

# LBT Observing Log: 2026 Apr 09 UT

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Partner Observer: Marshall Johnson

Telescope Operator: Gil Esquerdo

## Plan:

The plan for tonight will be to start with PEPSI and, if conditions allow, do our high-priority SHARK-VIS observations before swapping back to PEPSI; otherwise, we'll stick with PEPSI the whole night to get these observations out of the way during the brighter nights of the run.

## Summary:

PEPSI log:

[https://drive.google.com/file/d/1IWOPvPRHA7zjzS0\\_jk3\\_oSqscpZtQp\\_b/view?usp=sharing](https://drive.google.com/file/d/1IWOPvPRHA7zjzS0_jk3_oSqscpZtQp_b/view?usp=sharing)

OSU\_LBOISpec/55Cnc

OSU\_NGC2420/865401039307016448

OSU\_NGC2420/865399939794984320

SHARK-VIS observations

OSU\_LBOISpec/HD97658

UVa\_Multistar/HIP38979 [telluric standard]

OSU\_PASTA/EPIC229004835

UM\_TCrB/TCrB

UM\_TCrB/HR5501

OSU\_PASTA/TOI-2289

UVa\_Multistar/HIP96306 [RV standard]

UVa\_Multistar/TIC278352276

ND\_v426oph/V426Oph

UVa\_metalpoor/1370554648617496704

UVa\_metalpoor/1299295300021645824

[Plan:](#)

[Summary:](#)

[Issues:](#)

[Weather:](#)

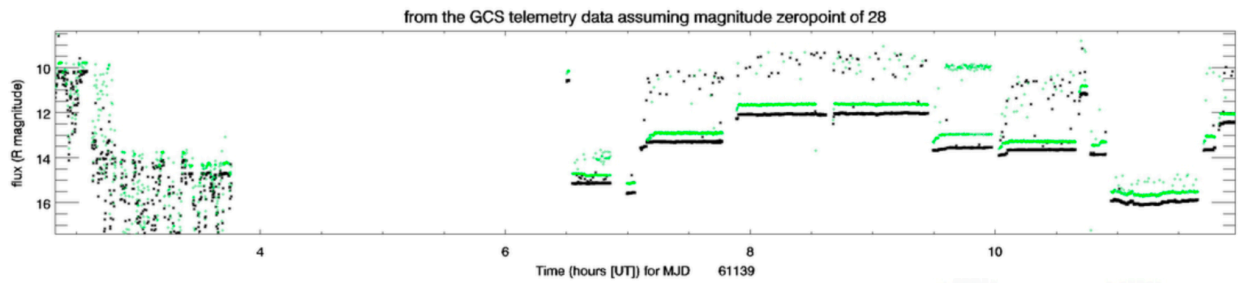
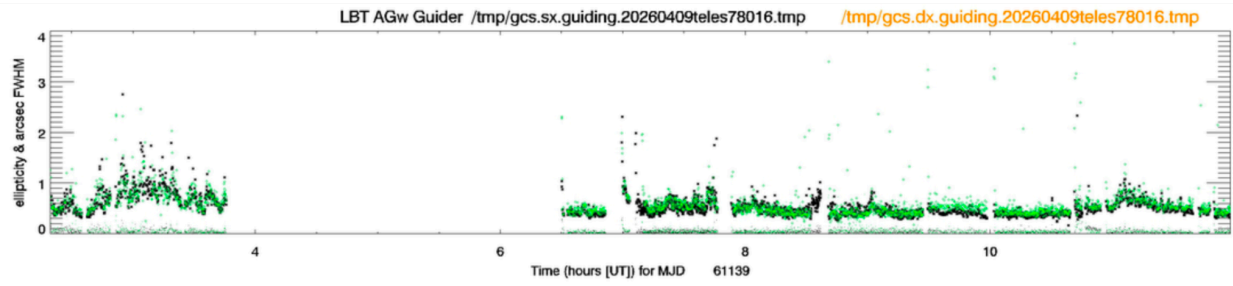
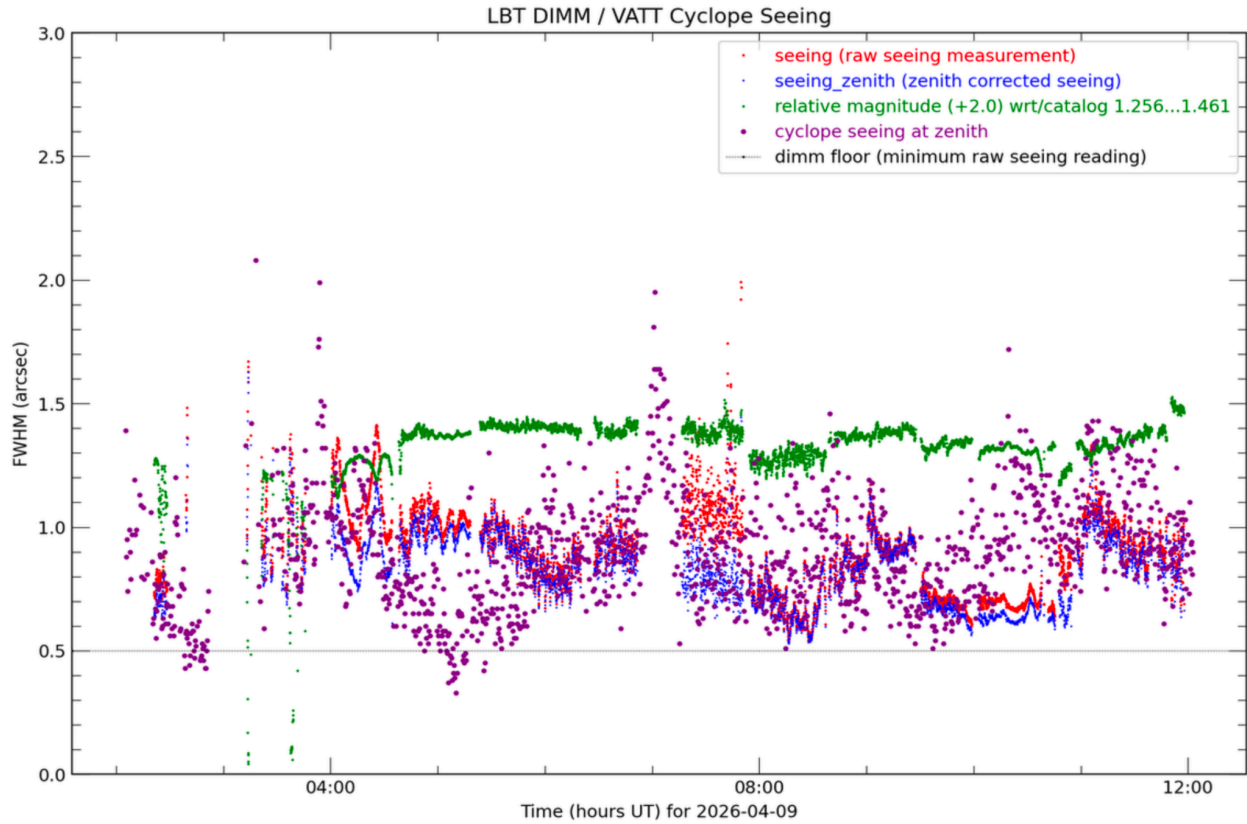
[Overview:](#)

