

# V&V Summary Report

## L2 ASCDS Version : 8.4.3

Observation 5420 - L2 Version 2  
Chandra X-Ray Center

L2 Processing Date : Mar 28 2012

See axaff05420N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	55.4687997

## Comments

Source is extended and asymmetric. It could be 2 unresolved stars or one star with an extended structure. Zeroth order used for spectral extraction was manually determined and positioned at the location of the brightest X-ray flux, presumably the position of the brighter star. The sky coordinates of the zeroth order used in this extraction are  $x=4088.775$ ,  $y=4109.875$ . The extended-structure/stellar-source is positioned parallel to (along) the spectral dispersion direction, extending about 2 arcsec to the SE. ACIS cannot differentiate the energies and positions of such closely-placed emission sources, so the entire emission structure will be included in the extracted spectral data.

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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.

seq_num	200353	Sequence number
obs_id	5420	Observation id
title	MAGNETIC ACTIVITY IN YOUNG STARS: THE WEAK-LINED T TAURI STAR HDE 245059	Proposal title
observer	Prof. Marc Audard	Principal investigator
object	HDE 245059	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.645417	Observer's specified target RA [deg]
dec_targ	10.118389	Observer's specified target Dec [deg]
ra_nom	83.64440958317	Nominal RA [deg]
dec_nom	10.116536334156	Nominal Dec [deg]
roll_nom	294.84098283433	Nominal Roll [deg]
revision	2	Processing version of data
ontime	55468.799793363	Sum of GTIs [s]
livetime	54766.420451078	Livetime [s]
ontime4	55468.799793363	Sum of GTIs [s]
ontime5	55468.799793363	Sum of GTIs [s]
ontime6	55468.799793363	Sum of GTIs [s]
ontime7	55468.799793363	Sum of GTIs [s]
ontime8	55468.799793363	Sum of GTIs [s]
ontime9	55468.799793363	Sum of GTIs [s]
l2events	738026	Number of level 2 events

