

HST INS Work Item Data Sheet

1. SI/Title: STIS/Spectral Dithering within MultiDrizzle
2. INS Lead: C. Proffitt
3. Description of Work:

This activity will allow the handling of spectroscopic STIS data within the MultiDrizzle tool. The intent is to allow combination of sets of spectral images which involve inter-exposure offsets (dithers) in the dispersion direction (across the slit), the spatial direction (along the slit), or both. The correction for dithers in the dispersion direction will involve calibrations that are dependent on grating and aperture. We anticipate that this activity will involve a significant amount of testing by STIS Team members. It will also involve writing an ISR and—likely—the need for delivery of reference files that allow for a correction of the throughput loss associated with stepping a source across the slit.
4. Schedule Constraints and Dependencies:
5. Risks and Open Issues:
6. Priority: High
7. Priority Justification:

Implementation of dithering will increase both spatial and spectral resolution of STIS observations.
8. Resources (including estimated calendar duration for each portion):
 - a. Requirements
STIS Instrument Scientist
 - b. Development
MultiDrizzle Developer
CALSTIS Developer
 - c. Testing
STIS Instrument Scientist(s)
STSI Data Analyst(s)
CDBS Administrator
9. Documentation and Deliverables:

Calibration ISR
MultiDrizzle Code Delivery
CALSTIS Code Delivery
CDBS Reference File(s) Delivery