```
-------------------------------------------------------------------------------
                 Mauna Loa Solar Observatory Observer's Log
-------------------------------------------------------------------------------
          Thu Jan 10 17:36:51 GMT 2013
Year: 13  Doy: 010
Observer: berkey
WEATHER COMMENT: Thu Jan 10 17:48:35 GMT 2013
temp 31f, wind 12mph from SE, skies mostly clear with some patchy cirrus
___end___
Thu Jan 10 17:50:53 GMT 2013: PSPT Start Patrol
Thu Jan 10 17:53:32 GMT 2013    CHIP      Start Patrol
Thu Jan 10 17:53:45 GMT 2013 COMP Start Patrol
Thu Jan 10 18:01:21 GMT 2013    MKIV     Start Patrol
Thu Jan 10 18:02:49 GMT 2013    CHIP      LSD
Thu Jan 10 18:04:47 GMT 2013    CHIP      End LSD
Thu Jan 10 18:04:54 GMT 2013    CHIP      BiasLSD
Thu Jan 10 18:05:49 GMT 2013    CHIP      End BiasLSD
Thu Jan 10 18:05:55 GMT 2013    CHIP      Bias
Thu Jan 10 18:06:36 GMT 2013    CHIP      End Bias
Thu Jan 10 18:06:44 GMT 2013    CHIP      ReStart Patrol
NOTE BY BEN: Thu Jan 10 18:08:03 GMT 2013
Changed shabar observing code to make the background color RED!!!! when at least one of the sensors is occulted (either by
 the dome or clouds).  The background goes back to labview gray when the all the sensors are "happy" again.
Technically this is done by looking at the stdev of the rebinned data streams and if any of these are above a threshold (r
ight now .04), the color is changed.  This scheme has no way of telling if the lines are flat due to no light or conistent
 light.
So the background will stay gray if the shabar is ran while the dome shutter is closed
___end___
Thu Jan 10 19:00:37 GMT 2013 COMP End Patrol
Thu Jan 10 19:02:52 GMT 2013 COMP Start Patrol
Thu Jan 10 20:01:08 GMT 2013    MKIV     End Patrol
Thu Jan 10 20:01:13 GMT 2013    MKIV     Start Cal
Thu Jan 10 20:20:00 GMT 2013    MKIV     End Cal
Thu Jan 10 20:20:07 GMT 2013    MKIV     Start Patrol
Thu Jan 10 20:39:03 GMT 2013    MKIV     End Patrol
Thu Jan 10 20:39:46 GMT 2013 COMP End Patrol
Thu Jan 10 20:42:28 GMT 2013: PSPT Abort Patrol
Thu Jan 10 20:42:40 GMT 2013: PSPT Abort Patrol
Thu Jan 10 20:43:37 GMT 2013    CHIP      End Patrol
Thu Jan 10 20:42:57 GMT 2013: PSPT Abort Patrol
NOTE BY BEN: Thu Jan 10 20:44:21 GMT 2013
Domes closed for incoming fog
___end___
NOTE BY BEN: Thu Jan 10 20:59:29 GMT 2013
Some snow came out of that cloud.
___end___
Thu Jan 10 21:14:02 GMT 2013: PSPT Start Patrol
Thu Jan 10 21:16:50 GMT 2013    MKIV     Start Patrol
```

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Thu Jan 10 21:17:39 GMT 2013 COMP Start Patrol
Thu Jan 10 21:18:14 GMT 2013    CHIP    Start Patrol
Thu Jan 10 23:00:43 GMT 2013    CHIP    LSD
Thu Jan 10 23:02:40 GMT 2013    CHIP    End LSD
Thu Jan 10 23:02:48 GMT 2013    CHIP    BiasLSD
Thu Jan 10 23:03:37 GMT 2013    CHIP    End BiasLSD
Thu Jan 10 23:03:49 GMT 2013    CHIP    Bias
Thu Jan 10 23:04:36 GMT 2013    CHIP    End Bias
Thu Jan 10 23:04:43 GMT 2013    CHIP    ReStart Patrol
NOTE BY BEN: Thu Jan 10 23:04:22 GMT 2013
Updated shabar to turn red when the mean of any of the signals is below 3V.
