

HST INS Work Item Data Sheet

1. SI/Title: NICMOS/Amp Glow Persistence
2. INS Lead: A. Koekemoer
3. Description of Work:

This work item is an investigation into the possible temperature-dependence of amp glow persistence, preferably using temperature-from-bias values. The temperature- and time-dependence will be characterized by means of coefficients. New header keyword(s) to define the amount of time the detector has spent in autoflush mode will be needed. A script to correct the images based on the investigation will be written, and a regression test data suite will be defined. Eventually, a PyRAF task will be written to perform the correction, and the task will be tested.
4. Schedule Constraints and Dependencies:

Schedule after the Temperature from Bias item is complete.

This is nearly ready to be scheduled.

Complete work by SM4.
5. Risks and Open Issues:

Open Issue – The method for determining the length of time in autoflush is not obvious. (True?)
6. Priority: Medium
7. Priority Justification:

The problem of amp glow persistence affects most long NICMOS exposures.
8. Resources (including estimated calendar duration for each portion):
 - a. Requirements
 - NICMOS Instrument Scientist
 - NICMOS Data Analyst
 - b. Development
 - NICMOS Data Analyst
 - CALNICA Developer
 - c. Testing
 - NICMOS Data Analyst
 - CALNICA Test Engineer
9. Documentation and Deliverables:

NICMOS ISR
PyRAF Code Delivery
NICMOS Data Handbook Updates