

# V&V Summary Report

## L2 ASCDS Version : 10.9.2

Observation 20556 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Oct 26 2020

See axaff20556N003\_VV001\_vvref2.pdf for the full report

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.417418202281

## Comments

A spatial region of the original bias map for CCD = 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 ( $\sim 20$  eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 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:(238.91138,66.16916), (238.91687,66.16758), (238.95959,66.19162), (238.95251,66.19232).

seq_num	801762	Sequence number
obs_id	20556	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	238.90847290252	Nominal RA [deg]
dec_nom	66.350369583272	Nominal Dec [deg]
roll_nom	234.33437521408	Nominal Roll [deg]
revision	3	Processing version of data
ontime	35417.418202281	Sum of GTIs [s]
livetime	34954.663559544	Livetime [s]
ontime0	35420.55927217	Sum of GTIs [s]
ontime1	35423.70027256	Sum of GTIs [s]
ontime2	35420.559131622	Sum of GTIs [s]
ontime3	35417.418202281	Sum of GTIs [s]
ontime6	35417.418171883	Sum of GTIs [s]
l2events	145000	Number of level 2 events

