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                  Mauna Loa Solar Observatory Observer's Log
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            Tue Jul  6 16:47:58 GMT 2010
Year: 10  Doy: 187
Observer: koon
WEATHER COMMENT: Tue Jul  6 16:48:00 GMT 2010
Clear sky, wind=5mph from the SE, temp=53F.
___end___
Tue Jul  6 16:55:05 GMT 2010     MKIV     Start Patrol
Tue Jul  6 16:55:22 GMT 2010     CHIP     Start Patrol
PSPT COMMENT BY DARRYL: Tue Jul  6 17:14:00 GMT 2010
Observing.
___end___
Tue Jul  6 17:36:33 GMT 2010     MKIV     End Patrol
Tue Jul  6 18:01:36 GMT 2010     CHIP     LSD
Tue Jul  6 18:03:08 GMT 2010     CHIP     End LSD
Tue Jul  6 18:03:16 GMT 2010     CHIP     BiasLSD
Tue Jul  6 18:04:02 GMT 2010     CHIP     End BiasLSD
Tue Jul  6 18:04:10 GMT 2010     CHIP     Bias
Tue Jul  6 18:04:56 GMT 2010     CHIP     End Bias
Tue Jul  6 18:05:09 GMT 2010     CHIP     ReStart Patrol
Tue Jul  6 20:19:18 GMT 2010     MKIV     Start Cal
**MKIV PROBLEM COMMENT BY DARRYL**: Tue Jul  6 20:19:40 GMT 2010
I think the CCD on the Mk4 camera is failing, we're seeing the same "dark noise"
signal like we did when the last CCD sensor failed in this camera, it's
not exactly the same but there is signal even when the sensor isn't
illuminated by the solar image, last bad CCD had raised noise across the
sensor with a high point in the central region, this sensor has a fairly
level raised signal area across the sensor but dip a lot near the right edge,
and there are high spikes on the outside edges of where the double signal
"humps" normally fall and lowered spikes on the inside edges of where those
humps normally fall - even though it is dark and there aren't any humps.
This is the case even with the camera and SK lens covered with black
photography cloth so it isn't a light leak problem.  The double humps also
show a big dip in the right humps as first noticed by Ben back on 6/28/10
before I started to realign the camera to increase the Vgain and in hopes
of eliminating this dip.  I've taken pictures and sent out an explanatory
email with a timeline and the request for help in getting a new CCD sensor.
We should keep running Mk4 anyway, the data may still be useful.  I'm
running a calibration now, after that I'll do a "Correct" and then run
another calibration.
___end___
Tue Jul  6 20:38:05 GMT 2010     MKIV     End Cal
Tue Jul  6 20:45:53 GMT 2010     MKIV     Start Correct
Tue Jul  6 20:47:25 GMT 2010     MKIV     End Correct
MKIV COMMENT BY DARRYL: Tue Jul  6 20:48:16 GMT 2010
Last output line from "Correct" shows:
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s & p hairlines 97 274 97 282
and the up/down signal looks greater than the last Correct showed. Back in
5/09 the hairlines were found at 107,275 and 108,274 instead of
97,274 and 97,282 like now, but the Correct graph looks bad at low heights
around that 95-110 region if I'm reading it right (there aren't any labeled
axes) so that corresponds to the bad looking lower heights in the scans and
in the double humps (inside edges are lower heights for both humps) and
so it makes sense that the Correct program would have difficulty finding
hairlines there. I'm going to cycle the KCC power as we have to do between
running a "Correct" and "Patrol" else the barrel runs to a limit and sits there.
Then I'll go on with other tasks and leave Mk4 as-is until I get back to
MLSO on 7/18.
___end___
Tue Jul 6 21:40:36 GMT 2010   MKIV   Start Patrol
Tue Jul 6 21:46:52 GMT 2010   MKIV   End Patrol
Tue Jul 6 21:47:42 GMT 2010   MKIV   Start Cal
MKIV COMMENT BY DARRYL: Tue Jul 6 21:51:57 GMT 2010
After the Correct the real-time scans look the same except for the ring inside
of the lowest corona is now mostly white instead of mostly blue. Running
another Cal then it's back to Patrol.
___end___
Tue Jul 6 22:07:12 GMT 2010   MKIV   End Cal
NOTE BY DARRYL: Tue Jul 6 22:12:41 GMT 2010
I setup a delivery of LN2 for 7/21/10, a 170 Liter dewar.
___end___
Tue Jul 6 23:02:37 GMT 2010   CHIP   LSD
Tue Jul 6 23:04:12 GMT 2010   CHIP   End LSD
Tue Jul 6 23:04:21 GMT 2010   CHIP   BiasLSD
Tue Jul 6 23:04:56 GMT 2010   CHIP   End BiasLSD
Tue Jul 6 23:05:12 GMT 2010   CHIP   Bias
Tue Jul 6 23:05:56 GMT 2010   CHIP   End Bias
Tue Jul 6 23:06:03 GMT 2010   CHIP   ReStart Patrol
Tue Jul 6 23:40:42 GMT 2010   CHIP   End Patrol
Tue Jul 6 23:44:14 GMT 2010   MKIV   End Patrol
Wed Jul 7 00:00:40 GMT 2010
        MkIV

16_55.rawmk4   17_30.rawmk4   22_17.rawmk4   22_53.rawmk4   23_32.rawmk4
16_58.rawmk4   17_33.rawmk4   22_20.rawmk4   22_56.rawmk4   23_35.rawmk4
17_01.rawmk4   20_22.rawmk4   22_23.rawmk4   22_59.rawmk4   23_38.rawmk4
17_03.rawmk4   20_28.rawmk4   22_26.rawmk4   23_01.rawmk4   23_41.rawmk4
17_06.rawmk4   20_34.rawmk4   22_29.rawmk4   23_04.rawmk4   c20_19.rawmk4
17_09.rawmk4   21_40.rawmk4   22_32.rawmk4   23_07.rawmk4   c20_25.rawmk4
17_12.rawmk4   21_43.rawmk4   22_35.rawmk4   23_13.rawmk4   c20_31.rawmk4
17_15.rawmk4   21_50.rawmk4   22_38.rawmk4   23_17.rawmk4   c21_54.rawmk4
17_18.rawmk4   21_57.rawmk4   22_41.rawmk4   23_20.rawmk4   c22_00.rawmk4
17_21.rawmk4   22_03.rawmk4   22_44.rawmk4   23_23.rawmk4
17_24.rawmk4   22_11.rawmk4   22_47.rawmk4   23_26.rawmk4

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17_27.rawmk4    22_14.rawmk4    22_50.rawmk4    23_29.rawmk4
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