
Mauna Loa Solar Observatory Observer's Log

Sat Jan 24 17:15:50 GMT 1998

Year: 98 Doy: 024

Observer: koon

WEATHER COMMENT: Sat Jan 24 17:15:53 GMT 1998 Clear sky, wind=10 mph from the SW, temp=42 F.

Sat Jan 24 17:16:17 GMT 1998 CHIP Startup--Initializing new tape

Sat Jan 24 17:25:43 GMT 1998 PICS Start Patrol

Sat Jan 24 17:25:45 GMT 1998 CHIP CHIP Start Patrol

Sat Jan 24 17:30:03 GMT 1998 MKIII Start Patrol

Sat Jan 24 18:00:17 GMT 1998 PICS Flat Sat Jan 24 18:01:47 GMT 1998 PICS End Flat

Sat Jan 24 18:02:16 GMT 1998 CHIP Bias

Sat Jan 24 18:03:18 GMT 1998 CHIP End Bias

Sat Jan 24 18:03:32 GMT 1998 CHIP Water Sat Jan 24 18:04:16 GMT 1998 CHIP End Water

MKIII COMMENT: Sat Jan 24 18:06:17 GMT 1998

Occulting was bad due to Spar Guider being out of adjustment, even though this was adjusted yesterday. I found that the spring-back mechanism of the E-W adjustment for the Spar guider wasn't working well, so the guider telescope would flop back and forth rather than stay in contact with the adjusting screw, I lubed things to fix the problem. But before I could check and tune the guiding, the Ol guider stopped working as it sometimes does for no obvious reason. Anyway the occulting looks good and I can adjust the guider later if needed, when the Ol guider is working again.

COMMENT: Sat Jan 24 18:10:43 GMT 1998

Spar was moved around for a while, maybe over the past 30 minutes or so while I worked on the quiders.

PSPT COMMENT: Sat Jan 24 18:19:36 GMT 1998

Sky looks good, starting observations with this.

MKIII COMMENT: Sat Jan 24 18:28:37 GMT 1998

Will try several different calibration/Patrol startup sequences both early (i.e., right now) and later today to see what types of light leaks I get in the dark scans. Just now I queued the Calibration while Patrol was running, then soon after the Calibration began I queued up Patrol.

Sat Jan 24 18:47:27 GMT 1998 MKIII Start Patrol

MKIII COMMENT: Sat Jan 24 18:49:01 GMT 1998

OK, that cal finished, I have queued up another to run right after the first normal Patrol scans that are running now. In this next squence I will wait for the cal to finish completely so that all is Idle before I start up Patrol.

Sat Jan 24 19:00:19 GMT 1998 PICS Flat Sat Jan 24 19:01:49 GMT 1998 End Flat PICS Sat Jan 24 19:02:07 GMT 1998 Bias CHIP Sat Jan 24 19:03:19 GMT 1998 CHIP End Bias Sat Jan 24 19:03:33 GMT 1998 CHIP Water Sat Jan 24 19:04:22 GMT 1998 CHIP End Water

Sat Jan 24 19:14:10 GMT 1998 MKIII Start Patrol MKIII COMMENT: Sat Jan 24 19:14:13 GMT 1998 OK, that second cal finished and all is idle so I started up the Patrol. I think I could see excess brightness in the dark scan from the first cal around 1841 ut down in the SSE. The dark scan for the second cal (1905 ut ?) looks very bad with lots of concentric rings of brightness, it looks like something electronic rather than a light leak and it gets worse as the scan progresses CCW so that it is quite bad when it ends in the SSW compared to the noise at the same position when the scan started. There is something regarding the dark shutter than can definitely be improved. Before the actual dark scan, which is the only scan of the six calibration scans in which the dark shutter needs to be moved, every time the opal is commanded to move in or out there is a corresponding command sent to the dark shutter to move out, thats four times per calibration that the dark shutter clutch gets slipped for no reason and for the entire 12 seconds (?) of the Out command. Sat Jan 24 20:00:16 GMT 1998 PICS Flat Sat Jan 24 20:01:45 GMT 1998 PICS End Flat Sat Jan 24 20:02:02 GMT 1998 CHIP Gain Sat Jan 24 20:08:05 GMT 1998 End Gain CHIP Sat Jan 24 20:08:15 GMT 1998 CHIP Bias Sat Jan 24 20:09:10 GMT 1998 CHIP End Bias Sat Jan 24 20:09:20 GMT 1998 CHIP Water Sat Jan 24 20:09:59 GMT 1998 CHIP End Water MKIII COMMENT: Sat Jan 24 20:35:49 GMT 1998 OK, starting a repeat of the earlier cal test sequence. This cal I started (queued up) while Patrol was running, then I queued up Patrol soon after the cal started. MKIII COMMENT: Sat Jan 24 20:53:55 GMT 1998 OK, this cal is finishing up. I can see concentric rings of brightness in the Xanim window image but not on the KCP scan monitor image, this also happened (or was noticed anyway) on the second of the earlier sequence of cals today. Sat Jan 24 21:00:15 GMT 1998 PICS Flat Sat Jan 24 21:01:42 GMT 1998 PICS End Flat Sat Jan 24 21:02:04 GMT 1998 Bias CHIP Sat Jan 24 21:03:21 GMT 1998 End Bias CHIP Sat Jan 24 21:03:31 GMT 1998 CHIP Water Sat Jan 24 21:04:15 GMT 1998 CHIP End Water Sat Jan 24 21:19:20 GMT 1998 MKIII End Cal MKIII COMMENT: Sat Jan 24 21:22:43 GMT 1998

