

# LBT Observing Log: 2026 Apr 08 UT

Observers: Jenny Power

Partner Observer: Marshall Johnson, Ali Crisp

Telescope Operator: Gil Esquerdo

## Plan:

Start with PEPSI tonight; if conditions allow we can switch to SHARK-VIS, otherwise stick with PEPSI the whole night.

## Summary:

PEPSI Log:

[OSURC PEPSI Log20260408.txt](#)

[OSU\\_LiDwarf/Gaia DR3 800532498968063744](#)

[OSU\\_PASTA/TOI-1772](#)

[OSU\\_LiDwarf/Gaia DR3 1533086450298925184](#)

[OSU\\_LiDwarf/Gaia DR3 789459076853329920](#)

[OSU\\_HIPS\\_SHARK \(weather loss - bad seeing\)](#)

[OSU\\_LiDwarf/Gaia DR3 789459076853329920](#)

[UVa\\_metalpoor/Gaia DR3 3935426345177882112](#)

[UVa\\_metalpoor/HIP51973](#)

[OSU\\_MWAbundDisp/2MJ1242+4602](#)

[OSU\\_MWAbundDisp/2MJ1155+5542](#)

[OSU\\_MWAbundDisp/2MJ1221+5658](#)

[OSU\\_LiDwarf/Gaia DR3 1564116901818692608](#)

[OSU\\_MWAbundDisp/2MJ1443+4928](#)

[OSU\\_MWAbundDisp/2MJ1408+3916](#)

[OSU\\_LiDwarf/Gaia DR3 1292664179755053824](#)

[OSU\\_LiDwarf/Gaia DR3 1276255274380603136](#)

[OSU\\_MWAbundDisp/2MJ1336+2132](#)

[OSU\\_MWAbundDisp/2MJ1341+1759](#)

[OSU\\_MWAbundDisp/2MJ1221+5658](#)

[OSU\\_MWAbundDisp/2MJ1155+5542](#)

[OSU\\_LBOISpec/TOI1462](#)

[UVa\\_metalpoor/Gaia DR3 1331616986212008192](#)  
[UVa\\_metalpoor/Gaia DR3 1365625572350020480](#)  
[OSU\\_LiDwarf/Gaia DR3 1355720003375576704](#)  
[OSU\\_PASTA/HD135694](#)  
[OSU\\_LiDwarf/Gaia DR3 1434458775523694848](#)  
[ND\\_v795her/V795Her](#)  
[OSU\\_LiDwarf/Gaia DR3 1399717747138922624](#)

## Issues:

## Weather:

Clear with variable seeing. Seeing ranged from 0.5-5"

## Overview:

00:40 UT Gil has finished his checkouts. I am running a few LUCI2 darsk while I power up the DX WFS in preparation for the possible SHARK VIS.

Luci2.20260408.0001-5 15x3.0s LIR INT  
Luci2.20260408.0006-10 1x100.0s MER NORM

01:01 UT Checking LUCI2 fieldstop alignment

01:07 UT Gil is ventilating chamber

01:40 UT Opening shutter doors

01:49 UT Sunset

02:26 UT Star not found on DX. Tried putting the IE and CA from 2 days ago and spiralling. Gil is homing the hexapod

02:39 UT 12 degree evening twilight

02:40 UT Pointed, sending collimation preset.

### OSU\_LiDwarf/Gaia DR3 800532498968063744

02:54 UT Sending preset to target. Seeing subarcsecond on guiders in collimation preset, and 0.64" on Cyclope.

02:57 UT Starting science. Seeing is 0.64" on SX and 0.71 on DX. Clear skies. SNR CD3/5 87/97 so below requested SNR. Setting up a second cycle.

03:03 UT Seeing is 0.63" on SX and 0.67" on DX, clear.

03:05 UT SNR CD 2/6 65/99

SNR 3/5 87/98

SNR 2/6 98/65

03:09 UT 18 degree evening twilight

### OSU\_PASTA/TOI-1772

03:11 UT Preset to target

03:14 UT Starting science. Seeing 0.54" on SX and 0.65" on DX, clear

SNR CD 3/5 158/195

SNR CD 2/4 150/228

SNR CD 1/6 150/514 (added 2 min to make it 10min instead of 8min)

Repeating the shorter setups. Seeing up to 0.8" on the guiders

SNR CD 3/5 134/168

SNR CD 2/4 143/220

### OSU\_LiDwarf/Gaia DR3 1533086450298925184

03:35 UT Presetting to target

03:37 UT Starting science. Seeing is 0.72 on SX and 0.79 on DX

SNR 3/5 98/116

SNR 2/6 74/119

Repeating 2/6 SNR 75/119

03:42 UT No SHARK team yet, we will do one more PEPSI field

## OSU\_LiDwarf/Gaia DR3 789459076853329920

03:43 UT Presetting to target

03:45 UT Starting science. Seeing is 0.67" on SX guider and 0.77 on DX guider, 0.8" on Cyclope

