
Mauna Loa Solar Observatory Observer's Log

Mon Mar 15 17:14:53 GMT 2021

Year: 21 Doy: 074

Observer: berkey

WEATHER COMMENT: mcotter: Mon Mar 15 17:23:50 GMT 2021

Temp: 34.0f, Humidity: 91%, Pressure: 28.753in, Wind: 2mph from 256degs, Skies: Clear overhead. Some Cirrus clouds on the eastern horizon and some Altocumulus clouds on the western and northern horizon. Inversion layer visible on horizon at or just below Haleakala.

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 17:33:15 GMT 2021

Opened windows upstairs

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 17:33:27 GMT 2021

PM Blew off Kcor O1

____end____

Mon Mar 15 17:38:48 GMT 2021 Kcor Focus/alignment program exited

GENERAL COMMENT BY mcotter: Mon Mar 15 17:45:17 GMT 2021

Started Kcor briefly, but clouds have moved in rather suddenly from the west southwest and are obscuring viewing.

Kcor now paused.

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 18:42:47 GMT 2021

Cloud coverage is diminishing and seems to be moving from the southwest to northeast in bands of upper level cirrus. There does not seem to be a threat of precipitation so we have kept the dome open.

Kcor again running.

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 19:45:07 GMT 2021

Clouds increased from the west briefly and blew accross the observatory causing us to close the dome. The threat of precipitation has now passed and the dome is again open.

Kcor is again running.

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 20:13:41 GMT 2021

Kcor has been stopped.

Clouds are moving in from the west southwest and forming over the observatory.

The dome shutter doors and windows are now closed.

____end____

GENERAL COMMENT BY mcotter: Mon Mar 15 21:00:08 GMT 2021

Cloud coverage has increase dramatically and the observatory and summit are now completely overcast. Some fog is forming to the northwest on the flank of Maunaloa and appears to be moving up the slope toward the observatory. Radar shows a low pressure area to the southwest-west of the Big Island with an increasing amount of clouds and moisture slowly moving toward the island and into the area of the observatory.

____end____

GENERAL COMMENT BY mcotter: Tue Mar 16 00:53:34 GMT 2021

Took some UCoMP data this morning. Looks like we will need to move the UCoMP O1 back toward the instrument a little more.

____end____

GENERAL COMMENT BY mcotter: Tue Mar 16 01:48:09 GMT 2021

Last autumn I had removed the middle pier access panel and inspected the middle pier to lower (cement) pier connection are

a, and the middle pier to upper pier connection area. I had found that the connection between the lower pier and the middle pier was accomplished using eight (8) 3/4" x 10 threaded studs that are embedded into the lower pier cement in a square bolt pattern. The threaded studs extend up approximately 3.25" from the cement. The middle pier has a square base that sits atop the cement pad formed at the top of the lower pier. When I had inspected this mounting hardware in the fall I had found all of the hardware to be finger loose, with the exception of the bolt that is in the North position (the eight position bolt pattern has a stud located at North, South, East, West, Northeast, Northwest, Southeast and Southwest). The North hardware was only tight because the pier was putting stress on it in an upward motion because gravity was pulling it forward. At that time I tightened all the hardware and re-secured the access panel. I ordered new hardware for all the mounting studs, (a hardened thrust washer, a Nordlok split locking washer assembly, a tight grip main nut and a secondary jam nut). I began replacing the hardware today. The studs are a bit banged up after all the years that they have been installed so it was necessary to chase all the threads by hand using an angled file and Scotchbrite. I was able to finish installing half the mounting hardware (stud position North, South, East and West) and will complete the rest of the hardware tomorrow.

___end___

GENERAL COMMENT BY mcotter: Tue Mar 16 01:52:28 GMT 2021

A small amount of data was taken this morning before condition became so poor that we were forced to close the dome around 10:00 am HST. Conditions now at the observatory and on the volcano are terrible. Overcast, fog, rain and sleet with dropping temperatures. We are leaving the facility.

___end___

ONSITE STAFF: berkey, mcotter