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## Mauna Loa Solar Observatory Observer's Log

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Sat Jun 14 16:46:51 GMT 1997

Year: 97 Doy: 165

Observer: koon

WEATHER COMMENT: Sat Jun 14 16:46:57 GMT 1997 Clear sky, wind=10 mph from the ESE, temp=50 F.

Sat Jun 14 16:52:37 GMT 1997 dPMon Start Patrol

Sat Jun 14 16:52:34 GMT 1997 CHIP CHIP Start Patrol

Sat Jun 14 17:01:57 GMT 1997 dPMon Flat Sat Jun 14 17:02:04 GMT 1997 CHIP Bias

Sat Jun 14 17:02:55 GMT 1997 dPMon End Flat

Sat Jun 14 17:02:51 GMT 1997 CHIP End Bias

Sat Jun 14 17:03:00 GMT 1997 CHIP Water Sat Jun 14 17:03:30 GMT 1997 CHIP End Water

LOW-L COMMENT: Sat Jun 14 17:22:55 GMT 1997

Manually ejected L00459 since the file number got reset on the afternoon of the 12th and was reading only 16 files around 1650 this morning instead of around 63 files. Also wanted to reinstall tape drive #1 (which I did) now that we aren't using it for CHIP data. Cleaned tape drive #0 due to blinking LED warning, installed L00460 in drive #0 and L00461 in drive #1 and restarted the program with both drives up and running.

Sat Jun 14 18:01:04 GMT 1997 CHIP Bias CHIP Sat Jun 14 18:01:52 GMT 1997 End Bias Sat Jun 14 18:02:08 GMT 1997 Flat dPMon Sat Jun 14 18:02:01 GMT 1997 CHIP Water Sat Jun 14 18:02:37 GMT 1997 CHTP End Water Sat Jun 14 18:03:03 GMT 1997 dPMon End Flat

MKIII COMMENT: Sat Jun 14 18:09:23 GMT 1997

The O1 guider is pinned to one limit after the adjusting I did yesterday. I've been watching it to see if it would improve, it didn't. In fact I think I can see what Alice and Donna were seeing, it looks like underocculting and interference fringing in the North (instead of the South as they saw it). Since the problem has shifted to the other side of the corona and I can't find an adequate Spar guider adjustment to prevent this problem all day I will have to stop all observations and try to balance the Spar itself, I think this will help.

Sat Jun 14 18:14:25 GMT 1997 dPMon End Patrol

COMMENT: Sat Jun 14 18:14:35 GMT 1997

Stopping all observations to balance Spar and do a CHIP "dv" test.

Sat Jun 14 18:17:38 GMT 1997 CHIP CHIP End Patrol

CHIP COMMENT: Sat Jun 14 18:19:25 GMT 1997

Doing a "dv" test with exposure=30 msec. Value at center ranges from 286 to 298.

Sat Jun 14 21:28:48 GMT 1997 dPMon Start Patrol Sat Jun 14 21:29:01 GMT 1997 CHIP CHIP Start Patrol

COMMENT: Sat Jun 14 21:28:51 GMT 1997

Starting up instruments again. I balanced the Spar better and managed to take off about 30 pounds of unnecessary weight. I still couldn't get the Y-axis MKIII O1 guider stepper motor to damp out so I checked it out. After removing the motor/gear assembly I found the Driving Gear on the motor output shaft is missing half of its teeth. Since the O1 is driven by an eccentric cam mechanism we need to get a new gear before the O1 will guide properly, as it is the Y-axis motor may sometimes drive the O1 in the X-axis direction. I tried adjusting the guider gain in the Y-axis direction but I can't tell if that helps to stabilize the Spar or O1 guiding. The Spar did start guiding smoother in dec after I rebalanced it though.

MKIII COMMENT: Sat Jun 14 21:46:01 GMT 1997

Tilt plate must have been in or partially in, scan looked weird until I gave the tltout command.

WEATHER COMMENT: Sat Jun 14 21:47:16 GMT 1997

Very thin cirrostratus is brightening up the sky.

COMMENT: Sat Jun 14 21:50:58 GMT 1997

Spar guiding appears to be better than it has been in a long time, despite the wind.

MKIII COMMENT: Sat Jun 14 21:52:10 GMT 1997

Still not sure about O1 guiding, the meters in the Control Room look fairly centered but I'm not sure if that is an accurate measure of the actual guiding.

Sat Jun 14 22:01:55 GMT 1997 dPMon Flat Sat Jun 14 22:02:52 GMT 1997 End Flat dPMon Sat Jun 14 22:03:04 GMT 1997 CHIP Bias Sat Jun 14 22:03:48 GMT 1997 End Bias CHIP Sat Jun 14 22:03:57 GMT 1997 CHIP Water Sat Jun 14 22:04:36 GMT 1997 CHIP End Water Sat Jun 14 22:30:24 GMT 1997 dPMon End Patrol CHIP End Patrol Sat Jun 14 22:31:41 GMT 1997 CHTP Sat Jun 14 22:44:16 GMT 1997 CHIP ending tape

COMMENT: Sat Jun 14 22:46:53 GMT 1997

Activity report:

OP: 65; 113; 218; 270-285; 303.

No coronal activity.

## TAPES: \*\*\*\*

MKIII: H01579 DPMON: P00910 CHIP: C00331

LOWL: L00460 in drive #0

SCAN-LOG

SCAN-LOG 16:53:24. 6/14/97 DOY 165

17:01:27	17:04:42	17:07:58	17:11:13	17:14:30
17:17:45	17:21:00	17:24:14	17:27:30	17:30:43
17:33:57	17:37:09	17:40:23	17:43:35	17:46:48

17:50:01	17:53:14	17:56:27	17:59:40	18:02:52
18:06:11	18:09:23	18:12:37	21:36:11	21:39:23
21:42:34	21:45:50	21:49:01	21:52:18	21:55:31
21:58:49	22:02:01	22:05:13	22:08:24	22:11:36
22:14:49	22:18:06	22:21:19	22:24:35	22:27:46
0 ERRORS				

OK