Mauna Loa Solar Observatory Observer's Log Thu Nov 4 17:06:50 GMT 2021 Year: 21 Doy: 308 Observer: berkey WEATHER COMMENT: berkey: Thu Nov 04 17:07:42 GMT 2021 Temp: 45.8f, Humidity: 23%, Pressure: 28.712in, Wind: 13mph from 145degs, Skies: Mostl y clear with patchy cirrus in the east. \_end\_ GENERAL COMMENT BY berkey: Thu Nov 04 17:41:49 GMT 2021 PM Blew off Kcor O1 front and back GENERAL COMMENT BY berkey: Thu Nov 04 17:41:53 GMT 2021 PM Blew off UCoMP 01 end Thu Nov 04 17:42:51 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk lin Thu Nov 04 17:47:55 GMT 2021 Kcor Focus/alignment program exited Thu Nov 04 17:49:29 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk lin e 0 Thu Nov 04 17:50:45 GMT 2021 Running UCOMP Cookbook 637\_Scan.cbk line 0 Thu Nov 04 17:52:41 GMT 2021 Running UCOMP Cookbook 656\_Scan.cbk line 0 Thu Nov 04 17:54:40 GMT 2021 Running UCOMP Cookbook 789\_Scan.cbk line 0 Thu Nov 04 17:56:29 GMT 2021 Running UCOMP Cookbook 1074\_Scan.cbk line 0 Thu Nov 04 17:58:19 GMT 2021 Running UCOMP Cookbook 1079\_Scan.cbk line 0 Thu Nov 04 18:00:08 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal\_flat.cbk lin Thu Nov 04 19:29:27 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk lin

Thu Nov 04 18:18:17 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal.cbk line 0 e 0 Thu Nov 04 19:31:15 GMT 2021 Running UCOMP Cookbook diffuser-calibration.cbk line 0

Thu Nov 04 19:43:57 GMT 2021 Running UCOMP Cookbook diffuser-calibration.cbk line 0 Thu Nov 04 19:55:12 GMT 2021 Running UCOMP Cookbook diffuser-calibration.cbk line 0 Thu Nov 04 20:02:31 GMT 2021 Running UCOMP Cookbook diffuser-calibration.cbk line 0

Thu Nov 04 20:16:19 GMT 2021 UCoMP Paused for clouds

Thu Nov 04 20:16:51 GMT 2021 UCoMP Restarted from pause

Thu Nov 04 20:41:00 GMT 2021 Running UCOMP Cookbook find\_focus.cbk line 0

Thu Nov 04 21:07:40 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk lin

Thu Nov 04 21:08:57 GMT 2021 Running UCOMP Cookbook 637\_Pol\_Calibrate.cbk line 0 GENERAL COMMENT BY berkey: Thu Nov 04 21:08:45 GMT 2021 Tried running the ucomp diffuser calibration.

We had a couple recipe issues for the first couple passes but starting at 20:02:31, the data set contains flats with the ucomp diffuser, the 1" nd filter and the old comp dif fusers.

With the 1" filter in the beam we see a circle of light about the size of the occulter but offset form the occulter toward the edge of FOV. Perhaps the box of the front of t he O1 isn't concentric with the O1.

During this test I was worried the O1 the new O1 might have a tilt driving the image of the ND filter off the center of the detector (thinking about it now that the test is d one I am less sure this makes sense). But the find\_focus.cbk data 789 at various O1 po stions was taken with ND filter in the beam to see if there was any beam walk. end

Thu Nov 04 21:13:01 GMT 2021 Running UCOMP Cookbook 656\_Pol\_Calibrate.cbk line 0 UCOMP COMMENT BY berkey: Thu Nov 04 21:13:38 GMT 2021

At the end of the diffuser test I noticed the edge of the occulter in the "flats" which was also reported this morning by Steve. So post find\_focus.cbk, some testing was don e moving the occulter in and out of the beam while looking at flats (diffuser in the be am) in real time. Here we noticed that at the end of travel (-3.13mm) for the occulter stage the we no longer see the shadow of the occulter stage in the flats data.

I don't understand what changed such over the weekend to cause the occulter to no longe r completely level the beam. But we have at least temporarily solved the issue by now

driving the Occulter stage to -3.13 mm when moving the occulter of the beam instead of the nominal home postilion of 0mm on the stage. Thu Nov 04 21:17:05 GMT 2021 Running UCOMP Cookbook 789\_Pol\_Calibrate.cbk line 0 Thu Nov 04 21:21:08 GMT 2021 Running UCOMP Cookbook 1074\_Pol\_Calibrate.cbk line 0 Thu Nov 04 21:25:12 GMT 2021 Running UCOMP Cookbook 1079\_Pol\_Calibrate.cbk line 0 Thu Nov 04 21:29:16 GMT 2021 Running UCOMP Cookbook waves\_1074\_1hour.cbk line 0 Thu Nov 04 21:32:01 GMT 2021 UCoMP Paused for clouds GENERAL COMMENT BY berkey: Thu Nov 04 21:33:50 GMT 2021 Lost guiding when the dome controller clipped the egde of the shutter. Shutter now ope ned up a bit further to avoid further clipping. \_\_\_end\_\_ Thu Nov 04 21:35:39 GMT 2021 UCoMP Restarted from pause Thu Nov 04 22:42:32 GMT 2021 Running UCOMP Cookbook dark\_200\_1sums\_80ms.cbk line 0 Thu Nov 04 22:47:34 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal\_flat.cbk lin e 0 Thu Nov 04 23:06:00 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal.cbk line 0 Thu Nov 04 23:44:53 GMT 2021 Running UCOMP Cookbook dark\_80ms\_2beam\_16sums\_BOTH.cbk lin Thu Nov 04 23:46:46 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal.cbk line 0 UCOMP COMMENT BY berkey: Thu Nov 04 23:47:54 GMT 2021 Fixed an issue with the occulter in position configuration. During this mornings fix o f the occulter to move further out of range, the in position value was wrongly configur ed. During this time some disk light may have made it back to the modulator. Thu Nov 04 23:49:55 GMT 2021 Running UCOMP Cookbook all\_wavelenght\_coronal.cbk line 7 Thu Nov 04 23:58:50 GMT 2021 UCoMP Paused for clouds Fri Nov 05 00:07:42 GMT 2021 UCoMP Restarted from pause UCOMP COMMENT BY berkey: Fri Nov 05 00:08:41 GMT 2021 The ol motor had a hiccup and needed resetting. \_\_\_end\_\_\_ ONSITE STAFF: berkey