
Mauna Loa Solar Observatory Observer's Log

Mon Dec 28 17:34:39 GMT 2020

Year: 20 Doy: 363

Observer: mlso

WEATHER COMMENT: mcotter: Mon Dec 28 17:38:34 GMT 2020

Temp: 38.2f, Humidity: 75%, Pressure: 28.822in, Wind: 18mph from 157deg, Skies: Clear skies overhead with some Cirrus clouds on the eastern horizon. Gusty wind out of the south, southeast. Frost and icy road conditions above approximately 10,000'.

____end____

GENERAL COMMENT BY mcotter: Mon Dec 28 17:55:39 GMT 2020

Opened windows upstairs

____end____

GENERAL COMMENT BY mcotter: Mon Dec 28 17:55:54 GMT 2020

PM Blew off Kcor 01

____end____

Mon Dec 28 18:12:21 GMT 2020 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Mon Dec 28 18:14:34 GMT 2020

Sky is much too bright to run focus routine at this time. Will try again shortly.

____end____

Mon Dec 28 18:27:40 GMT 2020 Kcor Focus/alignment program exited

Mon Dec 28 18:34:33 GMT 2020 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Mon Dec 28 18:38:14 GMT 2020

Sky is still too bright to run focus routine.

____end____

Mon Dec 28 19:26:47 GMT 2020 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Mon Dec 28 19:39:29 GMT 2020

The sky is still too bright to run focus routine. To confirm, I started Kcor with the lens cover in place then once Kcor was started I removed the lens cover and the Kcor image became saturated. I immediately stopped Kcor and put the lens cover back into beam. I will continue to monitor the sky and wait for conditions to improve.

____end____

Mon Dec 28 21:06:27 GMT 2020 Kcor Focus/alignment program exited

Mon Dec 28 21:35:05 GMT 2020 Kcor Focus/alignment program exited

Mon Dec 28 21:43:22 GMT 2020 Kcor Focus/alignment program exited

GPS COMMENT by MLSO: Mon Dec 28 21:45:11 GMT 2020

Successfully logged in to system

Good disk mount

GPS software running

Last 5 GPS data files are:

/mnt/usb/dataoutiq_2020_358_2338.bin 2147483647

/mnt/usb/dataoutiq_2020_359_2338.bin 2147483647

/mnt/usb/dataoutiq_2020_360_2338.bin 2147483647

/mnt/usb/dataoutiq_2020_361_2338.bin 2147483647

/mnt/usb/dataoutiq_2020_362_2338.bin 2147483647

Disk usage: /dev/sda1 916.9G 307.3G 563.0G 35% /mnt/usb

____end____

GENERAL COMMENT BY mcotter: Mon Dec 28 22:13:16 GMT 2020

I have attempted several times to run the focus routine but the sky is still too bright. When looking outside the sky appears to be clear, but when I hold my hand up to occult the Sun I can see how there is a halo around the Sun. When running the focus routine at 12:00 pm HST the sky does appear to be a little darker than earlier this morning, but still much too bright to run Kcor. I will try again in a little while.

____end____

Mon Dec 28 22:32:37 GMT 2020 Kcor Focus/alignment program exited

Mon Dec 28 22:53:11 GMT 2020 Kcor Focus/alignment program exited

Tue Dec 29 01:21:58 GMT 2020 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Tue Dec 29 02:53:44 GMT 2020

At approximately 12:30pm HST the sky appeared to have darkened a little as I was able to run the focus routine and get an acceptable parabola. I started Kcor and put the Polarizer in beam to check that the images were in the correct order (Mid, Bright, Dark, Mid), but they were not in the correct order (they appeared Mid, Dark, Bright, Mid). I called Ben and asked him how I should proceed with this situation; Ben told me to try power cycling the different components within the NEMA box that controls Kcor to see if it would correct itself. I tried repeatedly to power cycle the various computers and Kcor controllers but I was only able to get it to change it's sequence once, and it was not

correct (on the fifth power cycle of the various components it came up Dark, Bright, Mid, Mid). Clouds were coming and going during the course of the afternoon, and once I had to shut the dome because fog was rolling through. I reopened the dome and tried again with the power cycling but it did not work. At approximately 4:00pm HST I again called Ben to let him know that I was not able to correct the Polarizing image, and explained to him what I had done. Ben said that it may simply have been too bright for the Kcor instrument to observe, and the polarizer image that I had initially saw was correct for the bright sky the instrument was trying to image. Perhaps tomorrow will not be as bright and we can see if this is the case. While I had the dome closed waiting for the sky to clear I cleaned the dome, cleaned up some of the cabling in the rear of the spar and emptied the trash.

____end____

GENERAL COMMENT BY mcotter: Tue Dec 29 02:54:13 GMT 2020

No data today. Sky extremely bright!

____end____

ONSITE STAFF: mcotter