Mauna Loa Solar Observatory Observer's Log

______ Sat Feb 26 18:13:00 GMT 1994 Year: 94 Dov: 057 Observer: elmore Sat Feb 26 18:50:18 GMT 1994 Patrol Start Sat Feb 26 18:51:20 GMT 1994 Comment: Clear, light wind from the north, temp=12.0 C. Sat Feb 26 18:52:35 GMT 1994 MkIII : 0 channel calibration. Sat Feb 26 18:54:35 GMT 1994 MkIII : Redoing 0 channel calibration, was set to channel 5 (?) before. Sat Feb 26 19:00:17 GMT 1994 Filemark-Calibration Sat Feb 26 19:11:25 GMT 1994 Before observing: Disassembled CCD camera and replaced shutter and shutter control board. Were in contact with Kodak on the phone while doing this. Some video. Don't try this at home. Shutter works. Centered camera on coude bench by rotating bench and following rotation of image. Centered center of reticle. Focused camera on disc features, limb, filaments. Not much look with hartman mask. (luck that is) Determined exposures. For now, disc, limb, reference and diffuser are all the same at 27/100 second. Sat Feb 26 19:19:21 GMT 1994 dPMon: polq EPL at PA=65 looping up to PA+57, starting at ~1905ut, RV~1.1 and growing. Sat Feb 26 19:43:15 GMT 1994 MkTTT: Slight depletion visible at PA=260. Bright radial streak visible at PA=0. Sat Feb 26 20:00:20 GMT 1994 Filemark-Calibration Sat Feb 26 20:53:38 GMT 1994 Comment: Lost guiding due to dome non-rotation. Both mkIII and dPMon fouled up for several minutes. Sat Feb 26 21:00:18 GMT 1994 Filemark-Calibration Sat Feb 26 21:45:04 GMT 1994

dPMon:

Identified problems so far...

The bench angle is not correct. The occulter post is not at 180

degrees. Probably there is a zero offset problem with the bench encoder.

The limb and reference images show a bright ring outside the occulter.

It tracks the brightness of the limb. The ring is off center with more showing on what we think is the East (right limb).

Disc and limb images are somewhat displaced from each other. Reference and limb images are better aligned.

Seeing changes the spill on the limb and reference images. Subtraction may become difficult.

In order to show a significant sky background for the limb images bright prominences at the limb are saturated.

The reported bench angle runs faster than the angle specified by the ephemeris calculation.

The dome needs to be rotated frequently and has ruined some observations already today. Yet another at 21:50 or so.

Not a lot of experimentation has gone into determining the DayStar (Halle replacement) filter temperature. Right now the set point is 6.0. This looks a tiny bit better than 5.9 did this morning. Good news is that the filter was on band when we started this morning and it is now at mid day. Image brightness has increased just a little but I bet that if normalized by airmass there will have been no instrumental change (DFE).

Dark images show a bright patch in the lower left. There may

be a light leak somewhere.

Sat Feb 26 21:56:51 GMT 1994

dPMon:

corrected bench angle.

Sat Feb 26 22:00:14 GMT 1994

Filemark-Calibration

Sat Feb 26 22:35:37 GMT 1994

MkIII :

Cleaning has been going on in the dome following removal of the CVM.

Expect very dusty scans!

Sat Feb 26 22:37:23 GMT 1994

dPMon:

more identified problems:

Dark level is going up at mid-day meaning light leaks.

Occulting is wild. Seeing is bad and the guider tries to track it. Guider has gone into oscillation. If I slip up and drive the dome too far and block the guider for awaile, it takes a minute or so to settle down. Sat Feb 26 22:47:47 GMT 1994

Comment:

Guider shaded by dome slot. Rather than close, release the bottom, and re-open. We will just wait a few minutes today.

Sat Feb 26 23:00:15 GMT 1994

Filemark-Calibration

Sat Feb 26 23:17:00 GMT 1994

Patrol End

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Sat Feb 26 23:17:20 GMT 1994
 dPMon:
P00005 Activity East limb
Sat Feb 26 23:17:46 GMT 1994
 MkIII :
н00706
       No coronal activity.
        Sat Feb 26 23:19:01 GMT 1994
Filemark
SCAN-LOG
SCAN-LOG 18:11:39. 2/26/94 DOY 57
    18:06:03
   18:09:19
                  18:12:36
                                18:15:50
                                              18:19:04
                                                             18:22:18
   18:25:31
                  18:28:44
                                1832 0 CL
                                              18:37:30
                                                             1841 15CL
   18:54:26
                  1901 0 CL
                                19:04:24
                                              1908 15CL
                                                             19:18:09
   19:21:22
                  19:24:35
                                19:27:47
                                              19:31:01
                                                             19:34:14
   19:37:33
                  19:40:48
                                19:44:01
                                              19:47:13
                                                             19:50:26
   19:53:38
                  19:56:51
                                20:00:03
                                              20:03:17
                                                             20:06:29
    20:09:42
                  20:12:53
                                20:16:06
                                              20:19:20
                                                             20:22:39
                  20:29:08
                                              20:35:31
    20:25:50
                                20:32:19
                                                             20:38:42
    20:41:55
                  20:45:06
                                20:48:17
                                              20:51:27
                                                             20:54:39
    20:57:48
                  21:01:00
                                21:04:09
                                              21:07:21
                                                             21:10:31
    21:13:41
                                21:19:59
                                              21:23:07
                  21:16:50
                                                             21:26:17
    21:29:25
                  21:32:35
                                21:35:43
                                              21:38:53
                                                             21:42:01
    21:45:12
                  21:48:21
                                21:51:31
                                              21:54:40
                                                             21:57:51
    22:01:02
                  22:04:18
                                22:07:28
                                              22:10:38
                                                             22:13:48
    22:16:59
                  22:20:08
                                22:23:18
                                              22:26:29
                                                             22:29:39
    22:32:48
                  22:35:59
                                22:39:08
                                              22:42:19
                                                             22:45:28
    22:48:39
 0 ERRORS
OK
```