

-----  
Mauna Loa Solar Observatory Observer's Log  
-----

Mon Jan 4 17:28:17 GMT 2021

Year: 21 Doy: 004

Observer: berkey

WEATHER COMMENT: berkey: Mon Jan 04 17:29:17 GMT 2021

Temp: 41.8f, Humidity: 4%, Pressure: 28.817in, Wind: 10mph from 155degs, Skies: clear

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

GENERAL COMMENT BY berkey: Mon Jan 04 17:44:49 GMT 2021

Opened windows upstairs

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

GENERAL COMMENT BY berkey: Mon Jan 04 17:44:52 GMT 2021

PM Blew off Kcor O1

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

Mon Jan 04 18:05:04 GMT 2021 Kcor Focus/alignment program exited

GENERAL COMMENT BY berkey: Mon Jan 04 18:25:33 GMT 2021

Kcor up and running.

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

GENERAL COMMENT BY berkey: Mon Jan 04 19:40:35 GMT 2021

Stopping observations to work on Ucomp alignments.

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

CoMP COMMENT BY berkey: Tue Jan 05 02:45:16 GMT 2021

Checking UCoMP alignment from scratch.

Established PSM to O1 retro reflection off the front and back surfaces.

-Found the instrument plate was not well aligned to the beam. Initial attempt to align the instrument plate found the PSM laser outside of the alignment range of the instrument baseplate. O1 assembly was rotated slightly clockwise when looking at the face of the spar from the north. Previous attempts to do this O1 rotation were hampered by some aluminum guides that were expoyed to the spar for help the alignment after the 2015/2016 front end work. These guides were removed and O1 was aligned, to be within the range of the instrument plate adjustment.

-To accommodate some shims under the PSM, modulator and field lens the entire instrument base-plate was dropped about 5 thousands on the kinematic mounts

-Bessel beam was back propogated down the instrument to the newly established PSM position.

-Using the bessel-beam as a source and the PSM and a detector. The PBS, and field lens were individually shimmed to the best alignment. (Shims were marked and optics were removed after check to give a clean beam to the next optic.

Tomorrow we will finish shimming the modulator. And then all optics will be reinstalled for tests with the camera. At that point we may need to install the modulator to focus the cameras to the Occulter position. If this all goes well we will remove the lasers, reinstall the telescope tube and be ready for optical tests with the diffuser in the beam.

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

ONSITE STAFF: berkey, mcotter