Mauna Loa Solar Observatory Observer's Log

Wed Feb 23 18:08:49 GMT 1994
Year: 94 Doy: 054
Observer: yasukawa
  Comment: Wed Feb 23 18:13:52 GMT 1994
Cool, clear, light wind out of southwest.
  dPMon: Wed Feb 23 18:15:43 GMT 1994
PMON tape P00004 loaded.
  MkIII :Wed Feb 23 18:16:24 GMT 1994
H00704 loaded into MKIII
Wed Feb 23 18:17:44 GMT 1994
Patrol Start
  Comment: Wed Feb 23 18:22:03 GMT 1994
$$$ in thin cirrus. $$$
Wed Feb 23 19:00:30 GMT 1994
Filemark-Calibration
  Comment: Wed Feb 23 19:16:12 GMT 1994
$$$ still in thin cirrus $$$
Wed Feb 23 19:41:05 GMT 1994
Patrol End
  dPMon: Wed Feb 23 20:18:08 GMT 1994
Tested filters this morning: Andover, SFI, and Spectra Optics 6563.
Used Day Star filter tuned to H-alpha (close) plus each of these pre-filters.
Looked at each filter normal to the beam and tilted by small amounts.
Both the Andover and SFI filters produced images which were darker when
tilted compared to normal. The conclusion is their bandpasses were moving
away from the DayStar.
The Spectra Optics #3 filter was dim when normal to the beam. The intensity
increased, then decreased again with increasing tilt. The conclusion is that
this filter works well when slightly tilted (like the 5 degrees of those
in the filter wheel).

The Andover filter was located at the H-alpha position of the filter
wheel before 2/16/94. We replaced it with the SFI (the one removed earlier
this year). The Spectra Optics filter was in the wheel on 2/16 next to the
H-alpha slot. On 2/16 it was discovered that the blocked positions were one
position different from what was expected. Perhaps the definition of
the positions was changed by one at some time in the past?

Now, the Spectra Optics #3 is in the H-alpha slot, encoder position
6. The taped position is now clear.

We learned that the DayStar filter can produce very clean H-alpha
without any vignetting when it is centered on the beam and (nearly) normal.
We got some good images with the Halle in the afternoon when it was warm,
but not in the morning when cool. Also, the Halle was always vignetted on
the 'right'.

Since the Halle has a small aperture, we were never able to get
an unvignetted image, and has temperature drifts, we are going to use the
DayStar. We will also use the S.O.#3 H-alpha pre-filter.

In re-assembling the filter wheel, the position of the encoders was critical. By using repeadeed Qpeek 0xe01c commands (in a while loop) it was possible to see when bits were set.. By luck we were able to drive to a position and have the wheel stop. It was learned that the HEI pickups need to have the encoder wheel as close to the emitter side (outside) as possible. Also, the HEI mounts were tilted sideways in their slides.

MkIII :Wed Feb 23 22:10:27 GMT 1994
Still in cirrus, stopping scans.

dPMon: Wed Feb 23 22:11:00 GMT 1994
Kodak camera shutter failed. D. Elmore calling Kodak to determine how to fix or get a replacement for it.

MkIII :Wed Feb 23 22:13:30 GMT 1994
No cirrus-free data. recycling H00704

dPMon: Wed Feb 23 22:14:21 GMT 1994
Activity report:
QP: 55-70; 100-110; 125-133; 255; 265; 275-288; 320;
No activity

MkIII :Thu Feb 24 00:09:14 GMT 1994
Doing check-outs of MKIII DCSB cards by swapping "spares" with working cards on DCSB chan1.

Thu Feb 24 02:06:37 GMT 1994
Filemark