OK, this last cal is finished and all is Idle so I just started the Patrol again. During this cal I went up in the dome and watched the dark shutter motor and gears, the only time they turned was before and after the dark scan. Thats good, it means the clutch isn't being made to slip. But why do the Drive and Request "Out" LEDs light up those four other times during the calibration? I also checked the shutter during the last dark scan (2113 ut) and it appeared to be shut, but just barely, in fact

it could have been open 1/64" or so, its difficult to see in there. The Xanim image for the 2113 dark scan has concentric circles like before, more on this scan than on the one in the previous cal. Also, some of the other scans may be weird on this last cal because after the first scan I was up in the dome and I opened a hatch on the telescope to watch the Opal.

WEATHER COMMENT: Sat Jan 24 21:29:42 GMT 1998

Cirrus starting to pass over.

MKIII COMMENT: Sat Jan 24 21:30:20 GMT 1998

Some cirrus may have passed over during the last 2 cals also, I didn't notice.

Sat Jan 24 22:00:22 GMT 1998 PICS Flat Sat Jan 24 22:01:54 GMT 1998 End Flat PICS Sat Jan 24 22:02:05 GMT 1998 Bias CHIP Sat Jan 24 22:03:08 GMT 1998 End Bias CHIP Sat Jan 24 22:03:18 GMT 1998 CHIP Water Sat Jan 24 22:04:03 GMT 1998 CHIP End Water Sat Jan 24 22:22:17 GMT 1998 PICS End Patrol Sat Jan 24 22:22:41 GMT 1998 CHIP CHIP End Patrol Sat Jan 24 22:24:25 GMT 1998 CHIP ending tape COMMENT: Sat Jan 24 22:31:29 GMT 1998

TAPES: ****

MKIII: H01725 PICS: P01093 CHIP: C00481

LOWL: L00493 in drive #0

Sat Jan 24 22:33:51 GMT 1998 MkIII

17_30.rawmk3	18_31.rawmk3	19_49.rawmk3	20_57.rawmk3	22_09.rawmk3
17_33.rawmk3	18_38.rawmk3	19_52.rawmk3	21_03.rawmk3	22_12.rawmk3
17_36.rawmk3	18_44.rawmk3	19_55.rawmk3	21_10.rawmk3	22_15.rawmk3
17_39.rawmk3	18_47.rawmk3	19_58.rawmk3	21_16.rawmk3	22_18.rawmk3
17_42.rawmk3	18_50.rawmk3	20_01.rawmk3	21_22.rawmk3	c18_28.rawmk3
17_44.rawmk3	18_56.rawmk3	20_03.rawmk3	21_25.rawmk3	c18_35.rawmk3
17_47.rawmk3	19_02.rawmk3	20_06.rawmk3	21_28.rawmk3	c18_41.rawmk3
17_50.rawmk3	19_08.rawmk3	20_09.rawmk3	21_31.rawmk3	c18_53.rawmk3
17_53.rawmk3	19_14.rawmk3	20_12.rawmk3	21_34.rawmk3	c18_59.rawmk3
17_56.rawmk3	19_17.rawmk3	20_15.rawmk3	21_37.rawmk3	c19_05.rawmk3
17_59.rawmk3	19_20.rawmk3	20_18.rawmk3	21_40.rawmk3	c20_36.rawmk3
18_02.rawmk3	19_23.rawmk3	20_21.rawmk3	21_43.rawmk3	c20_42.rawmk3
18_05.rawmk3	19_25.rawmk3	20_24.rawmk3	21_46.rawmk3	c20_48.rawmk3
18_08.rawmk3	19_28.rawmk3	20_27.rawmk3	21_49.rawmk3	c21_00.rawmk3
18_11.rawmk3	19_31.rawmk3	20_30.rawmk3	21_52.rawmk3	c21_06.rawmk3
18_14.rawmk3	19_34.rawmk3	20_33.rawmk3	21_55.rawmk3	c21_13.rawmk3

18_17.rawmk3	19_37.rawmk3	20_39.rawmk3	21_57.rawmk3
18_20.rawmk3	19_40.rawmk3	20_45.rawmk3	22_00.rawmk3
18_22.rawmk3	19_43.rawmk3	20_51.rawmk3	22_03.rawmk3
18_25.rawmk3	19_46.rawmk3	20_54.rawmk3	22_06.rawmk3