
Mauna Loa Solar Observatory Observer's Log

Sat Apr 25 16:56:57 GMT 2026

Year:26 Doy:115

Observer: mcotter

Weather COMMENT BY mcotter: Sat Apr 25 16:58:45 GMT 2026

MLO Current Weather

Timestamp (UTC): 2026-04-25 16:53:00

Temperature : 43.25 deg F

Dew Point : -6.12 deg F

Pressure : 678.92 mbar

Wind Speed : 11.41 mph

Wind Direction : 240.3 deg

Skies: Very hazy subversion layer visible on the horizon above Haleakala. Skies appear to be quite bright.

____end____

GENERAL COMMENT BY mcotter: Sat Apr 25 16:59:01 GMT 2026

Opened windows upstairs

____end____

GENERAL COMMENT BY mcotter: Sat Apr 25 16:59:08 GMT 2026

Opened windows upstairs

____end____

** KCOR PM mcotter ** : Sat Apr 25 16:59:24 GMT 2026

Blew off Kcor 01

____end____

KCOR COMMENT BY mcotter: Sat Apr 25 17:08:08 GMT 2026

Kcor Calibration

____end____

Sat Apr 25 17:16:53 GMT 2026 Kcor Focus/alignment program exited

KCOR COMMENT BY mcotter: Sat Apr 25 17:30:43 GMT 2026

I ran the Kcor Focus Routine multiple times and could not obtain a decent parabola. The skies are bright and as I watch the Guider voltage trace on the SGS program It continues to climb since it was first energized. Though I could not get a decent Focus parabola I started the Kcor Synoptic Acquisition Mode anyways. The images are bright, but I am going to run it for a while and see if it improves as the Sun rises on the horizon and out of the highest area of haze.

____end____

COMMENT BY mcotter: Sat Apr 25 17:32:43 GMT 2026

Global Protect has been turned on on both computers.

____end____

KCOR COMMENT BY KCOR: Sat Apr 25 17:54:22 GMT 2026

KCOR file transfer report

KCor created 119 .bin files

119 .fts files

WARNING 109 fts file(s) found locally that was not transferred dawn

ACTION must be taken to copy:

20260425_171716_kcor.fts

20260425_171731_kcor.fts

20260425_171747_kcor.fts

20260425_171802_kcor.fts

20260425_171817_kcor.fts

20260425_171832_kcor.fts

20260425_171847_kcor.fts

20260425_171902_kcor.fts

20260425_171918_kcor.fts

20260425_171933_kcor.fts

20260425_171948_kcor.fts

20260425_172003_kcor.fts

20260425_172018_kcor.fts

20260425_172033_kcor.fts

20260425_172049_kcor.fts

20260425_172104_kcor.fts

20260425_172119_kcor.fts

20260425_172134_kcor.fts

20260425_172149_kcor.fts

20260425_172204_kcor.fts

20260425_172220_kcor.fts
20260425_172235_kcor.fts
20260425_172250_kcor.fts
20260425_172305_kcor.fts
20260425_172320_kcor.fts
20260425_172336_kcor.fts
20260425_172351_kcor.fts
20260425_172406_kcor.fts
20260425_172421_kcor.fts
20260425_172436_kcor.fts
20260425_172451_kcor.fts
20260425_172507_kcor.fts
20260425_172522_kcor.fts
20260425_172537_kcor.fts
20260425_172552_kcor.fts
20260425_172607_kcor.fts
20260425_172622_kcor.fts
20260425_172638_kcor.fts
20260425_172653_kcor.fts
20260425_172708_kcor.fts
20260425_172723_kcor.fts
20260425_172738_kcor.fts
20260425_172753_kcor.fts
20260425_172809_kcor.fts
20260425_172824_kcor.fts
20260425_172839_kcor.fts
20260425_172854_kcor.fts
20260425_172909_kcor.fts
20260425_172924_kcor.fts
20260425_172940_kcor.fts
20260425_172955_kcor.fts
20260425_173010_kcor.fts
20260425_173025_kcor.fts
20260425_173040_kcor.fts
20260425_173055_kcor.fts
20260425_173111_kcor.fts
20260425_173126_kcor.fts
20260425_173141_kcor.fts
20260425_173156_kcor.fts
20260425_173211_kcor.fts
20260425_173226_kcor.fts
20260425_173242_kcor.fts
20260425_173257_kcor.fts
20260425_173312_kcor.fts
20260425_173327_kcor.fts
20260425_173342_kcor.fts
20260425_173358_kcor.fts
20260425_173413_kcor.fts
20260425_173428_kcor.fts
20260425_173443_kcor.fts
20260425_173458_kcor.fts
20260425_173513_kcor.fts
20260425_173529_kcor.fts
20260425_173544_kcor.fts
20260425_173559_kcor.fts
20260425_173614_kcor.fts
20260425_173629_kcor.fts
20260425_173644_kcor.fts
20260425_173700_kcor.fts
20260425_173715_kcor.fts
20260425_173730_kcor.fts
20260425_173745_kcor.fts
20260425_173800_kcor.fts
20260425_173815_kcor.fts
20260425_173831_kcor.fts
20260425_173846_kcor.fts
20260425_173901_kcor.fts

