
Mauna Loa Solar Observatory Observer's Log

Sun May 10 16:46:34 GMT 2009

Year: 09 Doy: 130

Observer: koon

WEATHER COMMENT: Sun May 10 16:46:35 GMT 2009

Thick cirrostratus overcast, wind=3mph from the South, temp=44F.

____end____

COMMENT: Sun May 10 16:49:17 GMT 2009

No obs until clouds thin out.

____end____

GONG COMMENT: Sun May 10 19:37:36 GMT 2009

Back from shelter, stored away some things that were shipped to me, need to send them a bad board.

____end____

Sun May 10 19:58:21 GMT 2009 MKIV Start Patrol

MKIV PROBLEM Sun May 10 20:01:04 GMT 2009

Started up normally with old MV200 card in place, stalled startup with spare MV200 board in place when I tried that next, then I tried the spare MV200 board and left ribbon cable (digital input cable) disconnected, this time the GUI screen started up, started Patrol and got the same symptoms as when the old MV200 board is installed, the barrel turned all the way CCW to the limit. Checked data using printfetch in akamai window and got all zeros, so once again it looks like when no data gets through the barrel goes to CCW limit, data plays a role in the barrel behavior somehow. Tried balance 0 and balance 1 in akamai window, still get the same scattered points, what we were calling noise last time. Tried startup again, got same results, something coming through digital input cable is causing the startup program to stall, but when nothing comes through then the barrel runs to CCW limit and stalls and nothing gets plotted on the GUI screen.

____end____

Sun May 10 20:48:07 GMT 2009 MKIV Start Patrol

MKIV PROBLEM Sun May 10 20:51:52 GMT 2009

With Strobe jumpers at P321 reversed the startup stalls on "hello from t_operate" for a while but continues eventually and I get the GUI screen. Printfetch shows erratic number though, Patrol shows radially streaky "data" and barrel doesn't continue as far as it should. Tried reversing LVAL jumpers at P320 along with those at P321 and startup stalls before GUI. Left P320 reversed and put P321 jumpers back to normal, the startup program stalls before the GUI comes up, right after "hello from t_barrel". Put P320 jumpers back to normal and changed P321 jumpers again, got same results, the startup stalled right after "hell from t_operate" message in akamai window but then eventually continued and the GUI screen came up again.

The main upper power switch for KCC was turned off before each jumper change, that shuts off trans. board power.

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Sun May 10 21:30:05 GMT 2009 MKIV Start Patrol

Sun May 10 21:36:32 GMT 2009 MKIV End Patrol

MKIV PROBLEM : Sun May 10 21:34:28 GMT 2009

Interesting, I swapped the jumpers at P321 back to normal then changed all the jumpers from P404 to P407 to their different settings, then upon startup I got the GUI and upon running Patrol I got proper barrel operation for the first time using this spare MV200 board, the barrel went all the way to the proper places in the proper orders and directions, the data looks like noise but the sky is cloudy and the dome is closed. Printfetech gave very large numbers and balance gave the same scattered dots I've been seeing.

____end____

Sun May 10 21:49:20 GMT 2009 MKIV Start Patrol

MKIV PROBLEM : Sun May 10 21:59:24 GMT 2009

I tried changing the jumpers at P321 along with the others, but that caused stalling of the startup program and the Printfetech numbers still looked big and when I ran Patrol the barrel was like before when it would only scan sectors instead of the whole scan, the "data" looked like concentric rings.

____end____

Sun May 10 22:28:41 GMT 2009 MKIV Start Patrol

Sun May 10 22:39:03 GMT 2009 MKIV Start Patrol

MKIV PROBLEM : Sun May 10 22:02:10 GMT 2009

P404 through P407 are camera timing related jumpers, they change the signal EXSYNC, MCLK, PRIN, and BIN going up to the camera. For the next test I put P321 back to normal and P404-P406 back to normal, only P407 (EXSYNC) is changed, but that caused the startup program to stall. Next I changed P406 jumpers (PRIN) and P407 (EXSYNC) jumpers are still changed too, startup program stalled. Next I also changed P405 (MCLK) (as well as P406 and P407), stalled startup. Next I know things improve with P404 changed along with the 3 other sets P405-407, so this time I changed P404 and put P405 back to normal, with P404, P406 and P407 changed and P405 normal I get the same hopeful results as with P404-407 all changed. With P404 and P407 changed I get the same results as with P404-407 all changed. With just P404 changed I see the same results as with P404-407 all changed. So for the transformation board jumpers P404-407 controlling the signals to the camera I'll leave just P404 changed from normal. P404 jumpers are for BIN which controls the camera pixel binning.

____end____

Sun May 10 23:00:50 GMT 2009 MKIV Start Patrol

MKIV PROBLEM : Sun May 10 22:56:50 GMT 2009

Changed the P321 Strobe jumpers, these jumpers were changed by Eric back in 2007 when we installed a new MV200 board, they've been that way until my tests today; still getting a startup stall before the GUI screen with these jumpers changed, but eventually it continued to the GUI screen, using printfetech gives the same kind of results as with just jumpers P404 changed, some low numbers and some high numbers, running Patrol gives sector type scans. Tried changing the P320 LVAL jumpers on the transformation board next, with both P320 and P321 (and P404) changed I get that stall before the GUI screen that doesn't clear. With just P404 and P320 jumpers changed I see

the stall that doesn't clear also. Changed P320 back, currently the only changed jumpers on the transformation board are at P404.

____end____

WEATHER COMMENT: Sun May 10 23:20:59 GMT 2009

Still have thick clouds.

____end____

Sun May 10 23:25:32 GMT 2009 MKIV Start Patrol

MKIV PROBLEM : Sun May 10 23:50:50 GMT 2009

Tried the old MV200 board while P404 jumpers are changed and the results are the same as always, at Patrol barrel runs CCW to limit, no trace of data. The "data" that I've been seeing on the realtime GUI with the P404 jumpers changed and the spare MV200 in place looks like snow-type noise, but the scans are full like normal, not sectors, and there is no stalling during startup. Left the spare MV200 in place and only the P404 jumpers changed on the transformation board.

____end____

MKIV PROBLEM : Mon May 11 00:01:22 GMT 2009

I should mention that jumpers P320 (LVAL) and P321 (STROBE) control signals that go to the MV200 board, whereas P404-P407 control signals that go to the camera.

____end____

Mon May 11 00:14:50 GMT 2009

MkIV

20_48.rawmk4 21_33.rawmk4 22_28.rawmk4 22_42.rawmk4

21_30.rawmk4 21_49.rawmk4 22_39.rawmk4 23_00.rawmk4