:17 Taking PEPSI cals for the current configuration.

10:27 Waking MODS to take some cals.

10:28 Running simSnap.

10:43 Running mods biases with 1x2 binning.

10:55 Wind continues to gust over the shutdown limit.

11:24 Starting mods arcs, 1x2 binning. Wind gusts up to 23.3 m/s within the last 10 mins.

Slitless flats, 1x2.

5" slit flats, 1x2.

1" slit flats, 1x2.

0.8" slit flats, 1x2.

11:28 Taking LUCI darks for UVa)BCD. 20230206.0001-0030.

12:48 18 degree twilight. Giving up and calling it a night, there is no sign of the wind dropping.
LUCI safed.

13:17 12 degree twilight.

13:25 Putting mods to sleep. End of night.

14:06 Sunrise.