
Mauna Loa Solar Observatory Observer's Log

Sun Feb 17 17:39:12 GMT 2002

Year: 02 Doy: 048

Observer: koon

WEATHER COMMENT: Sun Feb 17 17:39:19 GMT 2002 Clear sky, wind=20 mph from the SE, temp=39 F. MKIV COMMENT: Sun Feb 17 17:44:00 GMT 2002 Temperature readings started, temp around 12 C.

Sun Feb 17 17:44:34 GMT 2002 MKIV Start Patrol

PSPT COMMENT: Sun Feb 17 18:00:07 GMT 2002

Observing.

Sun Feb 17 18:00:57 GMT 2002 CHIP LSD Sun Feb 17 18:02:07 GMT 2002 PICS Flat Sun Feb 17 18:03:20 GMT 2002 CHIP End LSD Sun Feb 17 18:03:36 GMT 2002 CHIP BiasLSD Sun Feb 17 18:04:34 GMT 2002 CHIP End BiasLSD Sun Feb 17 18:04:55 GMT 2002 CHIP Bias Sun Feb 17 18:05:05 GMT 2002 End Flat PICS Sun Feb 17 18:05:58 GMT 2002 CHIP End Bias

MKIV COMMENT: Sun Feb 17 18:14:07 GMT 2002

David hasn't seen the signal change as expected, although the trough starts out about 8 C above ambient temperatures and hasn't likely ever been any higher above ambient since we started this testing on 2/6/02. So I'm going to leave the thermo printer in place until we're sure about stopping the temperature readings.

PSPT PROBLEM: Sun Feb 17 18:23:58 GMT 2002

Crashed at 1808 the same way it crashed at 1908 yesterday. I sent the error messages to Alice yesterday. I killed runPspt.pro, ran Pspt, and restarted from "Daily Obs" to fix.

Sun Feb 17 18:51:22 GMT 2002 MKIV End Patrol Sun Feb 17 18:51:32 GMT 2002 MKIV Start Cal **PSPT PROBLEM**: Sun Feb 17 18:51:25 GMT 2002

Keep getting messages about the fast mirror not locking when the program tries to center the solar image. This probably explains the offset image and crashes. I watched the mirror servo drive signals and can see that the mirror is locked although possibly oscillating.

Sun Feb 17 19:02:02 GMT 2002 CHIP LSD Sun Feb 17 19:04:19 GMT 2002 CHIP End LSD Sun Feb 17 19:04:31 GMT 2002 CHIP BiasLSD Sun Feb 17 19:05:34 GMT 2002 End BiasLSD CHIP Sun Feb 17 19:05:47 GMT 2002 CHIP Bias Sun Feb 17 19:06:45 GMT 2002 CHIP End Bias

PSPT PROBLEM: Sun Feb 17 19:04:00 GMT 2002

I checked the operation of the fast mirror during a sun centering sequence, I could see that the mirror wasn't oscillating and was locking although the program was saying that is wasn't locking. We are getting marginal data

without the fast mirror because the program then decides not to use the fast mirror during the sun centering sequence.

PSPT PROBLEM: Sun Feb 17 19:08:01 GMT 2002

Maybe this problem is related to wind, it has been very windy today and was windy yesterday too.

```
Sun Feb 17 19:18:59 GMT 2002
                                 MKIV
                                         Start Patrol
Sun Feb 17 20:03:00 GMT 2002
                                 CHIP
                                          LSD
Sun Feb 17 20:05:22 GMT 2002
                                          End LSD
                                CHIP
Sun Feb 17 20:05:30 GMT 2002
                                          BiasLSD
                                CHIP
Sun Feb 17 20:06:23 GMT 2002
                                 CHIP
                                          End BiasLSD
Sun Feb 17 20:06:37 GMT 2002
                                CHIP
                                          Bias
Sun Feb 17 20:07:39 GMT 2002
                                          End Bias
                                 CHIP
Sun Feb 17 21:03:03 GMT 2002
                                 CHIP
                                          LSD
Sun Feb 17 21:05:30 GMT 2002
                                          End LSD
                                CHIP
Sun Feb 17 21:05:41 GMT 2002
                                          BiasLSD
                                CHIP
Sun Feb 17 21:06:28 GMT 2002
                                CHIP
                                          End BiasLSD
Sun Feb 17 21:06:43 GMT 2002
                                CHIP
                                          Bias
Sun Feb 17 21:07:33 GMT 2002
                                CHIP
                                          End Bias
**PSPT PROBLEM**: Sun Feb 17 21:27:35 GMT 2002
```

