

HST INS Work Item Data Sheet

1. SI/Title: Multidrizzle/STIS Spectral Multidrizzle
2. INS Lead: A. Koekemoer
3. Description of Work:

Update the current version of Multidrizzle to add STIS spectral Multidrizzle capability. Utilizing the STIS 2-dimensional spectral wavelength solution in IDCTAB format, requirements for the software enhancements will be developed followed by the actual software work. The STIS Data Handbook will be updated to document the new capability.
4. Schedule Constraints and Dependencies:

STIS needs to encode the 2-dimensional spectral wavelength distortion solution into IDCTAB format.
5. Risks and Open Issues:

Open Issue – STIS spectral Multidrizzle needs its algorithm defined, and wavelength/distortion characterized (allows for small rotations on the detector between exposures).
6. Priority: High
7. Priority Justification:

Incorporating the spectral Multidrizzle would improve the STIS science return through better-sampled line spread functions. This improvement would allow better comparison with theoretical spectra and provide better-determined physical parameters of the observed objects.
8. Resources (including estimated calendar duration for each portion):
 - a. Requirements
Instrument Scientists
 - b. Development
STSDAS Developer
 - c. Testing
Instrument Scientists
Data Analysts
STSDAS Test Engineer
9. Documentation and Deliverables:

STSDAS Code Deliveries
OPUS Pipeline Code Deliveries
Data Handbook Updates
Regression test Updates