
Mauna Loa Solar Observatory Observer's Log

Tue Aug 30 16:33:12 GMT 2022

Year: 22 Doy: 242

Observer: mcotter

WEATHER COMMENT: mcotter: Tue Aug 30 16:37:11 GMT 2022

Temp: 40.3f, Humidity: 21%, Pressure: 28.744in, Wind: 6mph from 194 degs. Relatively clear skies but there are some wisps of high altitude Cirrus clouds scattered about the sky to the East and South. The wind is light but steady out of the South with an inversion layer visible on the horizon just above Haleakala. The morning air is getting colder as ice was visible on puddles in the parking lot.

____end____

Tue Aug 30 17:09:42 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Tue Aug 30 17:10:50 GMT 2022 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Tue Aug 30 17:24:36 GMT 2022

Opened windows upstairs

____end____

GENERAL COMMENT BY mcotter: Tue Aug 30 17:24:45 GMT 2022

PM Blew off UCOMP 01

____end____

GENERAL COMMENT BY mcotter: Tue Aug 30 17:24:50 GMT 2022

PM Blew off Kcor 01

____end____

Tue Aug 30 17:29:59 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

KCOR COMMENT BY mcotter: Tue Aug 30 17:34:17 GMT 2022

Joan sent an email stating that a shadow could be observed in the previous two days NRG F images and asked that an inspection be performed of the Kcor light path to see if something physical could account for this anomaly. I inserted my head into the Kcor 01 Lens chamber and using a flashlight I looked down through the 01 Lens through the tube chamber and could see the occulter but could not identify anything physically in the path that would account for this shadow. I blew off the 01 Lens again then went to the Field Lens chamber and did an inspection. Again I could not see anything amiss that would account for this shadow. I gently grasped the occulter by the black mat finish provided for handling and applied gentle lateral pressure to see if the occulter had become loose or misaligned but there was absolutely no movement to the occulter and it appeared to be seated properly. I blew off the occulter and field lens and exited the chamber. An email was sent to Joan requesting further instructions.

____end____

Tue Aug 30 17:36:06 GMT 2022 UCOMP Paused for clouds

****Possible CME in Progress reported by mcotter**** : Tue Aug 30 17:41:38 GMT 2022

Observer reports with High confidence two CME's at the time, position angle, and width noted.

TIME: 17:14:10.

PA: 160 degs & 240 degs.

WIDTH: >40 degs each.

Both CME's were already in progress at the start of observing.

These regions of the Sun have been quite active lately and continued elevated activity should be anticipated.

____end____

Tue Aug 30 17:42:36 GMT 2022 UCOMP Restarted from pause

WEATHER COMMENT: mcotter: Tue Aug 30 17:44:54 GMT 2022

Unfortunately the instrument was paused briefly due to Cirrus clouds entering the viewing area. Significant solar activity is currently going on and two active CME's are in progress. I have turned the instrument back on though the sky conditions are less than ideal, but most of the clouds have passed through the viewing area.

____end____

Tue Aug 30 18:08:28 GMT 2022 UCOMP Paused for clouds

****Possible CME in Progress reported by mcotter**** : Tue Aug 30 18:10:48 GMT 2022

TIME: 17:54:04 UT

PA: 245 degs

WIDTH: 10 degs

Observers report with High confidence a CME at the time, position angle, and width note

d.

This CME appears to be a second one launching from the same area as a CME reported at 17:14:38 UT earlier today. This region of the Sun has been very active for several days and continued elevated activity should be anticipated.

____end____

Tue Aug 30 18:11:53 GMT 2022 UCoMP Restarted from pause

Tue Aug 30 18:12:45 GMT 2022 UCoMP Paused for clouds

Tue Aug 30 18:18:43 GMT 2022 UCoMP Restarted from pause

Tue Aug 30 18:24:01 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

WEATHER COMMENT: mcotter: Tue Aug 30 18:28:39 GMT 2022

I briefly paused the instruments as it appeared the sky had become bright and I could see light spillage in the images. Immediately after pausing I looked at the Yawcam Preview image and it appeared that the sky was clear, so I started the instruments but quickly saw light spillage again. I paused the instruments again and checked the Spar and saw that the auto correction numbers were not updating. I quickly tried pausing then restarting the SGS program but the numbers were still not advancing. I went to the dome and ensured that the Spar was still aligned with the Sun then went back to the control room and restarted the SGS program, but still no updates were happening. I restarted Kcor to see where the occulter position was and began to manually update the X(RA) & Y(Dec) fields to see if it would start up again and within 30 seconds the automated updates started to work. I could see that the occulter was misaligned by looking at the Synoptic Level 0 images so I continued to manually advance the X & Y fields until they were close and then let the automated advance system continue by itself until it finally caught up to where it should be.

