
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

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 OCsum 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 Ouadcell as given by the OCsum 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 OCsum 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 quess the band-aid solution for this will be to try to point the telecope to the sun manually when the OCsum values start looking strangely low, at least until we can understand what the software messages mean and why the OC 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 End Bias CHIP 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 End Patrol MKIII

Thu Feb 4 23:11:26 GMT 1999 CHIP End Patrol CHIP Thu Feb 4 23:17:26 GMT 1999 ending tape CHIP COMMENT: Thu Feb 4 23:45:29 GMT 1999

TAPES:

MKIV: 99035 CHIP: C00774

LOWL: L00578 in drive #0 PICS: Down for repairs

Thu Feb 4 23:46:48 GMT 1999 MkIII

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