[OSU\\_LBOISpec](#)  
[55Cnc \(02:35-02:49\)](#)  
[OSU\\_NGC2420](#)  
[Gaia DR3 865401039307016448 \(02:49-03:23\)](#)  
[Gaia DR3 865399939794984320 \(03:23-03:46\)](#)  
[REAUTHORISE \(03:46-03:53\)](#)  
[OSU\\_HIPS\\_SHARK](#)  
[HIP 55560\(03:53-05:18\)](#)  
[HIP 55016 \(05:18-](#)  
[REAUTHORISE \(06:19-06:31\)](#)  
[OSU\\_LBOISpec](#)  
[HD97658 \(06:31-](#)  
[UVa\\_Multistar](#)  
[HIP38979 \(06:51-07:04\)](#)  
[OSU\\_PASTA](#)  
[EPIC229004835 \(07:04-07:46\)](#)  
[UM\\_TCrB](#)  
[TCrB \(07:46-09:27\)](#)  
[HR5501 \(09:27-09:58\)](#)  
[OSU\\_PASTA](#)  
[TOI-2289 \(09:58-10:39\)](#)  
[UVa\\_Multistar](#)  
[HIP96306 \(10:39-10:44\)](#)  
[TIC278352276 \(10:44-10:54\)](#)  
[ND\\_v426oph \(Garnavich\)](#)  
[V426Oph \(10:54-11:39\)](#)  
[UVa\\_metalpoor](#)  
[Gaia DR3 1370554648617496704 \(11:39-11:48\)](#)  
[Gaia DR3 1299295300021645824 \(11:48-11:55\)](#)

## Issues:

## Weather:

Variable clouds at the beginning of the night. Skies started clearing just before SHARK-VIS ops. Seeing remained subarcsecond throughout the night. Photometric conditions from ~5:30UT onwards.



