

# V&V Summary Report

## L2 ASCDS Version : 10.8

Observation 22733 - L2 Version 2  
Chandra X-Ray Center

L2 Processing Date : Aug 26 2019

See [axaff22733N002\\_VV001\\_vvref2.pdf](#) for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.08.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.066891747713

## Comments

A spatial region of the original bias map for CCD = 1 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 ( $\sim 20$  eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 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:

(238.87629,66.44924), (238.85997,66.44873), (238.88661,66.30967),  
(238.90284,66.31019).

seq_num	801762	Sequence number
obs_id	22733	Observation id
title	Shock structure, the electron-ion equilibration timescale and the disintegrating cool core in A2146	Proposal title
observer	Helen Russell	Principal investigator
object	Abell 2146	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	239.06125	Observer's specified target RA [deg]
dec_targ	66.346917	Observer's specified target Dec [deg]
ra_nom	238.98718763007	Nominal RA [deg]
dec_nom	66.314319097212	Nominal Dec [deg]
roll_nom	274.27654388521	Nominal Roll [deg]
revision	2	Processing version of data
ontime	45066.891747713	Sum of GTIs [s]
livetime	44478.059629266	Livetime [s]
ontime0	45066.768627763	Sum of GTIs [s]
ontime1	45060.527706981	Sum of GTIs [s]
ontime2	45063.709717393	Sum of GTIs [s]
ontime3	45066.891747713	Sum of GTIs [s]
ontime6	45057.304626703	Sum of GTIs [s]
l2events	187063	Number of level 2 events

