

V&V Summary Report

L2 ASCDS Version : 10.8.1

Observation 23139 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Feb 10 2020

See [axaff23139N002_VV001_vvref2.pdf](#) for the full report

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|----------------------------|-----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2020.02.11 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 9.9076000763178 |

Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.

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A spatial region of the original bias maps for CCD = 0, CCD = 1, and CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias maps for CCD = 0, CCD = 1, and CCD = 2 have been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.

The pixels on CCD = 0 affected by the anomaly are bounded by sky coords:

(130.44058,7.88811), (130.44209,7.89191), (130.38736,7.91311),
(130.37918,7.91188).

The affected pixels on CCD = 1 are bounded by sky coords:

(130.19680,7.93625), (130.19471,7.93091), (130.24152,7.91282),
(130.25464,7.91390).

The affected pixels on CCD = 2 are bounded by sky coords:

(130.45755,7.98171), (130.45880,7.98489), (130.41584,8.00151),
 (130.41408,7.99854).

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|----------|---|---|
| seq_num | 801903 | Sequence number |
| obs_id | 23139 | Observation id |
| title | An random sub-sample of lambda=25-80 redMaPPer clusters | Proposal t |
| observer | Ming Sun | Principal investigator |
| object | RMJ084114.3+075843.6 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 130.309494 | Observer's specified target RA [deg] |
| dec_targ | 7.978788 | Observer's specified target Dec [deg] |
| ra_nom | 130.33874714619 | Nominal RA [deg] |
| dec_nom | 7.9727171786694 | Nominal Dec [deg] |
| roll_nom | 338.6636749449 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 9907.6000763178 | Sum of GTIs [s] |
| livetime | 9778.1499874516 | Livetime [s] |
| ontime0 | 9907.6000763178 | Sum of GTIs [s] |
| ontime1 | 9904.4591060877 | Sum of GTIs [s] |
| ontime2 | 9904.4590760469 | Sum of GTIs [s] |
| ontime3 | 9907.6000763178 | Sum of GTIs [s] |
| l2events | 29023 | Number of level 2 events |

