Night Log for UT 20230711

Partner observers: Donald Terndrup, OSU
Service Observer: Jenny Power
Telescope Operator: Steve Allanson

Plan:

Start with MODS

Summary:

Issues:

Telescope nudges continue to be an issue:

[lbto@obs1 ObserverSupport]$ ./nudgepredict.py -d 20230711 -e 12 -b 9
./nudgepredict.py script version of 31-May-2023
5195836799.0 end MJD sec for the end of this UT day
60136 end MJD day
5195793600.0 end MJD sec corrected for endhour 12.0
5195761200.0 start MJD sec using backhour 9.0
20230711 is the day to be plotted.
3.0 start hour using backhour 9.0 end hour 12.0
These UT start times will have a nudge if the telescope is tracking.
03:07:06
03:41:14
04:15:22
04:49:30
05:23:38
05:57:46
06:31:54
07:06:02
07:40:10
08:14:18
08:48:26
09:22:34
09:56:42

10:30:50
11:04:58
11:39:06

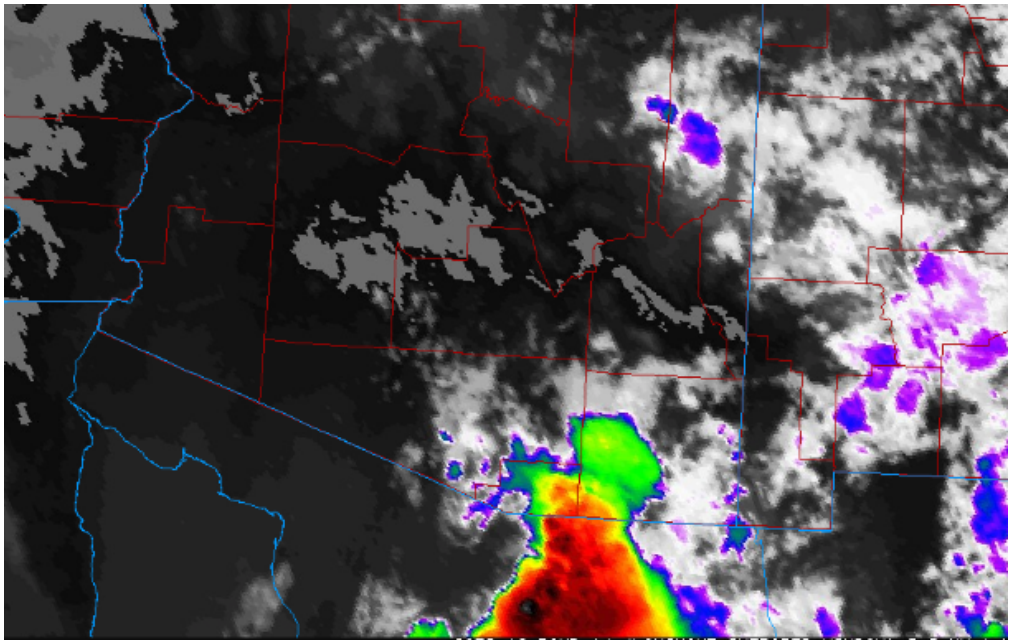
Overview:

