

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 2331 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

See [axaff02331N002-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	9.638

## 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 position of the brightest emission (sky coordinates `x=4129.0, y=4109.25`).

Note this is not the same position as used in `TGCat`. 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	800174	Sequence number
obs_id	2331	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	139.52809426103	Nominal RA [deg]
dec_nom	-12.097314705688	Nominal Dec [deg]
roll_nom	3.1924733071272	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9636.9287789613	Sum of GTIs [s]
livetime	9514.9001841002	Livetime [s]
ontime4	9636.9698189646	Sum of GTIs [s]
ontime5	9636.887738958	Sum of GTIs [s]
ontime6	9636.8466989696	Sum of GTIs [s]
ontime7	9636.9287789613	Sum of GTIs [s]
ontime8	9636.8056589663	Sum of GTIs [s]
ontime9	9636.764618963	Sum of GTIs [s]
l2events	107399	Number of level 2 events

