
Mauna Loa Solar Observatory Observer's Log

Mon Nov 22 16:25:07 GMT 2021

Year: 21 Doy: 326

Observer: mlso

WEATHER COMMENT: mcotter: Mon Nov 22 17:17:36 GMT 2021

Temp: 42.5f, Humidity: 9%, Pressure: 28.742in, Wind: 9mph from 161degs, Skies: Somewhat hazy skies at lower elevations. Mostly clear skies but bits of high altitude Cirrus is visible in some areas. Inversion layer visible on the horizon above Haleakala.

____end____

Mon Nov 22 17:40:55 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Mon Nov 22 17:42:12 GMT 2021 Running UCOMP Cookbook 637_Scan.cbk line 0

Mon Nov 22 17:44:39 GMT 2021 Running UCOMP Cookbook 656_Scan.cbk line 0

Mon Nov 22 17:46:29 GMT 2021 Running UCOMP Cookbook 789_Scan.cbk line 0

Mon Nov 22 17:48:18 GMT 2021 Running UCOMP Cookbook 1074_Scan.cbk line 0

Mon Nov 22 17:50:07 GMT 2021 Running UCOMP Cookbook 1079_Scan.cbk line 0

Mon Nov 22 17:51:57 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

KCOR COMMENT BY mcotter: Mon Nov 22 17:53:31 GMT 2021

When I came in this morning there was a small GUI opened on the Kcor screen stating the following:

```
Exception occurred in SPiiPlusCOM660.Channe. 1: Code 130, Timeout expired in K-COR - ACS-Enable.vi>K-Cor - Mechanism - Get Mech Position-async.vi2610001->K-Cor - Mechanism - Get Mech Position- async.vi.ACBProxyCaller.CD900016
```

At the bottom of the GUI there was an "OK" button.

I hit OK and tried to continue but the error GUI kept popping up. I tried closing all of the Kcor LabView programs (focus, observe, mcru) and restarting but it kept popping up. I tried to ignore it and run the focus routine but the GUI would pop up and interfere with the focus routine until I engaged the OK button again. Then the focus would continue for a few seconds, then the GUI would pop up again. I am able to move the lens cover in and out of the beam, but obviously something is corrupted. The sky is quite bright and there are high altitude Cirrus clouds visible in the Yawcam Preview image, so I don't think it is possible to run the Kcor instrument at this time but I will continue to troubleshoot and see if I can figure out what is going on.

____end____

UCoMP COMMENT BY mcotter: Mon Nov 22 17:53:57 GMT 2021

The Ucomp instrument is now running.

____end____

Mon Nov 22 18:10:04 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Mon Nov 22 18:12:32 GMT 2021 UCoMP Paused for clouds

Mon Nov 22 19:37:18 GMT 2021 Kcor Focus/alignment program exited

Mon Nov 22 19:39:07 GMT 2021 UCoMP Restarted from pause

Mon Nov 22 19:51:23 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal.cbk line 7

Mon Nov 22 20:26:45 GMT 2021 Kcor Focus/alignment program exited

KCOR PROBLEM COMMENT BY mcotter : Mon Nov 22 20:40:41 GMT 2021

To troubleshoot the Kcor mc4u issue I closed the LabView programs and closed LabView. I then shutdown and restarted the computer via the "Windows" button at the bottom of the screen. When the computer came up I selected the "mc4u" icon on the desktop and tried starting the LabView program via this function. It initially appeared the program was going to start normally but after a few moments an error GUI popped up stating the following:

```
Exception occurred in SPiiPlusCOM660.Channe. 1: Code 130, Timeout expired in K-COR - ACS-Enable.vi>K-Cor - Mechanism - Get Mech Position-async.vi2610001->K-Cor - Mechanism - Get Mech Position- async.vi.ACBProxyCaller.D6A00013
```

I tried opening the mc4u again and the error GUI came up within a moment. I engaged the "OK" button, then one by one I went through all the buttons on the mc4u GUI to see if perhaps one of the functions had gotten hung up and did not report back properly. After going through all the buttons the error GUI's continued to persist. I went to the dome and visually inspected the Kcor focus stage and associated wiring. All checked out good. At this point I called Ben and asked him what he thought. Ben told me that if I cont

inued to get an error GUI after each mc4u command that it sounded like the controllers in the NEMA box in the dome were corrupted. I physically power cycled both Kcor control units within the Nema Box and waited. When the units came back up I checked the mc4u status on the dome station but it was still coming up with error GUI's. This time I power cycled the control units in the NEMA box, but I also power cycled the computer from the dome control station. After the control units and the computer came up I opened the mc4u control program and no error GUI's came up, but I saw that the LED's for the Lens Cover status, Diffuser status and the Polarizer status were all off; no indication whether these items were in or out of beam. Manually I entered the Lens Cover, the Diffuser and the Polarizer into the beam. After this action all LED indicators came on and showed the status of the associated devices. I went back to the control room to start the Kcor focus routine, but first made adjustments to the SGS X&Y as needed. I was getting ready to start the Kcor focus routine and the mouse went over the task bar at the bottom. As soon as the cursor was positioned over the task bar a search screen popped up and the search field was filled two lines deep with the numeral "1" and the numbers continued to scroll. I immediately checked the keyboard numbers button and found that the # "1" button was stuck (the lower right #1 button). I pressed and depressed the button repeatedly but it was only after 3 or 4 attempts that it stopped. After this I was able to run the Kcor focus routine and then the Kcor-Stand Alone Image Acquisition with no problem.

