Mauna Loa Solar Observatory Observer's Log

_____ Tue Dec 3 17:15:43 GMT 1996 Year: 96 Doy: 338 Observer: koon WEATHER COMMENT: Tue Dec 3 17:15:49 GMT 1996 Clear sky, wind=10 mph from the SE, temp=40 F. Tue Dec 3 17:23:16 GMT 1996 CHIP Startup--Initializing new tape Tue Dec 3 17:23:25 GMT 1996 dPMon Start Patrol Tue Dec 3 17:23:47 GMT 1996 CHIP CHIP Start Patrol Tue Dec 3 18:02:58 GMT 1996 dPMon Flat Tue Dec 3 18:03:30 GMT 1996 CHIP Bias Tue Dec 3 18:03:53 GMT 1996 dPMon End Flat CHIP Tue Dec 3 18:04:22 GMT 1996 End Bias Tue Dec 3 18:04:32 GMT 1996 CHIP Water Tue Dec 3 18:04:57 GMT 1996 CHIP End Water COMMENT: Tue Dec 3 18:55:12 GMT 1996 I hear a howling sound up in the dome occassionally that lasts about 1 second. It might be a fan bearing wearing out or being affected by the cold air. Every time I go up and wait for it nothing happens, so I haven't pinpointed it yet. Tue Dec 3 19:02:55 GMT 1996 dPMon Flat Tue Dec 3 19:03:51 GMT 1996 End Flat dPMon Tue Dec 3 19:03:47 GMT 1996 Bias CHIP Tue Dec 3 19:05:00 GMT 1996 End Bias CHIP Tue Dec 3 19:05:09 GMT 1996 CHIP Water Tue Dec 3 19:05:44 GMT 1996 CHIP End Water Tue Dec 3 20:01:03 GMT 1996 dPMon Flat Tue Dec 3 20:01:58 GMT 1996 End Flat dPMon Tue Dec 3 20:03:47 GMT 1996 CHIP Gain Tue Dec 3 20:08:23 GMT 1996 CHIP End Gain Tue Dec 3 20:08:32 GMT 1996 CHIP Bias Tue Dec 3 20:09:14 GMT 1996 CHIP End Bias Tue Dec 3 20:09:22 GMT 1996 CHIP Water Tue Dec 3 20:09:51 GMT 1996 CHIP End Water COMMENT: Tue Dec 3 20:20:17 GMT 1996 The howling noise is coming less frequently now, it is originating from something at the front end of the Spar. I may have to wait for colder weather to pinpoint it. MKIII COMMENT: Tue Dec 3 20:29:51 GMT 1996 Still getting a lot of radial spikes in the coronal scans for channel #0. Channel #1 seems a lot less noisy but has a few spikes too. The P+S "loaf of bread" for channel #0 jumps out of sync and enlarges and looks noisy occassionally and that erratic behavior corresponds directly to the noise spike seen in the coronal scans. The P+S "loaf of bread" for channel #1 stays almost completely stable. Tue Dec 3 21:01:00 GMT 1996 dPMon Flat

Tue Dec 3 21:01:51 GMT 1996 dPMon End Flat Tue Dec 3 21:02:46 GMT 1996 CHIP Bias Tue Dec 3 21:03:55 GMT 1996 CHIP End Bias Tue Dec 3 21:04:04 GMT 1996 CHIP Water Tue Dec 3 21:04:39 GMT 1996 End Water CHIP Tue Dec 3 22:01:02 GMT 1996 dPMon Flat Tue Dec 3 22:01:59 GMT 1996 dPMon End Flat MKIII COMMENT: Tue Dec 3 21:57:33 GMT 1996 I don't see anything change on the Downstairs Start, Data, 1/rot, and 64/rot signals when the channel #0 "loaf of bread" gets a noise attack. The analog card rack DC power supplies are at 5.10v stable for channel #1 and varying between 5.07 and 5.08v for channel #0. I will swap the power supplies to see what happens to the P+S signals for both channels. Tue Dec 3 22:02:46 GMT 1996 CHIP Bias Tue Dec 3 22:03:55 GMT 1996 End Bias CHIP Tue Dec 3 22:04:06 GMT 1996 CHIP Water Tue Dec 3 22:04:46 GMT 1996 CHIP End Water MKIII COMMENT: Tue Dec 3 22:15:40 GMT 1996 Still have noisy P+S on channel #0 only, after swapping analog card rack DC power supplies. Swapped them back. Tue Dec 3 22:22:43 GMT 1996 dPMon End Patrol Tue Dec 3 22:22:46 GMT 1996 CHIP End Patrol CHIP MKIII COMMENT: Tue Dec 3 22:38:36 GMT 1996 When I stopped the barrel rotation (/SCAN) at 185 I didn't get any noise on the P+S trace, no matter how long I left it there. So I started scanning again and stopped as soon as I started to see noise (at AZ=175), the noise was almost always there as long as I let it sit. So it looks like there is a loose connection somewhere (in the troughs?) that gets affected by the barrel angle position, and it must be somewhere in the separate channel #0 wiring. Tue Dec 3 22:47:16 GMT 1996 CHTP ending tape Tue Dec 3 22:47:22 GMT 1996 CHIP ending tape COMMENT: Tue Dec 3 22:47:32 GMT 1996 Activity report: OP: 67; 104; 268; 282; 318. No coronal activity seen through noisy data. TAPES: * * * * * * MKIII: H01444 DPMON: P00771 CHIP: C00188 LOWL: L00429 in drive #0 SCAN-LOG SCAN-LOG 17:24:27. 12/3/96 DOY 338 17:29:38 17:32:54 17:36:12 17:39:29 17:42:48 17:46:05 17:49:23 17:52:39 17:55:57 17:59:12 18:02:28 18:05:42 18:08:59 18:12:14 18:15:29

| | 18:18:44 | 18:21:59 | 18:25:13 | 18:28:28 | 18:31:42 |
|---|----------|-----------|----------|----------|-----------|
| | 18:34:57 | 18:38:11 | 18:41:25 | 18:44:39 | 18:47:53 |
| | 18:51:07 | 18:54:22 | 18:57:35 | 19:00:50 | 1908 0 CL |
| | 19:13:14 | 1921 15CL | 19:26:40 | 19:30:58 | 19:34:11 |
| | 19:37:26 | 19:40:40 | 19:43:55 | 19:47:10 | 19:50:25 |
| | 19:53:38 | 19:56:53 | 20:00:06 | 20:03:23 | 20:06:36 |
| | 20:09:56 | 20:13:10 | 20:16:25 | 20:19:38 | 20:22:53 |
| | 20:26:06 | 20:29:22 | 20:32:36 | 20:35:51 | 20:39:05 |
| | 20:42:20 | 20:45:33 | 20:48:48 | 20:52:01 | 20:55:15 |
| | 20:58:28 | 21:01:43 | 21:04:56 | 21:08:11 | 21:11:24 |
| | 21:14:38 | 21:17:51 | 21:21:05 | 21:24:18 | 21:27:32 |
| | 21:30:47 | 21:34:07 | 21:37:19 | 21:40:33 | 21:43:46 |
| | 21:46:59 | 21:50:12 | 21:53:26 | | |
| 0 | ERRORS | | | | |
| | | | | | |

OK