# LBT Observing Log: 2025 Apr 07 UT

Observers: Alex Becker Partner Observer: Dom Rowan, Tawny Sit Telescope Operator: Steve Allanson

# Plan:

Uranus LUCI test run PEPSI at the start of the night until ~UT 4:30 Swap to SHARK-VIS for HIP 51213 and HIP 58654 Back to PEPSI for the rest of the night

#### **PEPSI Plan:**

MWAbund/2MASSJ05442312+6320468 (0.18hr) BHBinaries/2MASSJ07004282-1226187 (0.18hr) RRIyrae/J09042206+0513057 (0.1hr) not in queue, skipping

MWAbund/2MASS J11434835+5356116 BHBinaries/2MASSJ11312574+5100034 MWAbund/2MASS J11350820+5420454 BHBinaries/2MASSJ11294642+5054433 MWAbund/2MASS J11240553+4817259 ~Swap to SHARK here ~

Post-SHARK PEPSI targets: <u>RPED/Gaia\_DR3\_1475487434167030784 (0.41hr)</u> <u>RPED/Gaia\_DR3\_1613950617079880704 (0.32hr)</u>

These two need to be observed at similar airmass (and < 1.3 mas seeing) PEPSITCrB/TCrB (0.77hr) PEPSITCrB/HR550 (0.38hr)

UVa Multistar/TIC123098844 (0.15hr) BHBinaries/2MASSJ11202083+5027555 (0.35) MWAbund/2MASS J12172126+4247420 MWAbund/2MASS J12241481+4140508 MWAbund/2MASS J12352512+4449283 MWAbund/2MASS J13062137+4631111 UVa Multistar/TIC278352276 (0.13hr) BHBinaries/2MASSJ19162233+3828439 BHBinaries/2MASSJ20123851+3443257 MWAbund/2MASS J13355177+4421379

```
MWAbund/2MASS J14070067+4640145
MWAbund/2MASS J14103640+4547187
ND_OMGBinaries/HD144925 (0.23 hr)
MWAbund/2MASS J16593864-2127129
MWAbund/2MASS J15124575+0617352
MWAbund/2MASS J15015247+4655518
MWAbund/2MASS J14130773+4301061
MWAbund/2MASS J14132200+4412525
```

# Summary:

PEPSI log: https://drive.google.com/file/d/11y1r5jXj4kT1Kgg1Iz4Yk85dDvTR67i2/view?usp=sharing

# Issues:

IT #9311: Exposure time not set for subwindowed image.

# Weather:

Sky clear, seeing mostly around 1", 1.5" when pointing into the wind

# Overview (times are given in UT):

23:44 We ran into a lot of issues when initializing both LUCIs. There seemed to be a bigger issue with the LUCI software and it looks like there might be a hardware issue with the MOS computer.

00:30 LUCI issue is resolved. Glenn will investigate it further to understand the issue.

00:43 Preset to HD 83005 Now we are having issues with LUCI2 camera selection

00:58 Preset again

01:39 Preset 98425

02:10ish Preset to science target

We fought a bit with the pointing. And with LUCI1 DIT times. Optimized science setup with filters and subwindow. Learned that the web-iif is for instruments without a derotator and we had LUCI1 images rotated by 90deg because of that.

Overall as successful rehearsal with lots of lessons learned for tomorrow

# PEPSI

02:51 We had a little power bump. Steve is recovering

MWAbund

2MASSJ05442312+6320468 (0.18hr)

Seeing ~0.9"

03:14 Preset

03:16 Starting science exposure.

PEPSI software took a long time to respond to me starting the exposure. Something around 1min.

**BHBinaries** 

2MASSJ07004282-1226187 (0.18hr)

03:23 Preset

03:27 Starting exposure

MWAbund

2MASS J11434835+5356116

03:37 Preset

03:41 Starting exposure

BHBinaries

2MASSJ11312574+5100034

03:48 Preset

03:50 Starting exposure

#### MWAbund

2MASS J11350820+5420454

04:27 Preset

04:29 Starting exposure

#### **BHBinaries**

2MASSJ11294642+5054433

04:36 Preset

04:38 Starting exposure

### MWAbund

2MASS J11240553+4817259

04:43 Preset

04:44 Starting exposure

04:49 Reconfig to SHARK-VIS

## SHARK-VIS

HIP 51213

Some confusion about responsibilities and who is sending the preset.

05:00 Preset HIP 51213

HIP 58654

05:53 Preset HIP 58654

07:00 Reconfig PEPSI

# PEPSI

#### RPED

Gaia\_DR3\_1475487434167030784 (0.32hr)

07:11 Preset

07:12 Starting exposure

Gaia\_DR3\_1613950617079880704 (0.32hr)

07:31 Preset GS not found on SX. Pointing check

07:35 Preset

07:37 Starting science exposure

### PEPSITCrB

TCrB (0.77hr)

07:53 Pointing check

07:56 Preset

07:57 Starting exposure

HR 5501 fluxstd

Seeing got progressively worse throughout the observation. From 1.0 to 1.5 with spikes up to 2"

09:00 Preset

09:03 Starting exposure

UVa Multistar TIC123098844 (0.15hr)

Seeing is much better at this position 0.9-1.0 09:30 Preset

09:30 Starting exposure

**BHBinaries** 

2MASSJ11202083+5027555 (0.35hr)

09:37 Preset GS not found on both sides. Pointing check

09:42 Preset

09:45 Starting exposure

### MWAbund

2MASS J12172126+4247420

10:01 Preset

10:04 Starting science exposure

2MASS J12241481+4140508

10:09 Preset

10:11 Starting exposure

2MASS J12352512+4449283

10:16 Preset

10:19 Starting exposure

2MASS J13062137+4631111

10:26 Preset

10:26 Starting exposure

UVa Multistar

TIC278352276 (0.13hr)

10:32 Preset

10:36 Starting exposure

### **BHBinaries**

2MASSJ19162233+3828439

10:38 Preset

10:41 Starting exposure

2MASSJ20123851+3443257

10:46 Preset SX didn't grab the right star, but Steve is fixing it

10:49 Starting exposure

MWAbund

2MASS J13355177+4421379

10:56 Preset

11:00 Starting exposure

2MASS J14070067+4640145

11:05 Preset

11:07 Starting exposure

2MASS J14103640+4547187

11:12 Preset

11:14 Starting exposure

### ND\_OMGBinaries

HD 144925

11:19 Preset

11:26 Starting exposure

MWAbund

2MASS J16593864-2127129

11:30 Preset

11:32 Starting exposure

2MASS J15124575+0617352

11:38 Preset

11:41 Starting exposure

2MASS J15015247+4655518

11:46 Preset

11:49 Starting exposure

2MASS J14130773+4301061

11:55 Preset

11:57 Starting exposure

2MASS J14132200+4412525

12:02 Preset

12:04 Starting exposure

12:09 Done for tonight!

Pepsi calib for: MWAbund - done BHBinaries - done RPED - done OMGBinaries - done Multistar - done PEPSITCrB - done