## V&V Summary Report L2 ASCDS Version: 8.4.5

Observation 4559 - L2 Version 3 Chandra X-Ray Center

L2 Processing Date: Dec 15 2012

See axaff04559N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	75.136

## 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=4154.65, y=4062.23) into the \*src1a.fits file table. These corrected coordinates were determined using a software tool developed by CXC called tg\_findzo, available in CIAO. The tool calculates the point of intersection of the readout streak and the meg arm (in this case, the heg arm due to pileup). 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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Zeroth order coordinates off by about +30 arcsec in dec only from the coordinates requested. However, the zeroth order is at the exact coordinates found in SIMBAD for this object. Due to this apparent error in requestd coordinates, the target is not placed precisely in the center of the chip and the dispersed spectral arms do not have equal energy coverage between the + and - arms. The MEG - arm has more low energy coverage than usual and MEG + arm has less low energy coverage

than usual. The reverse is true for HEG.

seq_num	400342	Sequence number
	4559	Observation id
title	The Near Eddington Neutron Star 4U 1624-460: A Probe of Disk, Wind, and ISM structure	Proposal title
observer	Prof. Julia Lee	Principal investigator
object	4U 1624-49	Source name
dtycycle	0	<b>%</b> #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.01	Observer's specified target RA [deg]
dec_targ	-49.190306	Observer's specified target Dec [deg]
ra_nom	247.02381519316	Nominal RA [deg]
dec_nom	-49.193799984565	Nominal Dec [deg]
roll_nom	348.89785524009	Nominal Roll [deg]
revision	3	Processing version of data
ontime	75136.599473119	Sum of GTIs [s]
livetime	73365.470698147	Livetime [s]
ontime4	75134.858472943	Sum of GTIs [s]
ontime5	75134.858472914	Sum of GTIs [s]
ontime6	75136.599473119	Sum of GTIs [s]
ontime7	75136.599473119	Sum of GTIs [s]
ontime8	75134.858472943	Sum of GTIs [s]
ontime9	75136.599473119	Sum of GTIs [s]
12events	1439217	Number of level 2 events

