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Mauna Loa Solar Observatory Observer's Log  
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Sun May 25 16:44:14 GMT 2003

Year: 03 Doy: 145

Observer: koon

Sun May 25 16:48:32 GMT 2003 CHIP Start Patrol

Sun May 25 16:48:45 GMT 2003 PICS Start Patrol

WEATHER COMMENT: Sun May 25 16:44:16 GMT 2003

Hazy sky but no clouds, wind=10 mph from the SSE, temp=44 F.

MKIV COMMENT: Sun May 25 16:50:28 GMT 2003

Centered occulting.

Sun May 25 16:51:15 GMT 2003 MKIV Start Patrol

PSPT COMMENT: Sun May 25 17:12:12 GMT 2003

Observing.

A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Sun May 25 17:32:04 GMT 2003

Sun May 25 18:00:51 GMT 2003 CHIP LSD

Sun May 25 18:02:37 GMT 2003 CHIP End LSD

Sun May 25 18:02:58 GMT 2003 CHIP BiasLSD

Sun May 25 18:03:53 GMT 2003 PICS Flat

Sun May 25 18:03:59 GMT 2003 CHIP End BiasLSD

Sun May 25 18:04:12 GMT 2003 CHIP Bias

Sun May 25 18:05:06 GMT 2003 CHIP End Bias

Sun May 25 18:06:28 GMT 2003 PICS End Flat

MKIV COMMENT: Sun May 25 18:16:31 GMT 2003

Centered occulting.

Sun May 25 18:19:40 GMT 2003 MKIV End Patrol

Sun May 25 18:19:53 GMT 2003 MKIV Start Cal

Sun May 25 18:38:36 GMT 2003 MKIV End Cal

Sun May 25 18:53:18 GMT 2003 MKIV Start Patrol

COMMENT: Sun May 25 18:53:26 GMT 2003

Extended the dome slot.

MKIV COMMENT: Sun May 25 18:53:42 GMT 2003

Centered occulting.

WEATHER COMMENT: Sun May 25 18:53:53 GMT 2003

MLSO is elevated near the top of a deep thick layer of haze, very strange looking, I wonder if it is vog or "Chinese dust or soot" or Oilfield fire smoke. The wind is now from the North at 5-10 mph.

MKIV COMMENT: Sun May 25 19:31:30 GMT 2003

Centered occulting.

\*\*PSPT PROBLEM\*\* Sun May 25 19:57:33 GMT 2003

Crashed around 1911 UT, I sent error messages to Alice and restarted.

\*\*CHIP PROBLEM\*\* Sun May 25 20:22:20 GMT 2003

Stalled around 1900 UT with Optics:Busy and Program:FixCenter, did a kill/run cycle to fix it.

Sun May 25 20:25:37 GMT 2003 CHIP Start Patrol

MKIV COMMENT: Sun May 25 21:17:33 GMT 2003

Centered occulting.

WEATHER COMMENT: Sun May 25 21:30:33 GMT 2003

Small orographic clouds are passing by.

MKIV COMMENT: Sun May 25 22:04:26 GMT 2003

Centered occulting.

COMMENT: Sun May 25 22:36:17 GMT 2003

It's difficult to keep all instruments in the clear at solar noon this time of year, so some instruments are being blocked now and then, orographic clouds are also passing over.

WEATHER COMMENT: Sun May 25 22:37:41 GMT 2003

Orographic clouds are gathering and passing over.

MKIV COMMENT: Sun May 25 23:24:23 GMT 2003

Pausing due to clouds.

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Sun May 25 23:29:44 GMT 2003 MKIV End Patrol

**\*\*PSPT PROBLEM\*\***: Sun May 25 23:24:49 GMT 2003

This stalled around 2220, so I've been checking and adjusting the dome shutter as well as the dome azimuth slip that Allen mentioned in the log yesterday.

I can see where the az motor was slipping but there isn't much damage or signs of problems - it makes sense that the track may wear more where it lines up with the motor gear around the Home position because the dome stops and starts there from standstill at least once in the mornings daily. Maybe the track warps with solar heating. I tightened the meshing a little to see if that helps.

**\*\*PSPT PROBLEM\*\***: Mon May 26 00:35:20 GMT 2003

I found a couple of problems with the dome azimuth drive system. I had to loosen the entire motor mount and rotate it slightly and translate it slightly too. The gear wasn't tangential to the track until I did that, and the side of the gear closest to the dome skin was touching at the Home position, so the drive was oriented to try to climb out of the track until I adjusted it.

Also the Home switch mount wasn't oriented correctly, I could twist it in and out of tangential alignment easily by hand because it was held with only one bolt - so I added two screws to prevent the mount from twisting. To align the PSPT dome azimuth motor point to Home position and keep maybe one sixteenth inch of clearance on the side of the gear farthest from the motor, there will be more of a gap on the other side of the gear but that is necessary - especially around the dome position of 2000. The gear shouldn't pop out of the track anymore (for a while at least). The new "quick wrenches" I bought were very useful for the motor mount bolts for this motor and the shutter motor too.

Mon May 26 01:25:39 GMT 2003 MKIV Start Patrol

WEATHER COMMENT: Mon May 26 01:25:42 GMT 2003

In a clear spot, restarted mk4.

MKIV COMMENT: Mon May 26 01:26:19 GMT 2003

Centered occulting.

Mon May 26 02:25:44 GMT 2003 PICS End Patrol

Mon May 26 02:25:46 GMT 2003 CHIP End Patrol

**\*\*GONG PROBLEM\*\***: Mon May 26 02:32:35 GMT 2003

Going to shelter to fix waveplate sync problem.

Mon May 26 03:02:02 GMT 2003

MkIV

01_25.rawmk4	17_20.rawmk4	19_16.rawmk4	20_48.rawmk4	22_19.rawmk4
01_28.rawmk4	17_23.rawmk4	19_19.rawmk4	20_50.rawmk4	22_21.rawmk4
01_31.rawmk4	17_26.rawmk4	19_22.rawmk4	20_53.rawmk4	22_24.rawmk4
01_34.rawmk4	17_29.rawmk4	19_25.rawmk4	20_56.rawmk4	22_27.rawmk4
01_37.rawmk4	17_32.rawmk4	19_28.rawmk4	20_59.rawmk4	22_30.rawmk4
01_40.rawmk4	17_35.rawmk4	19_31.rawmk4	21_02.rawmk4	22_33.rawmk4
01_43.rawmk4	17_38.rawmk4	19_34.rawmk4	21_05.rawmk4	22_36.rawmk4
01_46.rawmk4	17_41.rawmk4	19_37.rawmk4	21_08.rawmk4	22_39.rawmk4
01_49.rawmk4	17_44.rawmk4	19_40.rawmk4	21_11.rawmk4	22_42.rawmk4
01_52.rawmk4	17_47.rawmk4	19_43.rawmk4	21_14.rawmk4	22_45.rawmk4
01_55.rawmk4	17_50.rawmk4	19_46.rawmk4	21_17.rawmk4	22_48.rawmk4
01_58.rawmk4	17_53.rawmk4	19_49.rawmk4	21_20.rawmk4	22_51.rawmk4
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02_06.rawmk4	18_01.rawmk4	19_57.rawmk4	21_29.rawmk4	23_00.rawmk4
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02_12.rawmk4	18_07.rawmk4	20_03.rawmk4	21_34.rawmk4	23_05.rawmk4
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17_03.rawmk4	18_59.rawmk4	20_30.rawmk4	22_01.rawmk4	c18_25.rawmk4
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17_17.rawmk4	19_13.rawmk4	20_45.rawmk4	22_16.rawmk4	