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## Mauna Loa Solar Observatory Observer's Log

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Thu Apr 8 17:15:32 GMT 2021

Year: 21 Doy: 098 Observer: berkey

WEATHER COMMENT: berkey: Thu Apr 08 17:15:53 GMT 2021

Temp: 37.6f, Humidity: 11%, Pressure: 28.705in, Wind: 5mph from 186degs, Skies: clear but bright looks like inversion laye

r is about 12,500ft

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

GENERAL COMMENT BY berkey: Thu Apr 08 17:22:25 GMT 2021

Opened windows upstairs

end

GENERAL COMMENT BY berkey: Thu Apr 08 17:22:29 GMT 2021

PM Blew off Kcor O1

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

Thu Apr 08 17:24:03 GMT 2021 Kcor Focus/alignment program exited

Thu Apr 08 21:29:05 GMT 2021 Kcor Focus/alignment program exited

Thu Apr 08 21:39:08 GMT 2021 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

KCOR COMMENT BY berkey: Thu Apr 08 21:42:45 GMT 2021

Pulled Rcam from kcor to try and find the fiber. No obvious material was seen on the detector, but just in case the detector was blown off.

There is no easy way to see the back surface of the camera lens, so this lens was blown off blind. When blowing off this lens a fiber structure was seen floating away from the lens. Not sure if this was the source of the fiber see in the data

On re-installing the camrea the focus knob was bumped, so the focus position was checked by scanning thru focus while look ing at the sharpness at the occulter edge at the top, right, left, and bottom edges. During this scanning it was found th at the focus stage has bound and was not moving along with the vernier. The focus stage was then removed from the tip/tilt frame for inspection. Loosening what I think is the linear stage break restored motion to the stage. The focus stage and camera were then reinstalled in the instrument.

The camera focus and tip/tilt where checked by looking at the occulter edges.

\_\_\_end\_\_

KCOR COMMENT BY berkey: Thu Apr 08 21:46:58 GMT 2021

Based on NRGF data taken since the camera was removed. Removing the camera to blow it off did not remove the black fiber, but it may have removed the bright white fiber seen near the edge of the filed of view near PA270. There also appears to be no change in the bright hot pixels.

Could the dark fiber be an artfact coming in via that flats not the data?

\_\_\_end\_

KCOR COMMENT BY berkey: Thu Apr 08 21:49:17 GMT 2021

The raw quicklook frames show the r-cam images show the camera to have shifted up and to the left (image down and to the r-ight) of where it was this morning.

end

GENERAL COMMENT BY berkey: Thu Apr 08 21:49:18 GMT 2021

end

Thu Apr 08 21:54:23 GMT 2021 KCOR End Calibration Script

Fri Apr 09 00:01:38 GMT 2021 SGS Alignment complete

GENERAL COMMENT BY berkey: Fri Apr 09 00:07:24 GMT 2021

PM Washed Kcor O1 to see if this could address the fringing.

Re-installing the O1 seem to give a large change in the RA angle of the O1. Was -123 now -198. Currently now sure why we are seeing such a big change in the RA.

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

Fri Apr 09 00:23:14 GMT 2021 SGS Alignment complete

Fri Apr 09 01:01:46 GMT 2021 SGS Alignment complete

KCOR COMMENT BY berkey: Fri Apr 09 01:38:22 GMT 2021

Post cleaning the Kcor O1 alignment sgs RA alignment moved back to -144. We will have to see if tomorrow morning the alignment is back to ~-120 and we were just seeing some amount of spar flexure or if the O1 removal/reinstall left some sort of tilt/alignment change.

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

GENERAL COMMENT BY berkey: Fri Apr 09 01:57:28 GMT 2021

Some okish data today.

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

ONSITE STAFF: berkey