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                 Mauna Loa Solar Observatory Observer's Log
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         Sun Aug 31 16:39:15 GMT 2003
Year: 03  Doy: 243
Observer: koon
Sun Aug 31 16:45:13 GMT 2003    CHIP     Start Patrol
Sun Aug 31 16:45:22 GMT 2003    PICS     Start Patrol
WEATHER COMMENT: Sun Aug 31 16:39:34 GMT 2003
Thin cirrostratus overcast, wind=5 mph from the SE, temp=49 F
Sun Aug 31 16:51:38 GMT 2003    MKIV     Start Patrol
PSPT COMMENT: Sun Aug 31 16:59:53 GMT 2003
Observing.
MKIV COMMENT: Sun Aug 31 17:43:25 GMT 2003
Centered occulting.
Sun Aug 31 17:44:49 GMT 2003    MKIV     End Patrol
Sun Aug 31 17:45:01 GMT 2003    MKIV     Start Cal
Sun Aug 31 18:00:50 GMT 2003    CHIP      LSD
Sun Aug 31 18:02:44 GMT 2003    CHIP      End LSD
Sun Aug 31 18:02:50 GMT 2003    PICS      Flat
Sun Aug 31 18:02:54 GMT 2003    CHIP      BiasLSD
Sun Aug 31 18:03:46 GMT 2003    MKIV     End Cal
Sun Aug 31 18:03:48 GMT 2003    CHIP      End BiasLSD
Sun Aug 31 18:04:09 GMT 2003    CHIP      Bias
Sun Aug 31 18:05:08 GMT 2003    CHIP      End Bias
Sun Aug 31 18:05:13 GMT 2003    PICS      End Flat
PSPT COMMENT: Sun Aug 31 18:20:13 GMT 2003
Paused to do some focus experiments and take another set of images for Randy,
as requested.
COMMENT: Sun Aug 31 20:48:17 GMT 2003
Spar lost tracking while I was working on PSPT, extended the dome slot and
repointed and reset guiding.
MKIV COMMENT: Sun Aug 31 20:49:11 GMT 2003
Cirrostratus all day so far, I need to clean the O1 and do a Correct sequence
but I need good clear sky before and after the O1 cleaning according to our
procedure.
**CHIP PROBLEM**: Sun Aug 31 21:15:12 GMT 2003
Image wasn't centered in Y direction, manually centered.
PSPT COMMENT: Sun Aug 31 21:33:33 GMT 2003
Cirrostratus is getting thicker and seeing is worse so I'm stopping my
focusing experiments and I didn't find the best focus for sure nor did I record
times and focus positions for Randy.  The best way to focus this telescope
appears to be in realtime by us Observers, because sometimes a dozen images
need to be viewed at each focus setting for each filter in order to see
the real focus through the Seeing fluctuations.  I've determined that this
can be done but we need good seeing and a clear sky, I'd be happy to continue
with this on Tuesday.  The big problem I've found is the non-repeatability
of the Focus Readings, due mostly to some kind of error introduced when trying
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to set the focus to around 2000 and beyond. The error introduced to the
reading can be seen when you do the "fcs home" command on the PC after pointing
to 2000 or higher, you'll see an "offset" value given in the PC screen
messages when you do the "fcs home" command - if that is zero then you really
were at the last displayed position before doing the "fcs home" command.
I'd guess that this is caused by binding on the focusing mechanism that makes
the stepper motor lose steps. That problem could have affected what I found
to be the ideal Blue position at 75, I thought it was 75 but that could be
an erroneous reading too. On the Red focus I found that I couldn't get past
a best focus position as I went up into the 2000+ range, the focus got better
but maybe not peaked and not worse again as I passed through the best focus.
So the range of focus looks like it isn't large enough to get that Red filter
image in focus. I'll try to look at the mechanism later to see if things
can be changed.

MKIV COMMENT: Sun Aug 31 22:11:52 GMT 2003
Paused due to cirrostratus.
Sun Aug 31 22:14:08 GMT 2003   MKIV   End Patrol
MKIV COMMENT: Sun Aug 31 22:51:42 GMT 2003
Centered occulting, will start this up again.
Sun Aug 31 22:52:03 GMT 2003   MKIV   Start Patrol
PSPT COMMENT: Mon Sep 1 00:08:42 GMT 2003
I can see that the focusing mechanism leadscrew is lubed but I can't see
much more up there under the Filter Wheel. It is a very difficult area to
access in the telescope - requiring a susbstantial though unknown amount of
disassembly to get to the focusing mechanism and check for binding. It may
not be a good thing to do this close to an observing campaign, scheduled for
9/8, on the other hand it may be necessary to get the best focus for the Red
images using the temporary filter.
PSPT COMMENT: Mon Sep 1 01:58:27 GMT 2003
Done with my focusing tests for today, more need to be done ideally on a day
with clearer and calmer sky. Restarted obs for a while.
Mon Sep 1 02:01:39 GMT 2003   MKIV   End Patrol
Mon Sep 1 02:13:18 GMT 2003   CHIP   End Patrol
Mon Sep 1 02:27:23 GMT 2003   PICS   End Patrol
Mon Sep 1 02:44:06 GMT 2003
        MkIV

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00_05.rawmk4   01_49.rawmk4   18_31.rawmk4   20_15.rawmk4   21_58.rawmk4
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