
Mauna Loa Solar Observatory Observer's Log

Sat Mar 26 17:09:55 GMT 2022
Year: 22 Doy: 085
Observer: mlso
WEATHER COMMENT: mcotter: Sat Mar 26 17:18:45 GMT 2022
Temp: 38.0f, Humidity: 27%, Pressure: 28.778in, Wind: 4mph from 137degs, Skies:Overcast skies with wet roads to approximately the 8500' elevation. Somewhat hazy skies with an inversion layer visible on the horizon above Maunakea. Cold morning with light steady wind from the north.
___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 17:18:51 GMT 2022
Opened windows upstairs
___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 17:18:58 GMT 2022
PM Blew off Kcor O1
___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 17:19:03 GMT 2022
PM Blew off UCoMP O1
___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 17:22:45 GMT 2022
The sky is much too bright at this time to run the instruments.
___end___
Sat Mar 26 17:43:13 GMT 2022 Kcor Focus/alignment program exited
Sat Mar 26 17:56:05 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal_flat.cbk line 0
UCoMP PROBLEM COMMENT BY mcotter : Sat Mar 26 18:04:57 GMT 2022
I started the Ucomp program as I normally do. The daily menu button was selected and I waited for the GUI that contains the daily menu to come up . The program never went in to the daily menu selection mode. On the bottom of the Ucomp-Controller GUI the "Filterwheel" LED never illuminated. I checked the temperatures displayed in the "Cropico Temp" display in the upper left of the GUI and all the temps were in the 35 deg range except the top "T Rack" temp which displayed in the 19 range. Looking at the Cropico controller over my shoulder, on the right side of the rack the display read 30.8 deg. I tried exiting the program and restarting the program but the program hung up again when I selected the daily menu button. I restarted the computer and tried running the program again. This time the computer came up, and it appears to be running normally, but it does seem a little slow. The temps in the Cropico Temps fields in the upper left were initially reading all approximately 34 deg except for the top "T RACK" which read 24 deg. When I engaged the daily menu program it came up properly and I select the "Daily Menu" file. The program appears to be running normally but the bottom "ILX" and "01" LED's are not illuminated. Also the T RACK temp read approximately 18 deg in the Cropico Temp fields. Everything appears to be running normally but the clouds button is now engaged due to bright skies.
___end___
Sat Mar 26 18:25:49 GMT 2022 Kcor Focus/alignment program exited
GENERAL COMMENT BY mcotter: Sat Mar 26 18:29:50 GMT 2022
The sky continues to be too bright to observe.
___end___
Sat Mar 26 19:21:17 GMT 2022 Kcor Focus/alignment program exited
KCOR COMMENT BY mcotter: Sat Mar 26 19:26:24 GMT 2022
I ran the Kcor focus routine, though the sky appears really bright and got a well shaped parabola on the first try. I started the Kcor synoptic program and though the images are bright they look acceptable and a coronal ring can be easily discerned.
Kcor now running.
___end___
Sat Mar 26 19:32:09 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal_flat.cbk line 0
UCoMP COMMENT BY mcotter: Sat Mar 26 19:41:24 GMT 2022
I had the Ucomp instrument running but in a "CLOUDS" paused state. I un-paused the Ucomp program and engaged the Center Occulter button but so far nothing has happened. I am going to attemt to restart the Ucomp Controller program again and see if it starts normally. When I restarted the Ucomp Controller program this time I did it by first restarting the "Labview" program first, then starting the Ucomp Controller program from the Labview GUI. The Ucomp Controller program has now started up normally with no apparent problems.

___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 19:50:56 GMT 2022
PM Blew off Kcor Field Lens.
The are some particles appearant on the Kcor NRGF image. The look to be in focus and ar
e at the approxomate loactions:
1) A spot at approx 20 deg approx 1" from edge of FOV.
2) A bright dot that looks like a pixel at approx 100 deg approx half inch from occulte
r.
3) A small fiber at approx 120 deg approx quarter inch from edge of FOV.
4) Two fibers that appear to be the same particle at approx 120 deg and 170 deg.both ap
prox 1" from edge of FOV.

Blowing off the Kcor Field Lens appears to have removed the #1 particle but the particl
es # 2, 3 & 4 have not moved.