Stalled at 2120 with the message about "sun too low, go back to bed" and the strange characters on the PC. I reinstalled the version of pspt.exe dated 1/16/02 that requires us to press "Enter" on the PC to get past some stalls but doesn't give us the last type of stall. I watched for the PSPT to stay locked on the sun with the active mirror but it never did today, it would also sometimes say "mirror is oscillating" while trying to setup for a data run but the mirror wasn't oscillating - I checked and didn't hear the typical oscillating tone at the mirror. Maybe the criteria for determining an oscillating mirror needs to be changed. That was with the previous version of pspt.exe that waits 45 minutes before doing something related to a perceived axis problem. Now I have the 1/16/02 version installed and will go start it up.

PSPT PROBLEM: Sun Feb 17 21:39:28 GMT 2002

With this version of pspt.exe the solar image was centered on the first try, no problem or messages about the fast mirror not locking or oscillating. The dome slot is still pointing into the stronger than normal wind, so I would say that the wind probably wasn't the cause of the centering problems earlier. Getting good data now.

```
Sun Feb 17 22:02:58 GMT 2002
                                CHIP
                                          LSD
Sun Feb 17 22:05:14 GMT 2002
                                          End LSD
                                CHIP
Sun Feb 17 22:05:32 GMT 2002
                                CHIP
                                          BiasLSD
Sun Feb 17 22:06:20 GMT 2002
                                CHIP
                                          End BiasLSD
Sun Feb 17 22:06:36 GMT 2002
                                          Bias
                                CHIP
Sun Feb 17 22:07:22 GMT 2002
                                CHIP
                                          End Bias
Sun Feb 17 22:16:56 GMT 2002
                                          End Patrol
                                PICS
Sun Feb 17 22:17:51 GMT 2002
                                          End Patrol
                                CHIP
Sun Feb 17 22:22:38 GMT 2002
                                MKTV
                                         End Patrol
MKIV COMMENT: Sun Feb 17 23:00:54 GMT 2002
```

Printer tape was getting low so I installed a new roll.

Sun Feb 17 23:06:40 GMT 2002 MkIV

17_44.rawmk4 17_50.rawmk4 17_54.rawmk4 17_57.rawmk4 18_00.rawmk4 18_03.rawmk4 18_06.rawmk4 18_09.rawmk4 18_11.rawmk4 18_14.rawmk4 18_17.rawmk4 18_20.rawmk4 18_23.rawmk4 18_23.rawmk4	18_44.rawmk4 18_48.rawmk4 18_54.rawmk4 19_00.rawmk4 19_06.rawmk4 19_19.rawmk4 19_21.rawmk4 19_24.rawmk4 19_30.rawmk4 19_33.rawmk4 19_36.rawmk4 19_39.rawmk4 19_39.rawmk4	19_57.rawmk4 20_00.rawmk4 20_03.rawmk4 20_06.rawmk4 20_08.rawmk4 20_11.rawmk4 20_17.rawmk4 20_21.rawmk4 20_24.rawmk4 20_27.rawmk4 20_30.rawmk4 20_33.rawmk4 20_36.rawmk4 20_39.rawmk4	20_54.rawmk4 20_56.rawmk4 20_59.rawmk4 21_02.rawmk4 21_05.rawmk4 21_108.rawmk4 21_11.rawmk4 21_14.rawmk4 21_17.rawmk4 21_20.rawmk4 21_23.rawmk4 21_26.rawmk4 21_29.rawmk4 21_32.rawmk4	21_47.rawmk4 21_49.rawmk4 21_52.rawmk4 21_55.rawmk4 21_58.rawmk4 22_01.rawmk4 22_04.rawmk4 22_07.rawmk4 22_10.rawmk4 22_13.rawmk4 22_16.rawmk4 22_19.rawmk4 c18_57.rawmk4
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18_29.rawmk4 18_32.rawmk4 18_35.rawmk4 18_38.rawmk4	19_45.rawmk4 19_48.rawmk4 19_51.rawmk4 19_54.rawmk4	20_42.rawmk4 20_45.rawmk4 20_48.rawmk4 20_51.rawmk4	21_35.rawmk4 21_38.rawmk4 21_41.rawmk4 21_44.rawmk4	c19_03.rawmk4