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Mauna Loa Solar Observatory Observer's Log

Mon Apr 27 16:43:13 GMT 1998 Year: 98 Doy: 117 Observer: yasukawa WEATHER COMMENT: Mon Apr 27 16:44:03 GMT 1998 Cool, clear, brisk west wind. Mon Apr 27 16:44:28 GMT 1998 Startup--Initializing new tape CHIP Mon Apr 27 16:49:03 GMT 1998 CHIP CHIP Start Patrol Mon Apr 27 16:49:20 GMT 1998 MKIII Start Patrol Mon Apr 27 16:49:17 GMT 1998 PICS Start Patrol Mon Apr 27 17:00:24 GMT 1998 PICS Flat Mon Apr 27 17:01:53 GMT 1998 PICS End Flat Mon Apr 27 17:02:03 GMT 1998 CHIP Bias Mon Apr 27 17:03:01 GMT 1998 CHIP End Bias Mon Apr 27 17:03:11 GMT 1998 Water CHIP Mon Apr 27 17:03:57 GMT 1998 CHIP End Water Mon Apr 27 18:01:24 GMT 1998 PICS Flat Mon Apr 27 18:02:01 GMT 1998 CHIP Bias Mon Apr 27 18:02:52 GMT 1998 PICS End Flat Mon Apr 27 18:03:03 GMT 1998 End Bias CHIP Mon Apr 27 18:03:16 GMT 1998 CHIP Water Mon Apr 27 18:04:05 GMT 1998 CHIP End Water Mon Apr 27 18:09:31 GMT 1998 MKIII Start Cal MKIII COMMENT: Mon Apr 27 18:23:41 GMT 1998 Calibration scans are badly streaked/noisy. Looking into problem. Mon Apr 27 18:29:54 GMT 1998 MKIII Start Correct Mon Apr 27 18:36:04 GMT 1998 MKIII End Correct Mon Apr 27 18:38:04 GMT 1998 Start Patrol MKIII MKIII COMMENT: Mon Apr 27 18:38:46 GMT 1998 Checked corrector hardware by reseating cards. Ran Correct. May be corrupted because the corrector values were scrambled at the beginning of Correct because of the analog system power down. Not sure if that affects the correct process. Resulting Patrol data is streaked. Will try Correct again. Mon Apr 27 18:44:52 GMT 1998 Start Correct MKIII Mon Apr 27 18:51:03 GMT 1998 MKIII End Correct MKIII COMMENT: Mon Apr 27 18:51:10 GMT 1998 Second Correct cleaned up the noisy pixels on the P-S monitor trace. Mon Apr 27 18:51:48 GMT 1998 MKIII Start Patrol MKIII COMMENT: Mon Apr 27 18:57:40 GMT 1998 Second Calibration atempt. 8 MKIII Start Cal Mon Apr 27 19:02:09 GMT 1998 CHIP Bias MKIII COMMENT: Mon Apr 27 19:02:17 GMT 1998 Still getting noise in the dark traces. Mon Apr 27 19:03:09 GMT 1998 CHIP End Bias

Mon Apr 27 19:03:51 GMT 1998 PICS End Flat Mon Apr 27 19:04:08 GMT 1998 CHIP End Water Mon Apr 27 19:28:24 GMT 1998 MKIII Start Patrol MKIII COMMENT: Mon Apr 27 19:28:53 GMT 1998 Replaced Light, Dark, and Gain MDACs on DCSB AN2 card for chan 0. Running Patrol to load corrector data into MDACs. When Patrol cycle is done, I will run another Correct. COMMENT: Mon Apr 27 19:31:34 GMT 1998 Stopping first to reconfigure dome shutter. Patrol Mon Apr 27 19:33:13 GMT 1998 PICS End Patrol Mon Apr 27 19:34:15 GMT 1998 MKIII End Patrol Mon Apr 27 19:40:13 GMT 1998 PICS Start Patrol Mon Apr 27 19:40:13 GMT 1998 PICS Start Patrol Mon Apr 27 19:44:18 GMT 1998 MKIII Start Correct MKIII COMMENT: Mon Apr 27 19:44:43 GMT 1998 Found tape covering preamp housing next door to Chan 0 preamp loose. sealed it down. Checked Dark, but image still noisy. Started Correct with new MDACs. Also discovered tape did not write last Dark scan test, got 'wrote 0 files' error. Unloading H01813 loading H01814. Will reset KCC after Correct. Mon Apr 27 19:50:32 GMT 1998 MKIII End Correct Mon Apr 27 19:52:29 GMT 1998 MKIII Start Patrol MKIII COMMENT: Mon Apr 27 19:53:41 GMT 1998 Running Patrol, then will Calibrate after 1 patrol cycle. Mon Apr 27 20:00:28 GMT 1998 PICS Flat Mon Apr 27 20:02:02 GMT 1998 CHIP Gain Mon Apr 27 20:02:02 GMT 1998 CHIP Gain MKIII COMMENT: Mon Apr 27 20:06:08 GMT 1998 O tilt image still hosed. Need to think a bit. MKIII COMMENT: Mon Apr 27 20:07:45 GMT 1998 There also seems to be a double image--a fold-over at the outer edge of the image. Mon Apr 27 20:09:09 GMT 1998 CHIP End Bias Mon Apr 27 20:09:19 GMT 1998 CHIP Water Mon Apr 27 20:10:00 GMT 1998 CHIP End Water MKIII COMMENT: Mon Apr 27 20:18:25 GMT 1998 Looking at chan 1 images on KCC monitor. Running a Cal 15 again. Mon Apr 27 20:19:00 GMT 1998 MKIII End Cal MKIII COMMENT: Mon Apr 27 20:21:26 GMT 1998 15 cal image in chan 1 looks OK. MKIII COMMENT: Mon Apr 27 20:25:51 GMT 1998 Swapped AN2 cards between chan 0 and chan 1. Looking at cal-15 images. MKIII COMMENT: Mon Apr 27 20:28:18 GMT 1998 Corrector table did not load after turning off Analog to swap cards. Running a Patrol cycle to get Corrector to load.

