

-----  
Mauna Loa Solar Observatory Observer's Log  
-----

Sat Jun 1 16:44:17 GMT 1996

Year: 96 Doy: 153

Observer: koon

WEATHER COMMENT: Sat Jun 1 16:44:27 GMT 1996

Clear sky, wind=10 mph from the SE, temp=49 F.

Sat Jun 1 16:45:06 GMT 1996	CHIP	Startup--Initializing new tape
Sat Jun 1 16:48:37 GMT 1996	dPMon	Start Patrol
Sat Jun 1 16:48:54 GMT 1996	CHIP	CHIP Start Patrol
Sat Jun 1 17:00:50 GMT 1996	dPMon	Filemark
Sat Jun 1 17:00:54 GMT 1996	dPMon	Flat
Sat Jun 1 17:01:18 GMT 1996	CHIP	CHIP Filemark
Sat Jun 1 17:01:42 GMT 1996	dPMon	End Flat
Sat Jun 1 17:01:36 GMT 1996	CHIP	Flat
Sat Jun 1 17:06:28 GMT 1996	CHIP	End Flat
Sat Jun 1 18:00:20 GMT 1996	CHIP	CHIP Filemark
Sat Jun 1 18:00:38 GMT 1996	CHIP	Flat
Sat Jun 1 18:00:58 GMT 1996	dPMon	Filemark
Sat Jun 1 18:01:02 GMT 1996	dPMon	Flat
Sat Jun 1 18:01:49 GMT 1996	dPMon	End Flat
Sat Jun 1 18:05:23 GMT 1996	CHIP	End Flat
Sat Jun 1 19:00:47 GMT 1996	dPMon	Filemark
Sat Jun 1 19:00:52 GMT 1996	dPMon	Flat
Sat Jun 1 19:01:39 GMT 1996	dPMon	End Flat
Sat Jun 1 19:02:27 GMT 1996	CHIP	CHIP Filemark
Sat Jun 1 19:05:53 GMT 1996	CHIP	Flat
Sat Jun 1 19:09:14 GMT 1996	dPMon	End Patrol
Sat Jun 1 19:11:17 GMT 1996	CHIP	End Flat

DPMON COMMENT: Sat Jun 1 19:12:23 GMT 1996

Pausing Patrol to do some testing to see why we have the occulting problem after the occulting wheel moves, in the morning. It appears that the occulting disk itself is moved to the South after it is put in place after the disk image, then it slowly comes back up to the correct position. Eric noticed that the prominences were staying in the same place through the bad occulting and I verified that today, also verified that the occulting disk position is actually changing with respect to the camera.

DPMON COMMENT: Sat Jun 1 19:21:38 GMT 1996

With the occulting disk in and the video program running I can see that there is some play in the occulting wheel. When I move it from one side of the play to the other the image of the disk moves North and South corresponding to our normal occulting when it is North and to our occulting problem when it is South. To move to North limit of play the wheel is moved CW when viewed from the O1 side of the occulting wheel.

Sat Jun 1 19:51:15 GMT 1996 dPMon Start Patrol

DPMON COMMENT: Sat Jun 1 19:51:21 GMT 1996

The occulting wheel play appears to be present regardless of the wheel

position. So the wheel must be unbalanced by the thick aluminum mount I just noticed at one of the occulting wheel openings, probably to be used for the Lowk instrument. We may have to balance the wheel somehow. I just restarted the Patrol program and noticed that the limb images show that the occulting disk is always to the South now. Since I haven't changed the occulting since this morning it appears that when the wheel axis is near horizontal in the morning the imbalance pulls it CW (viewed from O1 side) and as the Spar points more vertical the wheel axis becomes more vertical and the imbalance gradually exerts less torque on the wheel and it tends to stay where it was left after it gets moved. Then around 1900 ut the imbalance torque no longer can overcome the wheel rotational friction and the wheel stays put after being moved. So what we see if we don't touch the occulting adjustments is an occulter that gets pulled quickly to the North in the early morning, then it gets pulled more slowly to the North as the morning progresses (this is when we notice the change in occulting) and finally it no longer gets pulled to the North and the occulting remains stable. I can verify that the occulting wheel stays to the CW side of the play in the early morning on my next shift. The solution is to balance the wheel by adding weight 180 degrees opposite of the thick aluminum mount on the wheel, but until then we can assure good limb images are going to tape by adjusting the occulting normally in the morning until we notice the occulting problem, then adjust occulting so that the first image shown after the disk image is occulted correctly, this means that the limb images we see mid-morning when no data are written will not be occulted correctly, the sun will spill over in the South.

