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Mauna Loa Solar Observatory Observer's Log  
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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/dataoutiq\_2020\_115\_2146.bin 2147483647

/mnt/usb/dataoutiq\_2020\_116\_2146.bin 2147483647

/mnt/usb/dataoutiq\_2020\_117\_2146.bin 2147483647

/mnt/usb/dataoutiq\_2020\_118\_2146.bin 2147483647

/mnt/usb/dataoutiq\_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 O1 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 deadband 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 mass balance in the spar to keep the load against one side of the slope. But now as the spar is getting closer to zenith there isn't enough preload to keep us engaged against one 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