Mauna Loa Solar Observatory Observer's Log ______ Wed Mar 26 16:50:49 GMT 2003 Year: 03 Doy: 085 Observer: yasukawa WEATHER COMMENT: Wed Mar 26 16:50:53 GMT 2003 Cool, in broken cirrostratus, heavy, extensive cirrostratus approaching from northwest, very light south breeze. Wed Mar 26 16:57:22 GMT 2003 CHTP Start Patrol Wed Mar 26 16:57:39 GMT 2003 PICS Start Patrol A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Wed Mar 26 17:02:54 GMT 2003 PSPT COMMENT: Wed Mar 26 17:09:09 GMT 2003 Starting observations. MKIV COMMENT: Wed Mar 26 17:22:16 GMT 2003 Preset O1 steppers. Waiting for holes in cirrostratus. Wed Mar 26 17:52:54 GMT 2003 MKIV Start Patrol MKIV COMMENT: Wed Mar 26 17:52:58 GMT 2003 Clear hole. Centered O1 before starting Patrol. **PSPT PROBLEM**: Wed Mar 26 17:55:28 GMT 2003 Crashed in Hi-res Data, taking CaK image, at 1721 UT. Killed/restart. **MKIV PROBLEM**: Wed Mar 26 17:57:03 GMT 2003 CCW scan stalled after at 179.45 degrees after a few degrees from start. Modulator waveform looked OK at rear of KCC rack. Reset KCC (reset button). Wed Mar 26 18:00:51 GMT 2003 CHIP LSD Wed Mar 26 18:02:38 GMT 2003 CHIP End LSD Wed Mar 26 18:02:45 GMT 2003 BiasLSD CHIP Wed Mar 26 18:03:02 GMT 2003 PICS Flat Wed Mar 26 18:03:23 GMT 2003 Start Patrol MKIV Wed Mar 26 18:03:35 GMT 2003 End BiasLSD CHIP Wed Mar 26 18:03:42 GMT 2003 CHTP Bias Wed Mar 26 18:04:34 GMT 2003 CHIP End Bias Wed Mar 26 18:05:23 GMT 2003 PICS End Flat **MKIV PROBLEM**: Wed Mar 26 18:04:02 GMT 2003 Barrel still sticking, this time at 168 degrees. Barrel drive motor is running back and forth less than one rotation of the motor. Turned off spar power briefly and turned it back on. This did not remedy the problem. Waveplate modulator 64/rot pulses look OK. 1/rot pulses look OK, too. **MKIV PROBLEM**: Wed Mar 26 18:10:43 GMT 2003 Cycled power to KCC. Reset guider after power turned back on. Wed Mar 26 18:12:23 GMT 2003 MKIV Start Patrol **MKIV PROBLEM**: Wed Mar 26 18:13:32 GMT 2003 mk4 scanned past position angles that it was hanging up at. **MKIV PROBLEM**: Wed Mar 26 18:17:36 GMT 2003 Mk4 appears to be scanning normally now. Cycling main mk4 power apparently

fixed the problem. I separately cycled spar power, although for a shorter period, previously and that did not remedy the stall. Main power also controls spar power. Resetting the KCC with the reset button (reboot) did