I cannot be positive but I am of the belief that the stuck keyboard #1 button had corrupted the computer and associated controllers in some manner. The erratic behavior that we have been witnessing with screen display images for the last few days may also be tied in with this keyboard button error. The button may have been stuck at just the right time to have caused an erroneous input and corrupted the computer(s) display images.

___end___

KCOR COMMENT BY mcotter: Mon Nov 22 20:45:07 GMT 2021

Kcor instrument is now running.

SGS offsets: X(RA): 17, Y(Dec): 12.

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

___end___

GONG COMMENT BY mcotter: Mon Nov 22 20:55:44 GMT 2021

No GONG images were open on the desktops monitors.

GONG images now open.

___end___

Mon Nov 22 21:09:01 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Mon Nov 22 21:10:18 GMT 2021 Running UCOMP Cookbook 637_Scan.cbk line 0

Mon Nov 22 21:12:26 GMT 2021 Running UCOMP Cookbook 656_Scan.cbk line 0

Mon Nov 22 21:14:16 GMT 2021 Running UCOMP Cookbook 789_Scan.cbk line 0

Mon Nov 22 21:16:05 GMT 2021 Running UCOMP Cookbook 1074_Scan.cbk line 0

Mon Nov 22 21:17:55 GMT 2021 Running UCOMP Cookbook 1079_Scan.cbk line 0

Mon Nov 22 21:19:44 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

UCOMP COMMENT BY mcotter: Mon Nov 22 21:29:47 GMT 2021

It did not appear that the Ucomp "Instrument Status System Log" was updating. While watching the log updates, there was a log entry for approximately 10:55am HST, but by 11:10am HST there had not been another log update. I stopped the Ucomp Controller program and restarted it. It is now 11:28am HST and the Instrument Status System Log has been updating continuously. The instrument now appears to be updating the System Log Files regularly.

___end___

Mon Nov 22 21:38:01 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

****EVENT COMMENT BY mcotter**** : Mon Nov 22 22:15:18 GMT 2021

Observer reports with medium confidence a CME observed launching near PA 135 deg with a minimum width of 15 deg at UT time 21:24:00. An anomaly could be seen in the Kcor NRG F Image, but it was faint. Using the Kcor Quicklook Differential images it definitely showed increased activity in this region.

___end___

Mon Nov 22 22:25:42 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal.cbk line 24

Mon Nov 22 22:50:46 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Mon Nov 22 22:52:03 GMT 2021 Running UCOMP Cookbook 637_Pol_Calibrate.cbk line 0

Mon Nov 22 22:56:25 GMT 2021 Running UCOMP Cookbook 656_Pol_Calibrate.cbk line 0

Mon Nov 22 23:00:29 GMT 2021 Running UCOMP Cookbook 789_Pol_Calibrate.cbk line 0

Mon Nov 22 23:04:33 GMT 2021 Running UCOMP Cookbook 1074_Pol_Calibrate.cbk line 0

Mon Nov 22 23:08:37 GMT 2021 Running UCOMP Cookbook 1079_Pol_Calibrate.cbk line 0
Mon Nov 22 23:12:40 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0
Mon Nov 22 23:29:03 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 30
Mon Nov 22 23:29:04 GMT 2021 UCOMP Paused for clouds
Mon Nov 22 23:29:08 GMT 2021 UCOMP Restarted from pause
KCOR COMMENT BY mcotter: Mon Nov 22 23:57:58 GMT 2021
Kcor instrument stopped due to very bright skies.

____end____

UcOMP COMMENT BY mcotter: Mon Nov 22 23:58:21 GMT 2021
Ucomp instrument stopped due to very bright skies.

____end____

GENERAL COMMENT BY mcotter: Tue Nov 23 00:01:53 GMT 2021

The day started out a bit cloudy on the horizon but after approximately an hour the sky had cleared enough to start the instruments.

I initially had some problems with the Kcor program but was able to resolve it eventually.

The keyboard for the control station had a sticky button so I changed out the keyboard with the another from the nearby workstation. We had another wireless keyboard so I put that one on the nearby workstation.

____end____

ONSITE STAFF: mcotter