V&V Summary Report
L2 ASCDS Version : 8.4.3

Observation 12283 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Feb 8 2012

See axaff12283N003_VV001_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.055527376235

Comments

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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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Spatial regions of the original bias maps for CCDs = 0 and 2 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
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fully explored for this bias anomaly. The bias maps for CCD = 0 and 2 have 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 the sky coords: CCD 0: (209.66316,28.10701),(209.66149,28.09058),(209.68011,28.08914),(209.6631 6,28.10701)

CCD 2:
(209.71334,27.97923),(209.71260,27.97163),(209.76611,27.96747),(209.7582 4,27.97575)

seq_num	801002	Sequence number
obs_id	12283	Observation id
title	A 'CENTENNIAL' SAMPLE OF THE 100 X-RAY BRIGHTEST GALAXY CLUSTERS	
observer	Dr. Alexey Vikhlinin	Principal investigator
object	A1831	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.820417	Observer's specified target RA [deg]
dec_targ	27.980778	Observer's specified target Dec [deg]
ra_nom	209.81143478556	Nominal RA [deg]
dec_nom	27.979013180843	Nominal Dec [deg]
roll_nom	174.94053076826	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10055.527378321	Sum of GTIs [s]
livetime	9924.1445103514	Livetime [s]
ontime0	10055.404258311	Sum of GTIs [s]
ontime1	10055.445298314	Sum of GTIs [s]
ontime2	10055.486338317	Sum of GTIs [s]
ontime3	10055.527378321	Sum of GTIs [s]
ontime6	10055.363218307	Sum of GTIs [s]
l2events	43662	Number of level 2 events