Mauna Loa Solar Observatory Observer's Log ______ Thu Sep 30 16:50:16 GMT 1999 Year: 99 Doy: 273 Observer: koon Thu Sep 30 16:53:00 GMT 1999 MKIV Start Patrol WEATHER COMMENT: Thu Sep 30 16:53:07 GMT 1999 Clear sky, wind=10 mph from the SE, temp=48 F. atrol Thu Sep 30 16:53:24 GMT 1999 PICS Start Patrol Thu Sep 30 17:03:05 GMT 1999 CHIP Bias Thu Sep 30 17:04:05 GMT 1999 CHIP End Bias Thu Sep 30 17:04:19 GMT 1999 CHIP Water Thu Sep 30 17:05:06 GMT 1999 CHIP End Water Thu Sep 30 17:13:40 GMT 1999 MKIV End Patrol Thu Sep 30 17:24:19 GMT 1999 MKIV Start Patrol Thu Sep 30 17:31:16 GMT 1999 MKIV End Patrol COMMENT: Thu Sep 30 17:47:41 GMT 1999 Pausing observations to work on MKIV stuff. Patrol Thu Sep 30 17:48:23 GMT 1999 PICS End Patrol **PSPT PROBLEM**: Thu Sep 30 18:14:19 GMT 1999 The telescope came up on the sun OK, it is taking data, the image is just slightly to the lefty of center. It looks like the Quadcell stage is in the same Y position, I will watch this during the calibration to see if it will actually move. I will probably stop the observing later to try to align the guiding system. **PSPT PROBLEM**: Thu Sep 30 19:07:56 GMT 1999 I could see the Y direction movement of the Quadcell, so it does move on command. Yesterday I used the "xys goto ... " command without success on that axis (X axis worked). I'll try the "axis # goto" today. **PSPT PROBLEM**: Thu Sep 30 19:33:54 GMT 1999 There were some fuzzy images taken during the flat section of the cal. Bumping the spar can cause the fast mirror to go unstable, and bumping it again in the correct direction can also make it stop. I'll try turning down the gain(s) once I figure out where they are. Thu Sep 30 19:52:30 GMT 1999 MKIV Start Correct Thu Sep 30 19:53:47 GMT 1999 MKIV End Correct Thu Sep 30 19:53:53 GMT 1999 MKIV Start Patrol Thu Sep 30 20:00:42 GMT 1999 MKIV End Patrol Thu Sep 30 20:09:52 GMT 1999 Start Cal MKIV Thu Sep 30 20:23:38 GMT 1999 CHIP CHIP Start Patrol Thu Sep 30 20:23:50 GMT 1999 PICS Start Patrol Thu Sep 30 20:31:31 GMT 1999 MKIV End Cal Thu Sep 30 20:36:12 GMT 1999 MKIV Start Patrol

MKIV

MKIV

End Patrol

Start Patrol

Thu Sep 30 20:50:19 GMT 1999

Thu Sep 30 20:56:55 GMT 1999

```
MKIV COMMENT: Thu Sep 30 20:58:36 GMT 1999
Slit mask test using opal.
Thu Sep 30 21:03:05 GMT 1999
                                CHIP
                                         Bias
                                        End Patrol
Thu Sep 30 21:03:52 GMT 1999
                                MKIV
Thu Sep 30 21:04:10 GMT 1999
                                         End Bias
                                CHIP
Thu Sep 30 21:04:26 GMT 1999
                                         Water
                                CHIP
Thu Sep 30 21:05:18 GMT 1999
                                CHIP
                                         End Water
Thu Sep 30 21:12:56 GMT 1999
                                MKIV
                                        Start Patrol
MKIV COMMENT: Thu Sep 30 21:26:00 GMT 1999
MkIII PAU
**PSPT PROBLEM**: Thu Sep 30 21:33:27 GMT 1999
I'm trying to get the quadcell and ccd aligned but have run into problems,
waiting for Haosheng to call back. I was able to get manual images but
can't disply them.
Thu Sep 30 21:45:27 GMT 1999
                                MKIV
                                        End Patrol
Thu Sep 30 22:03:01 GMT 1999
                                CHIP
                                         Bias
Thu Sep 30 22:03:58 GMT 1999
                                CHIP
                                         End Bias
Thu Sep 30 22:04:08 GMT 1999
                                CHIP
                                         Water
Thu Sep 30 22:04:57 GMT 1999
                                CHIP
                                         End Water
**PSPT PROBLEM**: Thu Sep 30 22:15:56 GMT 1999
I actually have some time to work on this but since it was stalled and
Haosheng couldn't get back to me I cycled the Sparc power to clear the
stall, brute force but it has been done before without any problems.
Then I tried a few more times unsuccessfully to get images on the
display. Then I lined up the beamsplitter on the lens by eye while the
quider servo was on, then ran an ephmcal. I'll have to try Haoshengs
suggestions another day when I can talk to him as I try them. For now
I'll try one more data set to make sure it works for tomorrow. There is
still no easy way to do a small data set when starting obs from scratch
so I have to get it going now at the expense of doing more on the
quiding troubleshooting. So besides the ephmcal the only thing I
chnaged was the mirror softaware gains, they were at -25 and I turned
those gains down (smaller absolute value) to -10.
Thu Sep 30 22:44:46 GMT 1999
                                        Start Cal
                                MKIV
Thu Sep 30 23:03:02 GMT 1999
                                         Bias
                                CHIP
Thu Sep 30 23:04:00 GMT 1999
                                         End Bias
                                CHIP
Thu Sep 30 23:04:09 GMT 1999
                                CHIP
                                         Water
Thu Sep 30 23:04:55 GMT 1999
                                CHIP
                                         End Water
Thu Sep 30 23:05:08 GMT 1999
                                MKIV
                                        Start Patrol
Thu Sep 30 23:11:40 GMT 1999
                                MKIV
                                        End Patrol
Thu Sep 30 23:19:08 GMT 1999
                                MKIV
                                        Start Patrol
Thu Sep 30 23:32:26 GMT 1999
                                PICS
                                         End Patrol
Thu Sep 30 23:35:34 GMT 1999
                                         CHIP End Patrol
                                CHIP
Thu Sep 30 23:36:06 GMT 1999
                                         ending tape
                                CHIP
COMMENT: Thu Sep 30 23:36:19 GMT 1999
```

TAPES:

MKIV: 99273 CHIP: C00937 PICS: P01562

LOWL: L00630 in drive #1

Thu Sep 30 23:38:54 GMT 1999 MKIV End Patrol

Thu Sep 30 23:40:49 GMT 1999

MkIII

16_53.rawmk3	17_10.rawmk3	20_13.rawmk3	20_43.rawmk3	c20_17.rawmk3
16_56.rawmk3	17_24.rawmk3	20_20.rawmk3	20_46.rawmk3	c20_24.rawmk3
16_59.rawmk3	17_27.rawmk3	20_27.rawmk3	20_57.rawmk3	
17_03.rawmk3	19_53.rawmk3	20_36.rawmk3	21_00.rawmk3	
17_07.rawmk3	19_57.rawmk3	20_39.rawmk3	c20_09.rawmk3	