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                  Mauna Loa Solar Observatory Observer's Log
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         Wed Jul 11 16:40:15 GMT 2007
Year: 07  Doy: 192
Observer: yasukawa
WEATHER COMMENT: Wed Jul 11 16:40:44 GMT 2007
In broken altocumulus overcast, SE wind 25-30 mph, temp 45 F.
___end___
**MKIV PROBLEM**: Wed Jul 11 16:41:47 GMT 2007
Original log entries were curiously lost.  Did a Pau/Run and logs are now
(for now)working.
___end___
**MKIV PROBLEM**: Wed Jul 11 16:42:58 GMT 2007
When original Run was run, barrel was at CCW limit, ~274, and started
rotating CW, thru normal scan sector, and to CW limit.  Barrel angle
readout displayed properly, KCC status indicator LED indicating correctly.
GUI displayed rotation for a few degrees then stopped communicating
with akamai.  Right and left buttons on mouse unresponsive on command
buttons but cursor does move.  Display dims after a while, but mouse
move does resume normal brightness.  Problem is still with us.
___end___
PICS COMMENT: Wed Jul 11 16:48:43 GMT 2007
PICS started before I noticed logs were missing.
___end___
CHIP COMMENT: Wed Jul 11 16:49:17 GMT 2007
Ditto CHIP
___end___
PSPT COMMENT: Wed Jul 11 16:49:27 GMT 2007
Ditto PSPT startup.
___end___
**PSPT PROBLEM**: Wed Jul 11 16:51:19 GMT 2007
The menehunes are active today.  PSPT crashed after homing guider
during startup.  Killed and restarted.
___end___
PSPT COMMENT: Wed Jul 11 17:03:30 GMT 2007
Observing
___end___
**MKIV PROBLEM**: Wed Jul 11 17:04:42 GMT 2007
Regarding logs loss......  I don't recall seeing the original startup
(Run) dialog on the akamai window.  When I did notice the window, there was
only "connected" at the top.  Normally, there would be lines of commands and
status lines population all the rows and last entry would be on the bottom.
When I cycled power to KCC, The "normal" initialization dialog, including
multiple lines of "CW Limit" scrolled thru the window.  Dialogue ended with
same error messages noted in yesterday's logs.
Barrel, which was sitting on CW limit ran to CCW limit. Gui displayed
few degrees of motion before "freezing" again.  Mouse cursor still active.
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___end___
Wed Jul 11 17:29:15 GMT 2007    CHIP      End Patrol
Wed Jul 11 17:29:25 GMT 2007    PICS      End Patrol
WEATHER COMMENT: Wed Jul 11 17:29:33 GMT 2007
Overcast thick, guiding poor.  Standing down on obs for now.
___end___
**MKIV PROBLEM**: Wed Jul 11 18:52:39 GMT 2007
Startup script on akamai shows several entries indicating possible hardware
problems, David will comment out some of the software and we will try
rebooting and looking for more specific messages.
___end___
Wed Jul 11 21:35:32 GMT 2007    MKIV      Start Patrol
Wed Jul 11 22:01:05 GMT 2007    CHIP      Start Patrol
Wed Jul 11 22:01:20 GMT 2007    PICS      Start Patrol
**MKIV PROBLEM**: Wed Jul 11 22:02:35 GMT 2007
Stopped troubleshooting effort for today, synopsis to follow.
___end___
WEATHER COMMENT: Wed Jul 11 22:03:06 GMT 2007
Sky clear of most altocumulus. Resuming PICS, CHIP and PSPT obs.
___end___
**MKIV PROBLEM**: Wed Jul 11 22:39:03 GMT 2007
David and I spent all morning troubleshooting over the phone.  Initially,
he could not log into akamai but we tried a bunch of stuff, mostly rebooting
with variations of the scripts to determine where the failures were
occurring.  Other things tried were swapping ethernet cables (interface
was swapped yesterday)--no change, and swapping processor board with the
problematic MCC processor board that Allen removed in June--couldn't boot
with it, needs software changes.  We managed to get to different places
in the boot process, and as far as getting the barrel to rotate to it's
initial 180 with the gui display tracking the barrel angle.  We managed to
select Patrol on the gui (also could swap between VCP and Ops GUI displays)
but Patrol crashed before it started up because KCC couldn't swap between
reading the mech program and the data program.  At around that point,
David managed to log into KCC but got locked out when program crashed.
We went down many branched paths due to the variety of crash flavors
we encountered and had to discipline ourselves to return to the main
problem.  We also checked the lithium battery on the board to determine
if a clock problem wasn't the cause.  The battery is soldered onto the
board so an easy swap with the MCC processor's battery wasn't attempted.
Instead, I checked the voltages and they were the same on both
batteries, 3.4 V.


We believe that there is a hardware problem causing the boot to fail.
We believe the ethernet problem is due to that failure and not due
to an ethernet problem or the cause of the failure.

For tomorrow, the plan is for David to pack and ship their spare
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Max Video 200 board to swap with the one in the KCC. We will need to verify
the strapping on the spare with the KCC one before making the swap.
The Max Video 200 is the board referred to mv200 and dq (Datacube) in the
boot dialog.

Allen will use his RS-232 breakout box and the laptop to change the parameters
on the "broken" MCC processor to conform with the KCC porcessor parameters--
chief problem are the IPs, 18 -> 16 and 12 -> 11, but there might be other
differences. Verify strapping, then swap ant try to boot. Hopefully, the
processors original problem won't affect the boot and will not surface
at least until after Patrol starts up and runs for a bit.
___end___
NICE PICSLIMB IMAGE: 2211
NICE PICSDISC IMAGE: 2210
NICE CHIP   IMAGE: 2210
Wed Jul 11 23:40:20 GMT 2007   MKIV   End Patrol
WEATHER COMMENT: Thu Jul 12 00:29:09 GMT 2007
In cirrocumulus overcast.
___end___
PSPT PROBLEM: Thu Jul 12 00:42:00 GMT 2007
Crash at 0032 UT, k/r.
___end___
Thu Jul 12 01:05:35 GMT 2007   CHIP   End Patrol
Thu Jul 12 01:14:52 GMT 2007   PICS   End Patrol
WEATHER COMMENT: Thu Jul 12 01:16:17 GMT 2007
___end___
MKIV PROBLEM: Thu Jul 12 01:20:10 GMT 2007
Located connection between alakai (MCC) and nene. Electrical top level
interconnect diagrams in the PICS and CHIP binders indicate a connection
to kii but that has changed, connection is now to nene. I noted the changes
on the documents. For boot comparison between akamai and akamai, we can
now open an alakai terminal on nene. Right click on desktop to open
Workspace menu, right click Programs, select alakai from the menu.
We may be able to change parameters from there, too.
Connection is from MCC Ser2 on the back of the MCC over to Serial A on the
rear of nene.
___end___
MKIV PROBLEM: Thu Jul 12 01:44:11 GMT 2007
Checked kii workspace menu, there is an alakai entry on the programs
menu but selecting it flashes a window which goes away in a blink--no
connection to alakai exists on kii.
___end___
Thu Jul 12 02:05:59 GMT 2007
        MkIV