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--------------------------------------------------------------------------------
                  Mauna Loa Solar Observatory Observer's Log
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         Thu Jan  6 17:45:56 GMT 2000
Year: 00  Doy: 006
Observer: koon
WEATHER COMMENT: Thu Jan  6 17:45:59 GMT 2000
Clear sky, wind=10 mph from the SE, temp=40 F.
**MKIV PROBLEM**: Thu Jan  6 17:50:57 GMT 2000
Twice this morning the akamai window disappeared about one second after
appearing upon powerup of akamai.  I'm going to try observing without
the akamai window present.
Thu Jan  6 17:52:30 GMT 2000    CHIP    Startup--Initializing new tape
Thu Jan  6 17:54:28 GMT 2000    CHIP    CHIP Start Patrol
Thu Jan  6 17:54:28 GMT 2000    CHIP    CHIP Start Patrol
Thu Jan  6 18:01:12 GMT 2000    CHIP    Bias
Thu Jan  6 18:02:20 GMT 2000    CHIP    End Bias
Thu Jan  6 18:02:34 GMT 2000    CHIP    Water
Thu Jan  6 18:02:49 GMT 2000    PICS    Flat
Thu Jan  6 18:03:16 GMT 2000    CHIP    End Water
Thu Jan  6 18:05:27 GMT 2000    PICS    End Flat
Thu Jan  6 18:39:40 GMT 2000    PICS    End Patrol
Thu Jan  6 19:01:17 GMT 2000    CHIP    Bias
Thu Jan  6 19:02:27 GMT 2000    CHIP    End Bias
Thu Jan  6 19:02:42 GMT 2000    CHIP    Water
Thu Jan  6 19:03:34 GMT 2000    CHIP    End Water
**PICS PROBLEM**: Thu Jan  6 19:16:01 GMT 2000
Still have a problem finding the Clear position.  It worked OK for a while
this morning but now it can't find it every time.  I see the Home LED
light at the right time but it is before the Bit #1 LED which just blinks
right at the end of it's wedge as the encoding wheel rotates.  This worked
flawlessly yesterday afternoon, It may be due to thermal expansion or
contraction of the something, it has been really cold in the mornings,
especially with the wind chill.  If I put the wheel in the correct position
with a power supply the Bit #1 LED won't light until I remove and replace
the Wheel Status board, even if I use a different board.  This may mean
that the HEI voltage is just below the threshold needed to set Bit #1.
**GONG PROBLEM**: Thu Jan  6 19:35:53 GMT 2000
Still no reply from Jean at GONG, so I called Lana and gave her all the
information about the xterm console login problem and the network slowdown
and asked her to check if GONG network activities have changed in case
they may be causing the slowdown.  I mentioned how the TCP login
manager on the GONG workstation wasn't responding, she said they installed
TCP wrappers back in November during their PM trip but doesn't know of
any new network changes.  She'll check it out and call me back.
**GONG PROBLEM**: Thu Jan  6 19:49:17 GMT 2000
Lana called back already, nothing unusual could be found, and she said I can
try a workstation reboot now that everything has been checked.  So I'm
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going to do that in a few minutes.
```
Thu Jan  6 20:01:08 GMT 2000    CHIP    Gain
Thu Jan  6 20:07:03 GMT 2000    CHIP    End Gain
Thu Jan  6 20:07:17 GMT 2000    CHIP    Bias
Thu Jan  6 20:08:18 GMT 2000    CHIP    End Bias
Thu Jan  6 20:08:29 GMT 2000    CHIP    Water
Thu Jan  6 20:09:10 GMT 2000    CHIP    End Water
```
GONG PROBLEM: Thu Jan 6 20:16:04 GMT 2000
I reset the workstation, unlike yesterday there were error messages all
over a white non-observing screen:
Error: cannot open iraf shared library S7.e
and after the reboot those messages were still coming up on the xterm
window. I asked Lana and she said Jean found a problem with the iraf
stuff yesterday. So it appears they still aren't sure if they are back
to normal. After the reboot our console still can't login to the
workstation, no change.
PICS PROBLEM: Thu Jan 6 20:28:59 GMT 2000
Manually moved the wheel using the power supply, no Bit #1 LED lit, went
upstairs with a heatgun and heated the decoder/HEI area, the Bit#1 LED
came on. Definitely a thermal problem upstairs. Will try moving the
Bit #1 HEI next.
```
Thu Jan  6 21:01:10 GMT 2000    CHIP    Bias
Thu Jan  6 21:02:18 GMT 2000    CHIP    End Bias
Thu Jan  6 21:02:28 GMT 2000    CHIP    Water
Thu Jan  6 21:03:15 GMT 2000    CHIP    End Water
```
COMMENT: Thu Jan 6 21:15:39 GMT 2000
NOAA Darryl switched our FO cable to a different FO hub at about 2105.
We were on the hub with GONG and may have been slowed down by their
bandwidth usage or a faulty hub. Getting mail messages is much faster now.
```
Thu Jan  6 21:25:24 GMT 2000    MKIV    Start Patrol
```
MKIV COMMENT: Thu Jan 6 21:26:10 GMT 2000
I forgot to restart the Patrol after the cal, just did it now, too much
running around.
GONG PROBLEM: Thu Jan 6 21:29:22 GMT 2000
The MLSO console now will connect to the shelter, new hub better.
COMMENT: Thu Jan 6 21:29:53 GMT 2000
MLO image computer working, new hub better.
COMMENT: Thu Jan 6 21:30:18 GMT 2000
Darryl is going back down to add the GONG shelter to the new hub, then
we'll see if everyone (including NOAA) gets slowed down drastically.