SNR on CD3/5 was low at 88/107  
Increased exp time on CD2/6 to 8 min  
SNR low again SNR2/6 64/123

## OSU\_HIPS\_SHARK (weather loss - bad seeing)

04:07 UT Sending preset. HIP

Sending preset to nearby blinding star for pointing - Gam UMa  
IE/CA 24.5 59

04:13 UT Back to source and closing loop

04:15 UT OCAM bad bram. Moving source off to rebin. Seeing has blown up to 1.72"

04:21 UT Seeing is up to 3". Setting 10 modes.

04:29 UT Seeing is ~5" We are reauthorizing for PEPSI.

04:41 UT Seeing is 1.8-3.45" on the guiders during collimation preset, bouncing.

## OSU\_LiDwarf/Gaia DR3 789459076853329920

Revisit to see if we can meet the SNR request.

04:43 UT Sending preset back to source.

04:49 UT Starting science with double the exp time. Seeing is 2.2" on SX and 2.0" on DX.  
Clear.

CD3/5 90/107

CD2/6 81/152

05:03 UT Seeing may be trending back down. 1.48" on the guiders now and cyclope.

UVa\_metalpoor/Gaia DR3 3935426345177882112

05:17 UT Sending preset

05:22 UT Starting science with doubled exp time. Seeing 1.1-2" variable.

SNR CD2/4 129/223

Seeing was improving steadily, 0.9-1.2" by the end of the exposure.

UVa\_metalpoor/HIP51973

05:30 UT Preset to target. Seeing is improving steadily.

05:33 UT Starting science. Seeing 1.1" on SX and 1.2" on DX now. No increasing exp times any more.

SNR CD2/4 271/489

OSU\_MWAbundDisp/2MJ1242+4602

05:36 UT Sending preset to target.

05:38 UT Starting science. Seeing 0.94" on SX and 1.1" on DX. 1.18" on Cyclope.

SNR CD2/4 179/325

OSU\_MWAbundDisp/2MJ1155+5542

05:45 UT Preset to next target

05:47 UT Starting science. Seeing 0.83" on SX and 0.89" on DX.

SNR CD2/4 175/339

OSU\_MWAbundDisp/2MJ1221+5658

05:53 UT Sending preset

05:54 UT Starting science. Seeing is 1.05" on the guiders, 1.16" on cyclope. Clear.

SNR CD2/4 239/419

OSU\_LiDwarf/Gaia DR3 1564116901818692608

06:01 UT Sending preset.

06:02 UT Starting science. Seeing 1" on the guiders, 1.2" on cyclope, clear.

CD 3/5 61/86

CD 2/6 42/86

Running a second pass, seeing 0.8" on the guiders  
CD 3/5 70/96  
CD 2/6 44/89

OSU\_MWAbundDisp/2MJ1443+4928

06:29 UT Sending preset

06:32 UT Starting science. Seeing is 1.04 on SX and 1.07 on DX, 1.22" on Cyclope.

SNR CD2/4 184/318

OSU\_MWAbundDisp/2MJ1408+3916

06:37 UT Sending preset

06:39 UT Starting science.

06:43 UT Seeing has blown up to 1.88" on the guiders.

SNR CD2/4 139/276

OSU\_LiDwarf/Gaia DR3 1292664179755053824

06:45 UT Presetting. Exposure times doubled

06:48 UT Seeing 2.04" on SX and 2.1" on DX. Cyclope reporting 2.52". Starting science.

SNR CD 3/5 80/107 (with double exp time)

SNR CD 2/6 50/112 (with doubled exp time)

07:13 UT taking another pass with regular exp time for CD3/5 but same doubled time for CD2/6.  
Seeing is 2-2.3" on the guiders. Poor and variable.

SNR CD 3/5 39/57 (with reg exp time)

SNR CD 2/6 41/94 (with doubled exp time)

07:18 UT Moonrise, illuminated fraction 0.672

OSU\_LiDwarf/Gaia DR3 1276255274380603136

07:28 UT Preset to target.

07:32 UT Starting science with quadrupled exp time. Seeing is 2.2-2.4" on the guiders.

SNR CD 3/5 109/147 (with quadruple exp time)

SNR CD 2/6 87/188 (with quadruple exp time)

OSU\_MWAbundDisp/2MJ1336+2132

07:48 UT Sending preset

07:51 UT Starting science. Seeing 1.4" on the guiders, 1.96" on cyclope.

SNR CD2/4 161/296

OSU\_MWAbundDisp/2MJ1341+1759

07:56 UT Sending preset

07:58 UT Starting science. Seeing 1.7-1.8" on the guiders. Still clear.

