Mauna Loa Solar Observatory Observer's Log _____ Tue May 5 16:40:04 GMT 2009 Year: 09 Doy: 125 Observer: koon WEATHER COMMENT: Tue May 5 16:40:05 GMT 2009 Clear sky except for a layer of vog that is mostly below MLSO, no wind, temp=40F, frosty. end Tue May 5 16:46:15 GMT 2009 CHIP Start Patrol Tue May 5 16:46:48 GMT 2009 PICS Start Patrol **MKIV PROBLEM**: Tue May 5 17:07:42 GMT 2009 After starting mk4 I found that the mouse for the GUI didn't work, so I cycled the lower power button on the KCC, then the startup stalled at the VXWorks message: "hello from t barrel" with the words that come in diagonally on the GUI only about an inch iward from the corners. I tried cycled that switch again, then the main KCC power switch, then the lower switch, then the main power switch again but all 4 attempts all stalled at the same place described above, only my initial startup this morning got beyond that point. Yesterday Allen swapped the input module on the MV200 board with the one from the spare board, I've noticed this stall when using that entire MV200 board before but most often it happens at the VXWorks message: "hello from t_stat" and the startup will eventually work OK after cycling the lower KCC power switch. end PSPT COMMENT: Tue May 5 17:25:25 GMT 2009 obs. end Tue May 5 18:01:33 GMT 2009 CHIP LSD Tue May 5 18:02:32 GMT 2009 PICS Flat **MKIV PROBLEM**: Tue May 5 18:01:48 GMT 2009 No answer when I try to ping akamai from Nahenahe or Nene. end Tue May 5 18:02:58 GMT 2009 CHIP End LSD Tue May 5 18:03:04 GMT 2009 BiasLSD CHIP Tue May 5 18:03:48 GMT 2009 End BiasLSD CHIP Tue May 5 18:03:54 GMT 2009 Bias CHIP

Tue May 5 18:04:34 GMT 2009 CHIP End Bias Tue May 5 18:04:39 GMT 2009 CHIP ReStart Patrol Tue May 5 18:05:06 GMT 2009 PICS End Flat Tue May 5 18:05:11 GMT 2009 PICS ReStart Patrol **PSPT PROBLEM**: Tue May 5 18:34:51 GMT 2009 Had to re-home filter wheel.

____end__

Tue May 5 20:14:21 GMT 2009 MKIV Start Patrol **MKIV PROBLEM**: Tue May 5 19:11:36 GMT 2009 Swapping around the same cards Allen changed yesterday to try to find a working combination on the old MV200 card. The sm aller card is labelled Analog Generator and give a video output for monitoring, the larger card connects to the ribbon cable we see at the front of the MV200 board. I labelled the older cards that we were using until recently with an "O" (for old) on each of their flat cables that connect them with the front connectors that we see from outside the KCC, you have to remove the MV200 board from KCC to see these O marks (black marker pen writing). The old smaller card and the new larger (spare) card were in place for a test and I saw no difference, still see akamai window messages stalling at "hello from t_barrel" or "hello from t stat". end NICE PICSLIMB IMAGE: 1655 NICE PICSDISC IMAGE: 1704 NICE CHIP IMAGE: 1707 Tue May 5 20:32:51 GMT 2009 MKIV Start Patrol **MKIV PROBLEM**: Tue May 5 20:38:13 GMT 2009 I'm done with testing for the old MV200 board for now. I tried every combination of those 2 boards I mentioned earlier and I get the same results no matter which Analog Generator board I try in place, I even tried another spare Analog Generator board that we have mounted to a spare MV200 faceplate. The only difference happens when I try different larger input boards, the ones with the ribbon cable attached to the faceplate of the MV200 from outside, with the old card in place the program starts up to the point where I can launch Patrol, then it stalls at the CCW limit, no data goes to GUI, same result with all 3 Analog Genrator cards along with that old input card. With the new input card in place the VXWorks program doesn't complete and stalls at "hello from t_barrel" most often. Will try the newer spare MV200 motherboard with different combinations of these daughterboards next. I also tried all 3 Analog Generator cards with that newer input card, got the same result regardless of AG card. end Tue May 5 20:48:00 GMT 2009 CHIP End Patrol Tue May 5 20:48:43 GMT 2009 PICS End Patrol WEATHER COMMENT: Tue May 5 20:48:34 GMT 2009 Thick low clouds have moved in, spar not tracking, paused instruments. end Tue May 5 21:45:31 GMT 2009 MKIV Start Patrol Tue May 5 22:01:26 GMT 2009 MKIV Start Patrol Tue May 5 22:15:07 GMT 2009 MKIV Start Patrol Tue May 5 22:37:46 GMT 2009 Start Patrol MKIV Tue May 5 22:49:44 GMT 2009 MKIV Start Patrol Tue May 5 23:16:14 GMT 2009 MKIV End Patrol **MKIV PROBLEM**: Tue May 5 23:00:44 GMT 2009 Still testing the spare MV200 board. I noticed that with the old Analog Generator board installed I get larger sector scans, and where it stops scanning is interesting. When doing Patrol it scans CCW to 274 and stops, then goes back to around 185 and starts a CW scan to about 86 then stops, starts again CW then goes CCW slowly and the VXWorks akamai window shows CW Limit I checked and the CW limit is near there at 83, so it must hit the limit

and turn around and go slowly because of the limit. During the Patrol I can't get the barrel to scan CCW past 274, the actual limit is at 274 when going CCW but it is another 360 degrees CCW before it gets there, I verified that bu trying to Idlw the Patrol and then driving the barrel around one more rotation to get to the CCW limit at 274. Why does the CCW scans stop at 274 as if there is a limit that the program or hardware knows that there is a limit at 274 and stops barrel movement CCW - but misses the limit by exactly 360 degrees rotation. end **MKIV PROBLEM**: Tue May 5 23:52:04 GMT 2009 Put new small boards back into old MV200 board the same way Allen tried and left it, still doesn't start all the way up, will leave it this way to begin testing tomorrow. ____end___ Tue May 5 23:56:39 GMT 2009 MkIV 22_37.rawmk4 22_49.rawmk4 22_52.rawmk4 23_00.rawmk4 23_08.rawmk4 22 38.rawmk4 22 50.rawmk4 22 58.rawmk4 23 06.rawmk4 23 13.rawmk4