CHIP

Water

Mon Apr 27 19:03:18 GMT 1998

MKIII COMMENT: Mon Apr 27 20:40:42 GMT 1998 Problem did not change with AN2 card swap. Will try a Corrector card swap. Swapping AN2 cards back to original positions at the same time. MKIII COMMENT: Mon Apr 27 20:45:25 GMT 1998 Swapped only memory boards in corrector. AN2s swapped back. Mon Apr 27 20:46:23 GMT 1998 MKIII Start Patrol MKIII COMMENT: Mon Apr 27 20:46:47 GMT 1998 Running Patrol to load corrector table. Mon Apr 27 20:54:59 GMT 1998 MKTTT End Patrol MKIII COMMENT: Mon Apr 27 20:59:43 GMT 1998 Problem still there in chan 0. Swapping Corrector I/O cards. Mon Apr 27 21:01:28 GMT 1998 PICS Flat Mon Apr 27 21:02:03 GMT 1998 CHIP Bias Mon Apr 27 21:02:50 GMT 1998 MKIII Start Patrol Mon Apr 27 21:02:56 GMT 1998 PICS End Flat Mon Apr 27 21:03:04 GMT 1998 CHIP End Bias MKIII COMMENT: Mon Apr 27 21:03:16 GMT 1998 Running Patrol cycle to load corrector and then checking with Cal-15. Doing this because Cal-15 images the problem better than Corona. MKIII COMMENT: Mon Apr 27 21:14:24 GMT 1998 Restored system to original hardware state--just found out Alice is fiddling with the scaling--which may have been causing the 'noise' I was seeing which began this Chinese fire drill. I will wait until Alice finishes her work before resuming this drill. Mon Apr 27 21:18:20 GMT 1998 MKIII Start Patrol MKIII COMMENT: Mon Apr 27 21:27:46 GMT 1998 According to Alice, she didn't start fiddling until well after I began working on this problem--so it's probably not her. MKIII COMMENT: Mon Apr 27 21:29:05 GMT 1998 \*\*\* Recycling H01811 and H01812 \*\*\* WEATHER COMMENT: Mon Apr 27 21:50:25 GMT 1998 In orographic clouds. Mon Apr 27 21:50:56 GMT 1998 End Patrol PICS Mon Apr 27 21:52:36 GMT 1998 CHIP CHIP End Patrol Mon Apr 27 21:54:44 GMT 1998 ending tape CHIP COMMENT: Mon Apr 27 21:57:08 GMT 1998 Tapes: MKIII: H01813 and H01814 PICS: P01179 CHIP: C00569 LOWL: L00511 MKIII COMMENT: Mon Apr 27 22:05:31 GMT 1998 I will continue troubleshooting tomorrow as Alice and I sorta agree that there is probably a hardware problem. Nothing was made

| 10_17.10wm   | 1/_JO.10WIII1 | 10_J1.10WIIII | 21_00.10Willing |               |
|--------------|---------------|---------------|-----------------|---------------|
| 16_52.rawmk3 | 17_39.rawmk3  | 19_00.rawmk3  | 21_18.rawmk3    | c18_21.rawmk3 |
| 16_55.rawmk3 | 17_42.rawmk3  | 19_07.rawmk3  | 21_21.rawmk3    | c18_57.rawmk3 |
| 16_58.rawmk3 | 17_45.rawmk3  | 19_13.rawmk3  | 21_24.rawmk3    | c19_04.rawmk3 |
| 17_01.rawmk3 | 17_48.rawmk3  | 19_28.rawmk3  | 21_27.rawmk3    | c19_10.rawmk3 |
| 17_04.rawmk3 | 17_51.rawmk3  | 19_31.rawmk3  | 21_30.rawmk3    | c19_39.rawmk3 |
| 17_07.rawmk3 | 17_53.rawmk3  | 19_54.rawmk3  | 21_33.rawmk3    | c20_00.rawmk3 |
| 17_10.rawmk3 | 17_56.rawmk3  | 19_57.rawmk3  | 21_35.rawmk3    | c20_06.rawmk3 |
| 17_13.rawmk3 | 17_59.rawmk3  | 20_03.rawmk3  | 21_38.rawmk3    | c20_12.rawmk3 |
| 17_15.rawmk3 | 18_02.rawmk3  | 20_09.rawmk3  | 21_41.rawmk3    | c20_19.rawmk3 |
| 17_18.rawmk3 | 18_12.rawmk3  | 20_15.rawmk3  | 21_44.rawmk3    | c20_24.rawmk3 |
| 17_21.rawmk3 | 18_18.rawmk3  | 20_30.rawmk3  | 21_47.rawmk3    | c20_39.rawmk3 |
| 17_24.rawmk3 | 18_25.rawmk3  | 20_36.rawmk3  | 21_50.rawmk3    | c20_55.rawmk3 |
| 17_27.rawmk3 | 18_38.rawmk3  | 20_46.rawmk3  | 21_53.rawmk3    |               |
| 17_30.rawmk3 | 18_41.rawmk3  | 20_52.rawmk3  | 21_56.rawmk3    |               |
| 17_33.rawmk3 | 18_51.rawmk3  | 21_02.rawmk3  | c18_09.rawmk3   |               |
|              |               |               |                 |               |