

V&V Summary Report

L2 ASCDS Version : 8.4.3

Observation 12869 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Feb 3 2012

See [axaff12869N003_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.955855703652

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 = 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 map for CCD = 9 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:
(116.29020,29.55574), (116.29150,29.55807), (116.26921,29.56750), (116.26663,29.56571)

seq_num	702502	Sequence number
obs_id	12869	Observation id
title	Chandra Survey of Hard X-ray Selected Merging AGN Hosts	Proposal t
observer	Dr. Richard Mushotzky	Principal investigator
object	UGC 03995 NOTES01	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	116.029167	Observer's specified target RA [deg]
dec_targ	29.249	Observer's specified target Dec [deg]
ra_nom	116.02976418052	Nominal RA [deg]
dec_nom	29.24419542222	Nominal Dec [deg]
roll_nom	244.17005603721	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10955.855700254	Sum of GTIs [s]
livetime	10817.126058554	Livetime [s]
ontime3	10955.732580245	Sum of GTIs [s]
ontime5	10955.814660251	Sum of GTIs [s]
ontime6	10955.773620248	Sum of GTIs [s]
ontime7	10955.855700254	Sum of GTIs [s]
ontime8	10955.691540241	Sum of GTIs [s]
ontime9	10955.896740258	Sum of GTIs [s]
l2events	130418	Number of level 2 events

