

V&V Summary Report

L2 ASCDS Version : 10.2.1

Observation 16605 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Dec 10 2014

See [axaff16605N002_VV001_vvref2.pdf](#) for the full report

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| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2015.10.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 35.07325 |

Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.

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For ACIS-S with CC mode and HETG:

For ACIS/CC-mode w/ HETG, at with no SIM-Z offset, there are no MEG even order counts. MEG even orders overlap with HEG orders in energy, but MEG even order efficiencies are very low. Since HEG and MEG cannot be spatially separated, events are preferentially assigned to HEG. (MEG odd orders can be resolved.) For observations with a SIM-Z offset, MEG negative and MEG positive orders will be missing (off the array), and remove some of the ambiguity.

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As of November 1, 2009, events with a flight grade of 66 were added to the telemetry stream for continuous-clocking mode observations because it was found that a significant fraction of real X-ray events have this flight grade in this mode. To prevent these events from being discarded from Level 2 event files, the CALDB grade file was modified to change

the 'ASCA' grade for these events from 7 (a bad grade) to 2 (a good grade). The new grade file has been used in standard pipeline processing for code versions DS 10.3 and later (i.e. 2014 Oct 30 and later). Since the calibration products for continuous-clocking mode observations are appropriate for data that includes flight grade 66 events, data obtained on or after 2009 Nov 1, but that were processed using an earlier version of the pipeline code, should be reprocessed with CIAO using version 4.7 (i.e. 2014 December) or later. Note that it is not possible to fix the data obtained before 2009 Nov 1. Since these earlier continuous-clocking observations are not calibrated at present, spectral analyses of these data may yield inaccurate results.

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| seq_num | 401613 | Sequence number |
| obs_id | 16605 | Observation id |
| title | A Harder Look at the Bursting Pulsar | Proposal title |
| observer | Dr. Jon Miller | Principal investigator |
| object | GRO J1744-28 | Source name |
| ra_targ | 266.137917 | Observer's specified target RA [deg] |
| dec_targ | -28.740833 | Observer's specified target Dec [deg] |
| ra_nom | 266.13430141479 | Nominal RA [deg] |
| dec_nom | -28.736548098795 | Nominal Dec [deg] |
| roll_nom | 87.354885529177 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 35073.25 | Sum of GTIs [s] |
| livetime | 34936.245117188 | Livetime [s] |
| ontime4 | 35073.25 | Sum of GTIs [s] |
| ontime5 | 35073.25 | Sum of GTIs [s] |
| ontime6 | 35073.25 | Sum of GTIs [s] |
| ontime7 | 35073.25 | Sum of GTIs [s] |
| ontime8 | 35073.25 | Sum of GTIs [s] |
| ontime9 | 35073.25 | Sum of GTIs [s] |
| l2events | 3061595 | Number of level 2 events |