___end___
Thu Jan 10 23:17:01 GMT 2013    CHIP    End Patrol
Thu Jan 10 23:17:16 GMT 2013 COMP End Patrol
Thu Jan 10 23:20:59 GMT 2013    MKIV    End Patrol
Thu Jan 10 23:58:12 GMT 2013    MKIV    Start Patrol
Thu Jan 10 23:59:43 GMT 2013    CHIP    Start Patrol
Fri Jan 11 00:00:19 GMT 2013 COMP Start Patrol
Fri Jan 11 00:12:17 GMT 2013: PSPT Start Patrol
Fri Jan 11 00:13:05 GMT 2013 COMP End Patrol
Fri Jan 11 00:14:48 GMT 2013 COMP Start Patrol
NOTE BY BEN: Fri Jan 11 00:30:21 GMT 2013
CoMP temp monitor got a visa error when trying to talk to the lake shore.  Stop/Start the monitor to see if this fixes it
___end___
Fri Jan 11 01:02:50 GMT 2013: PSPT Start Patrol
Fri Jan 11 01:20:07 GMT 2013 COMP End Patrol
Fri Jan 11 01:20:36 GMT 2013    CHIP    End Patrol
Fri Jan 11 01:20:23 GMT 2013: PSPT Abort Patrol
Fri Jan 11 01:20:31 GMT 2013: PSPT Abort Patrol
Fri Jan 11 01:21:07 GMT 2013    MKIV    End Patrol
Fri Jan 11 01:27:02 GMT 2013
        MkIV


00_01.rawmk4    01_14.rawmk4    19_10.rawmk4    21_16.rawmk4    22_30.rawmk4
00_04.rawmk4    01_17.rawmk4    19_13.rawmk4    21_19.rawmk4    22_33.rawmk4
00_07.rawmk4    18_01.rawmk4    19_16.rawmk4    21_22.rawmk4    22_36.rawmk4
00_09.rawmk4    18_05.rawmk4    19_19.rawmk4    21_25.rawmk4    22_39.rawmk4
00_12.rawmk4    18_08.rawmk4    19_22.rawmk4    21_28.rawmk4    22_42.rawmk4
00_15.rawmk4    18_11.rawmk4    19_25.rawmk4    21_31.rawmk4    22_45.rawmk4
00_18.rawmk4    18_14.rawmk4    19_28.rawmk4    21_34.rawmk4    22_48.rawmk4
00_21.rawmk4    18_17.rawmk4    19_31.rawmk4    21_37.rawmk4    22_51.rawmk4
00_24.rawmk4    18_20.rawmk4    19_33.rawmk4    21_40.rawmk4    22_54.rawmk4
00_27.rawmk4    18_23.rawmk4    19_37.rawmk4    21_43.rawmk4    22_57.rawmk4
00_30.rawmk4    18_26.rawmk4    19_40.rawmk4    21_46.rawmk4    23_00.rawmk4
00_33.rawmk4    18_29.rawmk4    19_42.rawmk4    21_49.rawmk4    23_03.rawmk4
00_36.rawmk4    18_32.rawmk4    19_45.rawmk4    21_52.rawmk4    23_06.rawmk4
00_39.rawmk4    18_35.rawmk4    19_48.rawmk4    21_55.rawmk4    23_09.rawmk4
00_42.rawmk4    18_37.rawmk4    19_51.rawmk4    21_58.rawmk4    23_11.rawmk4
```

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00_45.rawmk4    18_40.rawmk4    19_54.rawmk4    22_01.rawmk4    23_14.rawmk4
00_48.rawmk4    18_43.rawmk4    19_57.rawmk4    22_03.rawmk4    23_17.rawmk4
00_51.rawmk4    18_46.rawmk4    20_04.rawmk4    22_06.rawmk4    23_58.rawmk4
00_54.rawmk4    18_49.rawmk4    20_10.rawmk4    22_09.rawmk4    c20_01.rawmk4
00_57.rawmk4    18_52.rawmk4    20_16.rawmk4    22_12.rawmk4    c20_07.rawmk4
01_00.rawmk4    18_55.rawmk4    20_20.rawmk4    22_15.rawmk4    c20_13.rawmk4
01_02.rawmk4    18_58.rawmk4    20_23.rawmk4    22_18.rawmk4
01_05.rawmk4    19_01.rawmk4    20_26.rawmk4    22_21.rawmk4
01_08.rawmk4    19_04.rawmk4    20_32.rawmk4    22_24.rawmk4
01_11.rawmk4    19_07.rawmk4    20_35.rawmk4    22_27.rawmk4
```