HST INS Work Item Data Sheet

1. SI/Title: STIS/ CCD E1 and E2 Aperture Sensitivities

2. INS Lead: L. Dressel

3. Description of Work:
   This activity involves the analysis of sensitivity measurements of spectrophotometric standard stars taken at the E1 and E2 pseudo-aperture locations near CCD row number 900. By moving a spectrum closer to the readout, the number of parallel charge transfers is reduced by about a factor of four, with a comparable reduction expected in the losses due to charge transfer inefficiency during the readout. It remains to be checked, however, whether detector sensitivity and focus near row 900 differ by a few percent from that near the middle of the detector. This would result in errors in the extracted fluxes that might differ from aperture to aperture. This dataset also include observations with a 5.5 pixel dither in the cross-dispersion direction both to provide sub-sampled PSFs and to check if small variations in the target position have a significant effect on the measured count rates. This activity will involve writing one ISR, and likely also an update of 1-2 reference files.

4. Schedule Constraints and Dependencies:

5. Risks and Open Issues:

6. Priority: High

7. Priority Justification:

8. Resources (including estimated calendar duration for each portion):
   a. Requirements
      STIS Instrument Scientist

   b. Development
      STIS Instrument Scientist
      CDBS Administrator

   c. Testing
      STIS Instrument Scientist
      CDBS Administrator

9. Documentation and Deliverables:
   Calibration ISR
   CDBS Reference File Deliveries