Mauna Loa Solar Observatory Observer's Log _____ Fri Dec 25 16:26:27 GMT 2020 Year: 20 Doy: 360 Observer: lisapg WEATHER COMMENT: lisapg: Fri Dec 25 17:13:43 GMT 2020 Temp: 43.1f with windspeed at about 15-20mph from the South-Southeast. Vog is at about 11,000ft + over Saddle but otherwis e the sky looks clear. end GENERAL COMMENT BY lisapg: Fri Dec 25 17:36:11 GMT 2020 PM Blew off Kcor Ol end GENERAL COMMENT BY lisapq: Fri Dec 25 17:36:15 GMT 2020 Opened windows upstairs end Fri Dec 25 18:01:45 GMT 2020 Kcor Focus/alignment program exited Fri Dec 25 18:03:54 GMT 2020 KCOR Start Synoptic Patrol Fri Dec 25 19:10:46 GMT 2020 KCOR End Patrol Fri Dec 25 19:10:47 GMT 2020 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini Fri Dec 25 19:15:26 GMT 2020 KCOR ABORT Calibration Script Fri Dec 25 19:15:42 GMT 2020 KCOR Start Synoptic Patrol Fri Dec 25 19:15:43 GMT 2020 KCOR Start Synoptic Patrol GENERAL COMMENT BY lisapg: Fri Dec 25 19:15:49 GMT 2020 SGS lost tracking during calibrations end Fri Dec 25 19:15:54 GMT 2020 KCOR End Patrol Fri Dec 25 19:15:58 GMT 2020 KCOR End Patrol Fri Dec 25 20:01:37 GMT 2020 Kcor Focus/alignment program exited Fri Dec 25 20:04:18 GMT 2020 KCOR Start Synoptic Patrol KCOR COMMENT BY lisapg: Fri Dec 25 20:05:37 GMT 2020 Kcor crashed after aborting calibration. end Fri Dec 25 20:14:13 GMT 2020 KCOR End Patrol Fri Dec 25 20:14:14 GMT 2020 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini Fri Dec 25 20:29:28 GMT 2020 KCOR End Calibration Script Fri Dec 25 20:29:45 GMT 2020 KCOR Start Synoptic Patrol Fri Dec 25 20:29:45 GMT 2020 KCOR Start Synoptic Patrol **GENERAL PROBLEM COMMENT BY lisapg** : Fri Dec 25 20:41:46 GMT 2020 After SGS lost voltage readings and tracking, I took out the diffuser and polarizer from the beam and put the lens cover i n beam. Then I went upstairs to check the cables on the East side of the spar to see if it was tight anywhere, possibly im peding the spar but everything had a good amount of slack, nothing was tight. I then pulled the spar out of alignment and back, SGS would not get any voltage reading higher then .8. RA and DEC were at two extremes, -10,000 arcsec for the DEC an d 5,000 arcsec for the RA. Since it looked as close to aligned as I could tell, I went back downstairs and tried to slew t he RA and DEC using the SGS GUI. I noticed the RA would move despite not actually slewing it. I stopped SGS and restarted the SGS computer. Once it was restarted, I went back upstairs, moved the spar off the Sun and then brought it back again. Still couldn't get a reading high then .8 on the voltage from the SGS telescope. Went upstairs and checked the cabling con nected to the SGS telescope, found that the SGS telescope electrical box mounted on the spar, below the SGS telescope, had

a lose cable connection on the East side. It came off with me touching it. I inspected the pins, nothing looked bent and then reconnected it, making sure it was properly secured. Moved the spar to see if it helped but it seemed to have not. Re booted the SGS computer to see if it helped and then went up stairs to move the spar out and then back on the Sun. Again t he voltage output stayed around or below .8. Ended up calling Ben, he had me move the spar off the Sun and back on to see if the SGS telescope was getting any readings. Luckily it started reading our normal voltage around 8.6 and the RA and DEC came back to guide properly. Not entirely sure what happened, but moving the spar off and on the Sun seems like a good way to see if anything was being read by SGS. end KCOR COMMENT BY lisapg: Fri Dec 25 20:47:15 GMT 2020 KCor MC4U controller GUI started loading and reloading again. It stopped after about 15-20 seconds and KCor computer seems operational. ____end___ GPS COMMENT by MLSO: Fri Dec 25 21:45:06 GMT 2020 Successfully logged in to system Good disk mount GPS software failure to start end GENERAL COMMENT BY lisapg: Fri Dec 25 23:38:14 GMT 2020 SGS lost tracking again. end Fri Dec 25 23:40:26 GMT 2020 KCOR End Patrol Fri Dec 25 23:48:18 GMT 2020 KCOR Start Synoptic Patrol **GENERAL PROBLEM COMMENT BY lisapg** : Fri Dec 25 23:51:34 GMT 2020 Voltage dropped to .4 and the RA kept increasing in value while the DEC jumped to the negative, then slowly made its way back to zero. After pushing the spar in and out of the Suns' path for about 7 minutes, it finally spiked back up to our no rmal voltage read and SGS was able to guide properly again. end Sat Dec 26 01:21:02 GMT 2020 KCOR End Patrol GENERAL COMMENT BY lisapq: Sat Dec 26 01:27:27 GMT 2020 The aerosols came in heavy not too long after we started taking data but besides the few hiccups with the spar not too bad of a day to take data. end ONSITE STAFF: lisapg