

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 2333 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

See axaff02333N002-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	10.051

## 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 or near the position of the brightest emission (sky coordinates  $x=4077.96$ ,  $y=4125.53$ ). 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. === 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. === The spectral lines are spatially-broadened and the `rmfs` are not valid.

seq_num	800176	Sequence number
obs_id	2333	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
dtcycle	0	&#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	139.52095236128	Nominal RA [deg]
dec_nom	-12.099327926346	Nominal Dec [deg]
roll_nom	254.23119220444	Nominal Roll [deg]
revision	4	Processing version of data
ontime	10049.765781537	Sum of GTIs [s]
livetime	9922.5095959684	Livetime [s]
ontime4	10049.80682154	Sum of GTIs [s]
ontime5	10049.724741533	Sum of GTIs [s]
ontime6	10049.683701545	Sum of GTIs [s]
ontime7	10049.765781537	Sum of GTIs [s]
ontime8	10049.642661542	Sum of GTIs [s]
ontime9	10049.601621538	Sum of GTIs [s]
l2events	120425	Number of level 2 events

