

V&V Summary Report

L2 ASCDS Version : 10.2.2

Observation 16208 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Dec 12 2014

See axaff16208N002_VV001_vvref2.pdf for the full report

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	142.59975

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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Aspect solution verified by Aspect Team.

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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.

seq_num	401603	Sequence number
obs_id	16208	Observation id
title	A Definitive Test of Relativistic Disk Lines in Neutron Stars	Prop
observer	Dr. Edward Cackett	Principal investigator
object	Serpens X-1	Source name
ra_targ	279.99	Observer's specified target RA [deg]
dec_targ	5.036	Observer's specified target Dec [deg]
ra_nom	280.00187910987	Nominal RA [deg]
dec_nom	5.0310967490758	Nominal Dec [deg]
roll_nom	169.15557390593	Nominal Roll [deg]
revision	2	Processing version of data
ontime	142599.75	Sum of GTIs [s]
livetime	142042.71972656	Livetime [s]
ontime5	142599.75	Sum of GTIs [s]
ontime6	142599.75	Sum of GTIs [s]
ontime7	142599.75	Sum of GTIs [s]
ontime8	142599.75	Sum of GTIs [s]
ontime9	142599.75	Sum of GTIs [s]
l2events	17736593	Number of level 2 events

