## Mauna Loa Solar Observatory Observer's Log \_\_\_\_\_\_ Sun Sep 14 16:43:00 GMT 1997 Year: 97 Doy: 257 Observer: yasukawa WEATHER COMMENT: Sun Sep 14 16:43:09 GMT 1997 In heavy cirrus overcast, cool, no wind. Uncertain if I can quide thru cirrus. Sun Sep 14 16:43:59 GMT 1997 CHIP Startup--Initializing new tape Sun Sep 14 16:53:50 GMT 1997 dPMon Start Patrol WEATHER COMMENT: Sun Sep 14 16:53:49 GMT 1997 Sky transmission is running less than 1/2 usual value causing quider to oscillate a lot--sky tx is AGC for quider, lower value increases gain. Sun Sep 14 16:55:49 GMT 1997 CHIP CHIP Start Patrol Sun Sep 14 17:00:20 GMT 1997 dPMon Flat Sun Sep 14 17:01:27 GMT 1997 dPMon End Flat WEATHER COMMENT: Sun Sep 14 17:00:38 GMT 1997 Data looks quite bad. I will run CHIP and DPMON anyway. I can recycle the tapes if holes don't materialize or sky doesn't clear enough to get useable data. Sun Sep 14 17:03:16 GMT 1997 CHIP Bias Sun Sep 14 17:04:04 GMT 1997 CHIP End Bias Sun Sep 14 17:04:14 GMT 1997 CHIP Water Sun Sep 14 17:04:46 GMT 1997 CHIP End Water Sun Sep 14 18:02:16 GMT 1997 CHIP Bias Sun Sep 14 18:03:01 GMT 1997 dPMon Flat Sun Sep 14 18:03:03 GMT 1997 CHIP End Bias Sun Sep 14 18:03:10 GMT 1997 CHIP Water Sun Sep 14 18:03:43 GMT 1997 CHIP End Water Sun Sep 14 18:03:58 GMT 1997 dPMon End Flat Sun Sep 14 19:01:10 GMT 1997 CHIP Bias Sun Sep 14 19:02:03 GMT 1997 CHIP End Bias Sun Sep 14 19:02:12 GMT 1997 CHIP Water Sun Sep 14 19:02:49 GMT 1997 CHIP End Water Sun Sep 14 19:03:06 GMT 1997 dPMon Flat Sun Sep 14 19:04:01 GMT 1997 dPMon End Flat WEATHER COMMENT: Sun Sep 14 18:53:38 GMT 1997 Cirrus thin enough that CHIP data looks useable. DPMON is also good. WEATHER COMMENT: Sun Sep 14 19:55:23 GMT 1997 In orographic clouds. Sun Sep 14 20:00:07 GMT 1997 dPMon Flat Sun Sep 14 20:01:05 GMT 1997 dPMon End Flat Sun Sep 14 20:01:05 GMT 1997 dPMon End Patrol Sun Sep 14 20:01:02 GMT 1997 CHIP Gain Sun Sep 14 20:05:18 GMT 1997 CHIP End Gain Sun Sep 14 20:05:25 GMT 1997 CHIP Bias

CHIP

End Bias

Sun Sep 14 20:06:05 GMT 1997

Sun Sep 14 20:06:12 GMT 1997 CHIP Water Sun Sep 14 20:06:38 GMT 1997 CHIP End Water

MKIII COMMENT: Sun Sep 14 20:54:29 GMT 1997

Addressed the AR11 signal swap. Found Sky transmission signal output at guider board and at end of cable that went to AR11. AR11 end of cable is terminated with an RC network and only the signal lead went on beyond the filter to the AR11. We had been using floating ground method of getting signal over to the AR11. We temporarily soldered pin jacks onto the end of the signal and ground wires and plugged them into P3 of the 3125 VME board in the KBOX to move the sky transmission over to the new system.

Sun Sep 14 21:01:02 GMT 1997 CHIP Bias
Sun Sep 14 21:01:56 GMT 1997 CHIP End Bias
Sun Sep 14 21:02:03 GMT 1997 CHIP Water
Sun Sep 14 21:02:36 GMT 1997 CHIP End Water

MKIII COMMENT: Sun Sep 14 20:59:19 GMT 1997

Addressed the missing bits in the corrector data. We determined that the 32 bit was missing in the ChO dark corrector and the 512 bit was missing in the CHI dark corrector. We then determined that the missing bits resided in the DCSB AN2 card's MDAC IC. Using the known good spare card, we removed the MDACs and swapped them for the bad ICs in both active AN2 cards. Tested corrector loads and the signals now look OK. Found spare MDAC ICs in our spares inventory so we installed new MDACs into the spare AN2 card. This card needs to be tested before installing.

CHIP COMMENT: Sun Sep 14 21:05:44 GMT 1997

CHIP began running again. I thought I stopped it. May have bumped mouse button while the cursor was sitting on Patrol (which it was), or program may have just failed to stop. Had to press Video to get an END button.

Pressed it but CHIP is still running.

Sun Sep 14 21:08:11 GMT 1997 CHIP CHIP End Patrol Sun Sep 14 21:11:35 GMT 1997 CHIP ending tape COMMENT: Sun Sep 14 21:12:33 GMT 1997

End observing day. It is raining outside.

## Activity report:

OP: 60-75; 230; 254; 290-320;

No coronal activity seen, only one good scan on new system taken, We will discontinue scan-log insertion onto logs with the phasing in of the 11/44 replacement system.

Tapes: MKIII: H01633 DPMON: P00986

CHIP: C00407 LOWL: L00472

COMMENT: Sun Sep 14 21:19:15 GMT 1997

Continuing MKIII work. Working on getting barrel limits signal down

the cable to the new system.

COMMENT: Sun Sep 14 21:26:49 GMT 1997

Guider signal to monitor was very noisy today. At first I thought it was due to the low sky tx AGC but as sky cleared, it became apparent that the noise wasn't due to the AGC. I unfloated the ground to the monitor and the signal quieted down.

LOW-L COMMENT: Sun Sep 14 23:14:49 GMT 1997

Looked at voltages at smartfan. Power supply voltage was OK at 28V. Output from controller was 5V. Output voltage went up to 28V when fan disconnected.

MKIII COMMENT: Mon Sep 15 00:10:14 GMT 1997

Still trying to understand what is or is not happening with the barrel limits.

MKIII COMMENT: Mon Sep 15 01:44:33 GMT 1997

Vague pinout listing of AlJ1 on barrelO1, Tilt... document for BRLCWLMTG wire led to miswiring of new stuff. Fixed. Also found that O1 guider signals needed to go upstairs on new cable. Brought the old cable end down from upstairs and jumpered the signals from the O1 guider/OCP over to the new cable. Now O1 guiders are chattering "nicely"

End of today's effort.