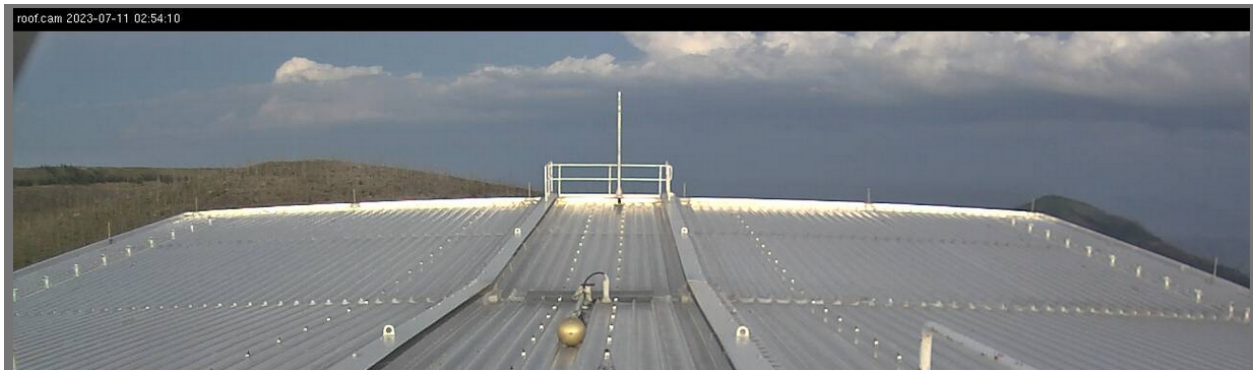
1:50 Wake MODS and running simSnap

Calibrations

Taking all MODS bias
8Kx3K mods[½]{r/b}.20230711.0003-7
4Kx3K mods[½]{r/b}.20230711.0008-12
3Kx3K mods[½]{r/b}.20230711.0013-17
1Kx1K mods[½]{r/b}.20230711.0018-22

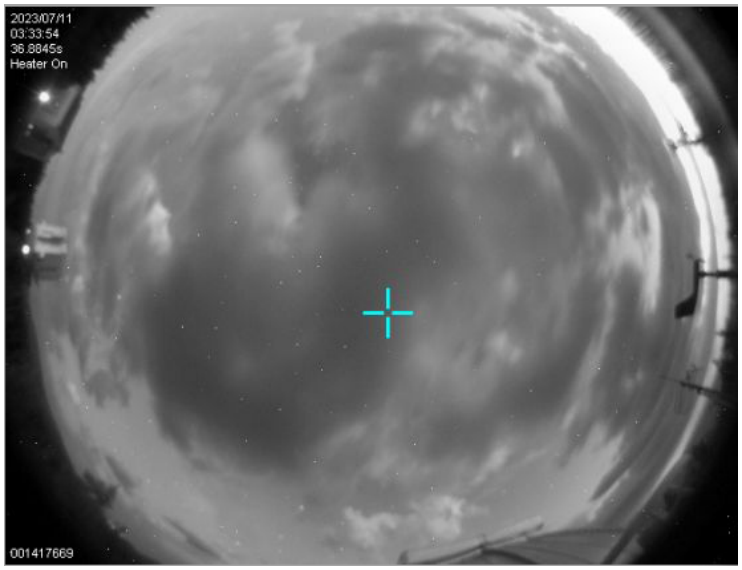
Night log:
2:35 Sunset. Steve is going to hold off on opening. There is a threatening system not far off to the south and it appears to be heading our way, just starting to appear on the southern all sky images. We will see how this progresses before opening.





