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Mauna Loa Solar Observatory Observer's Log  
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Mon Jul 12 17:06:50 GMT 1999

Year: 99 Doy: 193

Observer: yasukawa

WEATHER COMMENT: Mon Jul 12 17:07:28 GMT 1999

Cool, clear, brisk southeast wind.

\*\*MKIV PROBLEM\*\* Mon Jul 12 17:07:47 GMT 1999

Tapes did not transfer again last night. Andrew Stanger contacted me to load blank tape so he could transfer 99-190-192 data. nahenahe was left with /local/d full messages and wouldn't respond to login. Waited until we sorted things out and rebooted nahenahe. Login worked. Starting observations.

Mon Jul 12 17:10:12 GMT 1999 MKIII Start Patrol

Mon Jul 12 17:10:40 GMT 1999 CHIP CHIP Start Patrol

Mon Jul 12 17:10:55 GMT 1999 PICS Start Patrol

\*\*GONG PROBLEM\*\* Mon Jul 12 17:13:49 GMT 1999

UPS keypad hasn't arrived yet. I'll put off weekly pm, normally done today, until keypad arrives or tape get near full.

Mon Jul 12 18:01:11 GMT 1999 PICS Flat

Mon Jul 12 18:01:51 GMT 1999 CHIP Bias

Mon Jul 12 18:03:02 GMT 1999 CHIP End Bias

Mon Jul 12 18:03:18 GMT 1999 CHIP Water

Mon Jul 12 18:04:05 GMT 1999 PICS End Flat

Mon Jul 12 18:04:05 GMT 1999 PICS End Flat

Mon Jul 12 18:06:42 GMT 1999 MKIII Start Cal

Mon Jul 12 18:30:38 GMT 1999 MKIII Start Patrol

\*\*MKIV PROBLEM\*\* Mon Jul 12 18:37:16 GMT 1999

Stopping MkIV. David called and requested an alignment of the beam onto the detector, due to Alice's findings that we getting low signal in the inner corona due to probable misalignment.

Mon Jul 12 19:01:53 GMT 1999 CHIP Bias

Mon Jul 12 19:02:47 GMT 1999 CHIP End Bias

Mon Jul 12 19:02:58 GMT 1999 CHIP Water

Mon Jul 12 19:02:58 GMT 1999 CHIP Water

Mon Jul 12 19:03:46 GMT 1999 CHIP End Water

COMMENT: Mon Jul 12 19:41:09 GMT 1999

Stopping to reconfigure dome shutter.

Patrol

Mon Jul 12 19:42:35 GMT 1999 CHIP CHIP End Patrol

Mon Jul 12 19:43:38 GMT 1999 MKIII Start Patrol

\*\*MKIV PROBLEM\*\* Mon Jul 12 19:44:10 GMT 1999

Adjustment to the system resulted in a 72% drop in amplitude, with opal in, of the taller trace with a slope change from an average 85 degrees to 70 degrees and a decrease in amplitude of the shorter trace of 65% with a change in slope from 75 degrees to 60 degrees.

