
Mauna Loa Solar Observatory Observer's Log

Thu May 20 16:51:55 GMT 2021

Year: 21 Doy: 140

Observer: mlso

WEATHER COMMENT: mcotter: Thu May 20 16:53:33 GMT 2021

Temp: 46.2f, Humidity: 28%, Pressure: 28.706in, Wind: 9mph from 244degs, Skies: Clouds and mist up to approximately the 8, 500' level. Hazy skies with an inversion layer visible on the horizon at or above Maunakea.

____end____

GENERAL COMMENT BY mcotter: Thu May 20 16:53:41 GMT 2021

Opened windows upstairs

____end____

GENERAL COMMENT BY mcotter: Thu May 20 16:53:49 GMT 2021

PM Blew off Kcor O1

____end____

Thu May 20 16:59:24 GMT 2021 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Thu May 20 17:22:41 GMT 2021

Kcor now running.

SGS offsets: X(RA): 85, Y(Dec): -125.

Polarization started off wrong. Stopped Socket and restarted. Polarization now correct: Mid, Bright, Dark, Mid.

Polarization state before 171659 incorrect.

____end____

GENERAL COMMENT BY mcotter: Thu May 20 18:01:04 GMT 2021

Kcor has been stopped.

____end____

UCoMP COMMENT BY mcotter: Thu May 20 18:02:07 GMT 2021

Continuing to work on Ucomp installation.

____end____

WEATHER COMMENT: mcotter: Thu May 20 18:04:35 GMT 2021

Temp: 49.2f, Humidity: 31%, Pressure: 28.71in, Wind: 13mph from 259degs, Skies: Altocumulus clouds are beginning to form over the observatory. Additional Altocumulus clouds that are to the west are increasing in size and numbers and appear to be moving closer to the western slope of Maunaloa.

____end____

WEATHER COMMENT: mcotter: Thu May 20 19:09:46 GMT 2021

Temp: 51.9f, Humidity: 34%, Pressure: 28.708in, Wind: 19mph from 264degs, Skies: High altitude Cirrus clouds are increasing and Cirrus is continuing to blow in from the west. The wind is increasing out of the west-southwest with occasional strong gusts.

____end____

Thu May 20 20:34:13 GMT 2021 Kcor Focus/alignment program exited

Fri May 21 00:24:39 GMT 2021 Kcor Focus/alignment program exited

UCoMP COMMENT BY mcotter: Fri May 21 00:27:49 GMT 2021

UCoMP work today:

1) With ND in beam and pointing at sun, finished x-y centering of Rcam on solar disk. Checked that Tcam is still centered.

2) With spar vertical and pinned, removed Lyot filter and mounted laser near filter wheel pointing at cameras. Put target near beamsplitter and pointed laser at center of target. Removed target and looked at reflection off cameras and adjusted

tip/tilt to get reflection back on laser.

3) Mounted cooling tubes onto cameras connecting to bulkhead feedthroughs. Checked tip/tilt and it did not change.

4) Remove laser and re-install Lyot filter with ND still in beam. Pointed at sun and checked centering of sun on cameras. Looked good.

5) With ND removed, 1083 filter in beam, diffuser in beam, and occulter in beam, focused the cameras for sharpest focus of edge of occulter. Both cameras seemed to find best focus at the front of their focus stage range.

____end____

GENERAL COMMENT BY mcotter: Fri May 21 00:37:38 GMT 2021

Attempted to restart Kcor but the polarization repeatedly came up incorrect. I stopped and restarted the socket cam several times but the polarization would not self correct. Finally I restarted the Kcor computer and the polarization self corrected and changed state: Mid, Bright, Dark, Mid.

____end____

WEATHER COMMENT: mcotter: Fri May 21 00:44:08 GMT 2021

Temp: 55.4f, Humidity: 36%, Pressure: 28.66in, Wind: 15mph from 277degs, Skies: The skies have cleared, for the most part, but aerosols and very high altitude Cirrostratus clouds are present and making for a very bright sky. The wind is strong and gusty and is blowing from the west-northwest, causing some difficulties with observing as the spar buffeting.

____end____

GENERAL COMMENT BY mcotter: Fri May 21 01:32:27 GMT 2021

Looks like we may have had a CME on the west limb while doing UCoMP alignments this morning. With the afternoon aerosols it is hard to be sure since the structures are fairly washed out but it appears a big loop has opened up.

____end____

UCoMP COMMENT BY mcotter: Fri May 21 01:55:36 GMT 2021

Took O1 position vs focus data with UCoMP.

ND 3.8 in the beam

____end____

GENERAL COMMENT BY mcotter: Fri May 21 02:05:26 GMT 2021

Some data today and good progress on UCoMP

____end____

ONSITE STAFF: berkey, mcotter, Tomczyk