SNR CD2/4 147/272

OSU\_MWAbundDisp/2MJ1221+5658

08:03 UT Sending preset

08:08 UT Starting science. Seeing my be improving. 1.15" on the guiders, but still variable, jumped up right after to 1.5"

SNR CD2/4 210/368

OSU\_MWAbundDisp/2MJ1155+5542

08:16 UT Presetting to target

08:19 UT Starting science. Seeing 0.86" on guiders now.

SNR CD2/4 185/338

OSU\_LBOISpec/TOI1462

08:24 UT preset to target

08:28 UT Starting science. Seeing 0.87" on SX and 0.99" on DX, 1.21" on Cyclope, clear.

CD2/6 389/752

CD3/5 557/731

CD2/4 374/608

UVa\_metalpoor/Gaia DR3 1331616986212008192

08:40 UT Sending preset

08:42 UT Starting science.

SNR CD2/4 54/101

UVa\_metalpoor/Gaia DR3 1365625572350020480

08:53 UT Sending preset

08:56 UT Starting science. Seeing 1" on the guiders, 1.23" on cyclope. Clear.  
SNR CD2/4 48/100

OSU\_LiDwarf/Gaia DR3 1355720003375576704

09:07 UT Sending preset

09:10 UT Starting science. Seeing 0.74" on SX and 0.84" on DX.

SNR CD3/5 64/92

SNR CD2/6 35/75

09:20 UT Brief blip up to 2" but came back down, monitoring. Running the script a second time.

SNR CD3/5 53/74

09:28 UT Seeing is 1.1" on the guiders.

SNR CD2/6 40/90

OSU\_PASTA/HD135694

09:33 UT Sending preset

09:36 UT Starting science. Seeing is 1" on the guiders, 1.09" on cyclope, clear.

SNR CD 3/5 125/168

SNR CD 2/4 115/194

SNR CD 1/6 99/404

SNR is about half of that requested. Running a second pass

09:43 UT Seeing just blew up to 2.45, then back down to 1.3"

09:46 UT Seeing is bouncing around between 1.3-2.6"

SNR CD 3/5 57/85

SNR CD 2/4 74/132

SNR CD 1/6 68/320

09:50 UT Seeing is now up to 3.2-3.7" we will run another pass after pass 2.

09:56 UT seeing 1.4" on the guiders.

SNR CD 3/5 75/110  
SNR CD 2/4 91/164  
SNR CD 1/6 106/415

## OSU\_LiDwarf/Gaia DR3 1434458775523694848

09:59 UT Preset to target

10:02 UT Starting science. Preemptively doubled exposure times since these targets have typically benefitted from that tonight. Seeing is 1.06" on SX and 1.17" on DX to start.

10:07 UT CD 5 did not take the double exp time so stopped and read out and will take 2exp of CD3/5

SNR CD 3/5 86/91

SNR CD 2/6 66/143 (double exp time)

SNR CD 3/5

10:10 UT Seeing has improved and stabilized to 0.8-1" as seen on the guiders.

## ND\_v795her/V795Her

10:19 UT Sending preset to V795 Her

Target landed ust outside field, but Gil saw it and bumped it in.

10:25 UT Starting science. Seeing is 0.79" on SX and 0.86" on DX, 1.06" on Cyclope, 1.01" on DIMM. Clear.

10:42 UT The wrong fiber was in place in the OB. Corrected and restarted with D300. Seeing is now 0.68" on the guiders.

11:01 UT Seeing is 0.75" on the guiders. SNR is lower than listed in readme, but this is a time series so exp time is not being adjusted. SNR CD4 107 SNR CD1 80

11:09 UT Seeing is up to 1.1" on the guiders.

11:21 UT seeing is 0.67" on the guiders.

11:31 UT Seeing is 0.74" on SX and 0.78" on DX

11:34 UT 18 degree morning twilight

## OSU\_LiDwarf/Gaia DR3 1399717747138922624

11:42 UT Sending preset, exposure times preemptively doubled.

11:44 UT Pointing check. I'm not confident we grabbed the same source on the 2 sides.

11:48 UT It was correct but Gil tuned up pointing a bit. Back to source.

11:50 UT Starting science. Seeing is 0.5" on the guiders, 0.8" on Cyclope.

SNR CD 3/5 127/155 (double exp time)

SNR CD 2/6 88/153 (double exp time)

Blue was a bit low in CD2 so taking one single exp time

SNR CD 2/6 (single exp time)

12:04 UT 12 degree morning twilight

12:07 UT Closing up and starting PEPSI calibrations.

12:54 Sunrise

12:40 UT Flats and arcs for ND\_dwcnc taken. Scaled flat times for 0.75" longslit  
Luci2.20260408.0013-30