

# V&V Summary Report

## L2 ASCDS Version : 8.5.1.1

Observation 59449 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Mar 13 2013

See axaff59449N004\_VV001\_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.03.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.7996655435264

## Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.

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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 chip coords:

seq_num	&#160	Sequence number
obs_id	59449	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	339.98702657293	Nominal RA [deg]
dec_nom	21.974058160741	Nominal Dec [deg]
roll_nom	212.21322407309	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7799.6655435264	Sum of GTIs [s]
livetime	7700.9014820195	Livetime [s]
ontime4	7257.1164314449	Sum of GTIs [s]
ontime5	7801.5999709368	Sum of GTIs [s]
ontime6	7438.6108680665	Sum of GTIs [s]
ontime7	7799.6655435264	Sum of GTIs [s]
ontime8	7513.1532248855	Sum of GTIs [s]
ontime9	7420.430768311	Sum of GTIs [s]
l2events	1055779	Number of level 2 events