Weather Loss

3:32 12 degree evening twilight. Heavy cloud cover. Staying closed



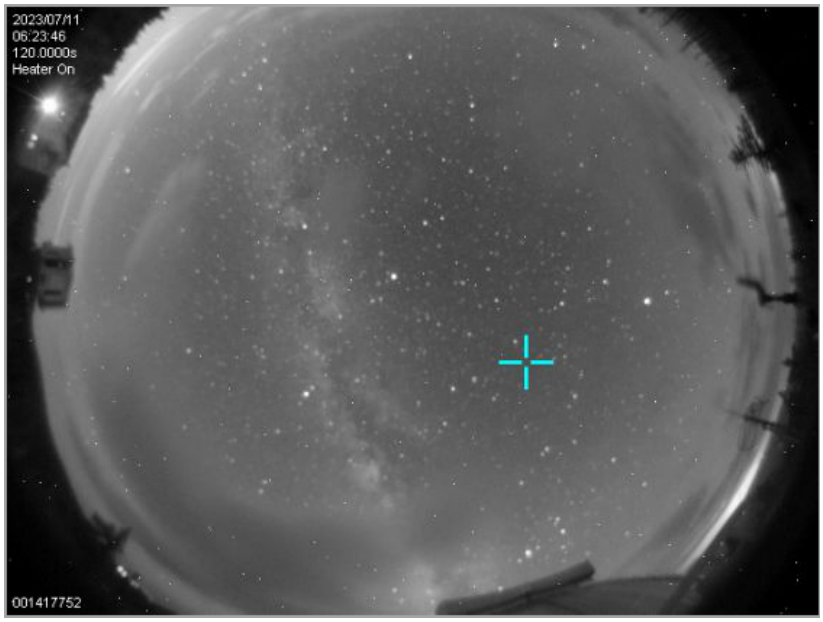
4:10 18 degree evening twilight

4:12 We are now over the limit for the particle monitor (dust or smoke)

5:40 Although we have had some clear patches, more threatening clouds coming in from the south and we remain borderline on and off the limit with our particulate counts. We are in a holding pattern.

6:10 Particles have come down and conditions look like they are improving.

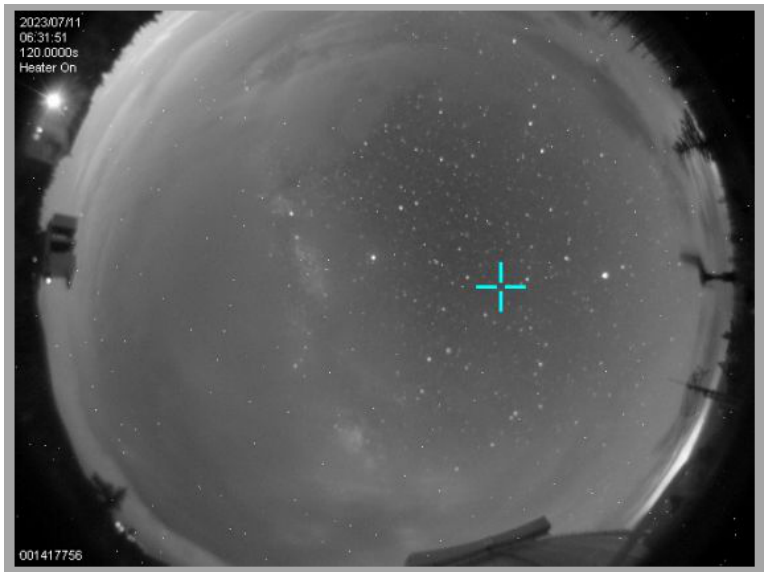
6:26 Opening



6:28 Steve is executing pointing and collimation near our first field

6:34 Clouds are once again quickly overtaking us. Seeing is 1.12” on the DIMM and 1-1.15” on the guiders.

6:25 And the clouds became threatening. **We are closing again.**



7:13 Giving it another shot. Opening.

7:21 Steve is doing a pointing and collimation check. Seeing 1.4-1.6” on the guiders.

OSU_XMDs_MODS - WD2149

7:26 Sending preset to WD2149. Seeing 1.15-1.25” on the guiders.
MODS1
Computed Slit Alignment Offset:
  dX = -0.713 arcsec
  dY = 12.328 arcsec

MODS1 Offset Command:
  offsetxy -0.713 12.328 rel
Additional:
MODS1 Offset Command:
  offsetxy -0.637 -0.070 rel