Mon Jul 12 19:58:36 GMT 1999 CHIP CHIP Start Patrol

Mon Jul 12 19:58:36 GMT 1999 CHIP CHIP Start Patrol

Mon Jul 12 19:58:57 GMT 1999 MKIII Start Correct  
Mon Jul 12 20:00:08 GMT 1999 MKIII End Correct  
Mon Jul 12 20:00:45 GMT 1999 MKIII Start Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:01:07 GMT 1999  
Ran one cycle of Patrol before closing dome. Ran Correct on MKIV after reconfiguring dome.  
Mon Jul 12 20:01:56 GMT 1999 CHIP Gain  
Mon Jul 12 20:06:59 GMT 1999 CHIP End Gain  
Mon Jul 12 20:07:09 GMT 1999 CHIP Bias  
Mon Jul 12 20:07:57 GMT 1999 CHIP End Bias  
Mon Jul 12 20:08:18 GMT 1999 CHIP Water  
Mon Jul 12 20:09:03 GMT 1999 CHIP End Water  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:17:40 GMT 1999  
Adjustment did not get the desired result. Lost outer signal. I will adjust beam back to where it was and then David will make a software change, I'll reboot, and then do a correct.  
Mon Jul 12 20:23:31 GMT 1999 MKIII End Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:45:02 GMT 1999  
Alignment reset and David made the software change to give a little higher gain. I reboot the KCC and will run a Correct as soon as the KCC comes up.  
Mon Jul 12 20:47:45 GMT 1999 MKIII Start Correct  
Mon Jul 12 20:48:59 GMT 1999 MKIII End Correct  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:49:04 GMT 1999  
Correct pau.  
Mon Jul 12 20:49:19 GMT 1999 MKIII Start Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:52:28 GMT 1999  
KCC showing access fault  
(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D  
Adjustment to the system resulted in a 72% drop in amplitude, with opal in, of the taller trace with a slope change from an average 85 degrees to 70 degrees and a decrease in amplitude of the shorter trace of 65% with a change in slope from 75 degrees to 60 degrees.  
(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D  
Ran one cycle of Patrol before closing dome. Ran Correct on MKIV after reconfiguring dome.  
(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D  
Adjustment did not get the desired result. Lost outer signal. I will adjust beam back to where it was and then David will make a software change, I'll reboot, and then do a correct.  
(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D  
Alignment reset and David made the software change to give a little higher gain. I reboot the KCC and will run a Correct as soon as the KCC comes up.  
(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D

(nahenahe) yasukawa : 4p  
End your comment by starting a new line with ^D  
KCC showing access fault  
Access Fault  
Program Counter: 0x00158f9c  
Status Register: 0x3014  
Access Address : 0x0272b41c  
Special Status : 0x0145  
Task: 0x37ed34 "t\_disp"  
Access Fault  
Pundefined symbol: Fault  
akamai-> rogram Counter: 0x00158f9c  
Staundefined symbol: Counter  
tuakamai-> s Register: 0x3014  
Accundefined symbol: Register  
akamai-> ess Address : 0x0272b41c  
Specundefined symbol: Address  
iakamai-> al Status : 0x0145  
Tasundefined symbol: Status  
akamai-> : 0x37ed34 "t\_disp"  
syntax error  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:55:02 GMT 1999  
Rebooting KCC.  
Mon Jul 12 20:56:34 GMT 1999 MKIV Start Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 20:58:35 GMT 1999  
Coronal image gain high, took it down to .25 to see good image.  
OOPS, scan must've gone the wrong. Turned off scan and moved barrel  
to midrange manually, reboot KCC and doing an end day to initialize barrel.  
Barrel keeps running to mechanical limit each time.  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 21:12:31 GMT 1999  
Ok, this KCC reboot worked. Barrel ran to 176.02 instead of limit. I hope it  
Runs in the right direction after the Correct, which I will run right now.  
Mon Jul 12 21:13:59 GMT 1999 MKIV Start Correct  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 21:14:19 GMT 1999  
David found that the original problem was probably software related.  
By increasing the gain, we got the inner corona back, albeit saturated.  
He modified the software to increase the headroom. That's why the  
Correct at this time.  
Correct is pau. Starting Patrol.  
Mon Jul 12 21:16:59 GMT 1999 MKIV Start Patrol  
\*\*MLSO PROBLEM\*\* : Mon Jul 12 21:17:58 GMT 1999  
Rats! Spar not pointed. Barrel also ran in the wrong direction again.  
Fixing thing again.  
Mon Jul 12 21:27:22 GMT 1999 MKIV Start Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 21:27:44 GMT 1999  
Pointed spar, manually rotated barrel to a midrange position, rebooted both  
nahenahe and KCC. Restarting Patrol.  
Scanning OK now.

\*\*MKIV PROBLEM\*\* : Mon Jul 12 21:31:58 GMT 1999  
Still having barrel problems. Checking it out.  
Mon Jul 12 21:35:35 GMT 1999 MKIV Start Patrol  
\*\*MKIV PROBLEM\*\* : Mon Jul 12 21:47:12 GMT 1999  
Hardware looks OK at this point.

