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                  Mauna Loa Solar Observatory Observer's Log
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          Tue Nov 26 16:58:21 GMT 1996
Year: 96  Doy: 331
Observer: koon
WEATHER COMMENT: Tue Nov 26 16:58:25 GMT 1996
Clear sky, wind=5 mph from the SE, temp=42 F.
Tue Nov 26 16:59:05 GMT 1996     CHIP      Startup--Initializing new tape
Tue Nov 26 17:02:38 GMT 1996     dPMon     Start Patrol
Tue Nov 26 17:02:51 GMT 1996     CHIP      CHIP Start Patrol
Tue Nov 26 18:01:48 GMT 1996     CHIP      Bias
Tue Nov 26 18:02:58 GMT 1996     dPMon     Flat
Tue Nov 26 18:03:05 GMT 1996     CHIP      End Bias
Tue Nov 26 18:03:15 GMT 1996     CHIP      Water
Tue Nov 26 18:03:53 GMT 1996     dPMon     End Flat
Tue Nov 26 18:03:54 GMT 1996     CHIP      End Water
MKIII COMMENT: Tue Nov 26 18:06:41 GMT 1996
The images started out with lots of the radial noise spikes that we saw
yesterday, then they got better although there were still faint radial
brightness differences, then the signal went away completely in both
channels and for some reason data stopped going to tape although everything
else appears to be running.
Tue Nov 26 19:02:46 GMT 1996     CHIP      Bias
Tue Nov 26 19:02:56 GMT 1996     dPMon     Flat
Tue Nov 26 19:03:49 GMT 1996     dPMon     End Flat
Tue Nov 26 19:03:55 GMT 1996     CHIP      End Bias
Tue Nov 26 19:04:05 GMT 1996     CHIP      Water
Tue Nov 26 19:04:43 GMT 1996     CHIP      End Water
MKIII COMMENT: Tue Nov 26 19:15:30 GMT 1996
When I just came down from checking the encoder and the test points I noticed
that the loaf of bread is back and the data are being recorded on tape again.
Doing a coronal scan shows almost no signal from channel #0 punctuated by
occasional bursts of noise as the scan progresses, similar symptoms seen on
channel #1.  The data appears to go to tape only when the "loaf of bread"
is visible, also Scan-log shows that data are occassionally recorded with
normal looking cadence between scans, then the time for several scans stays
the same, then no data recorded for 15 minutes or so.
MKIII COMMENT: Tue Nov 26 19:57:23 GMT 1996
While no "loaf of bread". getting 5vdc out of both Analog Corrector Power
Supplies (for chan 0 and 1).
Tue Nov 26 20:02:46 GMT 1996     CHIP      Gain
Tue Nov 26 20:02:58 GMT 1996     dPMon     Flat
Tue Nov 26 20:03:53 GMT 1996     dPMon     End Flat
Tue Nov 26 20:07:09 GMT 1996     CHIP      End Gain
Tue Nov 26 20:07:19 GMT 1996     CHIP      Bias
Tue Nov 26 20:08:01 GMT 1996     CHIP      End Bias
Tue Nov 26 20:08:11 GMT 1996     CHIP      Water
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Tue Nov 26 20:08:39 GMT 1996     CHIP      End Water
MKIII COMMENT: Tue Nov 26 20:32:46 GMT 1996
I can't find any start or rotational signals anywhere, upstairs or downstairs,
although I see a square wave at the data test point for channel O upstairs.
At the encoder cable connector that goes into the first box after the
encoder there is a loose ended black wire that was apparently soldered to
the braided shield of that cable, it looks like it broke off at the solder
connection, it is very small gauge.  I'll try to hookup a jumper cable between
it and the shield to see if that helps anything.
CHIP COMMENT: Tue Nov 26 20:40:13 GMT 1996
Images still look too bright like they did yesterday.
