```
Mauna Loa Solar Observatory Observer's Log
    ______
       Wed Apr 29 17:12:24 GMT 2009
Year: 09 Doy: 119
Observer: koon
WEATHER COMMENT: Wed Apr 29 17:12:26 GMT 2009
Thin to medium cirrostratus overcast, wind=5mph from the WSW, temp=44F.
  end
Wed Apr 29 17:15:26 GMT 2009
                               CHIP
                                       Start Patrol
Wed Apr 29 17:16:05 GMT 2009
                              PICS
                                       Start Patrol
Wed Apr 29 18:00:46 GMT 2009
                              CHIP
                                       LSD
Wed Apr 29 18:02:25 GMT 2009
                              PICS
                                       Flat
Wed Apr 29 18:02:18 GMT 2009
                              CHIP
                                       End LSD
Wed Apr 29 18:02:24 GMT 2009
                              CHIP
                                       BiasLSD
Wed Apr 29 18:03:08 GMT 2009
                              CHIP
                                       End BiasLSD
Wed Apr 29 18:03:15 GMT 2009
                              CHIP
                                       Bias
Wed Apr 29 18:03:55 GMT 2009
                              CHIP
                                       End Bias
Wed Apr 29 18:04:00 GMT 2009
                              CHIP
                                       ReStart Patrol
Wed Apr 29 18:04:51 GMT 2009
                                       End Flat
                              PICS
Wed Apr 29 18:05:00 GMT 2009
                                      Start Patrol
                              MKIV
Wed Apr 29 18:04:57 GMT 2009
                               PICS
                                       ReStart Patrol
Wed Apr 29 18:46:18 GMT 2009
                              MKIV
                                      End Patrol
PSPT COMMENT: Wed Apr 29 18:53:38 GMT 2009
obs.
  end
COMMENT: Wed Apr 29 19:15:19 GMT 2009
Extended the dome slot.
  end
**GONG PROBLEM**: Wed Apr 29 19:36:44 GMT 2009
Back from shelter, swapped in higher gain guider board to test if it will
control early morning oscillations better.
 end
**PSPT PROBLEM**: Wed Apr 29 19:47:23 GMT 2009
Crashed, restarted.
 end
Wed Apr 29 20:31:33 GMT 2009
                              MKIV
                                      Start Patrol
Wed Apr 29 20:54:05 GMT 2009
                              MKIV
                                      Start Patrol
Wed Apr 29 21:37:39 GMT 2009
                              MKIV
                                      Start Patrol
WEATHER COMMENT: Wed Apr 29 22:16:35 GMT 2009
Thin cirrostratus and haze all day.
 end
Wed Apr 29 22:24:23 GMT 2009
                              MKIV
                                      Start Patrol
**MKIV PROBLEM**: Wed Apr 29 22:25:14 GMT 2009
Searched logs and emails for similar problems. Tried changing 24 vdc on
```

Searched logs and emails for similar problems. Tried changing 24 vdc on spar power supply for barrel from PS1 to PS2 (white power supply boxes above spar junction with pier up in main dome) to see if this would improve anything because it did improve a problem with some similar symptoms back

in April 2003, but it didn't change anything, we still have the barrel running CCW until CCW limit at 274 with no apparent data shown on realtime scan GUI with old MV200 video card in place, and we still have sectored concentric ring looking scans with slow down scanning rates sometimes but a continuously scanning barrel with the spare MV200 board in place. Switched PS1 and PS2 outputs back to normal. Tried connecting a computer video monitor to the output jacks on each MV200 card, saw a 0.5"x3.0" horizontal rectangle of mostly white and one column of checkerboard-like pattern of rectangles at far right of screen when using spare MV200 board in place and scanning or with barrel still, with the old mv200 board in place I saw a checkerboard-like pattern of different shaded rectangles over the entire monitor whether scanning or with barrel still. Not sure why the output was different between the boards, or if the output was the "modulation states" David mentioned, I'll ask him. Old MV200 board is in place. Will continue searching for similar past problems next time.

```
20_54.rawmk4 21_12.rawmk4 21_45.rawmk4 22_15.rawmk4 23_11.rawmk4 20_55.rawmk4 21_13.rawmk4 21_51.rawmk4 22_53.rawmk4 23_17.rawmk4 20_56.rawmk4 21_20.rawmk4 21_53.rawmk4 22_54.rawmk4 23_19.rawmk4 21_02.rawmk4 21_37.rawmk4 21_59.rawmk4 22_55.rawmk4 23_25.rawmk4 21_04.rawmk4 21_40.rawmk4 22_01.rawmk4 23_02.rawmk4 21_06.rawmk4 21_42.rawmk4 22_07.rawmk4 23_03.rawmk4 21_09.rawmk4 21_43.rawmk4 22_09.rawmk4 23_09.rawmk4
```