DPMON COMMENT: Sat Jun 1 20:25:26 GMT 1996

I have restarted the Patrol program with proper occulting, about 30 minutes ago.

COMMENT: Sat Jun 1 20:26:03 GMT 1996

extended dome slot.

DPMON COMMENT: Sat Jun 1 20:37:29 GMT 1996

Pausing Patrol to test Optics commands, when trying to control the optics via software I noticed that the filter wheel commands move the objective wheel and vice versa, and the occulting wheel commands move the polarizer wheel (or at least try to, it times out), and vice versa. I just checked the Optics using the mouse and monitor selections and these appear to work properly. So maybe some software changes are needed?

DPMON COMMENT: Sat Jun 1 20:56:34 GMT 1996

I had a problem when I exited Patrol a while back, the Optics field was Busy and the Patrol wouldn't exit correctly. So I typed Kill in the Console window, then made sure onlt the tasks Xsun and Camera were active, then I typed Run in the Console window and brought up Patrol again. I didn't select EndDay or NewDay and was able to continue writing to the same tape as David suggested earlier for a previous CHIP problem, very nice!

Sat Jun 1 21:01:23 GMT 1996 CHIP CHIP Filemark

Sat Jun 1 21:01:37 GMT 1996 CHIP Flat

Sat Jun 1 21:02:55 GMT 1996 dPMon Filemark

Sat Jun 1 21:02:59 GMT 1996 dPMon Flat

Sat Jun 1 21:03:47 GMT 1996 dPMon End Flat  
 Sat Jun 1 21:06:28 GMT 1996 CHIP End Flat  
 Sat Jun 1 22:00:21 GMT 1996 CHIP CHIP Filemark  
 Sat Jun 1 22:00:38 GMT 1996 CHIP Flat  
 Sat Jun 1 22:02:51 GMT 1996 dPMon Filemark  
 Sat Jun 1 22:02:56 GMT 1996 dPMon Flat  
 Sat Jun 1 22:03:43 GMT 1996 dPMon End Flat  
 Sat Jun 1 22:05:25 GMT 1996 CHIP End Flat  
 Sat Jun 1 22:08:55 GMT 1996 dPMon End Patrol  
 Sat Jun 1 22:11:33 GMT 1996 CHIP CHIP End Patrol  
 Sat Jun 1 22:28:21 GMT 1996 CHIP ending tape

COMMENT: Sat Jun 1 22:28:32 GMT 1996

Activity report:

QP:

65; 104; 123; 220-240; 288.

No coronal activity.

TAPES:

\*\*\*\*\*

MKIII: H01306

DPMON: P00625

CHIP: C00042

LOWL: L00396 in drive #1

SCAN-LOG

SCAN-LOG 16:52:30. 6/1/96 DOY 153

16:58:07	17:01:22	17:04:37	17:07:52	17:11:04
17:14:19	17:17:31	17:20:43	17:23:56	17:27:09
17:30:21	17:33:33	17:36:45	17:39:57	17:43:09
17:46:26	17:49:36	17:52:47	17:55:57	17:59:08
1808 0 CL	18:11:49	1822 15CL	18:35:33	18:40:23
18:43:33	18:46:50	18:50:02	18:53:18	18:56:28
18:59:39	19:02:49	19:06:00	19:09:10	19:12:21
19:15:31	19:18:42	19:21:52	19:25:05	19:28:15
19:31:27	19:34:37	19:37:48	19:40:58	19:44:09
19:47:19	19:50:31	19:53:41	19:56:54	20:00:06
20:03:19	20:06:29	20:09:41	20:12:51	20:16:02
20:19:12	20:22:23	20:25:34	20:28:45	20:31:57
20:35:15	20:38:25	20:41:37	20:44:47	20:47:59
20:51:09	20:54:26	20:57:39	21:00:51	21:04:03
21:07:14	21:10:25	21:13:36	21:16:47	21:19:58
21:23:08	21:26:20	21:29:31	21:32:44	21:35:54
21:39:06	21:42:16	21:45:28	21:48:39	21:51:50
21:55:01	21:58:12	22:01:24	22:04:42	22:07:52

0 ERRORS

OK