Tue Nov 26 21:02:58 GMT 1996     dPMon     Flat
Tue Nov 26 21:03:49 GMT 1996     dPMon     End Flat
Tue Nov 26 21:03:46 GMT 1996     CHIP      Bias
Tue Nov 26 21:05:00 GMT 1996     CHIP      End Bias
Tue Nov 26 21:05:09 GMT 1996     CHIP      Water
Tue Nov 26 21:05:48 GMT 1996     CHIP      End Water
MKIII COMMENT: Tue Nov 26 21:23:23 GMT 1996
Jumping the black wire to the shield didn't make any difference.  The only
signals I see are: upstairs, ch 0 data signal, volts/div=1, time/div=5
microseconds; downstairs, ch 0 start signal, volts/div=1, time/div=5 micro-
seconds.  Note that I forgot to mention the downstairs signal earlier, but
it was there.  Could one of those testpoints be mislabeled so that I am
actually seeing only one signal at both places?
CHIP COMMENT: Tue Nov 26 21:57:52 GMT 1996
Images are starting to look better (less bright).
Tue Nov 26 22:01:50 GMT 1996     CHIP      Bias
Tue Nov 26 22:03:02 GMT 1996     dPMon     Flat
Tue Nov 26 22:03:07 GMT 1996     CHIP      End Bias
Tue Nov 26 22:03:17 GMT 1996     CHIP      Water
Tue Nov 26 22:03:59 GMT 1996     dPMon     End Flat
Tue Nov 26 22:03:56 GMT 1996     CHIP      End Water
Tue Nov 26 22:56:54 GMT 1996     dPMon     End Patrol
Tue Nov 26 22:58:34 GMT 1996     CHIP      CHIP End Patrol
MKIII COMMENT: Tue Nov 26 22:57:29 GMT 1996
Since the solder joint on the outside of the encoder cable may have damaged
some wires (near D-connector into first box) I turning off the Analog power
and disconnected both ends of that cable and tested for continuity.  All
wires are good between connectors, and none of the wires are shorted to
each other.  The gold cylindrical connector (Microtech?) doesn't connect
to the braided shield of the cable either through a pin or the metal
body of the connector, maybe that is why the black wire at the D-connector
on the other end of the cable isn't soldered to the shield, is this
desireable?  I checked for continuity between the unwired solder joint near
the D-connector and the pins and body of the gold metal connector.
The last few times I tried a coronal scan there were only concentric rings
for both channels, no random noise and no "loaf of bread".  Maybe the HEI
did get damaged by that short that Eric mentioned on 11/21/96.
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Tue Nov 26 23:33:03 GMT 1996    CHIP      ending tape
COMMENT: Tue Nov 26 23:30:57 GMT 1996
Activity report:
QP: 130; 233-245; 306; 314.
No coronal activity observed, but had problem with MKIII.

TAPES:
******
MKIII: H01441
DPMON: P00767
CHIP: C00184
LOWL: L00428 in drive #0
SCAN-LOG
SCAN-LOG  17:03:29. 11/26/96 DOY 331
      17:12:24      17:15:36      17:18:49      17:22:02      17:25:19
      17:28:32      17:31:48      17:35:03      17:38:20      17:41:35
      17:44:53      17:48:09      17:51:34      17:54:50      17:58:07
      17:58:07      17:58:07      17:58:07      18:13:01      18:13:01
      18:13:01      18:13:01      18:27:53      18:31:11      18:34:30
      18:37:48      18:41:07      18:44:59      18:44:59      18:44:59
      18:44:59      18:44:59      18:44:59      19:07:37      19:10:55
      19:14:11      19:17:29      19:20:46      19:24:05      19:27:23
      19:30:42      19:30:42      19:30:42      19:41:46      19:41:46
      19:41:46      19:41:46      19:41:46      19:41:46      19:41:46
      19:41:46      19:41:46      19:41:46      19:41:46      19:41:46
      19:41:46      19:41:46      19:41:46      19:41:46      19:41:46
      19:41:46      19:41:46      19:41:46
   0 ERRORS
OK
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