SDO HMI Internal Weekly On-Orbit Report

Week of Monday, January 10, 2011 through Sunday, January 16, 2011

Summary

HMI successfully performed their weekly calibrations on Tuesday, January 11th (observation mode-1) and on Wednesday, January 12th (flatfield calibration/observation mode-2, full focus sweep) using timed scripts. There was one nominal clock adjustment made this week. Retuned maneuver script STOLs loaded and tested successfully. HMI continues to perform nominally.

On Thursday, the EVE FOV and AIA/HMI Flatfields Instrument Maneuvers took place with no issues for AIA or HMI. Results will be analyzed in the near future.

Calibrations

Calibration	Date/Time	Ran by	FSN	Notes
Flat field (observation mode-1)	11-Jan-11 19:04:38	Timed Script	16384905	
Flat field (observation mode - 2)	12-Jan-11 19:04:40	Timed Script	16430986	
Flat field (calibration mode)	12-Jan-11 19:13:40	Timed Script	16431274	
Focus Sweep (full)	12-Jan-11 19:20:24	Timed Script	16431489	

Loads

1. **Retuned Maneuver Scripts STOL Load**
   January 12, 2011 at 20:00 UT
   Emma loaded the following calibration/maneuver STOLs which have been updated for the HMI retune:
   Loaded:
   H_EVE_FOV (Script 7002 – for the EVE FOV maneuver)
   H_FF_MAN (Script 7003 – for the HMI/AIA off-point maneuver)
   H_ROLL_MAN (Script 7005 – for the HMI roll maneuver)
   H_END_CAL (Script 9060 – response to maneuver end INC)
   Erased:
   H_EVE_CRUC (7001 – for the EVE Cruciform Maneuver)

Additional Operations

1. **Retuned Maneuver Script Testing**
   January 12, 2011 at 20:00 UT
   After loading several maneuver scripts which had been updated for the HMI retune,
   Emma performed the following operations:

   Configured:
         Script 9060 (H_END_CAL) to INC
   Ran:
         Script 7001 (Saw script missing error, as expected)
         Script 7002 (H_EVE_FOV) (Cleared with 9060)
         Script 7003 (H_FF_MAN) (Cleared with 9060)
         Script 7005 (H_ROLL_MAN) (Cleared with 9060)

   All operations were successful.

Instrument Anomalies
None

Limit violations
None

Clock Information

Date/Time (UT)	HMI WRT ground (ms)	Adjustment
1/10/11 @ 18:44	+19.0	HMI from 0x800275 to 0x800274

Thermal Adjustments
None

Sequencer Changes
None

Date/Time of Change	New Sequence	Notes

S/C Calibrations/Maneuvers

2. **EVE FOV Maneuver**
   13-Jan-2011 at 13:25:11 UTC
   An EVE Field Of View maneuver was performed on Thursday, January 13, 2011 at 13:15 UT to 15:57 UT. The maneuver was successful and HMI performed nominally.

   > 13-Jan-2011 at 13:25:11 UTC
   > Author: Jake
   >
   > The EVE FOV Coordinated Calibration is off and running. INCs received, loops told to open, scripts run, etc. Screens and plots not updated yet but will soon.
   >
   > --
   >
   > 13-Jan-2011 at 16:37:18 UTC
   > Author: Jake Wolfson
   >
   > EVE FOV ended and looked nominal at first glance.
   > HMI/AIA Flat-Field now going on and seems nominal.

3. **AIA/HMI Flat-Field Maneuver**
   13-Jan-2011 at 16:30 UTC
   An AIA/HMI Flat-Field maneuver was performed on Thursday, January 13, 2011 from 16:30 UT to 18:37 UT. The maneuver was successful and HMI performed nominally. The collected data has not yet been analyzed.

Pointing Adjustments
None

Long term Trends

1. **Corrupt Image FSN 469769216 (0x1C001C000)**
   Occurrences this week:
   > No new occurrences.
   Occurrences to date: 21

4. **Corrupt Image FSN 9175180 (0x008C008C)**
   Occurrences this week:
   > No new occurrences
   Occurrences to date: 2

Other

1. **MOC Workstation Reconfiguration**
   January 11, 2011 15:19 UT
   Three workstations (AIAMOC-MON, AIAMOC-CMD, and HMIMOC-CMD) were relocated from the SOS room to the MAR room in the MOC. The moves were successful and all three machines were reconnected for telemetry by 17:20 UT. The IMG machines will be moved at a later date (tentatively set for Tuesday, January 18), because they are on another network and thus require a different tool to move.