20260425_173916_kcor.fts
20260425_173931_kcor.fts
20260425_173946_kcor.fts
20260425_174002_kcor.fts
20260425_174017_kcor.fts
20260425_174032_kcor.fts
20260425_174047_kcor.fts
20260425_174102_kcor.fts
20260425_174117_kcor.fts
20260425_174133_kcor.fts
20260425_174148_kcor.fts
20260425_174203_kcor.fts
20260425_174218_kcor.fts
20260425_174233_kcor.fts
20260425_174249_kcor.fts
20260425_174304_kcor.fts
20260425_174319_kcor.fts
20260425_174334_kcor.fts
20260425_174349_kcor.fts
20260425_174404_kcor.fts
20260425_174420_kcor.fts
20260425_174435_kcor.fts

____end____

Sat Apr 25 18:26:02 GMT 2026 Kcor Focus/alignment program exited

** KCOR PROBLEM REPORTED BY mcotter ** : Sat Apr 25 19:04:57 GMT 2026

I started taking data with Kcor but the NRGF image looked a bit out of focus. I had called Ben because I wanted to know if I may be running the Kcor Synoptic program trying to get data with the sky too bright. Ben agreed that the sky was a bit bright and the image looked out of focus, so he had me run the Kcor Focus routine several more times in an attempt to get a more normal looking parabola and a focus distance more inline with what we have had previously. Several attempts were done with the focus routine but a parabola was never obtained. Ben instructed me to manually expand the Focus Range from 20 up to 24 mm. A parabola could not be obtained. At that point Ben had me manually change the Focus value from 135 to 133.5 mm (our average for 2026). I left the focus at that value at 133.5 then restarted the Kcor Synoptic program. The NRGF image that came up looked to be in a sharper focus, though the skies are still quite bright.

____end____

Weather COMMENT BY mcotter: Sat Apr 25 19:06:13 GMT 2026

MLO Current Weather

Timestamp (UTC): 2026-04-25 19:02:00

Temperature : 51.8 deg F

Dew Point : -9.27 deg F

Pressure : 679.85 mbar

Wind Speed : 10.96 mph

Wind Direction : 280.3 deg

Skies: Skies continue to be very bright. Elevated aerosol levels are visible in the Kcor NRGF images.

____end____

Guider/spar COMMENT BY mcotter: Sat Apr 25 19:14:29 GMT 2026

The SGS voltage display is fluctuating dramatically at times. The Voltage Range Scale opens up wide from 0.0 volts to 10.0 volts making the trace display line look like a straight line across the approximate 8.0 volt scale. After the trace completes a full time scale the Voltage Scale returns to approximately 7.0 volts to 8.5 volts and then the trace values begin to tighten up and the voltage display returns to normal.

The Spar and Guider appear to be functioning normally but the anomaly does appear from time to time. At this time I am not sure what is causing this fluctuation.

____end____

Sat Apr 25 20:00:25 GMT 2026 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

Sat Apr 25 20:15:40 GMT 2026 KCOR End Calibration Script

Weather COMMENT BY mcotter: Sat Apr 25 20:25:38 GMT 2026

MLO Current Weather

Timestamp (UTC): 2026-04-25 20:20:00

Temperature : 53.76 deg F

Dew Point : 24.2 deg F

Pressure : 679.95 mbar

Wind Speed : 11.86 mph

Wind Direction : 306.4 deg
Skies: The sky continues to be bright and the wind is getting blustery blowing from the Northwest.
____end____
Weather COMMENT BY mcotter: Sat Apr 25 21:19:20 GMT 2026
MLO Current Weather
Timestamp (UTC): 2026-04-25 21:14:00
Temperature : 52.9 deg F
Dew Point : 35.46 deg F
Pressure : 679.73 mbar
Wind Speed : 10.29 mph
Wind Direction : 334.1 deg
Skies: Skies are very bright and Orographic Clouds are coming up the slopes of Maunaloa and are also forming in the area of observations.
____end____
KCOR BY mcotter: Sat Apr 25 21:23:02 GMT 2026
Kcor is now paused and the lens cover is in beam due to sky conditions.
____end____
Weather COMMENT BY mcotter: Sat Apr 25 21:49:36 GMT 2026
MLO Current Weather
Timestamp (UTC): 2026-04-25 21:44:00
Temperature : 51.94 deg F
Dew Point : 35.82 deg F
Pressure : 679.62 mbar
Wind Speed : 6.93 mph
Wind Direction : 335.2 deg
Skies: The sky is still quite bright but the clouds have somewhat dissipated overhead, in the viewing area.
____end____
KCOR BY mcotter: Sat Apr 25 21:50:42 GMT 2026
Kcor Started

Kcor is again observing, though the sky is bright.
____end____
KCOR COMMENT BY mcotter: Sat Apr 25 21:52:28 GMT 2026
Kcor Stopped.

