V&V Summary Report L2 ASCDS Version: 8.4.5

Observation 1016 - L2 Version 5 Chandra X-Ray Center

L2 Processing Date : Oct 12 2012

See axaff01016N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.126

Comments

Zeroth order events were blocked by a spatial exclusion window. Standard data processing software did not correctly locate the zeroth order for this reason. Manual intervention was used to input the correct sky coordinates (x=4080.82, y=4094.3) 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 as tg_findzo (currently in ISIS as findzo). The tool calculates the point of intersection of the readout streak and the meg 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.

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The spatial exclusion window was not centered on the zeroth order. As a result,

some events outside the spatial exclusion window, consisting of background and readout streak, are included in the counts for the zeroth order. The counts should not be considered a measurement of zeroth order flux.

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Faint grating spectra can be seen in an image of bad events. This is probably due to pileup in the spectrum, causing migration to bad grades. This should be considered in analysis.

seq_num	400094	Sequence number
obs_id	1016	Observation id
title	PHOTOIONIZED X-RAY EMISSION IN CYG X-2	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	CYG X-2	Source name
dtycycle	0	& #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	326.17375	Observer's specified target RA [deg]
dec_targ	38.319611	Observer's specified target Dec [deg]
ra_nom	326.16876672372	Nominal RA [deg]
dec_nom	38.321698449974	Nominal Dec [deg]
roll_nom	174.99446463021	Nominal Roll [deg]
revision	5	Processing version of data
ontime	15126.799965337	Sum of GTIs [s]
livetime	14663.872781526	Livetime [s]
ontime5	15126.799965337	Sum of GTIs [s]
ontime6	15126.799965337	Sum of GTIs [s]
ontime7	15126.799965337	Sum of GTIs [s]
ontime8	15125.458925322	Sum of GTIs [s]
ontime9	15126.799965337	Sum of GTIs [s]
12events	4107845	Number of level 2 events

