Jan 26 UT 2022 Night notes.

Overview:

Observer: Olga Kuhn (LBTO);
Lead: Mark Whittle (UVa)
Other Partner Observers: Charlotte Wood (ND)
Telescope Operator: Steve Allanson (LBTO)

Clear night; seeing not so good.
Emphasize OSU targets since they are behind ~18 hours.
Object distribution not ideal – sparse early (galaxy overhead!).
Plan: start with PEPSI UM-V1405Cas; then MODS: UVa-WISE-AGN then OSU-ASASSN targets.

Objects completed (all times UT):

PEPSI:
UM-V1405Cas (+HR718)

MODS:
UVa-WISE-AGN J0612
OSU-ASASSN-14ae
OSU-ASASSN-SN2021adlw
OSU-ASASSN-14li (completed 6/8 before wind terminated)
OSU-ASASSN-J1409

Observing Log:

Sunset: 00:50
12-deg: 01:42
18-deg: 02:11

PEPSI:
Bright (V=10) first target, so start near 12-deg.

01:17 Slew to UV_V1405Cas; Acquire
01:32 start exposure. 3x (3x10min) Clear; Seeing ~1.1-1.4; Ha not saturated. Ilya overseeing observations.

02:36 problem switching CD, resolved.

03:09 finish.

03:18 Slew to HR718

03:25 Start exposure 3x (4x1 minute) red side: 3x (2x5min) blue side. Seeing 1.4 → 1.0 so ssomewhat

variable during this observation (some wind). Some light seen around fiber.
04:00 End

Change to MODS:

04:10 Collimate. Doesn't look good – try again.
04:35 Grabbing the wrong star – GCS downtime correcting this.

04:45 Slew to UVa-WISE-AGN J0612; acquisition OK; rather faint galaxy. Seeing 1.3
05:00 start exposure 3 x 1200 sec. Seeing 1.2 (SX) and 1.5 (DX). Ha+[NII] seen at z = 0.47, no obvious emission at +/- 12 pix (1.5 arcsec) over radio lobes, but seeing is still 1.2 & 1.4, so not ideal. However, Wave front sensor says 1.0 arcsec…

06:06 end

06:08 Slew to g191b2b. flux standard.
06:34 end

06.34 slew to OSU-ASASSN-14ae. Set PA to 95 to match mid-exposure (altitude will climb from 45-80 deg, ending about 1 hour before transit).
06:41 seeing 1.5 but varying.
06:56 start exposures: 6 x 1200 seconds = 2 hours.
09:08 end

09:09 Slew to OSU-ASASSN-SN2021adlw
09:17 Acquisition good – SN clearly visible (PA 105 – fixed, not parallactic).
09:28 Start exposure: 3x900 sec. Seeing 1.2 & 1.5.
10:13 Lost connection to mountain.
10:17 End exposure.

10:18 Slew to OSU-ASASSN-14li. Acquisition fine.
10:36 start exposures: 8 x 900 seconds (=2h 13m with overheads). Seeing 1.3 & 1.4, improving.
12:20 Wind terminates object (knocked off guiding); completed 6/8 exposures.

12:21 Slew to OSU-ASASSN-J1409; pointing off; recollimated.
12:30 Acquire – clear identification. Choose PA 180 since close to transit, and high elevation (~70).
12:39 start exposure. 3x300 sec; Seeing 1.0
12:59 end exposure.
13:00 start exposure. 3x300. Repeat because close to end of night and can't do anything else. Seeing 1.0.
13:20 end exposure. Seeing 1.2. (12-degree twilight).
13:21 start exposure. Continue since sufficiently bright object to tolerate more twilight. Likely increasing sky background in the next three images. Seeing 1.0. (final sky brightness 16m).
13:40 end.

13:40 End night