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Mauna Loa Solar Observatory Observer's Log  
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Tue May 12 16:35:18 GMT 2009

Year: 09 Doy: 132

Observer: koon

WEATHER COMMENT: Tue May 12 16:35:21 GMT 2009

Clear sky, wind=5mph from the SSE, temp=50F.

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

Tue May 12 16:40:57 GMT 2009 CHIP Start Patrol

Tue May 12 16:41:28 GMT 2009 PICS Start Patrol

Tue May 12 16:44:06 GMT 2009 MKIV Start Patrol

Tue May 12 16:50:21 GMT 2009 MKIV End Patrol

PSPT COMMENT: Tue May 12 17:46:35 GMT 2009

obs

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

**\*\*MKIV PROBLEM\*\***: Tue May 12 17:46:40 GMT 2009

Tried a couple of scans with sun, still looks like snow-noise on realtime monitor, same as if camera were in the dark. Printf fetch numbers are mostly high, in the tens of thousands, same as if dark or with Opal in place.

Likewise scans with shutter closed and with shutter open and Opal in place look the same as with full sun.

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

Tue May 12 17:51:14 GMT 2009 MKIV Start Patrol

Tue May 12 17:57:34 GMT 2009 MKIV End Patrol

**\*\*MKIV PROBLEM\*\***: Tue May 12 17:52:14 GMT 2009

The akamai processor seems slow to react to GUI commands, especially with scans running. I wonder if this slowness is what causes the system to lose control of the barrel, maybe changing the jumpers for BIN somehow made the "data" easier to handle so that the processor board can run fast enough that the rest of the mk4 data collection system including the barrel can operate better? Back when the barrel would run to the CCW limit after starting Patrol and when we were getting incomplete sector scans the GUI wouldn't operate at normal speed - there was lots of delays after clicking on GUI "buttons".

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

Tue May 12 18:00:25 GMT 2009 PICS Flat

Tue May 12 18:02:56 GMT 2009 PICS End Flat

Tue May 12 18:02:40 GMT 2009 CHIP LSD

Tue May 12 18:03:07 GMT 2009 PICS ReStart Patrol

Tue May 12 18:04:06 GMT 2009 CHIP End LSD

Tue May 12 18:04:14 GMT 2009 CHIP BiasLSD

Tue May 12 18:05:00 GMT 2009 CHIP End BiasLSD

Tue May 12 18:05:08 GMT 2009 CHIP Bias

Tue May 12 18:05:53 GMT 2009 CHIP End Bias

Tue May 12 18:06:06 GMT 2009 CHIP ReStart Patrol

COMMENT: Tue May 12 20:12:37 GMT 2009

Extended the dome slot.

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

Tue May 12 21:11:05 GMT 2009 MKIV Start Patrol

**\*\*MKIV PROBLEM\*\***: Tue May 12 21:14:28 GMT 2009

Doing some jumper testing, need to shutoff main KCC power between changes and that causes spar guiding to turn off briefly. I see PRIN signals to camera at about 480 Hz, if we need these at all to shorten the exposure of each 960 Hz camera read then it seems to me that these should be at 960 instead of 480 Hz. Tried removing the jumpers P406 to PRIN to see what happens to data display and barrel behavior. With BIN jumpers P404 left in their changed position (to allow barrel to behave) the startup and data displays seem the same, and still have a delay when click on Idle "button" from GUI. With BIN jumpers P404 put into normal positions the startup program stalls. Moved P404 jumpers back to changed position, re-installed the P406 jumpers in their normal position. Would like to set PRIN to logic High and PRINB to logic Low to be sure PRIN function is disabled.

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

**\*\*PSPT PROBLEM\*\***: Tue May 12 21:26:46 GMT 2009

Crashed, restarted.

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

Tue May 12 21:28:57 GMT 2009 MKIV Start Patrol  
Tue May 12 21:41:08 GMT 2009 MKIV End Patrol  
Tue May 12 22:47:23 GMT 2009 CHIP End Patrol  
Tue May 12 22:47:53 GMT 2009 PICS End Patrol

\*\*MKIV PROBLEM\*\* : Tue May 12 22:04:19 GMT 2009

Checking data in from camera at J29 on transformation board. Pin 27 data line signal looks different compared to the other data lines.

I don't see LVAL on pins 39 and 40 at the same frequency as EXSYNC which is at 960 Hz, LVAL signals look very weak and higher frequency. But I remember getting a decent LVAL signal upstairs at the camera before so I checked it, it still looks good, this sounds like we're losing the LVAL signals between upstairs and downstairs due to a bad cable possibly.

I'm going to skip coming in tomorrow and come in Thursday with Allen so we can benefit from both of us working on this apparent cable problem and we can toss around ideas about what else it could be.

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

Wed May 13 00:23:47 GMT 2009

MkIV

16\_44.rawmk4 17\_51.rawmk4 21\_11.rawmk4 21\_28.rawmk4 21\_34.rawmk4  
16\_47.rawmk4 17\_54.rawmk4 21\_14.rawmk4 21\_32.rawmk4 21\_37.rawmk4