```
--------------------------------------------------------------------------------
               Mauna Loa Solar Observatory Observer's Log
--------------------------------------------------------------------------------
        Fri Jul 31 16:27:20 GMT 1998
Year: 98  Doy: 212
Observer: yasukawa
Fri Jul 31 16:34:54 GMT 1998     CHIP      CHIP Start Patrol
WEATHER COMMENT: Fri Jul 31 16:35:13 GMT 1998
Cool, clear, no wind.
CHIP COMMENT: Fri Jul 31 16:35:46 GMT 1998
Started CHIP without invoking New Tape.  Aborting and starting over.
Fri Jul 31 16:37:02 GMT 1998     MKIII     Start Patrol
Fri Jul 31 16:37:30 GMT 1998     PICS      Start Patrol
Fri Jul 31 16:41:19 GMT 1998     CHIP      CHIP End Patrol
Fri Jul 31 16:41:54 GMT 1998     CHIP      Startup--Initializing new tape
Fri Jul 31 16:47:50 GMT 1998     CHIP      CHIP Start Patrol
Fri Jul 31 17:00:50 GMT 1998     CHIP      Bias
Fri Jul 31 17:01:56 GMT 1998     CHIP      End Bias
Fri Jul 31 17:02:06 GMT 1998     CHIP      Water
Fri Jul 31 17:02:50 GMT 1998     PICS      Flat
Fri Jul 31 17:02:50 GMT 1998     PICS      Flat
Fri Jul 31 17:04:17 GMT 1998     PICS      End Flat
Fri Jul 31 18:00:51 GMT 1998     CHIP      Bias
Fri Jul 31 18:01:45 GMT 1998     CHIP      End Bias
Fri Jul 31 18:02:00 GMT 1998     CHIP      Water
Fri Jul 31 18:02:42 GMT 1998     PICS      Flat
Fri Jul 31 18:02:49 GMT 1998     CHIP      End Water
Fri Jul 31 18:04:14 GMT 1998     PICS      End Flat
Fri Jul 31 19:01:07 GMT 1998     CHIP      Bias
Fri Jul 31 19:02:22 GMT 1998     CHIP      End Bias
Fri Jul 31 19:02:36 GMT 1998     PICS      Flat
Fri Jul 31 19:02:36 GMT 1998     PICS      Flat
Fri Jul 31 19:03:15 GMT 1998     CHIP      End Water
Fri Jul 31 19:04:04 GMT 1998     PICS      End Flat
COMMENT: Fri Jul 31 19:11:43 GMT 1998
Stopping to reconfigure dome shutter.
 Patrol
Fri Jul 31 19:12:29 GMT 1998     CHIP      CHIP End Patrol
Fri Jul 31 19:19:36 GMT 1998     MKIII     Start Patrol
Fri Jul 31 19:19:56 GMT 1998     CHIP      CHIP Start Patrol
Fri Jul 31 19:19:56 GMT 1998     CHIP      CHIP Start Patrol
Fri Jul 31 20:00:37 GMT 1998     PICS      Flat
Fri Jul 31 20:02:09 GMT 1998     PICS      End Flat
Fri Jul 31 20:02:50 GMT 1998     CHIP      Gain
Fri Jul 31 20:07:24 GMT 1998     CHIP      End Gain
Fri Jul 31 20:07:35 GMT 1998     CHIP      Bias
Fri Jul 31 20:08:26 GMT 1998     CHIP      End Bias
Fri Jul 31 20:08:36 GMT 1998     CHIP      Water
```

```
Fri Jul 31 20:09:12 GMT 1998     CHIP      End Water
Fri Jul 31 21:00:37 GMT 1998     PICS      Flat
Fri Jul 31 21:00:51 GMT 1998     CHIP      Bias
