V&V Summary Report L2 ASCDS Version : 10.9.1

Observation 6384 - L2 Version 5 Chandra X-Ray Center

L2 Processing Date : Oct 10 2020

See axaff06384N005_VV001_vvref2.pdf for the full report

| V&V Scientist | Beth Sundheim |
|----------------------------|---------------|
| V&V Date (YYYY-MM-DD) | 2020.10.22 |
| V&V Edition | 1 |
| V&V Disposition and Status | Repr+DD |
| V&V Charge Time | 22.45119 |

Comments

SAP Team: please reprocess using replacement bias file for chip 0. ===

The bias map for CCD_ID = 0 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data that have been bias-corrected by one of the 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 map for CCD_ID = 0 will be recreated to remove this anomaly and the data will be reprocessed. ===

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files ARE INCORRECT by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct.

| seq_num | 600486 | Sequence number |
|----------|---|---|
| obs_id | 6384 | Observation id |
| title | The Chandra ACIS Survey of M33 (ChASeM33): A Deep Survey of the Nearest Face-on Spiral Galaxy | Proposal title |
| observer | Manami Sasaki | Principal investigator |
| object | M33 | Source name |
| dtycycle | 0 | |
| cycle | Р | events from which exps? Prim/Second/Both |
| ra_targ | 23.36625 | Observer's specified target RA [deg] |
| dec_targ | 30.523694 | Observer's specified target Dec [deg] |
| ra_nom | 23.366786133847 | Nominal RA [deg] |
| dec_nom | 30.528860053766 | Nominal Dec [deg] |
| roll_nom | 145.70700353143 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 22451.199916363 | Sum of GTIs [s] |
| livetime | 22166.909304532 | Livetime [s] |
| ontime0 | 22451.199916363 | Sum of GTIs [s] |
| ontime1 | 22451.199916363 | Sum of GTIs [s] |
| ontime2 | 22451.199916363 | Sum of GTIs [s] |
| ontime3 | 22451.199916363 | Sum of GTIs [s] |
| ontime6 | 22451.199916363 | Sum of GTIs [s] |
| ontime7 | 22451.199916363 | Sum of GTIs [s] |
| l2events | 132842 | Number of level 2 events |

