
Mauna Loa Solar Observatory Observer's Log

Wed Jun 24 16:33:11 GMT 2020
Year: 20 Doy: 176
Observer: mcotter
WEATHER COMMENT: mcotter: Wed Jun 24 16:35:34 GMT 2020
Temp: 49.5f, Humidity: 5%, Pressure: 28.58in, Wind: 16mph from 163degs, Skies:clear
___end___
GENERAL COMMENT BY mcotter: Wed Jun 24 17:25:29 GMT 2020
Opened windows upstairs
___end___
GENERAL COMMENT BY mcotter: Wed Jun 24 17:25:39 GMT 2020
PM Blew off Kcor O1
___end___
Wed Jun 24 17:34:03 GMT 2020 SGS Alignment complete
Wed Jun 24 17:38:12 GMT 2020 Kcor Focus/alignment program exited
KCOR COMMENT BY berkey: Wed Jun 24 17:52:53 GMT 2020
Before start of observing today the kcor bitflow camera config files were changed from the old 2013 bitflow configs to the new ones sent to us by bitflow yesterday. This is a continuation of some of the close dome/raw file testing we did yesterday that showed some improvement in the columns on the right hand side of the raw data.
___end___
KCOR COMMENT BY berkey: Wed Jun 24 18:32:40 GMT 2020
Strange fringing polarization artifact north of the occulter.
___end___
Wed Jun 24 18:54:25 GMT 2020 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini
Wed Jun 24 19:09:35 GMT 2020 KCOR End Calibration Script
Wed Jun 24 20:20:32 GMT 2020 SGS Alignment complete
Wed Jun 24 20:30:18 GMT 2020 Kcor Focus/alignment program exited
Wed Jun 24 21:10:54 GMT 2020 KCOR Start Synoptic Patrol
Wed Jun 24 22:17:12 GMT 2020 KCOR End Patrol
Wed Jun 24 22:17:18 GMT 2020 KCOR End Patrol
Wed Jun 24 22:20:57 GMT 2020 KCOR Start Synoptic Patrol
Wed Jun 24 23:09:15 GMT 2020 Kcor Focus/alignment program exited
GENERAL PROBLEM COMMENT BY berkey : Thu Jun 25 01:55:47 GMT 2020
During a cloudy period the SGS guider stopped moving. The GUI showed -10V output voltages on both RA and DEC

Further investigation with a meter found that both amplifies had their reset flag high. And the status led on the copley amplifiers was a blinking red light. Per the copley manual a blinking red light looks like a "latching fault". In the copley software the various fault conditions can be set to transitory or latching. In latching mode the drive motors will be disabled until the amplifer is reset after a fault in transitory mode operations continue once the fault is passed. At this point we are unsure what the fault was; but looking at the possible faults most seem very motor specific except a faults with the Encoder +5Vdc . If the 5V power supply was flaky that seems like it could fault both motors in this condition.

Restarting the SGS PXI chassis cleared the fault issues and the guider was able to move again.

If fault condition continues to persist recommend changing 5 Volt DC power supply and continue to monitor to ensure fault condition has been rectified.
___end___
GENERAL COMMENT BY berkey: Thu Jun 25 01:57:54 GMT 2020
Took my first coronal data. Helped trouble shoot guider amplifier fault.
___end___
ONSITE STAFF: berkey, mcotter