

LBT Observing Log: 2026 Mar 14 UT

Observers: Alex Becker

Partner Observer: Peter Garnavich

Telescope Operator: Josh Williams

Plan:

LUCI

UVa_planets//DH Tau b (ESM) xxx

PEPSI

OSU_NGC2420/865401378607077888 xxx

OSU_NGC2420/865402924795303040 xxx

OSU_LBOISpec/HD63433 not done

OSU_LAMP/GaiaDR31048029989398510976 not done

OSU_LiDwarf/800532498968063744 highest 5.5UT not done

OSU_EBRV/NSVS10154047 6:54UT late xxx

OSU_LiDwarf/780375667690224000 xxx

OSU_LiDwarf/789459076853329920 (1541256440171188992) xxx

ND_HWOTargets/HD103095 double exp xxx high proper motion

ND_HWOTargets/HD101501 double exp xxx

ND_HWOTargets/HD115404A double exp xxx

OSU_LAMP/GaiaDR31534484719851800576 clouds xxx

ND_HWOTargets/HD126660A xxx

ND_HWOTargets/HD157214 xxx

ND_M3Cluster/NGC5272_357 xxx clouds

ND_HWOTargets/HD141004 xxx

ND_HWOTargets/HD134083 xxx

ND_HWOTargets/HD131156A xxx clouds

ND_HWOTargets/HD131156B xxx clouds

UVa_Snowbird in morning twilight - too close to facing sunrise

ND_HWOTargets/HD109358

Summary:

https://drive.google.com/file/d/1k8j2pITNeXYFBY2i99yIE_iBxWWNeaL6/view?usp=sharing

Issues:

Critical IT #9492: We lost a transformer powering the cryo coolers on both LUCIs. LUCI offline, most likely for more than 2 weeks.

Thanks to Joe Ornelas, Jay Prothro, and Steven Harmon, James Riedl, & Dave Thompson for diagnosing and attempting to fix the issue in the middle of the night.

Weather:

Overview:

01:23 Opening

LUCI

01:49 Pointing preset

UVa_planets

DH Tau b (ESM)

Seeing is pretty bad and variable

02:02 Preset

02:04 CCD47 on DX not working. Greg is recovering

02:07 Preset

02:16 Preset was successful and we took the first exposure (Acq Sky image). Afterwards the preset was sent to IIF again by LUCI ... I don't know why.

02:17 Preset ... starting fresh

First offset:

2026-03-14 02:21:26.8000 Left side command returned invalid side!

However, everything continued after a few seconds

02:34 The script put the mask back into turnout with the first science exposure after the blind offset

HD 284383

03:10 Preset

03:30 Reconfig to PEPSI. Seeing too bad for LUCI

PEPSI

OSU_NGC2420

865401378607077888

03:44 Preset

03:46 Starting exposure

03:49

Target jumped away on DX. First -2.6 110.1, then 168.3, -28.9
gcs.guidethread.error right stop guiding, HS drifted off CCD

03:50 New preset for DX, as I don't know if we are still on the correct target with DX or not..
No hotspot guiding

04:26 We are getting some thin clouds now. Not strongly impacting the count rate yet.

865402924795303040

04:36 Preset

04:38 Starting exposure

Technical downtime

05:00

LUCI cryo cooler went off at around 04:38 and the shield is warming up. Recovering now. It should not interfere with our observation.

05:09

Compressors are running. Issue must be with the coldheads on the LUCIs itself. We will have to go to zenith to recover and it needs to cool afterwards.

05:26 PEPSI exposure complete

05:26 Moving telescope up to zenith

05:55 Calling James Riedl for assistance.

The recovery is urgent and has to be done within the next few hours. Otherwise both LUCIs will be offline for 2 weeks (they have to warm up and be cooled down again).

07:24 Joe Ornelas, Jay Prothro, and Steven Harmon (at the telescope) & James Riedl, and Dave Thompson (remotely) are still working on it.

07:30 It looks like we might have lost a transformer. Only 2 out of 3 phases have ~110 Volt

PEPSI observing

07:44 Pointing check

OSU_EBRV

NSVS10154047

07:51 Preset

07:54 Starting exposure

OSU_LiDwarf

780375667690224000 highest 6.5UT

08:07 Preset

Missed the target on DX. Mono Acq preset

08:11 Mono active preset

08:13 Starting exposure

789459076853329920 (1541256440171188992)

08:19 Preset

Missed it on DX again

08:25 Starting exposure

CD3 & CD6 missing in PEPSI OB for all LiDwarf targets...

780375667690224000 highest 6.5UT

Going back to this target to take the missing configuration

08:39 Preset

08:42 Starting exposure

ND_HWOTargets

HD103095 double exp

08:47 Preset

HD101501 double exp

08:57 Preset

08:59 Starting exposure

HD115404A double exp

09:01 Preset

OSU_LAMP

Gaia DR3 1534484719851800576

09:10 Preset

09:15 Starting exposure

09:40 Repeating exposures

ND_HWOTargets

HD126660A

10:07 Preset

10:10 Starting exposure

HD157214

10:12 Preset

10:18 Starting exposure

ND_M3Cluster

NGC5272_357

10:22 Preset

10:25 Pointing check

10:29 Preset

10:35 Starting exposure

10:37 And aborting exposure. We are not on the same target with both sides. New pointing check

10:40 Preset

10:44 Starting exposure

ND_HWOTargets

HD141004

11:28 Preset

11:33 Starting exposure

HD134083

11:36 Preset

11:38 Starting exposure

HD131156A

11:41 Preset

11:43 Starting exposure

11:46 Taking another exposure

HD131156B

11:49 Preset

11:52 Starting exposure

UVa_Snowbird

EM* UHA 138

12:00 Preset

We are pointing directly towards the rising sun. We have to move away from this target

ND_HWOTargets

HD128167

12:08 Preset

12:12 Starting exposure

HD146233

12:14 Preset

12:19 Starting exposure

HD109358

12:24 Preset

12:27 Starting exposure

12:30 We are done for tonight!