

V&V Summary Report

L2 ASCDS Version : 10.2.1

Observation 15737 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Dec 10 2014

See axaff15737N004_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.10.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.963630094171

Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.

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Zeroth order piled up. The zeroth order sky position was determined using a software tool developed by CXC called findzero, which is available in CIAO as part of the tgdetect2 tool. The tool calculates the point of intersection of the readout streak and the meg dispersed spectral arm, rather than using a centroid position of the source. The findzero position is more accurate than a centroid position for this case. ===== The bias map for CCD_ID = 4 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data that have been bias-corrected by one of the 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_ID = 4 will be recreated to remove this anomaly and the data will be reprocessed. A spatial region of the original bias map for CCD = 4

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 = 4 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:

(268.72455, -32.82682), (268.72480, -32.82982), (268.73323, -32.82932), (268.72698, -32.82668)

seq_num	300321	Sequence number
obs_id	15737	Observation id
title	A Fermi/LAT Trigger of Grating Observations of One Bright Nova in Outburst	Proposal title
observer	Regents' Professor Sumner Starrfield	Principal investigator
object	V745 Sco	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	268.842792	Observer's specified target RA [deg]
dec_targ	-33.249581	Observer's specified target Dec [deg]
ra_nom	268.83961624736	Nominal RA [deg]
dec_nom	-33.248154571513	Nominal Dec [deg]
roll_nom	94.076372559588	Nominal Roll [deg]
revision	4	Processing version of data
ontime	39963.630094171	Sum of GTIs [s]
livetime	39457.586546709	Livetime [s]
ontime4	39963.671134174	Sum of GTIs [s]
ontime5	39963.589054167	Sum of GTIs [s]
ontime6	39960.30704385	Sum of GTIs [s]
ontime7	39963.630094171	Sum of GTIs [s]
ontime8	39963.506974161	Sum of GTIs [s]
ontime9	39963.465934157	Sum of GTIs [s]
l2events	366884	Number of level 2 events

