

SDO HMI Internal Weekly On-Orbit Report

Week of Monday, July 4, 2011 through Sunday, July 10, 2011

Summary

HMI successfully performed its weekly calibrations on Tuesday, July 5th (obs-mode flatfield and detune) and on Wednesday, July 6th (obs-mode flatfield, cal-mode flatfield, and reduced focus sweep), using timed scripts. On July 5th the duty cycle in heater zone 7 was increased in order to raise the bench temperatures closer to their target temperatures. HMI performed nominally during a Delta H (momentum management) maneuver on July 6. There were three corrupt images this week (FSN=469769216) for an on-orbit total of 41. HMI is performing nominally.

Weekly Calibrations

Calibration	Date/Time	Script	Ran by	Notes
Flat field (observation mode-1)	5-Jul-11 19:08 UT	2701	Timed Script	The detune calibration was performed with the day 1 calibrations rather than the day 2 calibrations in order to avoid interfering with the Delta H maneuver.
Detune	5-Jul-11 19:17 UT	2703	Timed Script	
Flat field (observation mode-1)	6-Jul-11 20:00 UT	2701	Timed Script	
Flat field (calibration mode)	6-Jul-11 20:08 UT	2702	Timed Script	
Reduced focus sweep	6-Jul-11 20:16 UT	2704	Timed Script	

Loads

None

Thermal Adjustments

1. Zone 7 Duty Cycle Increase

05-Jul-2011 @ 20:30 UT

Heater zone 7 was adjusted back to its values from early November 2010. The bench temperatures were getting close to the low deadbands, and the increase in the effective duty cycle of zone 7 brought them closer to their target temperatures. It also raised the front temperatures slightly, bringing the forward heater zones closer to their target temperatures as well.

Parameter	Old Values	New Values
Deadband duty cycle	81	87
Duty cycle duration	16	15
Effective duty cycle	81.25	86.6

S/C Calibrations/Maneuvers

1. Delta H Maneuver

6-Jul-2011

19:17 to 19:32 UT

HMI performed nominally during the Delta H / Momentum Management Maneuver on July 6.

Additional Operations

None

Instrument Anomalies

None

Limit violations

None

Clock Adjustments

None

Long term Trends

1. Corrupt Image FSN 469769216 (0x1C001C000)

Occurrences this week:

1. 2011-07-06 @ 14:33:25 UT
2. 2011-07-09 @ 14:12:28 UT
3. 2011-07-10 @ 20:34:44 UT

Occurrences to date: 39

2. Corrupt Image FSN 9175180 (0x008C008C)

Occurrences this week: None

Occurrences to date: 2

Other