

# V&V Summary Report

## L2 ASCDS Version : 8.4.3

Observation 12354 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Feb 5 2012

See axaff12354N003\_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	11.049599958897

## 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.

=====

A spatial region of the original bias map for CCD = 3 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 = 3 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:  
(132.10506,4.87449), (132.10030,4.87397), (132.10410,4.84023), (132.10909,4.83872)

seq_num	200689	Sequence number
obs_id	12354	Observation id
title	Searching for Millisecond Pulsars in Extremely Low-Mass White Dwarf Binaries	Proposal title
observer	Dr Marcel Agueros	Principal investigator
object	SDSS J084910.13+044528.7	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	132.292083	Observer's specified target RA [deg]
dec_targ	4.757972	Observer's specified target Dec [deg]
ra_nom	132.29510870169	Nominal RA [deg]
dec_nom	4.7541784152557	Nominal Dec [deg]
roll_nom	276.37826926103	Nominal Roll [deg]
revision	3	Processing version of data
ontime	11049.599958897	Sum of GTIs [s]
livetime	10909.683270947	Livetime [s]
ontime2	11049.599958897	Sum of GTIs [s]
ontime3	11049.599958897	Sum of GTIs [s]
ontime5	11049.599958897	Sum of GTIs [s]
ontime6	11049.599958897	Sum of GTIs [s]
ontime7	11049.599958897	Sum of GTIs [s]
ontime8	11049.599958897	Sum of GTIs [s]
l2events	127297	Number of level 2 events

