OSURC Nightlog 20220927UT

Observer: A. Becker
Lead Partner Observer*: Peter Garnavich, Brian Healy
Telescope Operator: D. Gonzalez-Huerta
AO Support*: ./.
*** = from home**

Night Info (AZ Time):

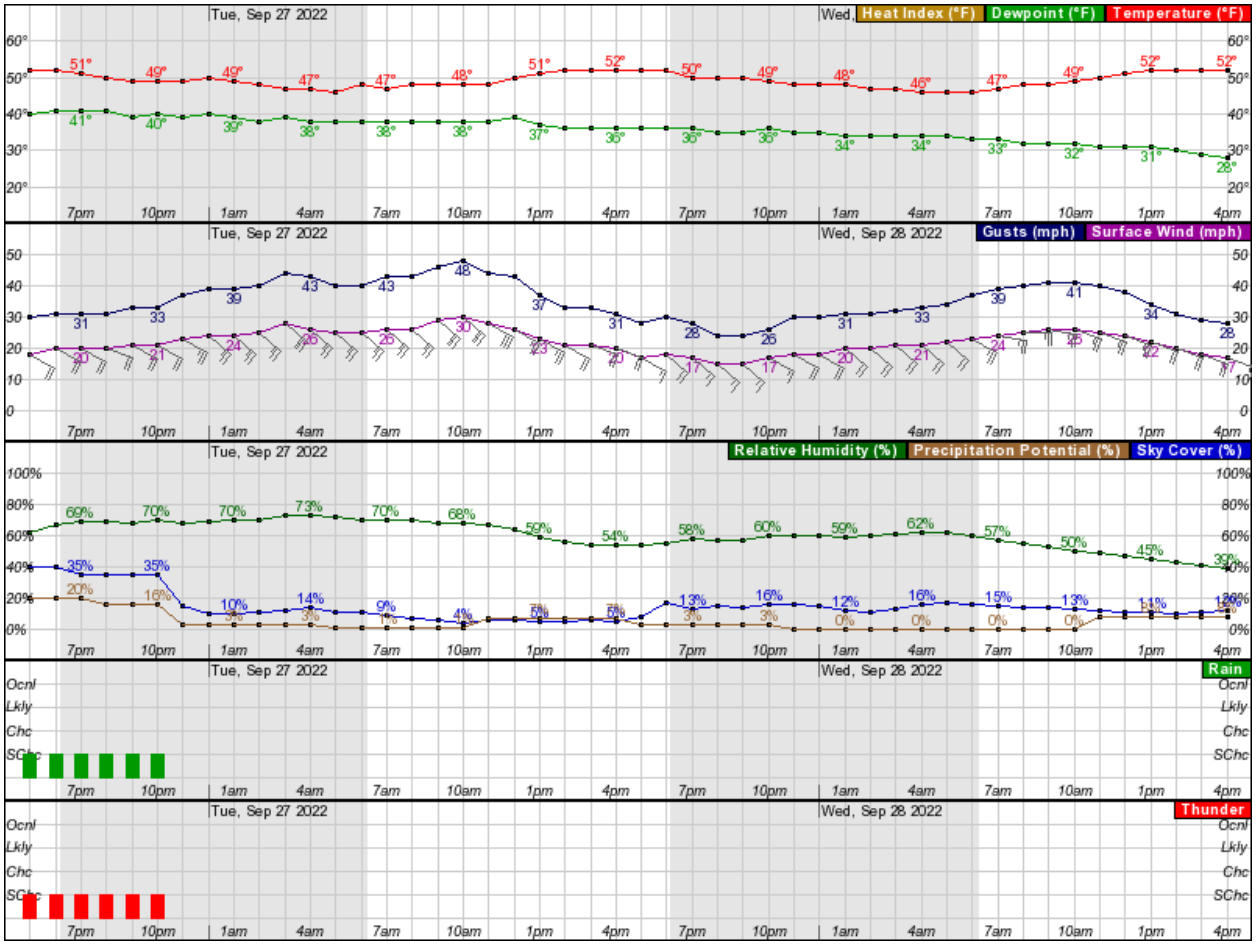
- Sunset: 18:17
- Nautical Twilight Ends: 19:05
- Astro Twilight Ends: 19:34
- Moonset: 18:30
- Astro Twilight Starts: 4:50
- Nautical Twilight Starts: 5:17
- Sunrise: 06:06