____end____

Tue Aug 30 19:02:03 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue Aug 30 19:10:31 GMT 2022 UCoMP Paused for clouds

Tue Aug 30 19:14:22 GMT 2022 UCoMP Restarted from pause

Tue Aug 30 19:44:19 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Tue Aug 30 20:04:53 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Tue Aug 30 20:29:48 GMT 2022 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

Tue Aug 30 20:45:02 GMT 2022 KCOR End Calibration Script

Tue Aug 30 21:15:19 GMT 2022 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Tue Aug 30 21:16:37 GMT 2022 Running UCOMP Cookbook 637_Pol_Calibrate.cbk line 0

Tue Aug 30 21:20:41 GMT 2022 Running UCOMP Cookbook 706_Pol_Calibrate.cbk line 0

Tue Aug 30 21:24:45 GMT 2022 Running UCOMP Cookbook 789_Pol_Calibrate.cbk line 0

Tue Aug 30 21:28:49 GMT 2022 Running UCOMP Cookbook 1074_Pol_Calibrate.cbk line 0

Tue Aug 30 21:32:53 GMT 2022 Running UCOMP Cookbook 1079_Pol_Calibrate.cbk line 0

Tue Aug 30 21:36:57 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue Aug 30 21:51:47 GMT 2022 UCoMP Paused for clouds

Tue Aug 30 22:14:14 GMT 2022 UCoMP Restarted from pause

****Possible CME in Progress reported by mcotter**** : Tue Aug 30 22:22:10 GMT 2022

Observers report with High confidence a CME at the time, position angle, and width noted.

TIME: 21:24:08 UT.

PA: Approximately 65 degs.

WIDTH: Approximately 20 degs.

This CME was identified using the images of Kcor NRGF and Kcor Diff together, as it is a little faint.

____end____

Tue Aug 30 22:54:41 GMT 2022 UCoMP Paused for clouds

Tue Aug 30 23:05:38 GMT 2022 UCoMP Restarted from pause

WEATHER COMMENT: mcotter: Tue Aug 30 23:09:52 GMT 2022

Orographic clouds began to rise into the area from the Northwest slope of Maunaloa. The instruments were paused and restarted a few times as we tried to continue observing in patches of blue sky as they became available, but the sky is now mostly overcast and aerosols have become quite heavy.

The instruments have been stopped due to poor sky conditions.

The dome shutter doors and windows are now closed.

____end____

GENERAL COMMENT BY mcotter: Wed Aug 31 02:30:59 GMT 2022

Moved some equipment including the firewalls over to the new UPS. Seems like they lost their config when they were powered down. Currently no interent. Message into NETS for help.

____end____

GENERAL COMMENT BY mcotter: Wed Aug 31 02:36:42 GMT 2022

Network looks to be back now.

Not sure if power cycling on our end of something on nets end fixed it.

____end____

GENERAL COMMENT BY mcotter: Wed Aug 31 03:05:50 GMT 2022

Ben and I continued to organize the Control Room and go through items on the shelves. We removed the existing monitor stanchion and remounted the monitor array so that it is affixed to the East wall of the Control Room and anchored to the floor. This allowed the operator work station to be moved closer to the East wall and opened up the remaining floor area. All monitors and the large display screen monitor are all now permanently configured and secured in place. The entire observatory, including the Control Room area, the IT and computer area, storage areas, the additional work stations and our small sink/kitchen area are now very organized after the recent refurbishment. We are continuing to go through older legacy items that have been at the observatory for years and weeded out what is pertinent and what can be eliminated and disposed of. Additionally, Ben and I permanently mounted the "National Science Foundation/ Mauna Loa Solar Observatory" sign to the front of the observatory.

____end____

GENERAL COMMENT BY mcotter: Wed Aug 31 03:09:24 GMT 2022

Today the sky started out fairly clear but wisps of upper level Cirrus clouds were present in the Eastern sky, so that for the first couple of hours the instruments needed to be paused and restarted several times. The Sun was very active today and a total of four CME's were reported before clouds came up from the Saddle Valley in the late morning and observations were suspended.

____end____

ONSITE STAFF: