```
-------------------------------------------------------------------------------
                  Mauna Loa Solar Observatory Observer's Log
-------------------------------------------------------------------------------
          Fri Apr  3 16:48:14 GMT 1998
Year: 98  Doy: 093
Observer: yasukawa
WEATHER COMMENT: Fri Apr  3 16:49:04 GMT 1998
Cold, clear, brisk southeast wind.
Fri Apr  3 16:52:16 GMT 1998    CHIP     Startup--Initializing new tape
Fri Apr  3 16:52:58 GMT 1998    MKIII    Start Patrol
Fri Apr  3 16:54:12 GMT 1998    CHIP     CHIP Start Patrol
Fri Apr  3 16:54:24 GMT 1998    PICS     Start Patrol
Fri Apr  3 17:01:04 GMT 1998    CHIP     Bias
Fri Apr  3 17:02:00 GMT 1998    CHIP     End Bias
Fri Apr  3 17:02:15 GMT 1998    CHIP     Water
Fri Apr  3 17:02:15 GMT 1998    CHIP     Water
Fri Apr  3 17:03:10 GMT 1998    CHIP     End Water
Fri Apr  3 17:03:48 GMT 1998    PICS     End Flat
PSPT COMMENT: Fri Apr  3 17:08:44 GMT 1998
Haosheng assessed the tape write problem and determined that the
problem lies with tape compatibility.  The black cartridges work
with the drive we sent back to Boulder but DON'T WORK with the new
drive.  USE THE WHITE CARTRIDGES.  We are testing this now.
PSPT COMMENT: Fri Apr  3 17:13:44 GMT 1998
As for the dome problem, We think that the drive motor is jumping the
track in the home position sector and the encoder works with the
motor (doesn't care where the dome is), counting from when home is
sensed.  I found the sector--topical grease is scraped off by the
drive gear teeth, and coaxed it up a bit with a crowbar.
PSPT COMMENT: Fri Apr  3 17:21:06 GMT 1998
THe dome rotated from Stow to Home OK, then rotated to where
sun should be OK without jumping track.
MKIII COMMENT: Fri Apr  3 17:25:54 GMT 1998

*** recycling H01787 ***

PSPT COMMENT: Fri Apr  3 17:35:10 GMT 1998
PSPT crashed.  Last messages indicated intensity was too low, but crash
messages were as follows:
% Variable is undefined:    FN
% Execution halted at:     DATA          45 data.pro
%                          PSPT_STARTUP  27 pspt_startup.pro
%                          PSPT_CONTROL  52 pspt_control.pro
%                          $MAIN$

IDL>

Exited and re Run.  Had to type 'exp' on PC to get the 3 initial
```

test exposures to go. Dome worked OK.
PSPT COMMENT: Fri Apr 3 17:42:49 GMT 1998
PSPT crashed again, same error message.
PSPT COMMENT: Fri Apr 3 17:50:51 GMT 1998
Exited IDL and restarting with 'Obs' instead of 'Run' since it is close
to the hour.
Fri Apr 3 18:01:03 GMT 1998   CHIP   Bias
PSPT COMMENT: Fri Apr 3 18:01:45 GMT 1998
Same crash. Have sent message to Haosheng. I'll wait for a reply
before attempting to startup again.
nd Bias
Fri Apr 3 18:02:31 GMT 1998   CHIP   Water
Fri Apr 3 18:03:17 GMT 1998   CHIP   End Water
Fri Apr 3 18:03:41 GMT 1998   PICS   End Flat
PSPT COMMENT: Fri Apr 3 18:17:19 GMT 1998
Haosheng called back, there was a change he made yesterday to
test the drive. A filename was changed and he forgot to restore
the system completely. He fixed the problem over the net so
I will restart PSPT.
MT 1998   MKIII   Start Cal
PSPT COMMENT: Fri Apr 3 18:20:35 GMT 1998
Started with 'Run'. Still had to type 'exp' on PC because the
first 3 test exposures did not go. Dome initialized OK.
I can see that the data is writing to the white data cartridge.
PSPT COMMENT: Fri Apr 3 18:26:36 GMT 1998
Guider looks lost. It is trying to home, Axis 0 is trying to go to
-500, but the encoder is running the wrong direction.
PSPT COMMENT: Fri Apr 3 18:29:26 GMT 1998
Hit Enter on PC and that routine stopped and started next routine.
I take it spar was Home but didn't know it.
After a couple of iterations, it concluded it was home and then
proceded to point to sun. At this point, the spar began to move.
Spar pointed at sun and program proceded OK.
PSPT COMMENT: Fri Apr 3 18:38:46 GMT 1998
PSPT guider wasn't pointed at sun. Quit and restarting. Had to type
'exp' on PC again.
PSPT COMMENT: Fri Apr 3 18:44:54 GMT 1998
Phew! finally looks like the PSPT is running correctly (except for
having to type 'exp' to start the 3 test exposures).
Fri Apr 3 19:01:08 GMT 1998   CHIP   Bias
Fri Apr 3 19:02:19 GMT 1998   PICS   Flat
Fri Apr 3 19:02:19 GMT 1998   PICS   Flat
Fri Apr 3 19:02:34 GMT 1998   CHIP   Water
Fri Apr 3 19:03:20 GMT 1998   CHIP   End Water
Fri Apr 3 19:03:52 GMT 1998   PICS   End Flat
Fri Apr 3 19:16:05 GMT 1998   PICS   End Patrol
Fri Apr 3 19:18:34 GMT 1998   CHIP   CHIP End Patrol
COMMENT: Fri Apr 3 19:18:47 GMT 1998

```
Stopping to reconfigure dome shutter.
Fri Apr  3 19:24:15 GMT 1998    MKIII    Start Patrol
Fri Apr  3 19:24:39 GMT 1998    PICS     Start Patrol
Fri Apr  3 19:24:39 GMT 1998    PICS     Start Patrol
PSPT COMMENT: Fri Apr  3 19:54:48 GMT 1998
Data tape started by Haaosheng over net pau.  Unloading and loading
next tape for overnight write.
Fri Apr  3 20:01:04 GMT 1998    CHIP     Gain
Fri Apr  3 20:02:02 GMT 1998    PICS     Flat
MKIII COMMENT: Fri Apr  3 20:03:32 GMT 1998
1956 UT scan had a blank sector, not sure why.
Ugh!  I think microprocessor crashed again, barrel is behaving badly.
Unloading H01788, loading H01789.  Resetting KCC and micro.
:22 GMT 1998    CHIP     Bias
Fri Apr  3 20:08:14 GMT 1998    CHIP     End Bias
Fri Apr  3 20:08:22 GMT 1998    CHIP     Water
Fri Apr  3 20:09:00 GMT 1998    CHIP     End Water
Fri Apr  3 20:16:35 GMT 1998    MKIII    Start Patrol
Fri Apr  3 21:01:04 GMT 1998    CHIP     Bias
Fri Apr  3 21:02:06 GMT 1998    CHIP     End Bias
Fri Apr  3 21:02:16 GMT 1998    PICS     Flat
Fri Apr  3 21:02:16 GMT 1998    PICS     Flat
Fri Apr  3 21:03:10 GMT 1998    CHIP     End Water
Fri Apr  3 21:03:47 GMT 1998    PICS     End Flat
Fri Apr  3 22:01:03 GMT 1998    CHIP     Bias
Fri Apr  3 22:02:03 GMT 1998    CHIP     End Bias
Fri Apr  3 22:02:12 GMT 1998    PICS     Flat
Fri Apr  3 22:02:20 GMT 1998    CHIP     Water
Fri Apr  3 22:03:13 GMT 1998    CHIP     End Water
Fri Apr  3 22:03:48 GMT 1998    PICS     End Flat
Fri Apr  3 22:08:45 GMT 1998    PICS     End Patrol
Fri Apr  3 22:09:36 GMT 1998    CHIP     CHIP End Patrol
Fri Apr  3 22:10:42 GMT 1998    CHIP     ending tape
COMMENT: Fri Apr  3 22:11:26 GMT 1998


Tapes:
MKIII: H01788 & H01789
PICS:  P01158
CHIP:  C00547
LOWL:  L00505


Fri Apr  3 22:12:37 GMT 1998
        MkIII


16_53.rawmk3    17_51.rawmk3    19_03.rawmk3    20_25.rawmk3    21_24.rawmk3
16_56.rawmk3    17_54.rawmk3    19_06.rawmk3    20_28.rawmk3    21_27.rawmk3
16_59.rawmk3    17_57.rawmk3    19_09.rawmk3    20_31.rawmk3    21_29.rawmk3
17_02.rawmk3    18_00.rawmk3    19_12.rawmk3    20_34.rawmk3    21_32.rawmk3
```

```
17_04.rawmk3    18_03.rawmk3    19_15.rawmk3    20_37.rawmk3    21_35.rawmk3
17_07.rawmk3    18_06.rawmk3    19_24.rawmk3    20_40.rawmk3    21_38.rawmk3
17_10.rawmk3    18_09.rawmk3    19_27.rawmk3    20_43.rawmk3    21_41.rawmk3
17_13.rawmk3    18_12.rawmk3    19_30.rawmk3    20_46.rawmk3    21_44.rawmk3
17_16.rawmk3    18_21.rawmk3    19_33.rawmk3    20_49.rawmk3    21_47.rawmk3
17_19.rawmk3    18_27.rawmk3    19_36.rawmk3    20_51.rawmk3    21_50.rawmk3
17_22.rawmk3    18_34.rawmk3    19_38.rawmk3    20_54.rawmk3    21_53.rawmk3
17_25.rawmk3    18_37.rawmk3    19_41.rawmk3    20_57.rawmk3    21_56.rawmk3
17_28.rawmk3    18_40.rawmk3    19_44.rawmk3    21_00.rawmk3    21_59.rawmk3
17_31.rawmk3    18_43.rawmk3    19_47.rawmk3    21_03.rawmk3    22_02.rawmk3
17_34.rawmk3    18_46.rawmk3    19_50.rawmk3    21_06.rawmk3    22_05.rawmk3
17_37.rawmk3    18_49.rawmk3    19_53.rawmk3    21_09.rawmk3    c18_18.rawmk3
17_40.rawmk3    18_51.rawmk3    19_56.rawmk3    21_12.rawmk3    c18_24.rawmk3
17_42.rawmk3    18_54.rawmk3    20_16.rawmk3    21_15.rawmk3    c18_31.rawmk3
17_45.rawmk3    18_57.rawmk3    20_19.rawmk3    21_18.rawmk3
17_48.rawmk3    19_00.rawmk3    20_22.rawmk3    21_21.rawmk3
```