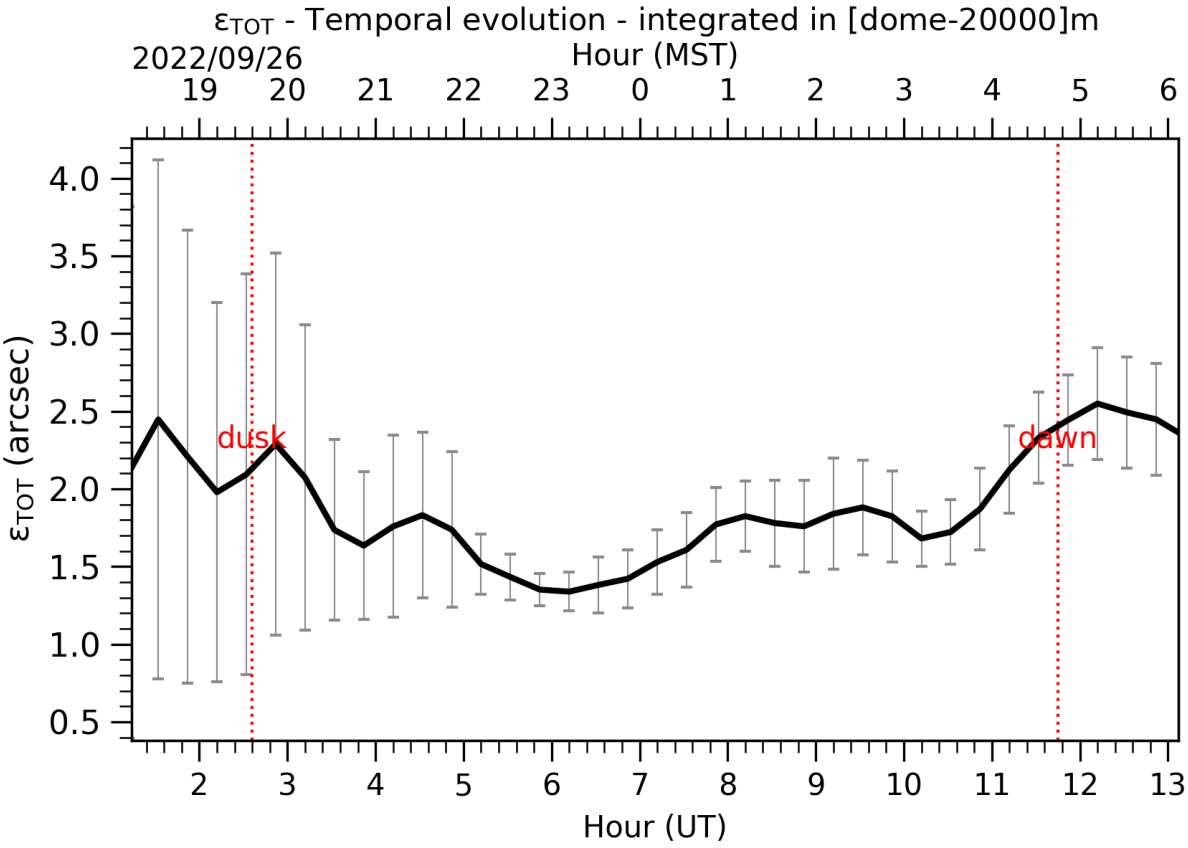
Plan:

Summary:

Issues:

Weather:





Night/Closed Dome Log (times are given in UT)

Closed Dome:

00:35 Humidity above 95%

00:36 Waking up MODS

00:38 simSnap bino

01:40 Taking MODS calibration data

03:37 mods2 blue fitsflush

03:55 mods2 red fitsflush

04:04 mods1 red fitsflush

04:30 Humidity is dropping rapidly.

04:35 It just dropped below 90%

04:36 And up again…

04:40 And below 90% again.

04:42 And above…

On-sky:

01:15 We stay closed due to high humidity.

