

V&V Summary Report

L2 ASCDS Version : 8.4.5

Observation 49896 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

See [axaff49896N003_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.785

Comments

This is an extended source with no strong central peak of emission. Standard software processing technique using the tool `tgdetect` failed to determine a position for the zeroth order for this observation. The source is extended. The coordinates supplied by the user for the position of the zeroth order could not be used in the processing because they are the coordinates for the optical position of Abell 1835, not the coordinates of the X-ray source. For this processing, the zeroth order position coordinates were estimated by eye to be approximately centered on the diffuse emission (sky coordinates $x=4053.5$, $y=4391.5$). 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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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 user will need to select a region or source of interest, then use software tools such as

CIAO to specify the coordinates of the zeroth order source of interest before running the tools to resolve the dispersed events.

seq_num	800019	Sequence number
obs_id	49896	Observation id
title	HIGH RESOLUTION X-RAY SPECTRA OF CLUSTER COOLING FLOWS	Proposal ti
observer	Prof Claude Canizares	Principal investigator
object	ABELL 1835	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.257917	Observer's specified target RA [deg]
dec_targ	2.858889	Observer's specified target Dec [deg]
ra_nom	210.25236237067	Nominal RA [deg]
dec_nom	2.8386223379599	Nominal Dec [deg]
roll_nom	259.6358531986	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9785.5590488613	Sum of GTIs [s]
livetime	9661.6484080283	Livetime [s]
ontime4	9788.8000091016	Sum of GTIs [s]
ontime5	9785.5590488613	Sum of GTIs [s]
ontime6	9785.5591884851	Sum of GTIs [s]
ontime7	9785.5590488613	Sum of GTIs [s]
ontime8	9785.5590488613	Sum of GTIs [s]
ontime9	9788.8000091016	Sum of GTIs [s]
l2events	93853	Number of level 2 events

