Mauna Loa Solar Observatory Observer's Log

Wed Nov 20 16:59:10 GMT 1996

Year: 96 Doy: 325 Observer: yasukawa

WEATHER COMMENT: Wed Nov 20 16:59:23 GMT 1996

In broken cirrus and altocumulus overcast, south wind.

Wed Nov 20 16:59:56 GMT 1996 CHIP Startup--Initializing new tape

CHIP CHIP Start Patrol Wed Nov 20 17:06:40 GMT 1996

CHIP COMMENT: Wed Nov 20 17:10:08 GMT 1996

In heavy altocumulus, no image on LOWL and CHIP. Stopping CHIP for now.

Wed Nov 20 17:12:48 GMT 1996 CHIP End Patrol CHIP Wed Nov 20 17:49:11 GMT 1996 dPMon Start Patrol Wed Nov 20 17:49:11 GMT 1996 CHIP CHIP Start Patrol

WEATHER COMMENT: Wed Nov 20 17:49:08 GMT 1996

I see an image on LOWL. Starting CHIP and DPMON.

COMMENT: Wed Nov 20 17:55:38 GMT 1996

Spar wasn't quiding at this startup, moved slot and pointed spar.

Wed Nov 20 18:02:01 GMT 1996 dPMon Flat Wed Nov 20 18:02:43 GMT 1996 CHIP Bias End Flat Wed Nov 20 18:02:56 GMT 1996 dPMon Wed Nov 20 18:03:49 GMT 1996 End Bias CHIP Wed Nov 20 18:03:58 GMT 1996 CHIP Water Wed Nov 20 18:04:38 GMT 1996 CHIP End Water MKIII COMMENT: Wed Nov 20 18:01:53 GMT 1996

Checked out MKIII.

- 11/44 started up OK and seemed to be working OK. Boot normal, barrel scan normal.
- PEEK OK. Table indicates that failure occurred during a TAKE, images 2 and 3 empty and image 1 holding an old image. This is what happens during a TAKE.
- Analog monitors: P+S not sync'd, abnormal waveforms.

P-S sync'd PGA sync'd

- Observed pixel sync pulse on monitors.
- * Noticed Analog Corrector fan not spinning when I went to check voltages.
- * Analog Corrector power supply #5, DC power to chan 0 at 0 volts.
 - * voltage at 5v when disconnected and under no load.
 - * voltage at 5v when connected to chan 1
- * Fan started up when I gave blades a nudge. Vac'd dust from fan.
- * Analog corrector power supply #4 to chan 1 was at 5v under load. * voltage at 5v when connected to chan 0.
- * Connected power supplies back to original channels and voltages on both supplies were 5v.

* P+S signal looked normal again on monitors.

microP digital isolator.

* MKIII appears to be back to normal operation.

Problem may have been with flaky OV circuit in the LNS-Z-OV-5-R power supply which tripped yesterday and then did not reset until I applied the no-load condition to it. We need to spare them as three of the original 6 have died and were trashed, the one remaining spare as well as the two working units are somewhat flaky.

WEATHER COMMENT: Wed Nov 20 18:33:51 GMT 1996 In cirrus. WEATHER COMMENT: Wed Nov 20 18:45:10 GMT 1996 Wed Nov 20 19:02:00 GMT 1996 dPMon Flat Wed Nov 20 19:02:45 GMT 1996 CHIP Bias Wed Nov 20 19:02:54 GMT 1996 dPMon End Flat Wed Nov 20 19:03:52 GMT 1996 CHIP End Bias Wed Nov 20 19:04:02 GMT 1996 CHIP Water Wed Nov 20 19:04:36 GMT 1996 CHIP End Water COMMENT: Wed Nov 20 19:31:21 GMT 1996 WEATHER COMMENT: Wed Nov 20 19:31:33 GMT 1996 In cirrus. WEATHER COMMENT: Wed Nov 20 19:43:08 GMT 1996 Clear. MKIII COMMENT: Wed Nov 20 19:43:16 GMT 1996 Analog went down again after stint with cirrus. Checking out and attempting fix. Wed Nov 20 20:02:46 GMT 1996 Gain CHIP Wed Nov 20 20:07:13 GMT 1996 CHIP End Gain Wed Nov 20 20:07:20 GMT 1996 CHIP Bias Wed Nov 20 20:07:58 GMT 1996 CHIP End Bias Wed Nov 20 20:08:05 GMT 1996 CHIP Water Wed Nov 20 20:08:30 GMT 1996 CHIP End Water WEATHER COMMENT: Wed Nov 20 20:14:05 GMT 1996 In cirrus. DPMON COMMENT: Wed Nov 20 20:14:23 GMT 1996 DPMON crash. waiting to fix. Wed Nov 20 20:53:58 GMT 1996 CHIP CHIP End Patrol WEATHER COMMENT: Wed Nov 20 20:53:19 GMT 1996 In heavy cirrus, stopping CHIP. DPMON is crashed and I can't kill the waits. DPMON COMMENT: Wed Nov 20 20:59:45 GMT 1996 Had to Kill/Run to recover. MKIII COMMENT: Wed Nov 20 21:16:48 GMT 1996 1/rot, 64/rot, and start pulses are missing upstairs at test points, 1/rot, 64/rot and data pulses are missing downstairs at

```
Thu Nov 21 00:32:50 GMT 1996
                               CHIP
                                        ending tape
MKIII COMMENT: Thu Nov 21 00:34:04 GMT 1996
I didn't see 1/2 wave plate encoder pulses anywhere so I replaced
the HEI sensor (with much difficulty). After the replacement, the
pulses were still gone. As a last item, I checked the 12V ssupply
in the barrel that is supposed to power the encoder card in the
trough behind the motor. Voltage looked OK.
Stopped to think things out.
MKIII still down.
COMMENT: Thu Nov 21 00:37:27 GMT 1996
Activity report:
QP: 95; 102; 115-125; 136; 238; 253; 260; 280; 285;
AP: 295-312
No coronal activity
Tapes: MKIII: H01439
       DPMON: P00765
       CHIP:
               C00182
       LOWL:
               L00427
SCAN-LOG
SCAN-LOG 17:07:42. 11/20/96 DOY 325
   18:00:30
                 18:03:48
                                             18:10:26
                               18:07:08
                                                           18:13:45
                 18:20:21
   18:17:02
                               18:23:37
                                             1828 0 CL
                                                           18:31:30
   1845 15CL
                 18:51:51
                               18:55:47
                                             18:59:02
                                                          19:02:19
   19:05:33
                 19:08:51
                               19:12:06
                                             19:15:26
                                                           19:18:41
   19:21:56
                 19:25:10
                               19:28:26
                                             19:31:40
                                                           19:34:56
   19:34:56
                 19:34:56
 0 ERRORS
```

OK