
Mauna Loa Solar Observatory Observer's Log

Tue May 24 16:49:50 GMT 2022

Year: 22 Doy: 144

Observer: mcotter

WEATHER COMMENT: mcotter: Tue May 24 16:54:11 GMT 2022

Temp: 43.2f, Humidity: 20%, Pressure: 28.761in, Wind: 5mph from 184degs, Skies: Skies appear relatively clear overhead, but it is hazy out. Heavy VOG in the Saddle Valley and the VOG can be observed on the horizon fairly high up being just below Maunakea. The inversion layer is a dark blue gray and is visible on the horizon just below Haleakala. I will continue to closely monitor the VOG and if it appears to be getting worse I will need to close the dome.

___end___

GENERAL COMMENT BY mcotter: Tue May 24 16:54:30 GMT 2022

PM Blew off Kcor 01

___end___

GENERAL COMMENT BY mcotter: Tue May 24 16:54:39 GMT 2022

PM Blew off UCOMP 01

___end___

Tue May 24 16:57:33 GMT 2022 Kcor Focus/alignment program exited

Tue May 24 16:58:52 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

KCOR COMMENT BY mcotter: Tue May 24 16:59:46 GMT 2022

Though the sky is bright I was able to run the focus routine and get a well shaped parabola.

Kcor now observing.

___end___

UCOMP COMMENT BY mcotter: Tue May 24 17:00:22 GMT 2022

Though the sky is bright Ucomp is now observing.

___end___

Tue May 24 17:14:12 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue May 24 17:42:28 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue May 24 18:09:55 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

WEATHER COMMENT: mcotter: Tue May 24 18:19:01 GMT 2022

Observing conditions have improved over the last hour, as the sky does not appear quite as bright as it did earlier.

___end___

Tue May 24 18:37:21 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Tue May 24 18:52:32 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

****Possible CME in Progress mcotter**** : Tue May 24 18:59:55 GMT 2022

Observers report with MEDIUM confidence a CME seeing launching near PA 130 deg with a minimum width of 10 deg at UT time 18:14:02.

This CME is in its early stage of development and was identified using the combined images of Kcor NRGF and Kcor Diff.

___end___

Tue May 24 20:02:22 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

KCOR COMMENT BY mcotter: Tue May 24 20:20:26 GMT 2022

The Kcor NRGF image showed some new "Bullet Holes" in the northwest quadrant of the image. I blew off the 01 several times but there was a stubborn little bug flying around the 01 that did not want to leave the area. After several minutes of thoroughly blowing off the lens and blowing out the lens chamber I think I was able to get the artifacts off the lens and the little bug to leave the area. I'll continue to monitor the new Kcor NRGF images and see if I had any success.

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Tue May 24 20:30:49 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

KCOR COMMENT BY mcotter: Tue May 24 20:43:47 GMT 2022

While blowing off the Kcor 01 I had the full Sun behind me, allowing me to do a thorough inspection of the lens surface. The lens has several particles of foreign debris present on both the front and rear surfaces. I was also able to identify an anomaly on the rear surface of the 01, along the north edge. It is difficult to describe, but it has the appearance of a splatter of water residue. I needed to move my head at different angles and from side to side so that I could capture the image in my vision but there is something.

The next day when we have poor weather and I have some time I am going to clean the 01.

___end___

Tue May 24 20:46:07 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0
KCOR COMMENT BY mcotter: Tue May 24 21:06:48 GMT 2022

The new "Bullet Holes" that appeared in the northwest quadrant of the Kcor NRGF image earlier are no longer in the new images. The blowing off of the 01 a little while ago seems to have done the trick removing those newer ones. The two older Bullet Holes remain at the bottom of the southwest quadrant at this time.

My next day here at the observatory is this Saturday May 28th. The weather satellite images currently show clear skies with no threat of storms for the next couple of days, but if it turns out that the conditions are poor for observing I will take the opportunity to clean the Kcor 01 on Saturday morning.

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Tue May 24 21:07:57 GMT 2022 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

Tue May 24 21:14:24 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue May 24 21:23:08 GMT 2022 KCOR End Calibration Script

Tue May 24 21:42:45 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue May 24 22:10:12 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

WEATHER COMMENT: mcotter: Tue May 24 22:48:34 GMT 2022

The sky is getting a little brighter and the Kcor Synoptic images have turned a pale gray color, but the images continue to look acceptable. Orographic clouds are beginning to form and move in from the south, west and north. So far they have not made their way to the science area but they are not far off.

___end___

GENERAL COMMENT BY mcotter: Tue May 24 22:51:26 GMT 2022

I manually rotated the dome in order to keep the dome slit opening facing the Sun. I did this yesterday as well, so I believe that from now until the Autumn we should remember to manually rotate the dome slit opening at approximately 12:40pm HST everyday.

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Tue May 24 22:53:18 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

****Possible CME in Progress mcotter**** : Tue May 24 22:57:19 GMT 2022

Observer reports with HIGH confidence a CME launching near PA 90 deg with a minimum width of 30 deg at UT time 22:16:01.

___end___

****Possible CME in Progress mcotter**** : Tue May 24 23:00:40 GMT 2022

Observer reports with HIGH confidence a CME observed launching near PA 50 deg with a minimum width of 50 deg at UT time 22:36:00.

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Tue May 24 23:02:16 GMT 2022 UCoMP Paused for clouds

WEATHER COMMENT: mcotter: Tue May 24 23:02:48 GMT 2022

Clouds have arrived and are now in the viewing area.

Instrument have been paused.

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KCOR COMMENT BY mcotter: Tue May 24 23:08:54 GMT 2022

There is a break in the clouds so I tried to restart the Kcor instrument but the skies remain too bright to observe.

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Tue May 24 23:10:27 GMT 2022 UCoMP Restarted from pause

Tue May 24 23:28:49 GMT 2022 UCoMP Paused for clouds

KCOR COMMENT BY mcotter: Tue May 24 23:28:51 GMT 2022

I restarted Kcor and left the instrument running for a short while to see how the images would look, but the Kcor Synoptic images look very bright and the Kcor NRGF image looks pretty grainy with aerosols.

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GENERAL COMMENT BY mcotter: Tue May 24 23:29:26 GMT 2022

Stopping both instrument due to poor sky conditions.

___end___

WEATHER COMMENT: mcotter: Tue May 24 23:34:32 GMT 2022

Orographic clouds have moved into the science area, as well as wisps of clouds forming and dissipating frequently in the viewing area. The air is also a bit hazy with VOG that has moved up from lower elevations and is now over the observatory.

___end___

Tue May 24 23:35:22 GMT 2022 UCoMP Restarted from pause

GENERAL COMMENT BY mcotter: Wed May 25 00:11:14 GMT 2022

Emptied the trash receptacles in the dome and the control room.

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GENERAL COMMENT BY mcotter: Wed May 25 00:13:08 GMT 2022

The morning was relatively clear, though a bit bright. By late morning, early afternoon, clouds and VOG moved up from the Saddle Valley and the sky steadily became worse for observing.

____end____

ONSITE STAFF: