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

## Observation 2603 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

See axaff02603N003\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.187

## Comments

Standard software processing technique using the tool tgdetect failed to determine an accurate position for the zeroth order for this observation. The source is extended and asymmetric. The processing software defaulted to the coordinates supplied by the user for the position of the zeroth order for the grating spectral extraction. ===

Source is quite far off-acis, and the PSF is asymmetric and contains the pattern of the struts. The zeroth order is not found at the precise center of the PSF, but is within about 1 arcsec. The off-acis position yields a minus side spectrum with energies beyond 100 A. The plus side spectrum is truncated. === The point spread function is significantly extended by this off-axis position. Off-axis source gratings observation: WARNING: there are no standard CIAO tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle. WARNING: The user will need to deconvolve the PSF of the off-axis source to get an accurate determination of the zeroth order position, then use software tools such as CIAO to specify the coordinates of the zeroth order before running the tools to resolve the dispersed events. The spectral data supplied in this processing are only energy-calibrated for the zeroth order position as given by the user-supplied coordinates. The tool tgdetect failed to find a source.

seq_num	290159	Sequence number
obs_id	2603	Observation id
title	AO3 LETG/HRC-I CALIBRATION OBSERVATIONS OF HZ43	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.092083	Observer's specified target RA [deg]
dec_targ	29.099	Observer's specified target Dec [deg]
ra_nom	199.12332903069	Nominal RA [deg]
dec_nom	29.259417511838	Nominal Dec [deg]
roll_nom	259.63511401326	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10187.73166886	[s]
livetime	10104.651733958	Ontime multiplied by DTCOR
l2events	622925	Number of level 2 events

