

HMI Weekly Report Summaries: November 2010

Week of Monday, November 1, 2010 through Sunday, November 7, 2010

HMI successfully performed its weekly calibrations on Wednesday, November 3rd (flatfields, focus sweep), including a leg alignment this week. There was one nominal clock adjustment made on Friday and no thermal adjustments. There were 2 corrupt images seen this week on Friday and Saturday. HMI also saw a slightly different kind of corrupt image this weekend of which we now know we've seen 2 of total on-orbit. HMI continues to perform nominally.

HMI performed nominally during the EVE Cruciform on Thursday and the Lunar Transit late Friday evening.

Week of Monday, November 8, 2010 through Sunday, November 14, 2010

HMI successfully performed their weekly calibrations on Tuesday, November 9th (flatfields, focus sweep), including a leg alignment this week. A detune was performed on Thursday. There were several nominal clock adjustments and no thermal adjustments made this week. There were 2 corrupt images seen on Tuesday and Sunday – making a mission total of 16. HMI continues to perform nominally.

An inertial/science mode test was performed on Wednesday this week and was monitored from the JSOC-IOC. The new approach (with the updated SNR offset quaternion) yielded much lower pointing offsets, and was decidedly better for both instruments. This configuration will be used during the next lunar transit on December 6th.

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

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.

Week of Monday, November 22, 2010 through Sunday, November 28, 2010

HMI successfully performed their weekly calibrations on Tuesday, November 23rd (flatfield observation mode-1) and Wednesday, November 24th (flatfield observation mode-2, focus sweep, detune). A leg alignment adjustment was also made on Tuesday. The flatfields were split by 24 hours to have a better flatfield by viewing different active regions. There was one nominal clock adjustment made on Wednesday and no thermal adjustments made this week. There was

also a corrupt image seen on Wednesday making an on-orbit mission total of 17 of that version. HMI continues to perform nominally.

Week of Monday, November 29, 2010 through Sunday, December 5, 2010

HMI successfully performed their weekly calibrations on Tuesday, November 30th (flatfield observation mode-1) and Wednesday, December 1st (flatfield calibration/observation mode-2, focus sweep). There were two nominal clock adjustments made this week and no thermal adjustments. There was also a corrupt image seen on Wednesday making an on-orbit mission total of 18 of that version. HMI continues to perform nominally.

Patches provided by Sun for the gnome desktop crash seemed to have fixed the problem as shown by a security scan this week on 2 of the workstations (one of which had previously crashed consistently). The patches will be installed on the rest of the workstations next week. One final successful security scan of all of the workstations should close the issue.

There was a lunar transit on Monday, December 6th UT (Sunday, December 5th PT). HMI made deadband duty cycle adjustments on heater zones 1-3 during the transit which were reset when the transit ended. HMI performed nominally.