not fix the problem. Main power cycle also, obviously, reboots the KCC. Barrel restarted without wrap-up intervention or external application of torque to barrel/stepper motor so I don't believe motor or cable binding are involved. Next test would be cycling power to just the KCC (lighted switch below akamai) to isolate the KCC only. Wed Mar 26 18:31:15 GMT 2003 MKIV Start Cal WEATHER COMMENT: Wed Mar 26 18:46:24 GMT 2003 Back in cirrus. Wed Mar 26 18:49:59 GMT 2003 MKIV End Cal Wed Mar 26 18:50:10 GMT 2003 MKTV Start Patrol WEATHER COMMENT: Wed Mar 26 19:28:27 GMT 2003 Clear holes. Wed Mar 26 19:59:51 GMT 2003 CHIP End Patrol Wed Mar 26 20:01:16 GMT 2003 End Patrol MKIV Wed Mar 26 20:10:49 GMT 2003 PICS End Patrol COMMENT: Wed Mar 26 20:10:58 GMT 2003 Stopped to reconfigure dome shutter. Waiting for PICS to end. Wed Mar 26 20:16:23 GMT 2003 MKIV Start Patrol Wed Mar 26 20:16:39 GMT 2003 CHIP Start Patrol Wed Mar 26 20:16:50 GMT 2003 PICS Start Patrol PSPT COMMENT: Wed Mar 26 20:16:47 GMT 2003 Aborted obs, exited both qui and Pspt IDL. Restarted Pspt and daily obs. This was to load Alice's modifications to address "making jpg images" crash. MKIV COMMENT: Wed Mar 26 20:19:22 GMT 2003 Centered 01. MKIV COMMENT: Wed Mar 26 21:18:11 GMT 2003 Centered 01. WEATHER COMMENT: Wed Mar 26 21:38:28 GMT 2003 In cirrostratus overcast. Wed Mar 26 21:38:57 GMT 2003 MKIV End Patrol Wed Mar 26 23:52:45 GMT 2003 CHTP End Patrol COMMENT: Wed Mar 26 23:52:38 GMT 2003 Ran into ladder, Stopping to reconfigure dome shutter. Wed Mar 26 23:53:34 GMT 2003 PICS End Patrol WEATHER COMMENT: Wed Mar 26 23:54:05 GMT 2003 In orographic clouds and cirrostratus. Thu Mar 27 00:21:24 GMT 2003 CHIP Start Patrol Thu Mar 27 00:21:37 GMT 2003 PICS Start Patrol MKIV COMMENT: Thu Mar 27 01:17:39 GMT 2003 Centered O1 in very brief hole. Thu Mar 27 01:19:54 GMT 2003 MKIV Start Patrol WEATHER COMMENT: Thu Mar 27 01:20:44 GMT 2003 In thin cirrostratus. WEATHER COMMENT: Thu Mar 27 01:36:22 GMT 2003 Back in thicker cirrostratus. Thu Mar 27 01:37:55 GMT 2003 MKIV End Patrol **CHIP PROBLEM**: Thu Mar 27 02:02:04 GMT 2003 ADR got disabled in clouds, CHIP got domed out. Moved dome manually.

Thu Mar 27 02:24:55 GMT 2003 CHIP End Patrol Thu Mar 27 02:25:27 GMT 2003 PICS End Patrol Thu Mar 27 02:26:51 GMT 2003 MkIV 20 28.rawmk4 01 19.rawmk4 18 40.rawmk4 19 28.rawmk4 21 12.rawmk4 01 22.rawmk4 18 46.rawmk4 19 31.rawmk4 20 31.rawmk4 21 15.rawmk4 01_25.rawmk4 18_50.rawmk4 19_34.rawmk4 20_34.rawmk4 21_18.rawmk4 01_28.rawmk4 18_53.rawmk4 19_37.rawmk4 20 36.rawmk4 21_21.rawmk4 20 39.rawmk4 01 31.rawmk4 18 56.rawmk4 19 40.rawmk4 21 24.rawmk4 01_34.rawmk4 18_58.rawmk4 19_43.rawmk4 20_42.rawmk4 21_26.rawmk4 19 01.rawmk4 17_52.rawmk4 19_46.rawmk4 20_45.rawmk4 21_29.rawmk4 18_03.rawmk4 19_04.rawmk4 19 49.rawmk4 20_48.rawmk4 21 32.rawmk4 18_12.rawmk4 19_07.rawmk4 19_52.rawmk4 20_51.rawmk4 21_35.rawmk4 18_15.rawmk4 19_10.rawmk4 19_54.rawmk4 20_54.rawmk4 c18_31.rawmk4 18 18.rawmk4 19 13.rawmk4 19 57.rawmk4 20 57.rawmk4 c18 37.rawmk4 18_21.rawmk4 19 16.rawmk4 20 16.rawmk4 21 00.rawmk4 c18 43.rawmk4 18 24.rawmk4 19 19.rawmk4 20 19.rawmk4 21 03.rawmk4 18 27.rawmk4 21 06.rawmk4 19 22.rawmk4 20 22.rawmk4 21_09.rawmk4 18_34.rawmk4 19_25.rawmk4 20_25.rawmk4