MODS2:
Computed Slit Alignment Offset:
  dX = 3.136 arcsec
  dY = 8.421 arcsec

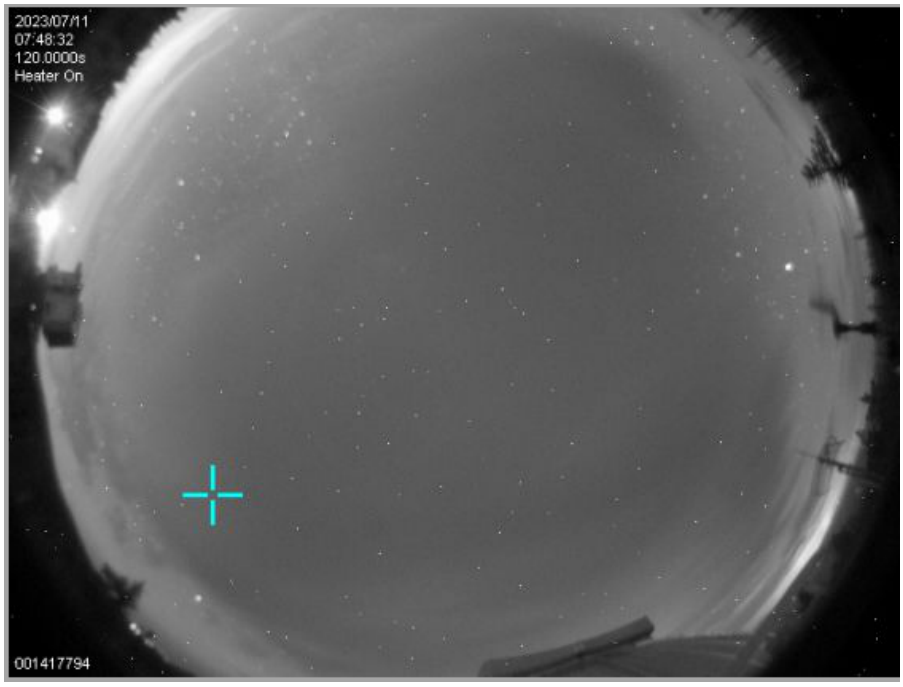
MODS2 Offset Command:
  offsetxy 3.136 8.421 rel

7:33 Science started on WD2149. Seeing 1.5” on the guiders
Dual grating:
mods[½]b.20230711.0023-25
mods[½]r.20230711.0026-28

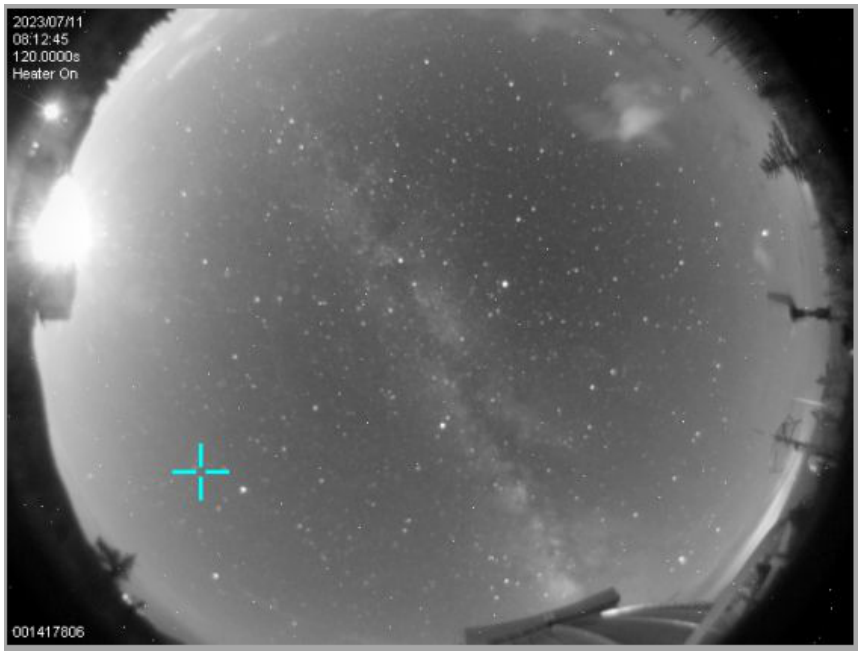
7:45 Starting blue grating on WD2149. Seeing variable. 1.2-1.4” on the guiders.
Red grating:
mods[½]r.20230711.0029
7:48 And **we lost our guide star.** Some clouds very quickly moved in and overtook us. This overtook us on the first image of the red grating. No flux whatsoever on the mods1 image. Two all sky frames from mostly clear to total overcast.

