
Mauna Loa Solar Observatory Observer's Log

Fri May 7 16:19:51 GMT 1999 Year: 99 Doy: 127 Observer: yasukawa WEATHER COMMENT: Fri May 7 16:20:52 GMT 1999 Cool, in broken cirrus, light south wind. Fri May 7 16:22:18 GMT 1999 CHIP Startup--Initializing new tape Fri May 7 16:27:29 GMT 1999 PTCS Start Patrol Fri May 7 16:27:56 GMT 1999 CHIP CHIP Start Patrol Fri May 7 16:28:02 GMT 1999 MKIII Start Patrol **CHIP PROBLEM**: Fri May 7 16:35:51 GMT 1999 CHIP filter temperature just hovering at edge of high end this morning. Fri May 7 17:01:31 GMT 1999 Flat PICS Fri May 7 17:01:50 GMT 1999 CHIP Bias Fri May 7 17:02:42 GMT 1999 CHIP End Bias Fri May 7 17:02:52 GMT 1999 CHIP Water Fri May 7 17:02:57 GMT 1999 PICS End Flat Fri May 7 17:03:36 GMT 1999 CHIP End Water **CHIP PROBLEM**: Fri May 7 17:27:34 GMT 1999 Stopping CHIP to check out the temperature controller. Fri May 7 17:30:24 GMT 1999 CHIP CHIP End Patrol Fri May 7 18:01:47 GMT 1999 PICS Flat Fri May 7 18:03:23 GMT 1999 PICS End Flat Fri May 7 19:01:29 GMT 1999 Flat PICS Fri May 7 19:02:59 GMT 1999 PICS End Flat **CHIP PROBLEM**: Fri May 7 19:13:18 GMT 1999 Setpoint was 0.534v, should be 0.644v. Inspected temperature controller and found that the soldering was quite messy, lots of solder splashes, albeit tiny drops, and lots of qunky rosin. Setpoint voltage jumped to 0.644v when I tapped the LMT324D IC under the large capaictor, closest to the interface connector. There are 4 LMT324D ICs and this was the last one I "tested". After cleaning around all of the pins on all of the ICs with alcohol and a fine scribe, I inspected the solder joints and none looked like they were cold soldered. Problem could have been the dirty environment between pins or it could be an internal flaw within the IC. setpoint voltage held at 0.644V as I reassembled the controller and it held after remounting the chassis on the spar.

CHIP filter temperature is now cold and rising. It'll take some time to stabilize at the correct temperature range. **MKIV PROBLEM**: Fri May 7 19:22:51 GMT 1999 Cirrus is gone and sky is improving. MKIII corona looks marginally OK, MKIV display is streaking radially. I thought it was due to the cirrus, but now that the sky is improving, I can see that the KCC needs a reset.

