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--------------------------------------------------------------------------
                  Mauna Loa Solar Observatory Observer's Log
--------------------------------------------------------------------------
          Thu Feb  4 17:41:40 GMT 1999
Year: 99  Doy: 035
Observer: koon
WEATHER COMMENT: Thu Feb  4 17:43:11 GMT 1999
Clear sky, wind=10 mph from the SE, temp=30 F, still very icy outside
with some snow drifts too.
Thu Feb  4 17:45:08 GMT 1999    CHIP      Startup--Initializing new tape
Thu Feb  4 17:49:58 GMT 1999    MKIII     Start Patrol
Thu Feb  4 17:50:19 GMT 1999    CHIP      CHIP Start Patrol
COMMENT: Thu Feb  4 17:52:47 GMT 1999
There was so much ice and clouds yesterday that I didn't come up, it was
a little too exciting of a drive and I wasn't sure if it would melt off
enough to be able to make those downhill-to-corner sections when I
wanted to leave.

It was a little less icy today but still several miles of constant black
ice, but the sun was out and it should melt it by the time I want to
leave MLSO.  The visiting NASA guys called Judy and she called me to let
me know that they got stuck in the ice somewhere behind me this morning,
probably at the corner-to-uphill section that can be a terror when going
in the other direction, they are driving a Toyota 4-Runner 4WD.
1999    CHIP      End Bias
Thu Feb  4 18:04:03 GMT 1999    CHIP      Water
**LOW-L PROBLEM**: Thu Feb  4 18:12:21 GMT 1999
Was crashed with DOS screen visible and L00577 popped out of drive #0 and
the instrument head was stowed.  I removed L00577, moved L00578 from Drive #1
to #0 and installed L00579 in drive #1.  Cycled PC power and typed lowl
to restart.
**MLSO PROBLEM**: Thu Feb  4 18:18:05 GMT 1999
Network connection to HAO is down.
**PSPT PROBLEM**: Thu Feb  4 18:20:44 GMT 1999
Stalled, "Running axis 0 to home..." message on screen.  PSPT was pointing
to the West.  Exited and tried Run again.
LOW-L COMMENT: Thu Feb  4 18:35:57 GMT 1999
I forgot that we have to enter the date and time manually before starting
the lowl program, or at least check them.  So I stopped obs and set those
and restarted.
Thu Feb  4 18:41:42 GMT 1999    MKIII     Start Cal
**MLSO PROBLEM**: Thu Feb  4 19:01:26 GMT 1999
I can't connect to the hao computer via POP server PC access or via using
the gate, and thanks to "security" measures we can't access any other
computer over there, and to top it off now it appears our old standby
backup route of using the modem doesn't work either, I just keep getting
a busy signal.  Leonard mentioned several times over several months
something about HAO dropping some 800 number dial-in modem lines, the line
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we use wasn't mentioned but I think it was eliminated. Now when you combine
all of that with the fact that we aren't allowed to get our email sent to
us here you have a big annoying waste of time. I have no way of checking
my email, this is very inefficient, it's bad enough to have to go through
all the contortions normally necessary to check and print and send mail
and other types of files, is all this "security" really needed? Eric said
the network was down yesterday too.
PSPT PROBLEM: Thu Feb 4 19:15:22 GMT 1999
Still trying to get this to work. I tried to "exit" to get the telescope
pointed back to home position. It appears from the PC screen that axis 0
was being pointed and the readout was way beyong the -500 is was supposed
to point to, but the telescope was stalled pointing a little East of
straight up. Rebooted the PC and tried using Run again.
PSPT PROBLEM: Thu Feb 4 19:25:11 GMT 1999
OK its working now. Axis 0 is apparently the RA axis. Rebooting the PC
was the fix for this one.
Thu Feb 4 20:01:46 GMT 1999   CHIP   Gain
Thu Feb 4 20:06:19 GMT 1999   CHIP   End Gain
Thu Feb 4 20:06:46 GMT 1999   CHIP   Bias
Thu Feb 4 20:07:39 GMT 1999   CHIP   End Bias
Thu Feb 4 20:07:50 GMT 1999   CHIP   Water
MLSO PROBLEM: Thu Feb 4 20:08:10 GMT 1999
I'm able to get mail via POP with the PC now, but can't login to my account
using the gate at HAO.
MLSO PROBLEM: Thu Feb 4 20:32:31 GMT 1999
The new UPS is giving some problem now. There is a message on the LCD
display, I will try to figure it out and hopefully I can figure it out and
fix the problem here.
Thu Feb 4 21:02:47 GMT 1999   CHIP   Bias
Thu Feb 4 21:03:37 GMT 1999   CHIP   End Bias
Thu Feb 4 21:03:47 GMT 1999   CHIP   Water
Thu Feb 4 21:04:26 GMT 1999   CHIP   End Water
MLSO PROBLEM: Thu Feb 4 21:31:33 GMT 1999
I fixed the UPS problem. A possible sticking relay sent the UPS into
Bypass Mode during its regular battery test sequence, that disabled battery
backup and Menu operation. I called APC and explained it to them and
they explained the secret procedure for resetting the Electronics Unit
so the error message went away and the UPS switched back to UPS mode.
After resetting it the Online mode (normal setting) worked fine. So
hopefully this won't recur, but if it does we can call them and refer
to the case ID number that I recorded in the APC manual along with other
notes in the troubleshooting section.
Thu Feb 4 22:01:49 GMT 1999   CHIP   Bias
Thu Feb 4 22:02:45 GMT 1999   CHIP   End Bias
Thu Feb 4 22:03:00 GMT 1999   CHIP   Water
MLSO PROBLEM: Thu Feb 4 22:03:26 GMT 1999
It also seems possible that the voltage regulation was set to be too
sensitive and so a relay was getting overworked trying to switch back and