If so, then GONG is causing the problem, if not then the old hub is
bad. One thing is for sure, the network connection is back to normal
using this new hub.
COMMENT: Thu Jan 6 21:46:12 GMT 2000
OK, we tried various combinations of hubs and cables and it looks like
the old hub is intermittently slow. I'll ask GONG to send out a new
one, until then we'll be on the new hub and they'll be on the old
hub.

```
Thu Jan  6 22:01:11 GMT 2000     CHIP     Bias
Thu Jan  6 22:02:20 GMT 2000     CHIP     End Bias
Thu Jan  6 22:02:36 GMT 2000     CHIP     Water
Thu Jan  6 22:03:24 GMT 2000     CHIP     End Water
Thu Jan  6 23:01:12 GMT 2000     CHIP     Bias
Thu Jan  6 23:02:23 GMT 2000     CHIP     End Bias
Thu Jan  6 23:02:34 GMT 2000     CHIP     Water
Thu Jan  6 23:03:20 GMT 2000     CHIP     End Water
**PICS PROBLEM**: Thu Jan  6 23:31:01 GMT 2000
Now that I'm finally able to continue work on the occulting wheel decoding
it is working fine every time, probably due to warmer temp.  I started
Patrol so I can get data (if nothing else) until it starts failing again.
I need to try an adjustment when Bit #1 isn't being sensed.
**PICS PROBLEM**: Thu Jan  6 23:34:34 GMT 2000
Patrol stalled at Init., doing Kill/Run to restart.
Thu Jan  6 23:36:53 GMT 2000     PICS     Start Patrol
**PICS PROBLEM**: Thu Jan  6 23:43:51 GMT 2000
I forgot to mention that earlier I tried blowing air over the HEI in case
dust had settled there but there was no change in the problem.  Right now
there are no symptoms of the problem and since the problem appears worse
in the morning that would be the time to work on this, that's a drag after
getting this close.  It appears the problem is either that the inner
HEI needs to be adjusted to see through the Bit #1 hole better or the HEI
is defective and needs to be replaced.
Thu Jan  6 23:50:28 GMT 2000     PICS     End Patrol
Fri Jan  7 00:01:29 GMT 2000     CHIP     Bias
Fri Jan  7 00:02:41 GMT 2000     CHIP     End Bias
Fri Jan  7 00:02:52 GMT 2000     CHIP     Water
Fri Jan  7 00:03:38 GMT 2000     CHIP     End Water
Fri Jan  7 00:15:33 GMT 2000     CHIP     CHIP End Patrol
Fri Jan  7 00:16:49 GMT 2000     CHIP     ending tape
COMMENT: Fri Jan  7 00:21:09 GMT 2000

TAPES:
******
MKIV: 00006
CHIP: C01005
PICS: P01629
LOWL: L00657 in drive #1 and L00658 in drive #0

**LOW-L PROBLEM**: Fri Jan  7 00:25:47 GMT 2000
Crashed at 23:30, graphics across screen, no data taken after crash.
Removed L00657 and installed L00659 in drive #0, data going to L00658
in drive #0

Fri Jan  7 00:27:12 GMT 2000
        MkIV
```

```
17_54.rawmk4    18_53.rawmk4    20_02.rawmk4    22_21.rawmk4    23_21.rawmk4
17_57.rawmk4    18_56.rawmk4    21_25.rawmk4    22_24.rawmk4    23_23.rawmk4
18_00.rawmk4    18_59.rawmk4    21_28.rawmk4    22_27.rawmk4    23_26.rawmk4
18_03.rawmk4    19_02.rawmk4    21_31.rawmk4    22_30.rawmk4    23_29.rawmk4
18_06.rawmk4    19_05.rawmk4    21_34.rawmk4    22_33.rawmk4    23_32.rawmk4
18_09.rawmk4    19_08.rawmk4    21_37.rawmk4    22_36.rawmk4    23_35.rawmk4
18_12.rawmk4    19_11.rawmk4    21_40.rawmk4    22_39.rawmk4    23_38.rawmk4
18_15.rawmk4    19_14.rawmk4    21_43.rawmk4    22_42.rawmk4    23_41.rawmk4
18_17.rawmk4    19_17.rawmk4    21_46.rawmk4    22_45.rawmk4    23_44.rawmk4
18_20.rawmk4    19_20.rawmk4    21_49.rawmk4    22_48.rawmk4    23_47.rawmk4
18_23.rawmk4    19_23.rawmk4    21_52.rawmk4    22_51.rawmk4    23_50.rawmk4
18_26.rawmk4    19_26.rawmk4    21_55.rawmk4    22_54.rawmk4    23_53.rawmk4
18_29.rawmk4    19_29.rawmk4    21_58.rawmk4    22_57.rawmk4    23_56.rawmk4
18_32.rawmk4    19_32.rawmk4    22_01.rawmk4    23_00.rawmk4    c19_46.rawmk4
18_35.rawmk4    19_35.rawmk4    22_03.rawmk4    23_03.rawmk4    c19_53.rawmk4
18_38.rawmk4    19_37.rawmk4    22_06.rawmk4    23_06.rawmk4    c19_59.rawmk4
18_41.rawmk4    19_40.rawmk4    22_09.rawmk4    23_09.rawmk4
18_44.rawmk4    19_43.rawmk4    22_12.rawmk4    23_12.rawmk4
18_47.rawmk4    19_49.rawmk4    22_15.rawmk4    23_15.rawmk4
18_50.rawmk4    19_56.rawmk4    22_18.rawmk4    23_18.rawmk4
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