Fri May 7 19:25:06 GMT 1999 MKIII Start Patrol

Fri May 7 19:25:13 GMT 1999 CHIP CHIP Start Patrol COMMENT: Fri May 7 19:25:57 GMT 1999 Stopping to reconfigure dome shutter. Fri May 7 19:26:24 GMT 1999 End Patrol PICS CHIP End Patrol Fri May 7 19:28:27 GMT 1999 CHIP Fri May 7 19:38:11 GMT 1999 Start Patrol MKIII Fri May 7 19:38:33 GMT 1999 CHIP CHIP Start Patrol Fri May 7 19:38:38 GMT 1999 PICS Start Patrol WEATHER COMMENT: Fri May 7 19:51:27 GMT 1999 In thin cirrus. Fri May 7 20:00:39 GMT 1999 PICS Flat Fri May 7 20:02:14 GMT 1999 PICS End Flat Fri May 7 20:02:51 GMT 1999 CHIP Gain Fri May 7 20:07:15 GMT 1999 End Gain CHIP Fri May 7 20:07:25 GMT 1999 Bias CHIP Fri May 7 20:08:15 GMT 1999 CHIP End Bias Fri May 7 20:08:27 GMT 1999 CHIP Water Fri May 7 20:09:07 GMT 1999 CHIP End Water Fri May 7 20:09:29 GMT 1999 MKIII End Cal **PICS PROBLEM**: Fri May 7 20:09:48 GMT 1999 PICS filter wheel is stalling, I think. Stopping to check it out. **PICS PROBLEM**: Fri May 7 20:12:48 GMT 1999 I think PICS also crashed. Fri May 7 20:28:09 GMT 1999 End Patrol PICS COMMENT: Fri May 7 20:49:49 GMT 1999 I was leaning pretty hard on the spar trying to reinstall the PICS insulating cover, lost guiding. Repointed. **PICS PROBLEM**: Fri May 7 20:50:46 GMT 1999 Set screw on filter wheel was loose, this caused mis-registration of the filter wheel and the floppiness also prevented positive contact with the encoding microswitches. This caused program to timeout or get confused about where the filter wheel was. Tightened set screw and tested PICS. Fri May 7 20:55:08 GMT 1999 Start Patrol MKIII MKIV COMMENT: Fri May 7 20:55:43 GMT 1999 Did not restart MKIV/MKIII after calibration due to preoccupation with PICS. Fri May 7 21:00:51 GMT 1999 Bias CHIP Fri May 7 21:01:42 GMT 1999 CHIP End Bias Fri May 7 21:01:42 GMT 1999 CHIP End Bias Fri May 7 21:01:57 GMT 1999 CHIP Water Fri May 7 21:02:38 GMT 1999 CHIP End Water Fri May 7 21:03:12 GMT 1999 PICS End Flat CHIP COMMENT: Fri May 7 21:20:55 GMT 1999 CHIP filter temperature still rising above range. It has not settled yet. **CHIP PROBLEM**: Fri May 7 21:57:56 GMT 1999 CHIP temperature is still rising. Either this is going to take some time to get it back on temperature or something else got hosed.

We'll be patient for now. Fri May 7 22:00:49 GMT 1999 CHIP Bias End Bias Fri May 7 22:01:42 GMT 1999 CHIP 7 22:01:42 GMT 1999 End Bias Fri May CHIP 7 22:01:55 GMT 1999 Fri May CHIP Water 7 22:02:36 GMT 1999 Fri May End Water CHIP 7 22:03:11 GMT 1999 Fri May PICS End Flat 7 22:05:27 GMT 1999 CHIP End Patrol Fri May CHIP Fri May 7 22:06:01 GMT 1999 ending tape CHIP End Patrol Fri May 7 22:07:26 GMT 1999 PICS COMMENT: Fri May 7 22:08:52 GMT 1999 Tapes: MKIV: 99-127 CHIP: C00845 PICS: P01433 LOWL: L00597 Fri May 7 22:17:43 GMT 1999 MkIII 16_28.rawmk3 17_27.rawmk3 18_26.rawmk3 19_30.rawmk3 21_33.rawmk3 16_31.rawmk3 17_30.rawmk3 18_30.rawmk3 19_38.rawmk3 21_36.rawmk3 18 33.rawmk3 21 40.rawmk3 16 35.rawmk3 17 34.rawmk3 19 42.rawmk3 16_39.rawmk3 17_38.rawmk3 18_37.rawmk3 19_49.rawmk3 21_44.rawmk3 16 42.rawmk3 17_42.rawmk3 18 41.rawmk3 19 57.rawmk3 21 48.rawmk3 16 46.rawmk3 17 45.rawmk3 18 45.rawmk3 20 05.rawmk3 21 51.rawmk3 16_50.rawmk3 17_49.rawmk3 18_48.rawmk3 20_55.rawmk3 21_55.rawmk3 16 53.rawmk3 17 53.rawmk3 18 52.rawmk3 20 59.rawmk3 21 59.rawmk3 16 57.rawmk3 17 56.rawmk3 18 56.rawmk3 21 03.rawmk3 22 03.rawmk3 17_01.rawmk3 18_00.rawmk3 18_59.rawmk3 21_06.rawmk3 22_06.rawmk3 17_05.rawmk3 18_04.rawmk3 19_03.rawmk3 21_10.rawmk3 c19_45.rawmk3 17_08.rawmk3 18_08.rawmk3 19 07.rawmk3 21_14.rawmk3 c19_53.rawmk3 17_12.rawmk3 18_11.rawmk3 19_10.rawmk3 21_18.rawmk3 c20_01.rawmk3 17_16.rawmk3 18_15.rawmk3 19_14.rawmk3 21_21.rawmk3 17 19.rawmk3 18 19.rawmk3 19 18.rawmk3 21 25.rawmk3 17_23.rawmk3 18_22.rawmk3 19_26.rawmk3 21_29.rawmk3