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

Observation 2330 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

See axaff02330N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.756

## 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. The position of the zeroth order was chosen to be the same as in TGCat and is at the position of the brightest emission (sky coordinates x=4128.03, y=4085.99). For grating analysis of localized X-ray emission within the extended emission, the investigator will need to extract one or more dispersed spectra using user-defined zeroth order positions for all positions of interest.

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The spectral data supplied in this processing are only energy-calibrated for the particular zeroth order position selected. 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.

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The spectral lines are spatially-broadened and the rmfs are not valid.

seq_num	800173	Sequence number
obs_id	2330	Observation id
title	ACIS-S/HETG OBSERVATIONS OF THE CENTRAL REGION OF THE HYDRA A CLUSTER OF GALAXIES	Proposal title
observer	Dr. J. Jernigan	Principal investigator
object	HYDRA A	Source name
dtycycle	0	<b>&amp;</b> #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	139.52375	Observer's specified target RA [deg]
dec_targ	-12.095833	Observer's specified target Dec [deg]
ra_nom	139.52801394094	Nominal RA [deg]
dec_nom	-12.094173405973	Nominal Dec [deg]
roll_nom	44.420969634823	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9756.0749806762	Sum of GTIs [s]
livetime	9632.5376848678	Livetime [s]
ontime4	9756.1160206795	Sum of GTIs [s]
ontime5	9756.0339406729	Sum of GTIs [s]
ontime6	9755.9929006845	Sum of GTIs [s]
ontime7	9756.0749806762	Sum of GTIs [s]
ontime8	9755.9517509937	Sum of GTIs [s]
ontime9	9755.9108206779	Sum of GTIs [s]
12events	107873	Number of level 2 events