Weather Loss

7:51 Complete overcast. Steve is closing us.



8:18 And the clouds moved out as fast as they moved in. We will try again.



OSU_XMDs_MODS - WD2149 take 2

8:23 Slewing to WD2149 for acquisition. Conditions clear now. Seein 1-1.1” on the guiders.
MODS1:
Computed Slit Alignment Offset:
  dX = -0.691 arcsec

dY = 12.359 arcsec

MODS1 Offset Command:
offsetxy -0.691 12.359 rel
Additional:
MODS1 Offset Command:
offsetxy -0.451 -0.193 rel

MODS2:
Computed Slit Alignment Offset:
dX = 2.741 arcsec
dY = 8.355 arcsec

MODS2 Offset Command:
offsetxy 2.741 8.355 rel

8:30 Starting science. Repeating dual grating now that conditions are clear. Seeing 1-1.1” on the guiders.
Dual grating:
mods[½]b.20230711.0026-28
mods[½]r.20230711.0033-35

8:44 Starting Red grating. Seeing 0.76-0.85” on the guider. .99” on the DIMM. Clear.
Red grating:
mods[½]r.20230711.0036-38

8:56 Starting red grating. Still mostly clear. Seeing 0.75-0.85” on the guiders.
Guide star jump on the right. Occurred during the configuration to the blue
Blue grating:
Mods[½]b.20230711.0029-31
9:03 MODS2 blue readout delay.

OSU_XMDs_MODS - WD2117

9:10 Sending preset to WD2117 for acquisition

MODS1:
Computed Slit Alignment Offset:
dX = -0.965 arcsec
dY = 13.080 arcsec

MODS1 Offset Command:
offsetxy -0.965 13.080 rel

MODS1 red redout delay.

MODS2:
Computed Slit Alignment Offset:
  dX = 3.137 arcsec
  dY = 9.252 arcsec

MODS2 Offset Command:
  offsetxy 3.137 9.252 rel
Additional:
MODS2 Offset Command:
  offsetxy 0.285 0.084 rel

9:18 Starting science on WD2149. Conditions mostly clear. Seeing 0.6” on the guiders. 0.87” on the DIMM.

Red grating:
mods1r.20230711.0041-43
mods2r.20230711.0042-44
9:30 MODS1 red readout delay.

9:32 Starting blue grating on WD2149. Seeing 0.67” on the guiders. Mostly clear.
Mods[½]b.20230711.0032-34

9:39 mods2 blue readout delay.

Standard: Feige 110

9:45 Sending preset to Feige 110. There are some clouds on the satellite that may head our way around twilight so we want to get the standard in. Cloud wisps have just started to form overhead.

Seeing 0.75” on the guiders
MODS1:
Computed Slit Alignment Offset:
  dX = -0.931 arcsec
  dY = 12.068 arcsec

MODS1 Offset Command:
  offsetxy -0.931 12.068 rel
Additional:
MODS1 Offset Command:

