SDO HMI Weekly Report
Week of Monday, September 27, 2010 through Sunday, October 3, 2010

<u>**Weekly Calibration Results**</u>
Wednesday September 29, 2010 @ 11:42 am PST
Operations performed today:
1) Obs mode flat field, FTS 3001, 18:42:15 UT, FSN 11603563
2) Cal mode flat field, FTS 3002, 18:47:00 UT, FSN 11602700
3) Focus Sweep (reduced), FTS 3000, 18:51:20 UT, FSN 11602843
4) Obs mode flat field (2), FTS 3001, 18:56:00 UT, FSN 11602984
5) Detune, FTS 3007, 19:14:00 UT, FSN 11603563
No leg alignment or clock adjust today.

<u>**Additional Operations**</u>

27-Sep-2010 at 20:34:02 UTC
Author: Brett Allard

Configured HMI back to script 9064 and 9065 for eclipse entry and exit, using stol
hmi_script_configure

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29-Sep-2010 at 07:26:49 UTC
Author: Paul Boerner

Ran Brett's new STOL hmi_diag in order to collect some high-rate data showing the
electronic noise on the ISS in the absence of sunlight. Selected "ISS PZTs and Diodes",
and entered 60 seconds (since we were getting close to the end of the eclipse; I can take a
longer run tomorrow if it is desired). The STOL ran nicely and the data were downloaded
in good order; ripping them now.

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30-Sep-2010 at 07:05:11 UTC
Author: Paul Boerner

Received command and diagnostic links for HMI about 7 minutes before the end of the
eclipse. Ran hmi_diag and collected 180 seconds of ISS PZT errors and diodes.
Collection finished and dump started ~2:30 before the eclipse_exit INC was sent.

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30-Sep-2010 at 07:28:23 UTC
Author: Paul Boerner

Sorry, I meant to say that we finished data collection 2:30 before the end of the eclipse; the INC is sent 3:00 later, so we were done 5:30 before the INC was sent.

Dump finished normally, disconnected command and diag channels.

Anomalies

27-Sep-2010 at 06:44:40 UTC
Author: Rock Bush

Missed images - all seems ok but dark due to eclipses.

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29-Sep-2010 at 02:38:46 UTC
Author: Jesper

Keh-Cheng just noticed that the high rate data stream has stopped. Investigating what is going on.

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29-Sep-2010 at 02:54:22 UTC
Author: Jesper

Oops!

Got this from Jim:

Everything is up an running.
The HMI data is not coming in from the DDS.

Jesper Schou wrote:
> Note that the AIA data are flowing.
>
> Jesper
>
> Keh-Cheng Chu wrote:
>> The last scp transfer from DDS was at 18:45.
>> Problem with the instrument or DDS or something
>> else?

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29-Sep-2010 at 03:27:58 UTC
Author: Jesper

Got hold of someone at the MOC. He was already looking into it. Stay tuned.

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29-Sep-2010 at 04:19:21 UTC
Author: Jesper

They are still working on it. He is not sure that he can fix it, but is still trying. In the end they may have to wait for someone at White Sands to reboot a machine tomorrow.

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29-Sep-2010 at 04:21:53 UTC
Author: Zoe Frank

The plots and screen snaps seem to be up to date at 04:03 UT. I'll proceed with the checklist but am hoping to hear from Jesper about what happened with the telemetry earlier.

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29-Sep-2010 at 04:27:40 UTC
Author: Jesper

Looks like they got the data unstuck!

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Operator: Sarah Gregory
Reporting Time Frame: 9hours.
Checklist completed at: 13:22:36

Images haven't updated on the Watch Level 0 page since 12:36UT (FSN11589491) but the FSN plot is still incrementing and the snap has the latest FSN as 11591601.

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03-Oct-2010 at 05:50:56 UTC
Author: Brett Allard

Spoke with Judy at the MOC and she commented that they were having issues with the DSIM and had recommend not being the command link up tonight if not needed. The DSIM expert has been notified will look into the issue either tomorrow or Monday.

I notified her that tonight work was not required. I will not be reconfiguring the eclipse script to 2064 tonight or to 3065 for Sunday night.

HMI is expected to warm the front window up to 40C tonight and Sunday night.

Limit violations
  None

Clock Information

Date/Time	S/C Time Offset +slow	HMI wrt S/C +fast	HMI wrt GND	S/C or Inst. Adustment?
9/27/10 @ 17:23 UT	-6.6 ms	-27.5 ms	-20.9 ms	HMI from 0x800271 to 0x800272
9/28/10 @ 15:36 UT	-1.3 ms	-17.7 ms	-16.4 ms	No change
9/29/10 @ 16:19 UT	+3.7 ms	-6.8 ms	-10.47 ms	No change.
9/30/10 @ 12:00 UT	0.0 ms	-10.0 ms	-10.0 ms	S/C reset to 0
10/1/10 @ 16:44 UT	+4.9 ms	+3.0 ms	-1.9 ms	No change
10/2/10 @ 03:20 UT	0.0 ms	-5.0 ms	-5.0 ms	S/C reset to 0
10/3/10 @ 20:00 UT	0.0 ms	+3.6 ms	+3,6 ms	S/C reset to 0

Thermal Adjustments

Eclipse-related thermal operations were performed and are noted under "Additional Operations" and "Loads" along with other eclipse-related operations.

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01-Oct-2010 at 20:10:02 UTC
Author: Brett Allard

between 19:08 and 19:54 conducted test switch thermal control of heater zone 3 from TS05 to TS06.

TS06 was under control from 19:18 to 19:51. Deadbands were managed to keep the zone in maintaining. Test was successful.

Sequencer Changes
  None

Date/Time of Change	New Sequence	Notes

S/C Calibrations/Maneuvers
     None

Pointing Adjustments
     None

Long term Trends
Corrupt Image FSN 469769216 (**0x1C001C000**) occurrences (this week / mission to date):
     1. 0/10 (no new corrupt images)

Loads

01-Oct-2010 at 20:06:54 UTC
Author: Brett Allard

Uploaded New eclipse load for testing
Script 3001 unchanged (controls focus sweeps and sets temp back to normal after 45 min)
Script 9064 HZ 1&2 to 38C HZ3 to 35C
Script 9065 waits 135 second and sets heaters to recovery +/-5DN
Script 2064 Sets HZ1&2 to 34C HZ3 to 35C
Script 4064 sets HZ1&2 to 40C HZ3 to 35C
Script 2065 waits 300 seconds and sets heaters to recovery +/-5DN
Script 3065 waits 480 seconds and sets heaters to recovery +/-5DN
Script 4065 waits 600 seconds and sets heaters to recovery +/-5DN

Friday night Script 4064 and 9065 will be used
Saturday night Script 2064 and 9065
Sunday night 9064 and 9065

Notes: