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Mauna Loa Solar Observatory Observer's Log  
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Fri Oct 2 16:33:28 GMT 1998  
Year: 98 Doy: 275  
Observer: yasukawa  
Fri Oct 2 16:34:21 GMT 1998 CHIP Startup--Initializing new tape  
WEATHER COMMENT: Fri Oct 2 16:34:38 GMT 1998  
Cool, clear, light south wind.  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 16:34:52 GMT 1998  
CHIP filter temp OK this morning at startup, 34.488.  
Fri Oct 2 16:42:41 GMT 1998 CHIP CHIP Start Patrol  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 16:42:56 GMT 1998  
Once sun warmed filter, temp went into red, presently 34.691.  
Fri Oct 2 16:43:53 GMT 1998 MKIII Start Patrol  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 16:56:52 GMT 1998  
Filter temp. now 35.607  
Fri Oct 2 17:00:49 GMT 1998 CHIP Bias  
Fri Oct 2 17:01:44 GMT 1998 CHIP End Bias  
Fri Oct 2 17:01:57 GMT 1998 CHIP Water  
Fri Oct 2 17:02:42 GMT 1998 PICS Flat  
Fri Oct 2 17:02:40 GMT 1998 CHIP End Water  
Fri Oct 2 17:04:09 GMT 1998 PICS End Flat  
\*\*PSPT PROBLEM\*\*: Fri Oct 2 17:18:27 GMT 1998  
PSPT started up OK, brushed front surface of entrance filter.  
Active mirror stable. Jeff Kuhn is supposed to arrive shortly  
to investigate active mirror problem.  
MKIII COMMENT: Fri Oct 2 17:20:07 GMT 1998  
CORRECT started up inadvertently. I must have brushed the mouse  
while cursor was sitting on button at some point.  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 17:22:33 GMT 1998  
temp 37.103  
Fri Oct 2 17:24:59 GMT 1998 MKIII Start Patrol  
MKIII COMMENT: Fri Oct 2 17:25:44 GMT 1998  
CORRECT was done a bit early but we were supposed to do one this month.  
It is a good day, weather-wise, to do it.  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 17:32:09 GMT 1998  
temp 37.598  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 17:46:21 GMT 1998  
38.255  
Fri Oct 2 18:02:48 GMT 1998 PICS Flat  
Fri Oct 2 18:02:49 GMT 1998 CHIP Bias  
Fri Oct 2 18:03:46 GMT 1998 CHIP End Bias  
\*\*PSPT PROBLEM\*\*: Fri Oct 2 18:03:59 GMT 1998  
1800 UT wake-up OK, active mirror stable.  
ri Oct 2 18:03:59 GMT 1998 CHIP Water  
\*\*CHIP PROBLEM\*\*: Fri Oct 2 18:04:29 GMT 1998  
38.979

Fri Oct 2 18:04:54 GMT 1998 CHIP End Water  
\*\*PSPT PROBLEM\*\*:  
1800 UT run went OK, active mirror was stable.  
\*\*CHIP PROBLEM\*\*:  
39.594  
\*\*CHIP PROBLEM\*\*:  
40.063  
Fri Oct 2 19:02:46 GMT 1998 PICS Flat  
Fri Oct 2 19:02:56 GMT 1998 CHIP Bias  
Fri Oct 2 19:04:01 GMT 1998 CHIP End Bias  
Fri Oct 2 19:04:01 GMT 1998 CHIP End Bias  
Fri Oct 2 19:04:15 GMT 1998 CHIP Water  
\*\*PSPT PROBLEM\*\*:  
1900 UT Run is oscillating. Jeff Kuhn arrived a few minutes before  
and is now investigating the problem.  
\*\*CHIP PROBLEM\*\*:  
40.907  
COMMENT:  
Stopping to reconfigure dome shutter.  
Fri Oct 2 19:11:37 GMT 1998 PICS End Patrol  
Fri Oct 2 19:11:31 GMT 1998 CHIP CHIP End Patrol  
Fri Oct 2 19:17:02 GMT 1998 MKIII Start Patrol  
Fri Oct 2 19:19:30 GMT 1998 PICS Start Patrol  
Fri Oct 2 19:19:30 GMT 1998 PICS Start Patrol  
COMMENT:  
Network is down.  
\*\*CHIP PROBLEM\*\*:  
41.414  
WEATHER COMMENT:  
Sky is very bright near sun, noisy.  
COMMENT:  
Net back up.  
Fri Oct 2 20:01:56 GMT 1998 CHIP Gain  
Fri Oct 2 20:02:42 GMT 1998 PICS Flat  
CHIP COMMENT:  
42.056  
Fri Oct 2 20:04:08 GMT 1998 PICS End Flat  
Fri Oct 2 20:06:37 GMT 1998 CHIP End Gain  
Fri Oct 2 20:06:51 GMT 1998 CHIP Bias  
Fri Oct 2 20:07:44 GMT 1998 CHIP End Bias  
Fri Oct 2 20:07:54 GMT 1998 CHIP Water  
Fri Oct 2 20:08:33 GMT 1998 CHIP End Water  
\*\*CHIP PROBLEM\*\*:  
42.260  
setpoint remains at .642V  
sensor voltage is slowly oscillating between .699V-.733V  
\*\*PSPT PROBLEM\*\*:  
Jeff suspected something flaky on the Mirror Drive board,

board we first suspected. There may be a bad connection somewhere as we can get the mirror servo meters to oscillate by jogging the card while it is out on extenders. Jeff is resoldering all of the connections on the board.

