

# V&V Summary Report

## L2 ASCDS Version : 8.1.1

Observation 1437 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Feb 22 2010

See axaff01437N001\_VV001\_vvref2.pdf for the full report

|                            |             |
|----------------------------|-------------|
| V&V Scientist              | Joy Nichols |
| V&V Date (YYYY-MM-DD)      | 2010.02.23  |
| V&V Edition                | 1           |
| V&V Disposition and Status | OK          |
| V&V Charge Time            | 1.756       |

## Comments

Due to an error in the designation of the SI mode, only events on chip S3 were collected for this observation. The target, Cas A, had been placed on S2. The processing produces an event list for the chip S3, but does not include any events for Cas A, which was projected onto S2. Since the error is in the commanding of the ACIS instrument, the Cas A events cannot be recovered.

All of the chips were clocked out by ACIS, so all of the chips have a non-zero ontime. With the use of windowing, all events were blocked from telemetry except those on S3.

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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

(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.

|          |   |   |
|----------|---|---|
| seq_num  | 580387                                  | Sequence number                             |
| obs_id   | 1437                                    | Observation id                              |
| title    | ACIS CHIP RESPONSE TO CAS A,<br>JAN. 99 | Proposal title                              |
| observer | Dr. CXC Calibration                     | Principal investigator                      |
| object   | CAS A [Chip S2, T=110, Offsets=6,0,0]   | Source name                                 |
| dtcycle  | 0                                       | &#160                                       |
| cycle    | P                                       | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 350.8575                                | Observer's specified target RA              |
| dec_targ | 58.814833                               | Observer's specified target Dec             |
| ra_nom   | 350.89178515716                         | Nominal RA                                  |
| dec_nom  | 58.916814260596                         | Nominal Dec                                 |
| roll_nom | 259.14134771856                         | Nominal Roll                                |
| revision | 4                                       | Processing version of data                  |
| ontime   | 1755.269929111                          | Sum of GTIs [s]                             |
| livetime | 1733.0436443719                         | Livetime [s]                                |
| ontime4  | 1755.3930491135                         | Sum of GTIs [s]                             |
| ontime5  | 1755.4340891093                         | Sum of GTIs [s]                             |
| ontime6  | 1755.269929111                          | Sum of GTIs [s]                             |
| ontime7  | 1755.4751291126                         | Sum of GTIs [s]                             |
| ontime8  | 1755.3520091102                         | Sum of GTIs [s]                             |
| ontime9  | 1755.3109691143                         | Sum of GTIs [s]                             |
| l2events | 17793                                   | Number of level 2 events                    |

