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Mauna Loa Solar Observatory Observer's Log  
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Wed Oct 20 16:49:07 GMT 2021

Year: 21 Doy: 293

Observer: mlso

WEATHER COMMENT: mcotter: Wed Oct 20 16:51:03 GMT 2021

Temp: 43.3f, Humidity: 27%, Pressure: 28.669in, Wind: 4mph from 229degs, Skies: Clear skies in all directions! Inversion layer visible on the horizon below Haleakala. Light wind out of the southwest. Slightly hazy skies at lower elevations.

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Wed Oct 20 17:07:31 GMT 2021

Opened windows upstairs

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Wed Oct 20 17:07:38 GMT 2021

PM Blew off UCOMP O1

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Wed Oct 20 17:07:44 GMT 2021

PM Blew off Kcor O1

\_\_\_\_end\_\_\_\_

Wed Oct 20 17:14:14 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk line 0

Wed Oct 20 17:15:31 GMT 2021 Running UCOMP Cookbook 637\_Scan.cbk line 0

Wed Oct 20 17:17:55 GMT 2021 Running UCOMP Cookbook 656\_Scan.cbk line 0

Wed Oct 20 17:19:56 GMT 2021 Running UCOMP Cookbook 789\_Scan.cbk line 0

Wed Oct 20 17:21:34 GMT 2021 Kcor Focus/alignment program exited

Wed Oct 20 17:21:58 GMT 2021 Running UCOMP Cookbook 1074\_Scan.cbk line 0

Wed Oct 20 17:24:02 GMT 2021 Running UCOMP Cookbook 1079\_Scan.cbk line 0

UCOMP COMMENT BY mcotter: Wed Oct 20 17:24:37 GMT 2021

Ucomp instrument now running.

\_\_\_\_end\_\_\_\_

Wed Oct 20 17:26:03 GMT 2021 Running UCOMP Cookbook 1083\_Scan.cbk line 0

KCOR COMMENT BY mcotter: Wed Oct 20 17:26:18 GMT 2021

Kcor instrument now running.

SGS offsets: X(RA): 45, Y(Dec): -15.

Polarization checked good: Mid, Bright, Dark, Mid.

\_\_\_\_end\_\_\_\_

Wed Oct 20 17:28:05 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal\_flat.cbk line 0

KCOR COMMENT BY mcotter: Wed Oct 20 17:43:11 GMT 2021

There is a very pronounced bullet hole in the Kcor NRGF image located approximately at PA 245 deg. ( they can be observed in other places but this is the worse one). I blew of the Kcor O1, then ble off the Kcor Field Lens for good measure. I will need to wait a little while to see whether this action had any positive improvemnet on the existing situation.

\_\_\_\_end\_\_\_\_

KCOR COMMENT BY mcotter: Wed Oct 20 17:49:53 GMT 2021

I forgot to mention in my earlier Kcor start up comments that when attempting to run the focus routine Auto-focus command I was able to obtain a well shaped parabola, but only in the backward direction. I ran the Auto-focus command twice and each time the parabola came out backwards. The Focus Position came out at 133.51, so I kept it at that setting and started the Kcor Stand Alone Acquisition program. The NRGF image looks good, but I am unsure why this is happening.

\_\_\_\_end\_\_\_\_

Wed Oct 20 17:53:13 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal.cbk line 0

KCOR COMMENT BY mcotter: Wed Oct 20 17:53:56 GMT 2021

The bullet hole(s) are still present in the NRGF image so the corrective action I attempted to mitigate this problem has not worked. Because of the position of the bullet hole(s) I would recommend cleaning the Kcor 01 at the first opportunity.

