
Mauna Loa Solar Observatory Observer's Log

Mon Nov 4 17:12:43 GMT 1996

Year: 96 Doy: 309

Observer: koon

WEATHER COMMENT: Mon Nov 4 17:12:48 GMT 1996

Scattered cirrus, wind=5 mph from the South, temp=45 F.

Mon Nov 4 17:13:30 GMT 1996 CHIP Startup--Initializing new tape

Mon Nov 4 17:17:45 GMT 1996 dPMon Start Patrol

Mon Nov 4 17:18:02 GMT 1996 CHIP CHIP Start Patrol

CHIP COMMENT: Mon Nov 4 17:22:39 GMT 1996

Had to reset the cooling unit since it wasn't running, no evidence of any power outage last night, will take a while for image to stabilize on-band since filter temperature is about 30 degrees now, plate temp about 11 deg.

LOW-L COMMENT: Mon Nov 4 17:25:45 GMT 1996

No images although program is running and HA is updating. HA=-68.496 but Enc HA=-29.574. Will stop and test manually.

Mon Nov 4 18:01:48 GMT 1996 CHIP Bias

Mon Nov 4 18:02:55 GMT 1996 CHIP End Bias

Mon Nov 4 18:03:04 GMT 1996 dPMon Flat

Mon Nov 4 18:03:05 GMT 1996 CHIP Water

Mon Nov 4 18:03:40 GMT 1996 CHIP End Water

Mon Nov 4 18:04:01 GMT 1996 dPMon End Flat

LOW-L COMMENT: Mon Nov 4 18:04:46 GMT 1996

When I use sx commands to move the head in RA I can hear the motor make sounds and the sx ra_isat command shows that the encoder is at the position that I sent the head to, but the head doesn't move. I'll pull off the motor cover and check things out a little later.

CHIP COMMENT: Mon Nov 4 18:07:16 GMT 1996

Plate temp is within disireable limits and Filter temp is getting closer.

WEATHER COMMENT: Mon Nov 4 18:34:59 GMT 1996

Getting medium cirrus now.

Mon Nov 4 19:01:49 GMT 1996 CHIP Bias

Mon Nov 4 19:02:56 GMT 1996 dPMon Flat

Mon Nov 4 19:03:02 GMT 1996 CHIP End Bias

Mon Nov 4 19:03:11 GMT 1996 CHIP Water

Mon Nov 4 19:03:49 GMT 1996 CHIP End Water

Mon Nov 4 19:03:55 GMT 1996 dPMon End Flat

Mon Nov 4 20:01:46 GMT 1996 CHIP Gain

Mon Nov 4 20:02:59 GMT 1996 dPMon Flat

Mon Nov 4 20:03:55 GMT 1996 dPMon End Flat

Mon Nov 4 20:06:18 GMT 1996 CHIP End Gain

Mon Nov 4 20:06:27 GMT 1996 CHIP Bias

Mon Nov 4 20:07:08 GMT 1996 CHIP End Bias

Mon Nov 4 20:07:18 GMT 1996 CHIP Water

Mon Nov 4 20:07:45 GMT 1996 CHIP End Water

LOW-L COMMENT: Mon Nov 4 20:16:19 GMT 1996

I can see that the setscrew must have come loose, the wave generator assembly has slipped down the motor shaft towards the instrument head. The setscrew was not very good, only 1/16" hex wrench size, I was afraid of stripping it so I didn't tighten it enough when I installed the new Harmonic Drive. I'll disassemble and try to install a better setscrew before assembling all.

Mon Nov	4	21:00:05	GMT 1996	dPMon	Flat
Mon Nov	4	21:01:00	GMT 1996	dPMon	End Flat
Mon Nov	4	21:02:34	GMT 1996	CHIP	Bias
Mon Nov	4	21:03:42	GMT 1996	CHIP	End Bias
Mon Nov	4	21:03:52	GMT 1996	CHIP	Water
Mon Nov	4	21:04:27	GMT 1996	CHIP	End Water
Mon Nov	4	22:02:44	GMT 1996	CHIP	Bias
Mon Nov	4	22:03:03	GMT 1996	dPMon	Flat
Mon Nov	4	22:03:51	GMT 1996	CHIP	End Bias
Mon Nov	4	22:03:56	GMT 1996	dPMon	End Flat
Mon Nov	4	22:03:58	GMT 1996	CHIP	Water
Mon Nov	4	22:04:34	GMT 1996	CHIP	End Water
Mon Nov	4	22:36:53	GMT 1996	dPMon	End Patrol
Mon Nov	4	22:37:49	GMT 1996	CHIP	CHIP End Patrol

COMMENT: Mon Nov 4 22:37:15 GMT 1996

Stopped all instruments due to thick clouds, there is probably lots of wasted tape since I just let things run while I worked on the lowl.

LOW-L COMMENT: Mon Nov 4 22:52:47 GMT 1996

OK, we're back in business, after fixing the lowl I did see images through the breaks in the clouds, and all field parameters looked normal. I removed the old setscrew that secured the motor shaft to the wave generator shaft, and replaced it with a round head hex screw, a tooth washer and a split washer are also in place to help keep the screw tight. I securely tightened the screw (which has a bigger 2 mm hex) onto the best place in the flat spot on the motor shaft, then I installed the motor/wave generator assembly into the flex spline. The screw is still accessible through the window in the motor mount. After mounting and unblocking everything the RA was off by only 0.001 degree from the reading I had before disassembly, same as last time. Also added more metal tape to the Holey Hose.

Mon Nov 4 23:05:51 GMT 1996 CHIP ending tape

COMMENT: Mon Nov 4 23:05:57 GMT 1996

Activity report:

QP: 50-60; 100; 123; 250-265; 300; 320.

No coronal activity.

TAPES:

MKIII: H01430

DPMON: P00755

CHIP: C00172

LOWL: L00425 in drive #0, started tape around 2230.

SCAN-LOG

SCAN-LOG 17:21:41. 11/4/96 DOY 309

17:33:27	17:36:44	17:40:00	17:43:17	17:46:32
17:49:50	17:53:06	17:56:23	17:59:39	18:02:57
18:06:13	18:09:31	18:12:47	18:16:06	18:19:23
18:22:40	18:25:57	18:29:14	18:32:31	18:35:49
18:39:05	18:42:23	18:45:40	18:48:58	18:52:15
18:55:33	18:58:49	19:02:07	19:05:23	19:08:40
1915 0 CL	19:19:23	1924 15CL	19:28:33	19:45:08
19:48:22	19:51:37	19:54:51	19:58:05	20:01:19
20:04:38	20:07:53	20:11:08	20:14:21	20:17:36
20:20:49	20:24:04	20:27:18	20:30:33	20:33:47
20:37:02	20:40:15	20:43:30	20:46:43	20:49:58
20:53:12	20:56:26	20:59:40	21:02:54	21:06:07
21:09:22	21:12:35	21:15:49	21:19:02	21:22:16
21:25:29	21:28:43	21:31:56	21:35:11	21:38:24
21:41:38	21:44:51	21:48:05	21:51:18	21:54:32
21:57:45	22:00:59	22:04:12	22:07:26	22:10:39
22:13:54	22:17:07	22:20:21	22:23:34	22:26:48
22:30:01	22:33:15	22:36:28		

0 ERRORS

OK