V&V Summary Report L2 ASCDS Version: 8.5.1.1

Observation 5173 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Apr 17 2013

See axaff05173N004_VV001_vvref2.pdf for the full report

| V&V Scientist | Joy Nichols |
|----------------------------|-------------|
| V&V Date (YYYY-MM-DD) | 2013.05.09 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 27.145 |

Comments

Spatial regions of the original bias maps for CCD = 8 and 9 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 = 8 and 9 have been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: CCD 8:

(329.69812,-30.01348),(329.69709,-30.01075),(329.67087,-30.01817),(329.67190,-30.02090)

The region on CCD 9 crosses a spectral arm.

(329.62741,-29.92622),(329.62643,-29.92363),(329.54482,-29.94668),(329.5

(329.62741,-29.92622),(329.62643,-29.92363),(329.54482,-29.94668),(329.54579,-29.94927)

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| seq_num | 790093 | Sequence number |
|----------|---|---|
| obs_id | 5173 | Observation id |
| title | AO5 Calibration Observations of PKS2155-304 | Proposal title |
| observer | Dr. CXC Calibration | Principal investigator |
| object | PKS2155-304 | Source name |
| dtycycle | 0 | & #160 |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 329.716667 | Observer's specified target RA [deg] |
| dec_targ | -30.225556 | Observer's specified target Dec [deg] |
| ra_nom | 329.71431923582 | Nominal RA [deg] |
| dec_nom | -30.224667630451 | Nominal Dec [deg] |
| roll_nom | 288.08882728698 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 27145.0 | Sum of GTIs [s] |
| livetime | 26706.584705475 | Livetime [s] |
| ontime4 | 27145.0 | Sum of GTIs [s] |
| ontime5 | 27145.0 | Sum of GTIs [s] |
| ontime6 | 27145.0 | Sum of GTIs [s] |
| ontime7 | 27145.0 | Sum of GTIs [s] |
| ontime8 | 27145.0 | Sum of GTIs [s] |
| ontime9 | 27145.0 | Sum of GTIs [s] |
| 12events | 321139 | Number of level 2 events |

