

HST INS Work Item Data Sheet

1. SI/Title: NICMOS/Pedestal Correction
2. INS Lead: A. Koekemoer
3. Description of Work:

This work item will attempt to find another method of performing the pedestal correction but correlating the pedestal level with the HST main bus voltage. The work consists of characterizing the dependence of the bias level with voltage, producing a script to test and verify the resulting correction algorithm, define a regression test data suite, and eventually produce a PyRAF package to perform this function.
4. Schedule Constraints and Dependencies:

Do this after the temperature from bias study is complete, since temperature may play a role in the bias level. The study part of this work can start now, and should complete by SM4.

If the temperature/voltage solution works, then implement new algorithm.

If the temperature/voltage solution does not work, then work the existing implementation to improve them.
5. Risks and Open Issues:

Open Issue – The study of bias level dependence on main bus voltage is still underway.
6. Priority: High
7. Priority Justification:

Pedestal level changes affect virtually all NICMOS exposures.
8. Resources (including estimated calendar duration for each portion):
 - a. Requirements
NICMOS Instrument Scientist (Koekemoer)
 - b. Development
STSDAS Developer
CALNICA Developer
NICMOS Data Analyst
 - c. Testing
NICMOS Data Analyst
9. Documentation and Deliverables:

NICMOS ISR
Pedestal Correction Script Delivery
STSDAS Code Delivery (PyRAF Code Delivery?)
NICMOS Data Handbook Updates(?)