\*\*CHIP PROBLEM\*\*:  
Fri Oct 2 20:27:41 GMT 1998

42.419 and still rising.

setpoint at .642V

sensor oscillating between .701V and .747V

Turned temp. controller off, getting concerned that the temp is getting too high.

\*\*CHIP PROBLEM\*\*:  
Fri Oct 2 20:32:58 GMT 1998

Stopping CHIP.

Fri Oct 2 20:35:19 GMT 1998 CHIP CHIP End Patrol

\*\*CHIP PROBLEM\*\*:  
Fri Oct 2 20:57:34 GMT 1998

temp coming down, 37.999 and dropping slowly. Controller off.

Fri Oct 2 21:02:40 GMT 1998 PICS Flat

Fri Oct 2 21:04:10 GMT 1998 PICS End Flat

\*\*CHIP PROBLEM\*\*:  
Fri Oct 2 21:05:32 GMT 1998

Turned controller back on.

37.504 when I did that, Temp is still dropping, now at 37.104.

\*\*CHIP PROBLEM\*\*:  
Fri Oct 2 21:14:53 GMT 1998

Temp is going back up. Turning controller back off to protect filter.

WEATHER COMMENT:  
Fri Oct 2 21:42:23 GMT 1998

In stratocumulus clouds.

\*\*PSPT PROBLEM\*\*:  
Fri Oct 2 21:44:15 GMT 1998

Jeff and I agree that the mirror drive board is flaky. Resoldering did not fix problem. I think there is a hairline flaw in the power or ground circuit as this is the only circuit common to both X and Y drive circuits. Temperature and vibration cause the drive circuits to peg between limits. The reason I got off that track the last time when I was cooling the board with the fan was the air pressure was causing the board to waver to and fro in the breeze. This mechanical vibration was also causing the board to get flaky. Thermal expansion probably caused flakyness when the board was securely mounted in the HOT chassis. We currently have the board out on extenders and tied down with a wire. PSPT is running OK. Jeff Kuhn has left satisfied that we resolved the problem. Haosheng will send out a spare mirror drive board to replace the flaky one.

Fri Oct 2 21:52:03 GMT 1998 CHIP ending tape

PSPT COMMENT:  
Fri Oct 2 21:53:42 GMT 1998

Optics around active mirror and beam-splitter dusted off.

Fri Oct 2 22:02:45 GMT 1998 PICS Flat

Fri Oct 2 22:04:13 GMT 1998 PICS End Flat

COMMENT:  
Fri Oct 2 22:07:05 GMT 1998

Tapes:

PICS: P01310

CHIP: C00707

LOWL: L00545

Fri Oct 2 22:08:34 GMT 1998

PICS End Patrol

Fri Oct 2 22:14:28 GMT 1998

MkIII

16_43.rawmk3	17_54.rawmk3	19_08.rawmk3	20_18.rawmk3	21_22.rawmk3
16_47.rawmk3	17_57.rawmk3	19_17.rawmk3	20_21.rawmk3	21_25.rawmk3
16_49.rawmk3	18_03.rawmk3	19_20.rawmk3	20_24.rawmk3	21_28.rawmk3
16_52.rawmk3	18_09.rawmk3	19_22.rawmk3	20_27.rawmk3	21_31.rawmk3
16_55.rawmk3	18_15.rawmk3	19_25.rawmk3	20_30.rawmk3	21_34.rawmk3
16_58.rawmk3	18_18.rawmk3	19_28.rawmk3	20_33.rawmk3	21_37.rawmk3
17_01.rawmk3	18_21.rawmk3	19_31.rawmk3	20_36.rawmk3	21_40.rawmk3
17_04.rawmk3	18_24.rawmk3	19_34.rawmk3	20_38.rawmk3	21_43.rawmk3
17_07.rawmk3	18_27.rawmk3	19_37.rawmk3	20_41.rawmk3	21_46.rawmk3
17_10.rawmk3	18_30.rawmk3	19_40.rawmk3	20_44.rawmk3	21_49.rawmk3
17_13.rawmk3	18_33.rawmk3	19_43.rawmk3	20_47.rawmk3	21_51.rawmk3
17_16.rawmk3	18_36.rawmk3	19_46.rawmk3	20_50.rawmk3	21_54.rawmk3
17_25.rawmk3	18_39.rawmk3	19_49.rawmk3	20_53.rawmk3	21_57.rawmk3
17_28.rawmk3	18_42.rawmk3	19_52.rawmk3	20_56.rawmk3	22_00.rawmk3
17_31.rawmk3	18_45.rawmk3	19_55.rawmk3	20_59.rawmk3	22_03.rawmk3
17_33.rawmk3	18_47.rawmk3	19_58.rawmk3	21_02.rawmk3	c18_00.rawmk3
17_36.rawmk3	18_50.rawmk3	20_00.rawmk3	21_05.rawmk3	c18_06.rawmk3
17_39.rawmk3	18_53.rawmk3	20_03.rawmk3	21_08.rawmk3	c18_12.rawmk3
17_42.rawmk3	18_56.rawmk3	20_06.rawmk3	21_11.rawmk3	
17_45.rawmk3	18_59.rawmk3	20_09.rawmk3	21_13.rawmk3	
17_48.rawmk3	19_02.rawmk3	20_12.rawmk3	21_16.rawmk3	
17_51.rawmk3	19_05.rawmk3	20_15.rawmk3	21_19.rawmk3	