
Mauna Loa Solar Observatory Observer's Log

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 Flat PICS 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 End BiasLSD CHIP Sun Aug 31 18:04:09 GMT 2003 Bias CHIP

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.

End Bias

CHIP

COMMENT: Sun Aug 31 20:48:17 GMT 2003

Sun Aug 31 18:05:08 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

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.

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 End Patrol CHIP Mon Sep 1 02:27:23 GMT 2003 End Patrol PICS Mon Sep 1 02:44:06 GMT 2003 MkIV 00 02.rawmk4 01 46.rawmk4 18 28.rawmk4 20 12.rawmk4 21 56.rawmk4 01 49.rawmk4 00 05.rawmk4 18 31.rawmk4 20 15.rawmk4 21 58.rawmk4 00 08.rawmk4 01_52.rawmk4 18_34.rawmk4 20 18.rawmk4 22 01.rawmk4 00 11.rawmk4 01 55.rawmk4 18 37.rawmk4 20 21.rawmk4 22 04.rawmk4 00 14.rawmk4 01 58.rawmk4 18 40.rawmk4 20 24.rawmk4 22 07.rawmk4 00 17.rawmk4 16 51.rawmk4 18 43.rawmk4 20 27.rawmk4 22 10.rawmk4 00 20.rawmk4 16 54.rawmk4 18 46.rawmk4 20 30.rawmk4 22 52.rawmk4

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