## Overview:

01:42 UT Shutters opening

01:50 UT Sunset

02:11 UT Pointing check

02:19 UT Collimation preset

OSU\_LBOISpec

55Cnc (02:35-02:49)

02:35 UT Preset sent

02:38 UT Starting exposures.

Cyclope 0.43"

Guider FWHM SX: 0.38" DX: 0.45"

Thin clouds across half of the sky:



RH ~40%. Wind ~4m/s

02:39 UT 12 deg twilight

SNR CD2:401 CD4:747

02:45 UT DX OCAM cooling in prep for S-VIS ops

02:46 UT SNR CD2:312 CD5:508

OSU\_NGC2420

Gaia DR3 865401039307016448 (02:49-03:23)

02:49 UT Preset sent

02:53 UT Some thicker clouds coming through:



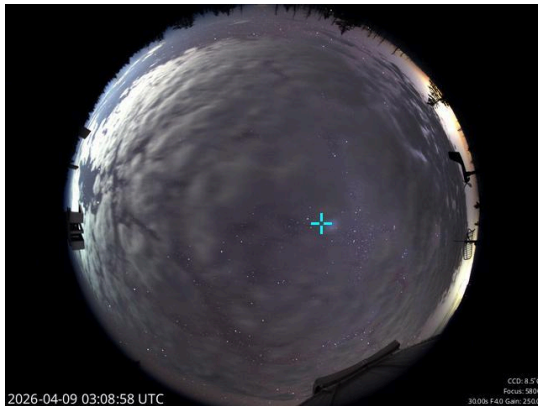
02:44 UT Exposures started  
Guider FWHM SX: 0.87" DX: 0.9"  
Cyclope/DIMM impacted by clouds.

02:55 UT Target momentarily disappeared from both guiders, clouds are variable.

03:05 UT SNR CD1:27 CD5:166  
Aiming for 100/100, we'll grab another sequence here

03:08 UT DX jumped, lost the object. Resending mono preset.

03:09 UT Reacquired on DX. Starting exposures  
Guider FWHM SX:0.93" DX: 0.84"



03:10 UT 18 deg twilight

SNR CD1:31 CD5:177

Gaia DR3 865399939794984320 (03:23-03:46)

03:23 UT Preset sent

03:26 UT Exposure started.

DIMM 0.80"

Guider FWHM SX: 0.64" DX: 0.61"

03:45 UT SNR CD1:48 CD5:277

REAUTHORISE (03:46-03:53)

03:46 UT Reconfig SHARK-VIS

Sky is clearing nicely:



OSU\_HIPS\_SHARK

HIP 55560(03:53-05:18)

03:53 UT Preset sent

04:05 UT Loops closed, object centered on S-VIS detector.

04:07 UT S-VIS having some issues due to brightness of target (saturating)

04:16 UT DIMM 0.83" Cyclope 0.88"

04:31 UT Science exposures running

DIMM 0.81" Cyclope 0.93"

04:57 UT DIMM 1.03" Cyclope 0.69"

05:05 UT about ~20 mins left on this target, then we'll switch to 2nd target.

HIP 55016 (05:18-06:19)

05:18 UT Preset sent

05:26 UT Loops closed, object centered. Over to S-VIS

DIMM 1.02" Cyclope 0.74"  
Clear skies.

05:47 UT DIMM 0.91 Cyclope 0.60

REAUTHORISE (06:19-06:31)

06:19 UT Reconfig PEPSI

OSU\_LBOISpec

HD97658 (06:31-06:46)

06:26 UT Pointing check

06:29 UT Collimation preset

06:31 UT Preset sent

06:33 UT Exposures started

DIMM 0.83" Cyclope 0.69"  
Guider FWHM SX: 0.47" DX: 0.50"  
Clear skies.

06:39 UT SNR CD2:266 CD6:527

06:42 UT SNR CD3:384 CD5:502

06:45 UT SNR CD2:273 CD4:421

## UVa\_Multistar

HIP38979 (06:51-07:04)

06:46 UT Object missing from OB. Importing.

06:51 UT Preset sent

06:53 UT Missed it on both sides. Pointing check (large slew)

06:58 UT Resending preset

07:00 UT Exposures started.

Guider FWHM SX: 0.61" DX: 0.67"

SNR CD3:417 CD6: 363

## OSU\_PASTA

EPIC229004835 (07:04-07:46)

07:04 UT Preset sent

07:06 UT Missed it on DX. Sending DX as acquire, paddling target in.

07:08 UT resending DX as active preset.

