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                  Mauna Loa Solar Observatory Observer's Log
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            Wed May  6 17:07:19 GMT 1998
Year: 98  Doy: 126
Observer: koon
WEATHER COMMENT: Wed May  6 17:08:10 GMT 1998
Clear sky, wind=5 mph from the West, temp=49 F.
Wed May  6 17:14:21 GMT 1998     MKIII     Start Patrol
Wed May  6 17:14:32 GMT 1998     PICS      Start Patrol
Wed May  6 17:14:32 GMT 1998     PICS      Start Patrol
MKIII COMMENT: Wed May  6 17:55:09 GMT 1998

*****RECYCLED H01818*****

Wed May  6 18:01:23 GMT 1998     PICS      Flat
Wed May  6 18:02:54 GMT 1998     PICS      End Flat
Wed May  6 18:03:05 GMT 1998     CHIP      Bias
Wed May  6 18:04:03 GMT 1998     CHIP      End Bias
Wed May  6 18:04:18 GMT 1998     CHIP      Water
Wed May  6 18:05:14 GMT 1998     CHIP      End Water
Wed May  6 18:08:35 GMT 1998     MKIII     Start Cal
PICS  COMMENT: Wed May  6 18:24:25 GMT 1998
At 1815 the O2A doesn't vignet the light for the disk image, the edge of
the beam is about 1/8" in from the pillar side of the lens.  It is more
difficult to tell with the occulted images due to low light, it looks like
there may be a little light spilling off the pillar side of the lens, but
that might just be scattered light I'm seeing.  So no obvious vignetting
yet.
PSPT COMMENT: Wed May  6 18:28:44 GMT 1998
The program stalled at "homing guider" earlier, so I exited and reset the
PC.  About 10 minutes ago I tried Run again and so far it looks like
it is working.  Also, Haosheng called earlier and wants me to help him
remove, adjust, and reinstall a filter, once I get other things under
control here.
PSPT COMMENT: Wed May  6 18:42:08 GMT 1998
Stalled with the typical message about sky conditions being bad (it isn't),
or the guider not being locked (it looks like it is), or the telescope
not being pointed correctly (it looks OK), and asking me to type
"q" to quit.
PSPT COMMENT: Wed May  6 18:45:44 GMT 1998
I guess the guider actually isn't locked, the mirror servo light is off.
I saw that the needles in the gauges were centered and thought the guider
was locked.
Wed May  6 19:02:18 GMT 1998     PICS      Flat
Wed May  6 19:03:11 GMT 1998     CHIP      Bias
Wed May  6 19:03:53 GMT 1998     PICS      End Flat
Wed May  6 19:04:28 GMT 1998     CHIP      End Bias
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Wed May 6 19:04:38 GMT 1998   CHIP   Water
Wed May 6 19:05:21 GMT 1998   CHIP   End Water
PICS COMMENT: Wed May 6 19:11:29 GMT 1998
It is difficult to tell if the light beam has moved on the O2A, it may have
moved a little towards the pillar.
PSPT COMMENT: Wed May 6 19:54:20 GMT 1998
I removed the blue filter and changed the tilt a little according to request
from Haosheng and Roy, hopefully this will improve the Flat images.
Wed May 6 20:00:16 GMT 1998   PICS   Flat
Wed May 6 20:01:43 GMT 1998   PICS   End Flat
Wed May 6 20:03:01 GMT 1998   CHIP   Gain
Wed May 6 20:09:02 GMT 1998   CHIP   End Gain
Wed May 6 20:09:12 GMT 1998   CHIP   Bias
Wed May 6 20:10:07 GMT 1998   CHIP   End Bias
Wed May 6 20:10:20 GMT 1998   CHIP   Water
Wed May 6 20:11:02 GMT 1998   CHIP   End Water
COMMENT: Wed May 6 20:13:38 GMT 1998
Extended the dome slot.
PICS COMMENT: Wed May 6 20:13:48 GMT 1998
The strange light (possibly caused by a reflection somewhere in the optical
train and possibly related to the vignetting I've seen) is now very
visible in the double image K-corona images to the WSW and just off the
limb and extending out across the FOV. The light isn't noticeable in the
regular limb images but you can see the light "contours" aren't concentric
if you point the mouse pointer off the image in the Camera window, that
is the window where you see the K-corona double images, nothing looks
strange in the Display window. I checked the optics and it looks as though
the beam touches the lens holder when doing the disk images and definitely
is spilling about 1/4" onto the pillar side of the mirror holder for
the mirror just after the O2A.
PICS COMMENT: Wed May 6 20:32:12 GMT 1998
Since the K-corona occulter isn't perfectly aligned with the regular limb
occulter there is a difference in occulting such that when the regular images
are correctly occulted then the K-corona images show a little of the limb
peeking over in the WSW which is where I see that extra unwanted light
out away from the limb. So I changed the occulting so that the K-corona
images would have the sun peeking over a little on the opposite (ENE) side
of the occulter. That greatly reduced the amount of extra light to the
WSW but there is still some there, so bad occulting isn't the cause of
the light. I checked the light on the optics with this change in
occulting and it looks the same, no change in where the light is falling
as far as I can tell yet the extra light in the K-corona has been
reduced.
PICS COMMENT: Wed May 6 20:46:52 GMT 1998
I am changing the occulting back to normal again.
PSPT COMMENT: Wed May 6 20:48:21 GMT 1998
The program again stalled like it did this morning, while "homing guider".
I exited, reset the PC again, and did Run again. Now I am getting the

