## V&V Summary Report L2 ASCDS Version: 8.1.1

Observation 1423 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Nov 21 2009

See axaff01423N001\_VV001\_vvref2.pdf for the full report

| V&V Scientist              | Joy Nichols |
|----------------------------|-------------|
| V&V Date (YYYY-MM-DD)      | 2010.08.12  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 19.164      |

## Comments

ACIS response to line source on S3.

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Enhanced count rate 3-5 ksec and 10-11.5 ksec into the observation due to a slightly high radiation environment.

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The focal plane temperature is approximately  $-110\ C$  during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a  $T_GAIN$  correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.

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| seq_num  | 580373  | Sequence number                          |
|----------|---|--|
| obs_id   | 1423  | Observation id                           |
| title    | ACIS CHIP RESPONSE TO LINES WITH<br>E=0.6-1.5 KEV | Proposal title                           |
| observer | Dr. CXC Calibration                               | Principal investigator                   |
| object   | E0102-72.3 [Chip S3, T=110, Offsets=-1,0,0]       | Source name                              |
| dtycycle | 0   | <b>&amp;</b> #160                        |
| cycle    | P   | events from which exps? Prim/Second/Both |
| ra_targ  | 16.01   | Observer's specified target RA           |
| dec_targ | -72.032028  | Observer's specified target Dec          |
| ra_nom   | 16.072644146451                                   | Nominal RA                               |
| dec_nom  | -72.041225889704                                  | Nominal Dec                              |
| roll_nom | 340.49490099979                                   | Nominal Roll                             |
| revision | 4   | Processing version of data               |
| ontime   | 19161.559057631                                   | Sum of GTIs [s]                          |
| livetime | 18918.923859137                                   | Livetime [s]                             |
| ontime5  | 19161.559057631                                   | Sum of GTIs [s]                          |
| ontime6  | 19158.318097413                                   | Sum of GTIs [s]                          |
| ontime7  | 19161.559057631                                   | Sum of GTIs [s]                          |
| ontime8  | 19161.559057631                                   | Sum of GTIs [s]                          |
| ontime9  | 19161.559057631                                   | Sum of GTIs [s]                          |
| 12events | 434797  | Number of level 2 events                 |