That was a short lived opportunity to observe, as the clouds are again back overhead in the viewing area.

Kcor has been stopped.
____end____
KCOR COMMENT BY KCOR: Sat Apr 25 21:59:28 GMT 2026
KCOR file transfer report
KCor created 911 .bin files
908 .fts files
NOTICE ? 3 .bin file(s) with no matching .fts:
20260425_180735_kcor.bin
20260425_212158_kcor.bin
20260425_215050_kcor.bin
Remote site is complete ? no rsync required.
____end____
KCOR COMMENT BY KCOR: Sat Apr 25 22:00:13 GMT 2026
KCOR file transfer report
KCor created 911 .bin files
908 .fts files
NOTICE ? 3 .bin file(s) with no matching .fts:
20260425_180735_kcor.bin
20260425_212158_kcor.bin
20260425_215050_kcor.bin
Remote site is complete ? no rsync required.
____end____
Weather COMMENT BY mcotter: Sat Apr 25 22:05:46 GMT 2026
MLO Current Weather
Timestamp (UTC): 2026-04-25 21:59:00

Temperature : 51.69 deg F
Dew Point : 40.21 deg F
Pressure : 679.53 mbar
Wind Speed : 10.74 mph
Wind Direction : 353.3 deg

Skies: The Skies have become very bright and clouds keep forming and dissipating in the viewing area. Additionally, Orographic clouds are beginning to push there way up the slopes of the mountain.

____end____

KCOR COMMENT BY mcotter: Sat Apr 25 22:13:48 GMT 2026

Kcor Stopped.

Because the sky conditions are poor and at the present time observations cannot be accomplished I have completely shutdown the Kcor Instrument and computer (this also turns off the HEPA System) in order to let the ECO FLO battery bank charge up for a while. I am hoping that I can let the system charge enough to allow the ILX to run overnight and maintain power to the heaters.

____end____

GENERAL COMMENT BY mcotter: Sat Apr 25 22:16:20 GMT 2026

ECO FLO readings at this time;

Power input: 1420 W

Output: 220 W

Battery Power Storage: 38%

____end____

Weather COMMENT BY mcotter: Sat Apr 25 22:39:59 GMT 2026

MLO Current Weather

Timestamp (UTC): 2026-04-25 22:35:00

Temperature : 52.97 deg F

Dew Point : 35.3 deg F

Pressure : 679.3 mbar

Wind Speed : 7.61 mph

Wind Direction : 334.5 deg

Skies: Clouds are encroaching on the observatory from all directions with thicker clouds forming and dissipating above in the viewing area. The sky is becoming increasingly overcast.

____end____

GENERAL COMMENT BY mcotter: Sat Apr 25 23:18:20 GMT 2026

Dome closed.

The sky is now mostly overcast.

____end____

GENERAL BY mcotter: Sat Apr 25 23:19:41 GMT 2026

Dome and windows are both all shut.

____end____

KCOR COMMENT BY KCOR: Sat Apr 25 23:24:30 GMT 2026

KCOR file transfer report

KCor created 911 .bin files

908 .fts files

NOTICE ? 3 .bin file(s) with no matching .fts:

20260425_180735_kcor.bin

20260425_212158_kcor.bin

20260425_215050_kcor.bin

Remote site is complete ? no rsync required.

____end____

GENERAL COMMENT BY mcotter: Sun Apr 26 00:32:36 GMT 2026

End of Day.

The day began with bright skies and elevated aerosols, but I was able to run the Kcor Instrument for most of the morning without any issues. Toward noon time I shut down the Kcor Instrument and powered down the Kcor computer due to the poor sky conditions. Having shut down the Kcor computer I was able to allow the ECO FLO power supply to increase it's input to out ratio and was able to bring up the ECO FLO battery storage to 76%. With the battery level at 76% I am going to leave the Kcor ILX and heaters on overnight. Currently the Yeti Power Unit battery storage is at 100%, so the network should have no issues with power overnight.

____end____

Logger COMMENT BY mcotter: Sun Apr 26 00:32:49 GMT 2026

Log closed

ONSITE STAFF: mcotter

____end____