

Mauna Loa Solar Observatory Observer's Log

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Sun Apr 23 16:50:39 GMT 1995

Year: 95 Doy: 113

Observer: yasukawa console Apr 23 16:40

WEATHER COMMENT: Sun Apr 23 16:50:58 GMT 1995

Cold, clear, no wind at this time. Cloud bank to east quite high.

Temp=34F, relative humidity 70%.

COMMENT: Sun Apr 23 16:52:13 GMT 1995

Island-wide power outage yesterday evening. Internet connection still out, as evidenced by slow startup of Sparcstation this morning.

LOW-L COMMENT: Sun Apr 23 16:53:41 GMT 1995

Lowl was restarted and taking data on unit 0. Since there were numerous problems yesterday, and the data has already been overwritten at the beginning of the tape, I decided to just let it continue on L00224.

Sun Apr 23 16:55:59 GMT 1995: Patrol Start

DPMON COMMENT: Sun Apr 23 16:59:07 GMT 1995

Optics runaway. Resetting manually.

Sun Apr 23 17:01:43 GMT 1995: Patrol Start

COMMENT: Sun Apr 23 17:05:48 GMT 1995

Network check with ping command indicates connection between MLO router on mountain and MLO at FB is down.

DPMON COMMENT: Sun Apr 23 17:37:59 GMT 1995

Daystar runaway, reset Plessey.

Sun Apr 23 17:40:10 GMT 1995: Patrol Start

DPMON COMMENT: Sun Apr 23 17:40:18 GMT 1995

Had to use manual control to reset. Objective had run away also.

MKIII COMMENT: Sun Apr 23 17:44:53 GMT 1995

Vdiff check shows streaking occurring. Will try an ALLFRESH attempt to see if problem is with correctors.

MKIII COMMENT: Sun Apr 23 17:51:40 GMT 1995

By applying ALLFRESH to CORONA trace, streaking clears up briefly. Check of VDIFF indicates no fix.

Sun Apr 23 18:02:05 GMT 1995: Calibration

MKIII COMMENT: Sun Apr 23 18:12:36 GMT 1995

Swapped AN4 card (A/D converters) in channel 2 analog (micro 0) with a known good spare.

MKIII COMMENT: Sun Apr 23 18:22:15 GMT 1995

Streaking still present. Swapping AN4 back. Swapping AN2 (MDACs) as a next step.

MKIII COMMENT: Sun Apr 23 18:37:47 GMT 1995

That may have been it! Replaced AN2 card in Analog chan 2 (Micro 0) with a known-good spare. That cleaned up the streaking. Will run for a while to make sure that cycling the power is not the cause of the "fix". Upon close examination of the "faulty" AN2 board, one of the filter capacitors between the ground plane power and ground is very fuzzy with corrosion, probably from leaking electrolyte.

MKIII COMMENT: Sun Apr 23 18:48:08 GMT 1995

Latest VDIFF with first scan indicates that streaking may be returning. This indicates that the cycling of the power may have temporarily fixed the problem.

At this time the streaking signature is very subtle so I will run a bit longer before attempting other things.

Sun Apr 23 19:01:59 GMT 1995: Calibration

MKIII COMMENT: Sun Apr 23 19:36:15 GMT 1995

At this point, methinks that the subtle streaking might just be a touch of paranoia and the sky getting a bit noisy. Will keep up vigilance.

COMMENT: Sun Apr 23 19:47:25 GMT 1995

Opening top of dome.

Sun Apr 23 20:02:01 GMT 1995: Calibration

MKIII COMMENT: Sun Apr 23 20:13:17 GMT 1995

Inspected suspect AN2 board further and found that negative lead to filter capacitor broke off at touch underneath all the corrosion. Removed capacitor and replaced it with closest substitute available, a 10mfd-35V tantalum. Will need to test board before adding it to spares inventory.

MKIII COMMENT: Sun Apr 23 21:01:37 GMT 1995

Sky very noisy. Stopping MKIII exabyte while trying a couple of tests to see if streaking fix worked.

WEATHER COMMENT: Sun Apr 23 21:35:52 GMT 1995

In orographic clouds.

Sun Apr 23 21:37:04 GMT 1995: Patrol End

MKIII COMMENT: Sun Apr 23 21:42:29 GMT 1995

Tried looking at VDIFF comparing two opal-in scans. That subtle streak/noise is present in outer 1/4 of scan. Tried swapping the analog corrector memory cards and repeated opal-in/VDIFF test and results were the same. Outer noise may be an effect of detector misalignment, pixel noise in the outer pixels, or some combination of alignment and corrector values. Clouds came in so further tests were not done, although it was not really clear to me what I was planning to do next.

MKIII COMMENT: Sun Apr 23 21:46:56 GMT 1995

Restored the corrector memory boards.

COMMENT: Sun Apr 23 21:47:21 GMT 1995

Activity report:

Nice prominences on west limb, got carried away with streak investigation, forgot to note down their PA.

No coronal activity.

COMMENT: Sun Apr 23 21:48:36 GMT 1995

Tapes: MKIII: H01016

DPMON: P00337

LOWL: L00224

Sun Apr 23 21:50:10 GMT 1995: Filemark

SCAN-LOG

SCAN-LOG 16:50:19. 4/23/95 DOY 113

17:04:51	17:08:02	17:11:15	17:14:26	17:17:40
17:20:50	17:24:01	17:27:10	17:30:22	17:33:32
17:36:44	17:39:56	17:43:09	17:46:21	17:49:34
17:52:45	17:56:02	18:14:47	18:17:58	18:27:26
18:30:37	18:33:53	18:37:04	18:40:16	18:43:26
1847 0 CL	18:50:54	1856 15CL	19:02:16	19:06:16
19:09:27	19:12:40	19:15:50	19:19:01	19:22:11
19:25:23	19:28:33	19:31:46	19:34:57	19:38:08
19:41:18	19:44:29	19:47:38	19:50:49	19:53:59
19:57:11	20:00:23	20:03:33	20:06:43	20:09:54
20:13:04	20:16:15	20:19:26	20:22:37	20:25:47
20:29:03	20:32:13	20:35:24	20:38:33	20:41:46
20:44:55	20:48:06	20:51:16	20:54:28	20:57:39
21:00:54				

0 ERRORS

OK