
Mauna Loa Solar Observatory Observer's Log

Thu Jun 24 16:56:39 GMT 1999
Year: 99 Doy: 175
Observer: koon
WEATHER COMMENT: Thu Jun 24 16:56:52 GMT 1999
Clear sky, wind=5 mph from the West, temp=52 F.
CHIP COMMENT: Thu Jun 24 17:00:43 GMT 1999
The repaired Filter Temperature Controller arrived. I'll install it and
turn it on and watch the temperature, with luck it will be correctly
setup and I'll be able to collect some data later in the day.
LOW-L COMMENT: Thu Jun 24 17:12:08 GMT 1999
Tape file count was at 70, so I stopped the program and removed L00606 from
drive #0 and installed L00608 there. Data currently going to L00607 in
drive #1.
CHIP COMMENT: Thu Jun 24 17:53:18 GMT 1999
Temperature controller installed, setpoint=3.077 vdc, sensor=9.93 vdc,
output=9.99 vdc. CHIP temperature field on GUI monitor is at 24.081 C,
it was at around 22.0 C before I installed the temperature controller.
CHIP COMMENT: Thu Jun 24 19:21:46 GMT 1999
Temp finally overshot and is at 34.651 and climbing.
CHIP COMMENT: Thu Jun 24 20:34:52 GMT 1999
It doesn't appear to have the correct setpoint. Temp=38.328. setpoint=3.077,
sensor=5.72, output=10.0, all in vdc.
COMMENT: Thu Jun 24 20:46:48 GMT 1999
Extended the dome slot around 2015 ut.
CHIP COMMENT: Thu Jun 24 21:08:01 GMT 1999
I turned off the temperature controller since it didn't start bringing the
temperature back down. I'll check the sensor voltage with the controller
on as the temperature passes through the correct range, I'm sure it
isn't between 0-5 vdc and I think it needs to be for the control loop
to work right. I'll then take down the controller and reset the jumper
and setpoint to what they were before the guy at Meadowlark changed them.
CHIP COMMENT: Thu Jun 24 23:04:27 GMT 1999
I set the setpoint and the "jumpers" (actually pins soldered together,
lots of work to get to those, had to remove entire board, etc) to the
previous setpoint of 0.644 and using 100 microamps. Meadowlark
had it set to a setpoint of 3.077 and sensor circuit resistance of
1 milliamp, with that resistance the control loop for the temperature
would not have worked because the sensor voltage would have been up
around 6.70 vdc, that is outside the control loop working range of
0 to 5 vdc. Now we'll have a sensor voltage of about .670 vdc, 2.5 vdc
is probably ideal but that's the best we'll get with the sensor we
are using and the choices of sensor circuit resistance available.
The temperature is at 29.621 and climbing, I'll wait and see if it
stabilizes. I'll also run the instrument to what the data look like.
Thu Jun 24 23:14:01 GMT 1999   CHIP   CHIP Start Patrol

PSPT COMMENT: Thu Jun 24 23:14:11 GMT 1999
This ran all day without crashing.
COMMENT: Thu Jun 24 23:24:11 GMT 1999
Rotated the dome 180 degrees to get sun on CHIP.
CHIP COMMENT: Thu Jun 24 23:58:46 GMT 1999
temperature just passed through the high end of the ideal range, it's at
34.546 C and climbing slowly. We want it between 34.3 and 34.5 C
Fri Jun 25 00:03:47 GMT 1999   CHIP   End Bias
Fri Jun 25 00:04:05 GMT 1999   CHIP   Water
Fri Jun 25 00:04:51 GMT 1999   CHIP   End Water
CHIP COMMENT: Fri Jun 25 00:26:24 GMT 1999
Yeehah, the temperature turned around at 36.282 and started going back down.
That means there is some control and it won't get hotter than 36.282. So
I can go home now and leave it on overnight. I'm not sure where it will
stabilize, Eric will find out tomorrow.
CHIP COMMENT: Fri Jun 25 00:35:25 GMT 1999
All but a few images look bad due to incorrect filter temperature, tomorrow
they may be great again.
Fri Jun 25 00:38:21 GMT 1999   CHIP   CHIP End Patrol
Fri Jun 25 00:39:50 GMT 1999   CHIP   ending tape
COMMENT: Fri Jun 25 00:42:21 GMT 1999

TAPES
*****
MKIV: 99175
CHIP: C00846, its back.
LOWL: L00606 in drive #0 and L00607 in drive #1
PICS: Down for repairs.

Fri Jun 25 00:44:29 GMT 1999
        MkIII

00_00.rawmk3	18_00.rawmk3	19_42.rawmk3	21_12.rawmk3	22_41.rawmk3
00_04.rawmk3	18_03.rawmk3	19_45.rawmk3	21_15.rawmk3	22_45.rawmk3
00_08.rawmk3	18_07.rawmk3	19_49.rawmk3	21_19.rawmk3	22_49.rawmk3
00_12.rawmk3	18_11.rawmk3	19_53.rawmk3	21_23.rawmk3	22_53.rawmk3
00_15.rawmk3	18_15.rawmk3	19_57.rawmk3	21_27.rawmk3	22_56.rawmk3
00_19.rawmk3	18_18.rawmk3	20_00.rawmk3	21_30.rawmk3	23_00.rawmk3
00_23.rawmk3	18_22.rawmk3	20_04.rawmk3	21_34.rawmk3	23_04.rawmk3
00_26.rawmk3	18_26.rawmk3	20_08.rawmk3	21_38.rawmk3	23_08.rawmk3
17_00.rawmk3	18_30.rawmk3	20_12.rawmk3	21_42.rawmk3	23_11.rawmk3
17_03.rawmk3	18_33.rawmk3	20_15.rawmk3	21_45.rawmk3	23_15.rawmk3
17_07.rawmk3	18_37.rawmk3	20_19.rawmk3	21_49.rawmk3	23_19.rawmk3
17_11.rawmk3	18_41.rawmk3	20_23.rawmk3	21_53.rawmk3	23_23.rawmk3
17_15.rawmk3	18_44.rawmk3	20_27.rawmk3	21_57.rawmk3	23_26.rawmk3
17_18.rawmk3	18_48.rawmk3	20_30.rawmk3	22_00.rawmk3	23_30.rawmk3
17_22.rawmk3	18_52.rawmk3	20_34.rawmk3	22_04.rawmk3	23_34.rawmk3
17_26.rawmk3	18_56.rawmk3	20_38.rawmk3	22_08.rawmk3	23_38.rawmk3

17_30.rawmk3	18_59.rawmk3	20_42.rawmk3	22_12.rawmk3	23_41.rawmk3
17_33.rawmk3	19_03.rawmk3	20_45.rawmk3	22_15.rawmk3	23_45.rawmk3
17_37.rawmk3	19_11.rawmk3	20_49.rawmk3	22_19.rawmk3	23_49.rawmk3
17_41.rawmk3	19_19.rawmk3	20_53.rawmk3	22_23.rawmk3	23_53.rawmk3
17_45.rawmk3	19_26.rawmk3	20_57.rawmk3	22_27.rawmk3	23_56.rawmk3
17_48.rawmk3	19_30.rawmk3	21_00.rawmk3	22_30.rawmk3	c19_07.rawmk3
17_52.rawmk3	19_34.rawmk3	21_04.rawmk3	22_34.rawmk3	c19_15.rawmk3
17_56.rawmk3	19_38.rawmk3	21_08.rawmk3	22_38.rawmk3	c19_23.rawmk3