V&V Summary Report L2 ASCDS Version: 8.4.5

Observation 11931 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date : Jun 18 2012

See axaff11931N004_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.0375

Comments

Zeroth order piled up. Standard data processing software did not correctly locate the zeroth order due to pileup. Manual intervention was used to input the correct sky coordinates (x=4108.76, y=4109.0) into the *src1a.fits file table. These corrected coordinates were determined using a software tool developed by CXC called findzero, which is expected to be released in CIAO (currently in ISIS). The tool calculates the point of intersection of the readout streak and the meg arm (preferred position), or the readout streak and the heg arm. The zeroth order source position determined by the standard pipeline processing using the tool tgdetect was not used in this processing. The newly determined zeroth order coordinates have been placed in the *src1a.fits file, replacing the coordinates determined by tgdetect. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.

A spatial region of the original bias map for CCD = 8 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 = 8 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: (79.42399,45.82315),(79.42875,45.81971),(79.45327,45.83621),(79.45091,45.84126)

seq_num	290920	Sequence number
obs_id	11931	Observation id
title	AO-11 Calibration Observations of Capella	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	Capella	Source name
dtycycle	0	& #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.17625	Observer's specified target RA [deg]
dec_targ	45.997889	Observer's specified target Dec [deg]
ra_nom	79.174954679285	Nominal RA [deg]
dec_nom	45.99513506446	Nominal Dec [deg]
roll_nom	134.1536057988	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30037.5	Sum of GTIs [s]
livetime	29552.368321632	Livetime [s]
ontime4	30037.5	Sum of GTIs [s]
ontime5	30037.5	Sum of GTIs [s]
ontime6	30037.5	Sum of GTIs [s]
ontime7	30037.5	Sum of GTIs [s]
ontime8	30037.5	Sum of GTIs [s]
ontime9	30037.5	Sum of GTIs [s]
12events	404637	Number of level 2 events