offsetxy -0.376 -0.200 rel

MODS2
Computed Slit Alignment Offset:
dX = 2.729 arcsec
dY = 8.085 arcsec

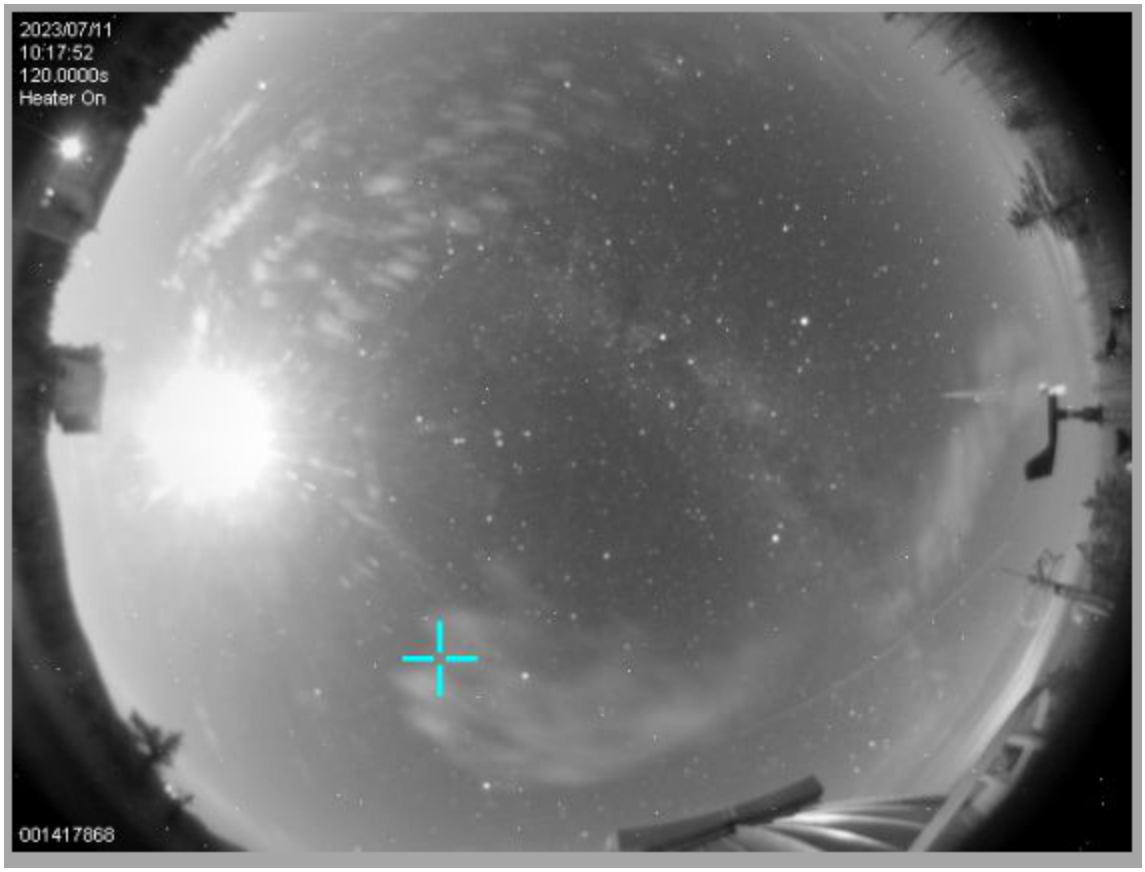
MODS2 Offset Command:
offsetxy 2.729 8.085 rel
Additional:
MODS2 Offset Command:
offsetxy 0.382 -0.016 rel

9:55 Starting science for Feige110
Dural Grating inst config timeout on MODS2 first try, retry success
Seeing 0.9” on the guider. Patchy cirrus now.
Dual grating:
Mods1b.20230711.0035-37
Mods1r.20230711.0047-49
Mods2b.20230711.0035-37
mods2r.20230711.0048-50
10:04 MODS2 blue readout delay

10:09 Starting Red Grating. Cirrus. Seeing 0.9-1” on the guiders. DIMM 0.92”
Mods1r.20230711.0050-53
Mods2r.20230711.0051-52

10:17 mods1 hung on exposure done, sent red expdone. Seeing 0.8-0.9” on the guiders. Cirrus.

10:22 Starting blue grating. Cirrus, seeing 0.8-0.9” on the guider.
Mods1b.20230711.0038-40
Mods2b.20230711.0038-40



10:26 mods2 blue readout delay

We have run out of targets.

10:33 We are done for the night.

10:41 18 degree morning twilight

11:18 12 degree morning twilight

12:15 Sunrise