
Mauna Loa Solar Observatory Observer's Log

Wed May 19 15:35:04 GMT 2021

Year: 21 Doy: 139

Observer: lisapg

WEATHER COMMENT: lisapg: Wed May 19 16:15:40 GMT 2021

Temp: 39.3f with windspeed at about 4-9mph for the Southeast. Sky looks a bit hazey at present.

____end____

UCoMP COMMENT BY berkey: Thu May 20 00:51:41 GMT 2021

UCoMP work today:

- 1) Mounted the laser near the back of the optical rail and centered it on the target near the prime focus. Removed target and looked at reflection from O1. Tilted (back toward the west) and shimmed the front of the O1 to center reflection back on laser.
- 2) Mounted laser near prime focus pointed towards back of optical rail. Centered laser on target near back. Removed target and mounted camera plate with T and R targets installed. Translated the back of the plate to center laser on T target, and translated the front of the plate to match the overhang off the instrument plate. (Overhang is about 6.1 mm). Inserted beamsplitter and verified that laser was centered on T and R targets.
- 3) Removed laser and inserted modulator and field lens with green filter with ND filter installed. Pointed at sun and inspected image of O1 at Lyot stop. It was centered on Lyot stop.
- 4) Installed cameras, Lyot filter and filter wheel. Now all components are on rail.
- 5) Pointed at sun with ND filter and translated the cameras to center the solar disk on the cameras. T camera was aligned and R camera mostly aligned, but rain clouds moved in and we needed to stop.

Baffling was a difficult problem as the covers needed to be removed to adjust the camera positions. We have some ideas on how to fabricate a better baffle that will connect to the c-mount threads on the front of the cameras. Looks like during periods of bad baffling we saw negative values on the subtracted images and the sun solar disk looked dimmer than the background; correcting the baffling fixed this issue.

Another good day of progress...

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GENERAL COMMENT BY berkey: Thu May 20 00:53:51 GMT 2021

We have still having that funny "clear sky" rain where clouds a couple miles away are raining and the drops are periodical blowing onto the observatory.

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ONSITE STAFF: berkey, lisapg, tomczyk