I will attempt to blow off the Kcor Field Lens again and the Kcor 01 and see if this wo
rks.
___end___
GENERAL COMMENT BY mcotter: Sat Mar 26 20:03:35 GMT 2022
Blew off Kcor O1 and the Kcor Field Lens again to see if the particles I see in the Kco
r NRGF image may be removed. So far I have not observed any positive effect, but I will
 give it a few minutes to see if the foreign particles persist.
___end___
KCor PROBLEM COMMENT BY mcotter : Sat Mar 26 20:26:39 GMT 2022
I waited several minutes to see if blowing the Kcor 01 and the Kcor Field Lens again ma
de any positive difference with the particle observed in the Kcor NRGF image, but no ap
parent improvement was observed.
I removed the Kcor detector box cover and tried blowing the lenses and detectors surfac
es while the instrument is running, as there appears to be activity in the Suns corona.
 I will wait and see if this has any positive effect on the particles observed.
___end___
Sat Mar 26 21:21:36 GMT 2022 KCOR Start Calibration script: c:\kcor\mlso-calibration22d
eg-20171025.ini
Sat Mar 26 21:36:47 GMT 2022 KCOR End Calibration Script
Sat Mar 26 22:17:02 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal_flat.cbk lin
e 0
UCoMP COMMENT BY mlso: Sat Mar 26 22:23:51 GMT 2022
UCOMP was hung for most of the morning while waiting on the filter wheel to return. Ma
rc was able to follow the cable train up to the filter wheel reseating the cables and i
t looked like we had a poor connection either at the back of the bulkhead or at the fil
ter wheel connection itself. After getting all the cables reseated we found we were a
ble to move the wheel with the manufacturer's software but the labview code was hung up
.

It looks like we had a few hundred (maybe more) queued move commands that were waiting
to be processed all morning. A bug fix was applied to the observing code to prevent t
his queuing of extra moves while a filter wheel move is pending.

We are now observing.

___end___
Sat Mar 26 22:32:18 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal.cbk line 0
Sat Mar 26 23:00:15 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal.cbk line 0
WEATHER COMMENT: mcotter: Sat Mar 26 23:18:53 GMT 2022
Some Orthographic clouds have moved into the viewing area and the instruments were paus
ed for a short while. Additionally aerosols have increased.
The clouds that were in the viewing area have broken up and the viewing area, though br
ight, shows blue sky.
Instruments are back on sky.
___end___
****Possible CME in Progress mcotter**** : Sat Mar 26 23:20:44 GMT 2022
Observers report with medium confidence a CME seeing launching near PA 120 deg, with a
minimum width of 20 deg, at UT time 19:24:09.
___end___
Sat Mar 26 23:21:15 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal.cbk line 14
****Possible CME in Progress mcotter**** : Sat Mar 26 23:25:32 GMT 2022
Observers report with low confidence a CME seeing launching near PA 320 deg, with a min

imum width of 10 deg, at UT time 20:46:04.
This event is difficult to see and was detected using Kcor NRGF & Kcor Diff images.
___end___
Sat Mar 26 23:29:06 GMT 2022 Running UCOMP Cookbook all_wavelenght_coronal.cbk line 0
Sat Mar 26 23:35:34 GMT 2022 UCoMP Paused for clouds
WEATHER COMMENT: mcotter: Sat Mar 26 23:38:29 GMT 2022
Clouds have blown into the viewing area.
Both Instrument have been paused due to sky conditions.
___end___
WEATHER COMMENT: mcotter: Sat Mar 26 23:56:01 GMT 2022
Clouds above the observatory and in the viewing area are getting a bit thick and gray.
The dome shutter doors and windows have been closed in the event of precipitation.
___end___
WEATHER COMMENT: mcotter: Sun Mar 27 02:08:02 GMT 2022
Overcast skies persist with a light mist.
___end___
GENERAL COMMENT BY mcotter: Sun Mar 27 02:14:18 GMT 2022
The day started out relatively clear but the skies were quite bright. After approximate
ly an hour or so the skies were good enough for me to try the Kcor focus routine and ob
tain a decent parabola and begin running the instrument. Shortly after Ucomp started th
e controller program lost contact with the filter wheel and the instrument got hung up.
 I was in contact with Ben for other reasons, so he helped me trouble shoot the problem
. The cable connector going to the filter mechanism was reseated and the issue went awa
y. Also there was an issue with the weather getting updated by the Kodiak computer, but
 stopping and then restarting the computer seemed to have solved the problem.
A good morning for taking data, though it was a bit bright.
___end___
ONSITE STAFF: mcotter