"type q to quit message", again, just like this morning. I mentioned
this problem to Haosheng earlier today and he said to try again and see
what happens. I'll send a message to him.
Wed May 6 21:00:28 GMT 1998   PICS   Flat
Wed May 6 21:01:56 GMT 1998   PICS   End Flat
Wed May 6 21:03:02 GMT 1998   CHIP   Bias
Wed May 6 21:04:08 GMT 1998   CHIP   End Bias
Wed May 6 21:04:18 GMT 1998   CHIP   Water
Wed May 6 21:05:01 GMT 1998   CHIP   End Water
PICS COMMENT: Wed May 6 21:14:13 GMT 1998
I can't tell if the beam has moved. It is possible that the beam hasn't
moved at all throughout today and that I thought it was moving because the
beam was getting brighter and it became obvious where the edges were, this
would be because of the brightening of the sun as it rises towards noon.
Anyway, it is obvious that the beam is being vignetted at the first mirror
after the O2A. The extra light in the K-corona images seems to be
reduced from an hour ago. So it appears that the vignetting may not
be changing but the intensity of some unwanted extra light in the
K-corona images changes throughout the day although the position of that
light is always in the WSW, and the light is only visible in the
K-corona images but there may be hints of it in the disk and limb
images.
PSPT COMMENT: Wed May 6 21:25:31 GMT 1998
I exited from the program and Haosheng will investigate the problem
from his side.
Wed May 6 22:01:25 GMT 1998   PICS   Flat
Wed May 6 22:02:55 GMT 1998   PICS   End Flat
Wed May 6 22:03:05 GMT 1998   CHIP   Bias
Wed May 6 22:04:11 GMT 1998   CHIP   End Bias
Wed May 6 22:04:25 GMT 1998   CHIP   Water
Wed May 6 22:05:10 GMT 1998   CHIP   End Water
PSPT COMMENT: Wed May 6 22:18:26 GMT 1998
Haosheng called up, we found out that the telescope was hitting the
declination limit before pointing to the sun, in Hawaii the sun will
go north of straight up at this time of year since we are within
the tropics. I repositioned the limit switch activator to allow
a greater declination and Haosheng is recalibrating the ephemeris for
this new position. We'll probably have to do this again once he
checks the ephemeris to see how far north the telescope needs to point
in declination.
Wed May 6 22:23:24 GMT 1998   PICS   End Patrol
Wed May 6 22:23:40 GMT 1998   CHIP   ending tape
PSPT COMMENT: Wed May 6 22:58:10 GMT 1998
Still helping Haosheng with the calibration.
PICS COMMENT: Wed May 6 22:58:33 GMT 1998
I checked the light beam around 2230 ut and it still looks like is in
the same position as earlier, so if there is a drift it is very small.
COMMENT: Wed May 6 23:03:13 GMT 1998

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TAPES:
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MKIII: H01819
PICS: P01185
CHIP: C00575
LOWL: L00513 in temp drive #1


Wed May  6 23:04:15 GMT 1998
        MkIII


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17_17.rawmk3    18_30.rawmk3    19_31.rawmk3    20_32.rawmk3    21_34.rawmk3
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17_23.rawmk3    18_35.rawmk3    19_37.rawmk3    20_38.rawmk3    21_40.rawmk3
17_26.rawmk3    18_38.rawmk3    19_40.rawmk3    20_41.rawmk3    21_43.rawmk3
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18_24.rawmk3    19_25.rawmk3    20_27.rawmk3    21_28.rawmk3
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