

SDO HMI Internal Weekly On-Orbit Report

Week of Monday, January 24, 2011 through Sunday, January 30, 2011

Summary

HMI successfully performed their weekly calibrations on Tuesday, January 25th (observation mode-1) and on Wednesday, January 26th (flatfield calibration/observation mode-2, full focus sweep) using timed scripts. During the EVE Cruciform a new script set the cadence to 90 seconds as opposed to the nominal 135 second cadence. (It was changed back to nominal after the calibration). HMI continues to perform nominally.

Calibrations

Calibration	Date/Time	Ran by	FSN	Notes
Flat field (observation mode-1)	25-Jan-11 19:04:40	Timed Script	17028174	
Flat field (observation mode - 2)	26-Jan-11 19:04:37	Timed Script	17074252	
Flat field (calibration mode)	26-Jan-11 19:13:37	Timed Script	17074540	
Focus Sweep (full)	26-Jan-11 19:20:25	Timed Script	17074758	

Loads

1. EVE Cruciform Load

26-Jan-2011 @ 19:38:51 UT

Uploaded script 7011 (H_CRUC_TEST) to be run during the EVE Cruciform maneuver.

This script runs a 90 second cadence rather than the nominal 135 second cadence.

Thermal Adjustments

None

S/C Calibrations/Maneuvers

1. EVE Cruciform

27-Jan-2011

An EVE Cruciform maneuver took place from 14:15 UT to 23:05 UT. During the maneuver, HMI ran a 90 second cadence (FTS 1020) between 17:00 UT and 22:00 UT to help troubleshoot the HCM delay issue.

Details:

27-Jan-2011 at 17:05:01 UTC

Author: Emma Lehman

Script 7011 was executed as expected at 17:00. FTS 1020 is now running with a cadence of 90 seconds.

At 22:00 script 9060 will run, which will clear out the priority table, lay back in FTS 1021 and 2021, and change the cadence back to 135 seconds.

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27-Jan-2011 at 22:25:59 UTC

Author: Jesper

It is back to 1021! Looks like transition went as desired and that we are back in sync.

Additional Operations

1. SDOIOC-SPR Testing

25-Jan-2011 at 19:25:02 UTC

Author: Emma Lehman

Successfully sent a no-op from SDOIOC-SPR through Viper on port 2002, SFID H3.

2. EVE Cruciform Preparation

26-Jan-2011 at 19:38:51 UTC

- Set up a timed script to run script 7011 (1-27-11) @ 17:00 UT

- Set up a timed script to run script 9060 (maneuver end script) (1-27-11) @ 22:00 UT

Instrument Anomalies

None

Limit violations

None

Clock Adjustments

Date/Time (UT)	HMI WRT ground (ms)	Adjustment
1/26/11 @ 19:34	+5	HMI from 0x800274 to 0x800273

Date/Time (UT)	HMI WRT ground (ms)	Adjustment
1/28/11 @ 21:42	-11.5	HMI from 0x800273 to 0x800274

Sequencer Changes

None

Date/Time of Change	New Sequence	Notes

Long term Trends

1. Corrupt Image FSN 469769216 (0x1C001C00)

Occurrences this week:

1. No new occurrences

Occurrences to date: 24

3. Corrupt Image FSN 9175180 (0x008C008C)

Occurrences this week:

- No new occurrences

Occurrences to date: 2

Other

1. EGSE Limit Adjustments

29 Jan 2011 0:55 GMT

We (Brett and Emma) updated hmi_instr_limit.src to tighten the yellow limits on the CIF SDRAM errors as much as possible. This was following an HMI checklist meeting where we agreed that the CIF SDRAM question would be removed from the checklist if we tighten the limits so that if the error count for any buffer is not zero we will get an alert.

We also noticed an error in the limit file, where the camera gain and offset limits were +/- 1 from where they should have been, so we tightened those limits as well. We tested this on the testbed, then updated and tagged the limits file for both HMI and AIA ON_ORBIT directories.