

V&V Summary Report

L2 ASCDS Version : 8.4.3

Observation 13129 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Feb 2 2012

See axaff13129N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.547354640961

Comments

The temperature is as high as about -114 deg C at the beginning of the observation and decreases to the nominal -119.7 deg C temperature at the end. The beginning temperature is slightly higher than the highest temperature that has been observed before for observations where the focal-plane temperature was 'set' to -120 deg C. The pulse-height amplitudes (i.e. PHA, ENERGY, and PI) are temperature dependent because the CTI is temperature dependent. However, the standard temperature-dependent CTI adjustment was performed. A comparison of the PI distribution of the data taken at temperatures between about -114 and -116 deg C with the PI distribution of the data taken at a temperature of about -119.7 deg C indicates that the two distributions are nearly identical. The user should be able to use the spectral information with the existing calibration products with little degradation in the reliability of the results. If the user is particularly concerned, then they can use the spectral data to the portion that was obtained at temperatures within about 1 deg C of -119.7. The relatively high temperature at the beginning of the observation has no effect on the event times and should have a marginal affect on the spatial locations of the events. In summary, I think that the data is suitable for use for scientific analyses.===

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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.

seq_num	900956	Sequence number
obs_id	13129	Observation id
title	Properties of the Warm-Hot Intergalactic Medium Using X-ray/SZ Cross-Correlation	Proposal title
observer	Dr. Massimiliano Galeazzi	Principal investigator
object	Blanco Cosmological Survey	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.25	Observer's specified target RA [deg]
dec_targ	-52.0	Observer's specified target Dec [deg]
ra_nom	79.257881228863	Nominal RA [deg]
dec_nom	-52.000350347734	Nominal Dec [deg]
roll_nom	324.16283897455	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27547.354645848	Sum of GTIs [s]
livetime	27198.533454297	Livetime [s]
ontime2	27547.395685852	Sum of GTIs [s]
ontime3	27543.99051553	Sum of GTIs [s]
ontime5	27547.313605845	Sum of GTIs [s]
ontime6	27547.272565842	Sum of GTIs [s]
ontime7	27547.354645848	Sum of GTIs [s]
ontime8	27547.190485835	Sum of GTIs [s]
l2events	313348	Number of level 2 events