forth between battery and grid power. So I lowered the voltage regulation
sensitivity to see if we get less of those sudden and noisy buzzing
episodes that immediately preceded this problem. The battery test has
been set to happen every 14 days but that buzzing seems to be more often.
That noise is enough to get the adrenalin pumping if you are close to the
UPS when it happens, but now maybe it'll happen less often.
PSPT PROBLEM: Thu Feb 4 22:18:28 GMT 1999
Experiencing the late morning Quadcell problem again, I still haven't
received any replies to my questions about this, they are in the log
for last Saturday, DOY 030. So, once again it appears something
strange happens late in the morning regarding the Quadcell and the
camera exposures. First the QCsum values appears very low, last time
it looked like they remained low even when I pointed to the sun but
this time it appeared different. The program would stall due to lack
of sufficient light on the Quadcell as given by the QCsum value. I
opened the side cover and checked the Quadcell (QC) stage, it wasn't
at any limits. The image of the sun wasn't centered on optics, it was
off in declination, I checked the declination limit and it wasn't at
the limit. I pushed the telescope until the light was centered on
the optics then went into control and saw that the QCsum was up to
about 2500 which is good, and the screen said it was activating the
Active Mirror, the Active Mirror LED was lit (it wasn't before I pushed
the telescope). Then the program progressed a little but said the
exposure was too low at about 100, I don't understand what this means,
does it mean the exposure value that was calculated was too low or does
it mean that when it tried an exposure of 100 the image was too dark?
Anyway it sat there for a while repeating that low exposure message
and I figured it was stalled again so I started this log entry, but at
about 2225 ut I heard the dome move and it became apparent that the
program had progressed. I closed the side cover and let it do its thing.
So I guess the band-aid solution for this will be to try to point the
telecope to the sun manually when the QCsum values start looking
strangely low, at least until we can understand what the software messages
mean and why the QC doesn't have the sun centered on it in the late
mornings.
Thu Feb 4 23:00:48 GMT 1999   CHIP   Bias
Thu Feb 4 23:01:47 GMT 1999   CHIP   End Bias
Thu Feb 4 23:01:57 GMT 1999   CHIP   Water
Thu Feb 4 23:02:39 GMT 1999   CHIP   End Water
WEATHER COMMENT: Thu Feb 4 23:04:51 GMT 1999
Clouds have started to pass over.
Thu Feb 4 23:07:17 GMT 1999   MKIII   End Patrol
Thu Feb 4 23:11:26 GMT 1999   CHIP   CHIP End Patrol
Thu Feb 4 23:17:26 GMT 1999   CHIP   ending tape
COMMENT: Thu Feb 4 23:45:29 GMT 1999

TAPES:
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MKIV: 99035
CHIP: C00774
LOWL: L00578 in drive #0
PICS: Down for repairs


Thu Feb  4 23:46:48 GMT 1999
        MkIII


17_50.rawmk3    19_05.rawmk3    20_10.rawmk3    21_14.rawmk3    22_19.rawmk3
17_53.rawmk3    19_08.rawmk3    20_13.rawmk3    21_17.rawmk3    22_22.rawmk3
17_56.rawmk3    19_11.rawmk3    20_16.rawmk3    21_20.rawmk3    22_25.rawmk3
17_59.rawmk3    19_15.rawmk3    20_19.rawmk3    21_24.rawmk3    22_28.rawmk3
18_03.rawmk3    19_18.rawmk3    20_22.rawmk3    21_27.rawmk3    22_31.rawmk3
18_06.rawmk3    19_21.rawmk3    20_26.rawmk3    21_30.rawmk3    22_35.rawmk3
18_09.rawmk3    19_24.rawmk3    20_29.rawmk3    21_33.rawmk3    22_38.rawmk3
18_12.rawmk3    19_28.rawmk3    20_32.rawmk3    21_37.rawmk3    22_41.rawmk3
18_16.rawmk3    19_31.rawmk3    20_35.rawmk3    21_40.rawmk3    22_44.rawmk3
18_19.rawmk3    19_34.rawmk3    20_39.rawmk3    21_43.rawmk3    22_48.rawmk3
18_22.rawmk3    19_37.rawmk3    20_42.rawmk3    21_46.rawmk3    22_51.rawmk3
18_25.rawmk3    19_40.rawmk3    20_45.rawmk3    21_49.rawmk3    22_54.rawmk3
18_28.rawmk3    19_44.rawmk3    20_48.rawmk3    21_53.rawmk3    22_57.rawmk3
18_32.rawmk3    19_47.rawmk3    20_51.rawmk3    21_56.rawmk3    23_00.rawmk3
18_35.rawmk3    19_50.rawmk3    20_55.rawmk3    21_59.rawmk3    23_04.rawmk3
18_38.rawmk3    19_53.rawmk3    20_58.rawmk3    22_02.rawmk3    c18_41.rawmk3
18_45.rawmk3    19_57.rawmk3    21_01.rawmk3    22_06.rawmk3    c18_48.rawmk3
18_51.rawmk3    20_00.rawmk3    21_04.rawmk3    22_09.rawmk3    c18_55.rawmk3
18_58.rawmk3    20_03.rawmk3    21_08.rawmk3    22_12.rawmk3
19_02.rawmk3    20_06.rawmk3    21_11.rawmk3    22_15.rawmk3
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