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Mauna Loa Solar Observatory Observer's Log  
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Tue Oct 21 16:39:29 GMT 2008

Year: 08 Doy: 295

Observer: koon

WEATHER COMMENT: Tue Oct 21 16:39:31 GMT 2008

Clear sky, wind=5 mph from the South, temp=44F.

\_\_\_\_end\_\_\_\_

\*\*MLSO PROBLEM\*\* : Tue Oct 21 16:40:18 GMT 2008

Dome shutter is stuck in open position since yesterday afternoon. No precipitation overnight as far as I can tell. I'll assess the problem and probably remove the transmission from the top of the dome to see if I can repair the trans. The weather still looks clear so it is unlikely I'll need to close the dome right away, so I won't try to manually close the dome unless I can't fix the trans today or unless the weather gets wet. I'll run PSPT and GONG but nothing on the spar until I can move the dome shutter like normal, that's because I need to move the spar around to position the dome and stairs where needed.

\_\_\_\_end\_\_\_\_

A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Tue Oct 21 17:09:51 GMT 2008

PSPT COMMENT: Tue Oct 21 17:20:24 GMT 2008

obs

\_\_\_\_end\_\_\_\_

\*\*MLSO PROBLEM\*\* : Tue Oct 21 19:54:56 GMT 2008

Removed trans, will open it up soon. Had difficulty removing trans because the L-bracket that hold the shutter drive gear to the shutter had to be removed while the dome was fully opened, this is difficult to reach and dangerous to fingers because the shutter is out of balance and wants to move fully opened, also the shutter lifts off of the gear and will allow the shutter to slid open more. It is necessary to prevent the movement of the shutter, I used a vise-grip tool in each track next to a roller in each track, that jams the rolleroller and prevents the shutter from moving in the open direction. If unsure which way the shutter will move then put a vise-grip on each side of the rollers. Another problem later will be getting the gear to mesh into the shutter rack enough so that the gear won't slip, the shutter isn't a perfect curve so adjusting the L-bracket may require stopping the shutter at a different location to more easily do the adjustment. So far the weather has been clear, there are low clouds and vog slowly coming uphill but I think I'll have clear weather most of the day.

\_\_\_\_end\_\_\_\_

WEATHER COMMENT: Tue Oct 21 21:33:02 GMT 2008

Clouds and vog are here, shut down PSPT.

\_\_\_\_end\_\_\_\_

\*\*MLSO PROBLEM\*\* : Tue Oct 21 21:33:26 GMT 2008

The woodruff key on the worm gear and output gear look to be OK. I suspect that the rollpin for the internal gear is sheared, it is difficult to tell for sure because everything turns like normal by hand, it takes a big load to

cause slippage. I haven't found a rollpin large enough up here, but I want to pull the internal gear to be sure that rollpin is the problem. It will take a fair amount of time to get that gear out. Right now I'm "switching gears" and giving more priority to closing or covering the dome slot since clouds are now present.

\_\_\_\_end\_\_\_\_

\*\*MLSO PROBLEM\*\* : Tue Oct 21 23:00:11 GMT 2008

I got the dome slot closed. I used levers up at the top to move the shutter, a long handled screwdriver that I got from Sears just for this purpose and a auger-type spinner handle from the toolbox on the floor by the electronics bench, 2 screwdrivers would be better, I'll get another one. One tool levers in the track while the other stays in the track in case the lever slips. Vise-grips in the roller tracks helped prevent a problem if both levers slip. I also had a rope tied around the trans mount area and looped twice to the lower end of the shutter to give drag, when the balnce point was reached I let out the rope through gloved hands, at the bottom of the shutter opening I mounted a "bumper" made out of my old lawn mower tire stuffed with high density foam, in case I slipped, but I didn't. We are weatherproof again. I need to take a break.

\_\_\_\_end\_\_\_\_

COMMENT: Wed Oct 22 00:06:46 GMT 2008

Kaiee was stalled trying to reboot again, I rebooted it.

\_\_\_\_end\_\_\_\_

Wed Oct 22 02:13:29 GMT 2008

MkIV