Fri Jul 31 21:01:46 GMT 1998     CHIP      End Bias
Fri Jul 31 21:02:04 GMT 1998     PICS      End Flat
Fri Jul 31 21:02:04 GMT 1998     PICS      End Flat
Fri Jul 31 21:02:47 GMT 1998     CHIP      End Water
Fri Jul 31 22:00:41 GMT 1998     PICS      Flat
Fri Jul 31 22:00:47 GMT 1998     CHIP      Bias
Fri Jul 31 22:01:46 GMT 1998     CHIP      End Bias
Fri Jul 31 22:01:56 GMT 1998     CHIP      Water
Fri Jul 31 22:02:14 GMT 1998     PICS      End Flat
Fri Jul 31 22:02:39 GMT 1998     CHIP      End Water
Fri Jul 31 22:09:36 GMT 1998     PICS      End Patrol
Fri Jul 31 22:11:34 GMT 1998     CHIP      CHIP End Patrol
Fri Jul 31 22:12:11 GMT 1998     CHIP      ending tape
COMMENT: Fri Jul 31 22:15:50 GMT 1998
Tapes:
PICS:  P01257
CHIP:  C00652
LOWL:  L00535
Fri Jul 31 22:18:10 GMT 1998
        MkIII
```

```
16_37.rawmk3    17_44.rawmk3    19_01.rawmk3    20_12.rawmk3    21_19.rawmk3
16_40.rawmk3    17_47.rawmk3    19_04.rawmk3    20_15.rawmk3    21_22.rawmk3
16_43.rawmk3    17_50.rawmk3    19_07.rawmk3    20_18.rawmk3    21_25.rawmk3
16_46.rawmk3    17_53.rawmk3    19_10.rawmk3    20_21.rawmk3    21_28.rawmk3
16_48.rawmk3    17_56.rawmk3    19_12.rawmk3    20_23.rawmk3    21_31.rawmk3
16_51.rawmk3    17_59.rawmk3    19_19.rawmk3    20_26.rawmk3    21_34.rawmk3
16_54.rawmk3    18_01.rawmk3    19_22.rawmk3    20_29.rawmk3    21_37.rawmk3
16_57.rawmk3    18_07.rawmk3    19_25.rawmk3    20_32.rawmk3    21_39.rawmk3
17_00.rawmk3    18_14.rawmk3    19_28.rawmk3    20_35.rawmk3    21_42.rawmk3
17_03.rawmk3    18_20.rawmk3    19_31.rawmk3    20_38.rawmk3    21_45.rawmk3
17_06.rawmk3    18_23.rawmk3    19_34.rawmk3    20_41.rawmk3    21_48.rawmk3
17_09.rawmk3    18_26.rawmk3    19_37.rawmk3    20_44.rawmk3    21_51.rawmk3
17_12.rawmk3    18_29.rawmk3    19_40.rawmk3    20_47.rawmk3    21_54.rawmk3
17_15.rawmk3    18_32.rawmk3    19_43.rawmk3    20_50.rawmk3    21_57.rawmk3
17_18.rawmk3    18_35.rawmk3    19_45.rawmk3    20_53.rawmk3    22_00.rawmk3
17_21.rawmk3    18_37.rawmk3    19_48.rawmk3    20_56.rawmk3    22_03.rawmk3
17_23.rawmk3    18_40.rawmk3    19_51.rawmk3    20_59.rawmk3    22_06.rawmk3
17_26.rawmk3    18_43.rawmk3    19_54.rawmk3    21_01.rawmk3    22_09.rawmk3
17_29.rawmk3    18_46.rawmk3    19_57.rawmk3    21_04.rawmk3    22_12.rawmk3
17_32.rawmk3    18_49.rawmk3    20_00.rawmk3    21_07.rawmk3    c18_04.rawmk3
17_35.rawmk3    18_52.rawmk3    20_03.rawmk3    21_10.rawmk3    c18_11.rawmk3
17_38.rawmk3    18_55.rawmk3    20_06.rawmk3    21_13.rawmk3    c18_17.rawmk3
17_41.rawmk3    18_58.rawmk3    20_09.rawmk3    21_16.rawmk3
```