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Mauna Loa Solar Observatory Observer's Log  
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Sat Jan 30 18:04:17 GMT 1999

Year: 99 Doy: 030

Observer: koon

WEATHER COMMENT: Sat Jan 30 18:04:19 GMT 1999

Thin fog blowing over, clouds to the East, wind=15 mph from the SE,  
temp=35 F.

Sat Jan 30 18:15:26 GMT 1999 CHIP Startup--Initializing new tape

\*\*MKIV PROBLEM\*\* Sat Jan 30 20:32:02 GMT 1999

OK, we're back in business again. The Bit3 board in the Sparc5 was the culprit. Everything comes up normally now. I will try some observations next.

WEATHER COMMENT: Sat Jan 30 20:33:21 GMT 1999

Fog has cleared, will, start observations now.

Sat Jan 30 20:38:23 GMT 1999 CHIP CHIP Start Patrol

MKIII COMMENT: Sat Jan 30 20:57:50 GMT 1999

No animation display so far. The mk4 scans were looking strange due to bad guiding by the spar, I reset the declination guider.

COMMENT: Sat Jan 30 20:59:55 GMT 1999

Guiding was off in declination, I reset the dec guider.

Sat Jan 30 21:03:03 GMT 1999 CHIP Bias

Sat Jan 30 21:03:52 GMT 1999 CHIP End Bias

Sat Jan 30 21:04:00 GMT 1999 CHIP Water

Sat Jan 30 21:04:36 GMT 1999 CHIP End Water

WEATHER COMMENT: Sat Jan 30 21:08:05 GMT 1999

The clouds to the East are rising up again and thin wisps are starting to blow over us, we may have fog again soon.

\*\*MKIV PROBLEM\*\* Sat Jan 30 21:17:21 GMT 1999

I don't see any data files for Mk4 or Mk3. Part of the previous troubleshooting included renaming a file that invokes ReadKcc during a Nahenahe reboot and probably during a normal startup. I renamed that file after starting up so I going to try to reboot and start everything over from the beginning.

\*\*MKIV PROBLEM\*\* Sat Jan 30 21:42:20 GMT 1999

OK, after rebooting Nahenahe and restarting the observing program I now see data files in the appropriate directories and the MkIII animation is back. The quality of the scans is questionable though. The MkIII scans look terrible, very noisy. The sky looks OK and the "loaf of bread" looks OK. Occasionally some wisps of clouds may be passing over, but not a lot.

Sat Jan 30 22:01:51 GMT 1999 CHIP Bias

Sat Jan 30 22:02:42 GMT 1999 CHIP End Bias

Sat Jan 30 22:02:52 GMT 1999 CHIP Water

Sat Jan 30 22:03:31 GMT 1999 CHIP End Water

\*\*PSPT PROBLEM\*\* Sat Jan 30 22:05:27 GMT 1999

Guider wouldn't lock on sun, QCsum=0 to 35, even though sun is bright and

no clouds are in the way. Used Restart to try again.

\*\*MKIII PROBLEM\*\* : Sat Jan 30 22:17:30 GMT 1999

Now the scans are beginning to show streamers, etcetera. MKIII data is starting to appear from behind all that noise, I'm not sure why the noise is disappearing but I guess it must have been moisture in the sky.

\*\*PSPT PROBLEM\*\* : Sat Jan 30 22:21:34 GMT 1999

Restart didn't work, QCsum still very low (17) despite clear sky. Exited again and tried Run to fix it.

\*\*PSPT PROBLEM\*\* : Sat Jan 30 22:43:35 GMT 1999

Still showed low QCsum of around 100. I opened side door and saw that the telescope was off in declination, I manually pushed it into place in hopes of seeing the QCsum go up, but it didn't change at all. Why does the QCsum equal 100 and why does the "Mirror On" LED stay lit even when the telescope is pointed off the sun? Why doesn't QCsum change even a little when I point the scope to the sun? Also, why does the telescope start pointing off to the West when I block the light beam to look at the shutter. Something is definitely wrong. It seems logical that the telescope should stop trying to guide on the sun when it thinks that the light level is too low, and that it should follow some sort of ephemeris-based clock drive mode while the light level is low, but it doesn't appear to do these things. When I move the telescope while it is pointed at the sun shouldn't I see the Quadcell stages move too? They don't move and the Quadcell (QC) doesn't seem to see the sun when it is pointed right at it, something is flaky with how the Quadcell is being used, sometimes it works well, sometimes it apparently doesn't.

WEATHER COMMENT: Sat Jan 30 23:08:52 GMT 1999

Clouds and fog starting to move in, closing down.

\*\*PSPT PROBLEM\*\* : Sat Jan 30 23:16:56 GMT 1999

As an afterthought I checked the Quadcell stages to see if they were at limits after stowing the telescope, they weren't. When I was checking on the problem earlier I only checked the limits on one stage, the one that runs East-West, it wasn't at a limit. Maybe the N-S axis stage was at a limit?

COMMENT: Sat Jan 30 23:22:24 GMT 1999

TAPES:

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MKIV: 99030

CHIP: C00772

LOWL: L00577 in drive #1

PICS: Down for repairs.

Sat Jan 30 23:31:53 GMT 1999

MkIII

21_32.rawmk3	21_51.rawmk3	22_11.rawmk3	22_40.rawmk3	c22_30.rawmk3
21_35.rawmk3	21_54.rawmk3	22_14.rawmk3	22_44.rawmk3	c22_37.rawmk3
21_38.rawmk3	21_58.rawmk3	22_17.rawmk3	22_47.rawmk3	
21_41.rawmk3	22_01.rawmk3	22_20.rawmk3	22_50.rawmk3	

21\_45.rawmk3 22\_04.rawmk3 22\_27.rawmk3 22\_53.rawmk3  
21\_48.rawmk3 22\_07.rawmk3 22\_34.rawmk3 c22\_23.rawmk3