

V&V Summary Report

L2 ASCDS Version : 8.4.3

Observation 13135 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Feb 6 2012

See axaff13135N003_VV001_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.804537896752

Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.

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A spatial region of the original bias map for CCD = 1 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 map for CCD = 1 has 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: (x1, y1 etc)

seq_num	801056	Sequence number
obs_id	13135	Observation id
title	Survey of AGN outbursts in galaxy clusters, Abell 3112	Proposal ti
observer	Dr Stephen Murray	Principal investigator
object	Abell 3112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.49	Observer's specified target RA [deg]
dec_targ	-44.238056	Observer's specified target Dec [deg]
ra_nom	49.48156433439	Nominal RA [deg]
dec_nom	-44.258350866799	Nominal Dec [deg]
roll_nom	247.01499115938	Nominal Roll [deg]
revision	3	Processing version of data
ontime	42804.53790617	Sum of GTIs [s]
livetime	42245.265106183	Livetime [s]
ontime0	42807.555776417	Sum of GTIs [s]
ontime1	42798.173895478	Sum of GTIs [s]
ontime2	42804.496866167	Sum of GTIs [s]
ontime3	42804.53790617	Sum of GTIs [s]
ontime6	42807.514736414	Sum of GTIs [s]
l2events	295763	Number of level 2 events