02:51

05:30 We are opening now

Temp 7.9, Humidity 82.7, Wind ~11m/s@120,

05:39 Collimation and pointing check

05:51 DIMM seeing between 2” and 2.5”

06:05 We had trouble finding the pointing star. Homing guide probes a second time help a bit, but star was still well outside

ND foaqr

foaqr

06:22 Preset pa-160

modsAlign -y 11 mods1r.20220927.0060.fits mods1r.20220927.0061.fits

MODS1 Offset Command:
  offsetxy 1.768 11.822 rel

modsAlign -y 9 mods2r.20220927.0060.fits mods2r.20220927.0061.fits
MODS2 Offset Command:
  offsetxy 6.259 8.661 rel

Manually tweaked the position by delta_x+-0.25 and delta x=+0.12 for both side. The target then ended up
The star ended up far up in y. It seems like the initial delta y offset was sent again, even though I had set the y offset to 0 and confirmed with “enter”.

Redoing alignment
modsAlign -y 11 mods1r.20220927.0064.fits mods1r.20220927.0065.fits
MODS1 Offset Command:
  offsetxy 2.008 11.636 rel

modsAlign -y 9 mods2r.20220927.0064.fits mods2r.20220927.0065.fits
MODS2 Offset Command:
  offsetxy 6.313 8.508 rel

additional delta_x = -0.2” for mods2

06:45 Starting science science
MODS1 RED IMCS lock failed.

06:56 Wind is near the limits, but so far below. Let’s hope for the best.
Seeing about 1.5” on the guiders.

07:10 We have some clouds coming through from time to time, bringing up to 1.5 mag extinction for a short amount of time

07:45 We have lost the guide star on the left side.
mods1b.0082 and mods1r.0089 compromised and only a very faint spectrum.

From the DX guide plot I would say that we also had lost the guide star on DX for about 1 min at UT 07:42

Paused the exposure on MODS1. MODS1r got stuck on erasing the CCD. I might have been too quick hitting PAUSE.

It has been a bit of a fight recovering mods1r. I first used “red expdone” and ended up with “MC1 ERROR: GO Already acquiring data! EXPSTATUS=TCSTATUS”. red reset didn’t resolve the issue. In the end I had to be quick again and hit “abort” before the error msg showed up.

Last exposures:
mods1b 0099
mods1r 0103
mods2b 0103
mods2r 0119

UVa_BCD_MODS

J0122

08:42 Preset J0122.acq

modsAlign -y 11 mods1r.20220927.0104.fits mods1r.20220927.0105.fits
MODS1 Offset Command:
  offsetxy -1.153 11.172 rel

modsAlign -y 9 mods2r.20220927.0120.fits mods2r.20220927.0121.fits
MODS2 Offset Command:
  offsetxy 3.252 7.994 rel

During modsAlign on mods1 the software didn’t register my keyboard input. Neither ‘a’ nor with ‘x’. It took a minute or two until I was able to mark the target.

08:58 Starting science

Last exp
mods1b 0104
mods1r 0110
mods2b 0107
mods2r 0126

OSU_ASASSN

ELLJ023227

10:08 Preset ELLJ001532_UT1200.acq

modsAlign -y 11 mods1r.20220927.0111.fits mods1r.20220927.0112.fits
MODS1 Offset Command:
  offsetxy -0.722 11.562 rel

modsAlign -y 9 mods2r.20220927.0127.fits mods2r.20220927.0128.fits
MODS2 Offset Command:
  offsetxy 3.475 8.304 rel

MODS1 would have needed a small correction of about delta_x = -0.05".
MODS2 looked great

10:17 Closing due to high humidity

11:47 Done for tonight

18deg twilight and it doesn't look good outside. Still at 100% humidity.

11:55 Putting MODS to sleep

Calibrations:

MODS

Bias 8K

```
mods1/2 b/r: 0003-0007
```

Bias 3K

```
mods1/2 b/r: 0008-0012
```

grflats dual

```
mods1b: 0013-0022
mods1r: 0013-0027
mods2b: 0013-0022
mods2r: 0013-0027
```

grpixflats dual

```
mods1b: 0023-0032
mods1r: 0028-0032
mods2b: 0023-0032
mods2r: 0028-0032
```

slitflats dual

```
mods1b: 0033-0056
mods1r: 0033-0056
mods2b: 0033-0056
mods2r: 0033-0056
```

grlamps dual

```
mods1b: 0057-0059
mods1r: 0057-0059
mods2b: 0057-0059
mods2r: 0057-0059
```