Mauna Loa Solar Observatory Observer's Log \_\_\_\_\_ Wed Apr 29 16:39:38 GMT 2020 Year: 20 Doy: 120 Observer: berkey WEATHER COMMENT: berkey: Wed Apr 29 16:41:18 GMT 2020 Temp: 45.2f, Humidity: 13%, Pressure: 28.735in, Wind: 5mph from 187degs, Skies: clear end GENERAL COMMENT BY berkey: Wed Apr 29 16:55:13 GMT 2020 PM Blew off Kcor O1 and opened windows upstairs end Wed Apr 29 17:02:29 GMT 2020 SGS Alignment complete Wed Apr 29 17:02:31 GMT 2020 Kcor Focus/alignment program exited Wed Apr 29 17:03:13 GMT 2020 KCOR Start Synoptic Patrol Wed Apr 29 19:05:00 GMT 2020 KCOR End Patrol Wed Apr 29 19:05:01 GMT 2020 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini Wed Apr 29 19:20:16 GMT 2020 KCOR End Calibration Script Wed Apr 29 19:20:33 GMT 2020 KCOR Start Synoptic Patrol Wed Apr 29 19:20:33 GMT 2020 KCOR Start Synoptic Patrol GPS COMMENT by MLSO: Wed Apr 29 21:45:06 GMT 2020 Successfully logged in to system Good disk mount GPS software running Last 5 GPS data files are: /mnt/usb/dataoutig\_2020\_115\_2146.bin 2147483647 /mnt/usb/dataoutig 2020 116 2146.bin 2147483647 /mnt/usb/dataoutig 2020 117 2146.bin 2147483647 /mnt/usb/dataoutig\_2020\_118\_2146.bin 2147483647 /mnt/usb/dataoutig\_2020\_119\_2146.bin 2147483647 end Wed Apr 29 22:25:50 GMT 2020 Kcor Focus/alignment program exited Wed Apr 29 23:41:54 GMT 2020 Kcor Focus/alignment program exited KCOR COMMENT BY berkey: Wed Apr 29 23:46:43 GMT 2020 Kcor labview code showed a werid bight pattern that ran vertical thu the image that was about the width of the occulter. The NRGF images also seem to show this pattern running from N to SW. A beam train inspection showed that the hair we saw Monday on the Ol was back in the center of the lens. During the inspection the O1 and field lens were blew off. end GENERAL COMMENT BY berkey: Wed Apr 29 23:54:47 GMT 2020 Blowing off the lenses cleared up the artifacts. end GENERAL COMMENT BY berkey: Thu Apr 30 00:41:43 GMT 2020 Sky getting very bright end GENERAL COMMENT BY berkey: Thu Apr 30 00:41:44 GMT 2020

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

Thu Apr 30 00:51:24 GMT 2020 SGS Alignment complete Thu Apr 30 00:51:25 GMT 2020 Kcor Focus/alignment program exited GENERAL COMMENT BY berkey: Thu Apr 30 02:37:09 GMT 2020 Inspecting the dec train. It looks like somewhere between the dec ball screw and ball screw nut we are getting enough dea dband to allow .5" of motion of the back of the spar before the clutch starts to slip.

We noticed this back in the fall, but as we got into the winter and the sun got lower in the southern sky we had enough mi ss balance in the spar to keep the load agaisnt one side of the slop. But now as the spar is getting closer to zenith the re isn't enough preload to keep us engaged against on of the ball screws. Until repair the ball screw system we will need to find a way to add some mass somewhere that keeps the ball nuts engaged.

\_\_\_\_end\_

ONSITE STAFF: berkey