## V&V Summary Report L2 ASCDS Version: 8.5.1.1

Observation 3568 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Feb 27 2013

See axaff03568N003\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.03.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	100.999

## 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=4080.467, y=4092.064) into the \*src1a.fits file table. These corrected coordinates were determined using a software tool developed by CXC called tg\_findzo, which is available in CIAO. 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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A spatial region of the original bias map for CCD = 6 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 = 6 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: (217.27517,42.57218),(217.27228,42.57676),(217.18140,42.54559),(217.18430,42.54102).

Note that this region crosses both spectral arms.

seq_num	700630	Sequence number
obs_id	3568	Observation id
title	PROBING THE INTERGALACTIC MEDIUM AT LOW REDSHIFT	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	H 1426+428	Source name
dtycycle	0	<b>&amp;</b> #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	217.135833	Observer's specified target RA [deg]
dec_targ	42.6725	Observer's specified target Dec [deg]
ra_nom	217.13294140228	Nominal RA [deg]
dec_nom	42.673130211206	Nominal Dec [deg]
roll_nom	294.97867291317	Nominal Roll [deg]
revision	4	Processing version of data
ontime	100999.91798973	Sum of GTIs [s]
livetime	99368.681710766	Livetime [s]
ontime4	100982.13111836	Sum of GTIs [s]
ontime5	100994.83607918	Sum of GTIs [s]
ontime6	100999.91804957	Sum of GTIs [s]
ontime7	100999.91798973	Sum of GTIs [s]
ontime8	100992.29516882	Sum of GTIs [s]
ontime9	100994.8360891	Sum of GTIs [s]
12events	962990	Number of level 2 events

