

SDO HMI Internal Weekly On-Orbit Report

Week of Monday, November 15, 2010 through Sunday, November 21, 2010

Summary

HMI successfully performed their weekly calibrations on Wednesday, November 17th (flatfields, focus sweep). There were a few nominal clock adjustments and a few thermal adjustments made this week. Reduced focus sweeps were ran during the heater zone 7 adjustments to monitor the effects of the changes. HMI continues to perform nominally.

Troubleshooting continued this week of the Gnome desktop error crash that we've been seeing sporadically when the FOT does a security scan of our workstations. Sun has provided patches that have been installed on the SDOIOC-SPR and AIAMOC-MON workstations and will be tested via another security scan on Wednesday, November 24th. Further details and questions about this matter are available upon request.

Calibrations

Calibration	Date/Time	Ran by	Notes
Focus Sweep (full)	17-November-2010 18:47 UT	Emma & Zoe	FSN 13849950
Flat field (observation mode-1)	17-November-2010 18:53 UT	Emma & Zoe	FSN 13851490
Flat field (calibration mode)	17-November-2010 18:58 UT	Emma & Zoe	FSN 13850292
Flat field (observation mode - 2)	17-November-2010 19:04 UT	Emma & Zoe	FSN 13850507

Additional Operations

1. Heater Zone 7

Focus sweeps were taken to monitor the effects of the heater zone 7 temperature changes (see "Thermal Adjustments" section).

17-Nov-2010 at 21:56:22 UTC

Author: Emma Lehman

Ran reduced focus sweep (FTS 3000) to monitor changes from the zone 7 adjustments earlier today. I will take another reduced focus sweep tomorrow morning.

21:53 UT - Reduced focus sweep, FSN 13855907

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18-Nov-2010 at 18:15:35 UTC

Author: Emma Lehman

Ran reduced focus sweep (FTS 3000) to monitor changes from the zone 7 adjustments yesterday.

18:13 UT - Reduced focus sweep (FTS 3000), FSN 13894937

Instrument Anomalies

None

Limit violations

None

Clock Information

Date/Time (UT)	HMI WRT S/C (ms)	S/C WRT ground (ms)	HMI WRT ground	Adjustment
11/15/10 @ 20:42	-10.8	+1.6	-9.2	HMI from 0x800274 to 0x800275
11/18/10 @ 12:00	+5.0	0	+5.0	SC reset to 0
11/19/10 @ 16:05	+9.9	0	+9.9	SC reset to 0
11/19/10 @ 18:38	+9.5	0	+9.5	HMI from 0x800275 to 0x800274

Thermal Adjustments

1. Heater Zone 3

17-Nov-2010 at 19:13:55 UTC

Author: Emma & Zoe

19:01 UT - Raised heater zone 3 deadband high from 31C to 32C.

2. Heater Zone 7

The duration and duty cycle of heater zone 7 was lowered. This operation brought down the optical bench temperatures (zones 4-7) by about 0.3 degrees C, and may be repeated in the future.

17-Nov-2010 at 19:13:55 UTC

Author: Emma & Zoe

18:51 UT - Set the heater zone 7 deadband duty cycle to 83%, and the duration to 6.

Sequencer Changes

None

Date/Time of Change	New Sequence	Notes

S/C Calibrations/Maneuvers

None

Pointing Adjustments

None

Long term Trends**1. Corrupt Image FSN 469769216 (0x1C001C000)**

Occurrences this week:

1. No new occurrences

Occurrences to date: 16

2. Corrupt Image FSN 9175180 (0x008C008C)

Occurrences this week:

1. No new occurrences

Occurrences to date: 3

Loads

None

Other**1. EGSE testing on the SPR machine**

19-Nov-2010 at 19:56:47 UTC

Author: Emma Lehman

This morning around 18:15 I restarted the EGSE on the SPR computer (it had not been started again after the reboot) and did an HMI clock adjust. Everything went nominally, and I will continue to use the SPR machine for HMI operations next week.