LBT Observing Log for 2024 07 06

Observers: Justin Rupert
Partner Observer: Marshall Johnson (OSU)
Telescope Operator: David Gonzalez Huerta

Plan:

PEPSIPOL/PEPSI PFU all night.
~~HD140538~~
~~Then HD157214 if time allows~~
~~KELT-9 transit~~
~~HD 197076~~

Summary:

Overview (times are given in UT):
- OSU_PETS
  - Kelt-9 (UT 05:27-09:59)
- OSU_WMBStokesV
  - HD 197076 (UT 09:59-)

Issues:

IT #9142 AGw4 Theta Stage Error

Weather:

Good weather all night. Seeing was ~1”. Thin clouds were present all night, but didn’t significantly impact science.

Overview (times are given in UT):

02:41 UT Opening. Skies are clear. There’s a huge system developing to the south along the border. Will have to keep an eye on that.

02:49 UT Pointing and collimation check.

02:50 UT AGw4 guide probe throwing error when trying to move guide probe. David said there was no issue with his test preset earlier (01:53 UT).

05/07/2024 19:51:50.8 POL.DX
general state: 0x201
general errors: 0
THETA state: 0x100
THETA errors: 0x20000
R state: 0
R errors: 0
FOC state: 0
FOC errors: 0
FIL state: 0
FIL errors: 0
Home Status: 0
UMAC Power Status: 1
OAC Version: 5.2.2
Ambient Temp: 17.4 degC
PC Enclosure Temp: 27.7 degC
Guide Controller Temp: 20.3 degC
WFS Controller Temp: 19.0 degC
Guide Camera Temp: 17.9 degC
WFS Camera Temp Temp: 18.0 degC
UMAC Enclosure Temp: 33.3 degC
-15 Voltage: -2.7 volt
+15 Voltage: 1.4 volt
Peltier Voltage: 0.2 volt
HK Power Status: 0
HK Flow Status: 0
HK Alarm Status: OK
HK Warning Status: OK
Guide probe position
x: -0.040000
y: 418.550000

Focus position: 0.000000

Filter number: 0

This will require manual intervention. Joe is going to climb up into the spider to free the theta stage from the limit. We have closed.

03:04 UT GCS software crashed for David when working with AGw. Trying to bring everything back up. Joe and Tim are on standby in the meantime.

03:14 UT David has brought everything back up and given Joe and Tim the go-ahead to climb into the spider.

03:33 UT 18-degree twilight.

04:26 UT So after a great deal of troubleshooting that didn't resolve this issue with the theta stage on AGw4, Ilya and Marshall have decided to monocularly observe with PEPSI-POL. Joe was able to move all stages and Ilya power cycled the AGws multiple times to no avail. Joe also pressed the limit switches of the theta stage which didn't eliminate the error. Creating IT# 9142.

04:49 UT That big system to the south is starting to encroach on us.

05:08 UT **Reauthorize PEPSI-POL Monocular (SX).**

05:15 UT Opening.

05:21 UT Pointing and collimation checks.

OSU_PETS

Kelt-9 (UT 05:27-09:59)

05:27 UT Preset.

05:28 UT Starting science. Seeing is 0.8" on SX guider. Thin clouds on the target.

05:32 UT DIMM reading 1.3".

06:00 UT DIMM reading 0.9". Still thin clouds in the way.

06:38 UT DIMM reading 0.8". Still thin clouds in the way.

07:13 UT DIMM reading 1". Still thin clouds in the way.

07:51 UT DIMM reading 1.1". Still thin clouds in the way.

08:30 UT DIMM reading 1.1". Still thin clouds in the way.

08:36 UT Had to power cycle the left NUC in the remote room. It froze around 08:03 UT; it didn't respond to commands from the display's website and I couldn't move the cursor when I plugged the mouse in. It was fine after it rebooted.

09:12 UT DIMM reading 1.1". Thin clouds are still passing through.

OSU_WMBStokesV

HD 197076 (UT 09:59-11:42)

09:59 UT Preset. AZ unwind.

10:04 UT Starting science.

10:10 UT DIMM reading 0.9”. Thin clouds are still passing by.

10:36 UT 18-degree twilight.

10:41 UT DIMM reading 0.8”. Thin clouds are still passing through.

11:13 UT DIMM reading 0.9”. Thin clouds are still passing through.

11:42 UT Closing.