07:11 UT Exposures started.

Cyclope 1.1"

Guider FWHM SX: 0.5" DX: 0.64"

07:14 UT SNR CD3:146 CD5:187

Aiming for 200/254 so we'll repeat this one

07:16 UT SNR CD2:143 CD4:225

aiming for 200, 318. We'll do a repeat of all 3 CD pairs.

07:30 UT SNR CD1:165 CD6:498

07:30 UT Starting 2nd round of exposures

DIMM 0.81" Cyclope 0.7"

Guider FWHM SX: 0.52" DX: 0.59"

## UM\_TCrB

TCrB (07:46-09:27)

07:46 UT Preset sent

07:54 UT Exposures started

DIMM 0.76" Cyclope 0.88"

Guider FWHM SX: 0.54" DX: 0.56"

08:14 UT SNR CD2:143 CD4:347

Aiming for 125 SNR, looks good.

DIMM 0.53" Cyclope 0.90"

Guider FWHM SX: 0.46" DX: 0.47"

08:35 UT Lost the star on DX, right as the exposure was finishing.

Mono preset did not find the star. Pointing check before resuming with final CD pair

08:35 UT SNR CD3:310 CD5:658

08:39 UT resending preset to science target

08:41 UT Starting final CD pair exposures

09:02 UT SNR CD1:75 CD6:934

Targeting SNR 125. We'll repeat this CD pair.

09:05 UT Repeat exposure started for CD1/CD6

DIMM 0.91" Cyclope 0.75"

Guider FWHM SX: 0.47" DX: 0.48"

HR5501 (09:27-09:58)

09:27 UT Preset sent

09:30 UT Exposures started

DIMM 0.74" Cyclope 0.65"

Guider FWHM SX:0.45" DX: 0.54"

09:40 UT SNR CD2:1262 CD4:1663

09:47 UT SNR CD3:1591 CD5:1508

09:58 UT SNR CD1: CD6:

## OSU\_PASTA

TOI-2289 (09:58-10:39)

09:58 UT Preset sent

10:03 UT Exposures started.

Increased Exptime by 1.5x to account for lower than expected SNR on previous targets for this program.

10:05UT DIMM 0.60" Cyclope 0.74"  
Guider FWHM SX: 0.40" DX: 0.47"

10:08 UT SNR CD3:199 CD5:229  
Target: 200, 254

10:15 UT SNR CD2:196 CD4:282  
Target 200, 318

10:38 UT SNR CD1:214 CD6:637  
Target: 200, 712

## UVa\_Multistar

HIP96306 (10:39-10:44)

10:39 UT Preset sent

10:42 UT Exposures started

DIMM 0.64" Cyclope 1.21"  
Guider FWHM SX:0.44" DX: 0.63"

10:44 UT SNR CD3:319 CD6:340

TIC278352276 (10:44-10:54)

10:44 UT Preset sent

10:46 UT Wrong star on DX. Nudging correct star in.

10:48 UT Exposures started  
DIMM 0.64" Cyclope 0.74"  
Guider FWHM SX: 0.49" DX: 0.60"

10:50 UT SNR CD3:119 CD6:142

10:52 UT SNR CD3:121 CD6:142

## ND\_v426oph (Garnavich)

V426Oph (10:54-11:39)

Only 2/3rds of exposures complete - see below.

10:54 UT Preset sent

10:57 UT Exposures started  
DIMM: 0.97" Cyclope 0.92"  
Guider FWHM SX:0.51 DX:0.58

11:09 UT SNR CD4:114

11:18 UT SNR CD1:67 CD4:109

11:26 UT This target is in the wrong part of the sky - we're pointing where the sun will rise.  
We're going to have to curtail after 2 blue exp/4 red exp.

11:32 UT 18 deg twilight

11:38 UT SNR CD1:67 CD4:121

## UVa\_metalpoor

Gaia DR3 1370554648617496704 (11:39-11:48)

11:39 UT Preset sent. Long slew  
11:43 UT Exposures started.  
DIMM 0.79" Cyclope 0.92"  
Guider FWHM SX: 0.46 DX: 0.54"

SNR CD2:97 CD4:195  
Aiming for 40

Gaia DR3 1299295300021645824 (11:48-11:55)

11:48 UT Preset sent

11:50 UT Starting exposures  
DIMM 0.84" Cyclope 0.91"  
Guider FWHM SX: 0.42" DX: 0.49"

11:55 UT SNR CD2:200 CD4:316

11:56 UT Science complete, no further targets in this part of the sky with low enough exptime to be useful.

11:58 UT PEPSI calcs running