Bias

Mon Jul 12 22:01:47 GMT 1999 CHIP End Bias  
Mon Jul 12 22:01:56 GMT 1999 CHIP Water  
Mon Jul 12 22:02:40 GMT 1999 CHIP End Water

PICS COMMENT: Mon Jul 12 22:43:12 GMT 1999

Rotated dome around, was looking at dome while troubleshooting barrel.

Mon Jul 12 23:02:49 GMT 1999 CHIP Bias  
Mon Jul 12 23:03:41 GMT 1999 CHIP End Bias  
Mon Jul 12 23:03:50 GMT 1999 CHIP Water  
Mon Jul 12 23:04:30 GMT 1999 CHIP End Water  
Tue Jul 13 00:01:58 GMT 1999 CHIP Bias  
Tue Jul 13 00:02:54 GMT 1999 CHIP End Bias  
Tue Jul 13 00:03:04 GMT 1999 CHIP Water  
Tue Jul 13 00:03:44 GMT 1999 CHIP End Water

\*\*MKIV PROBLEM\*\* : Tue Jul 13 00:24:55 GMT 1999

David executed a bunch of diagnostic changes to the barrel drive software.  
We determined that the CW limit switch was not working properly.  
Checked out switch with ohm meter and found it was VERY flaky. Darn if  
it had to fail right after doing a bunch of stuff on MKIV, confusing issues.  
Replaced switch with a modified spare--had to clip off the roller arm.

\*\*MKIV PROBLEM\*\* : Tue Jul 13 00:40:16 GMT 1999

Once I got the barrel to the CW software limit (Start point for Patrol),  
Corona ran to the CCW software limit and stopped like it should have.  
Barrel also ran the other direction (anoroC) successfully.

Testing with Patrol.

Tue Jul 13 00:43:36 GMT 1999 MKIV Start Patrol

\*\*PSPT PROBLEM\*\* : Tue Jul 13 00:45:52 GMT 1999

PSPT crashed starting up one of its loops. Have no idea which hour.

Tue Jul 13 01:00:48 GMT 1999 CHIP Bias  
Tue Jul 13 01:01:41 GMT 1999 CHIP End Bias  
Tue Jul 13 01:01:55 GMT 1999 CHIP Water  
Tue Jul 13 01:02:43 GMT 1999 CHIP End Water  
Tue Jul 13 01:08:53 GMT 1999 PICS End Patrol  
Tue Jul 13 01:09:23 GMT 1999 CHIP CHIP End Patrol  
Tue Jul 13 01:10:02 GMT 1999 CHIP ending tape

COMMENT: Tue Jul 13 01:10:19 GMT 1999

TAPES:

MKIV: 99-193

PICS: P01482

CHIP: C00861

LOWL: L00612 in drive #0, 54 files and still running.

Tue Jul 13 01:13:01 GMT 1999  
MkIII

00_35.rawmk3	17_10.rawmk3	17_45.rawmk3	18_34.rawmk3	21_27.rawmk3
00_39.rawmk3	17_13.rawmk3	17_49.rawmk3	19_43.rawmk3	22_02.rawmk3
00_43.rawmk3	17_17.rawmk3	17_53.rawmk3	19_47.rawmk3	22_11.rawmk3
00_47.rawmk3	17_22.rawmk3	17_57.rawmk3	20_00.rawmk3	c18_06.rawmk3
00_51.rawmk3	17_26.rawmk3	18_02.rawmk3	20_04.rawmk3	c18_15.rawmk3
00_54.rawmk3	17_30.rawmk3	18_11.rawmk3	20_08.rawmk3	c18_22.rawmk3
00_58.rawmk3	17_34.rawmk3	18_18.rawmk3	20_12.rawmk3	
01_02.rawmk3	17_37.rawmk3	18_26.rawmk3	20_16.rawmk3	
10_18.rawmk3	17_41.rawmk3	18_30.rawmk3	20_19.rawmk3	