Mauna Loa Solar Observatory Observer's Log ______ Tue May 18 16:43:17 GMT 2021 Year: 21 Doy: 138 Observer: mlso WEATHER COMMENT: mcotter: Tue May 18 16:44:06 GMT 2021 Temp: 41.1f, Humidity: 9%, Pressure: 28.674in, Wind: 3mph from 123degs, Skies: Clear but somewhat hazy skies with the inve rsion layer visible on the horizon at or above Maunakea. GENERAL COMMENT BY mcotter: Tue May 18 16:44:13 GMT 2021 Opened windows upstairs end GENERAL COMMENT BY mcotter: Tue May 18 16:44:18 GMT 2021 PM Blew off Kcor O1 end GENERAL COMMENT BY mcotter: Tue May 18 16:55:49 GMT 2021 The sky appears very bright in the Yawcam-Preview image and in the Kcor focus routine image. Cannot start Kcor at this tim e. ___end_ GENERAL COMMENT BY mcotter: Tue May 18 17:36:00 GMT 2021 The mouse for the Kcor monitor froze up. Disconnecting and reconnecting the USB cable at the mouse keyboard branch out beh ind monitor 4 brought it back to life. end GENERAL COMMENT BY mcotter: Tue May 18 18:13:21 GMT 2021

The sky is very bright and we have decided not to run Kcor today.

end

GENERAL COMMENT BY mcotter: Tue May 18 18:14:45 GMT 2021

Steven Tomczyk has arrived and today Steve, Ben and myself will be working on re mounting the Ucomp instrument.

UCOMP COMMENT BY mcotter: Wed May 19 01:41:36 GMT 2021

- 1) removed all components from optical rail except occulter stage and field lens mount.
- 2) while guiding on sun with ND filter in place, mounted target with crosshair just behind occulter disk surface. Sun was not centered on target - off by about 0.5 mm in both x and y.
- 3) mounted nudgers at back of rail, 2 in the x-direction, 1 in z. put washers under bolts holding rain to baseplate.
- 4) Solar image was too bright, cut down light using the polarizer instead of the ND3.8 at the front of the spar. , image o f sun looked well centered on prime focus target.
- 5) Using 400mm FL lens at location of field lens, , image of O1 at ~beamsplitter was off by ~4mm off center in direction o f spar. Efforts to move baseplate closer to spar did not work due to limited range.
- 6) Marc and Ben moved spar extender 4mm to the north.
- 7) Optical rail was then aligned to solar beam by translating optical rail and adjusting kinematic mounts while looking at the images of the sun and image of O1 alternately.

Excellent progress for day 1!

Alignment targets used:

SM1 target threaded into the UCoMP alignment fixtures at near the occulter.

Oversized paper target was centered on a SM2 cover threaded into the SM1 adaptor. With a large with oversized

UCOMP COMMENT BY mcotter: Wed May 19 01:42:19 GMT 2021

Spar was rebalanced by removing 52 pounds from the south shelf.

___end__

ONSITE STAFF: berkey, mcotter, Tomczyk