\_\_\_\_end\_\_\_\_

Wed Oct 20 19:18:17 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk line 0

Wed Oct 20 19:19:34 GMT 2021 Running UCOMP Cookbook 637\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:24:13 GMT 2021 Running UCOMP Cookbook 656\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:28:30 GMT 2021 Running UCOMP Cookbook 789\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:32:57 GMT 2021 Running UCOMP Cookbook 1074\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:37:25 GMT 2021 Running UCOMP Cookbook 1079\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:41:50 GMT 2021 Running UCOMP Cookbook 1083\_Pol\_Calibrate.cbk line 0

Wed Oct 20 19:46:15 GMT 2021 Running UCOMP Cookbook waves\_1074\_1hour.cbk line 0

KCOR COMMENT BY mcotter: Wed Oct 20 20:12:12 GMT 2021

The Kcor NRGF image moves about slightly at the beginning of the day. I believe this movement is attributed to me making adjustments to the spar guider offsets. The X&Y offsets have changed due to the use of the new guider position. The guider position is now physically mounted on the north side of the spar at approximately the level of the spars fulcrum. I was at tempting to get a feel for how the positive and negative offset inputs affect the occulter position as seen in the Kcor St and Alone Image Acquisition GUI.

The X&Y offset inputs now affect the occulter position as follows:

Positive X: occulter moves UP.

Positive Y: occulter moves LEFT.

Negative X: occulter moves DOWN.

Negative Y: occulter moves RIGHT.

\_\_\_\_end\_\_\_\_

Wed Oct 20 20:16:35 GMT 2021 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

Wed Oct 20 20:16:43 GMT 2021 Running UCOMP Cookbook waves\_1074\_1hour.cbk line 66

Wed Oct 20 20:31:53 GMT 2021 KCOR End Calibration Script

Wed Oct 20 20:44:28 GMT 2021 Running UCOMP Cookbook dark\_200\_1sums\_80ms.cbk line 0

Wed Oct 20 20:49:28 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal\_flat.cbk line 0

Wed Oct 20 21:14:59 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal.cbk line 0

WEATHER COMMENT: mcotter: Wed Oct 20 21:39:40 GMT 2021

Temp: 57.5f, Humidity: 13%, Pressure: 28.678in, Wind: 9mph from 298degs, Skies: The skies continue to be beautifully clear !

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Wed Oct 20 21:42:38 GMT 2021

Ben showed me how to capture SGS Engineering RA & Dec trace values and how to put them into a file on the desktop, so that they may be accessed later for reference.

\_\_\_\_end\_\_\_\_

Wed Oct 20 22:40:01 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal.cbk line 0

Thu Oct 21 00:04:38 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk line 0

Thu Oct 21 00:05:55 GMT 2021 Running UCOMP Cookbook 1074\_Pol\_Calibrate.cbk line 0

Thu Oct 21 00:10:30 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal\_flat.cbk line 0

Thu Oct 21 00:11:31 GMT 2021 Kcor Focus/alignment program exited

KCOR COMMENT BY mcotter: Thu Oct 21 00:12:35 GMT 2021

Kcor has been stopped due to the sky being very bright.

\_\_\_\_end\_\_\_\_

Thu Oct 21 00:35:49 GMT 2021 Running UCOMP Cookbook all\_wavelength\_coronal.cbk line 0

Thu Oct 21 01:17:11 GMT 2021 Kcor Focus/alignment program exited

Thu Oct 21 01:17:58 GMT 2021 UCoMP Paused for clouds

Thu Oct 21 01:18:26 GMT 2021 UCoMP Restarted from pause

UCoMP COMMENT BY mcotter: Thu Oct 21 01:21:56 GMT 2021

Ucomp instrument has been stopped due to bright skies.

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Thu Oct 21 01:54:47 GMT 2021

I tried a couple of times to go back on sky but the sky has remained entirely too bright to do so.

\_\_\_\_end\_\_\_\_

UCoMP COMMENT BY mcotter: Thu Oct 21 03:00:03 GMT 2021

I removed the Ucomp 01 lens from the instrument and cleaned it repeatedly using only deionized water, as per Ben's instruction. I spot dry the lens frame to absorb any residual water that may have clung to the frame. After cleaning I put the lens into the horizontal nest fixture and left it inside the Cleatech HEPA table and left the fan on to help mitigate dust from falling on the lens and to assist in drying the lens frame.

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY mcotter: Thu Oct 21 03:01:15 GMT 2021

Good day to collect data with clear skies for most of the day. The sky became too bright to collect data around 3:30pm HST

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\_\_\_\_end\_\_\_\_

ONSITE STAFF: mcotter