

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 12121 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Jun 25 2012

See [axaff12121N003\\_VV001\\_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.065046582103

## Comments

Note: spectrum appears faintly in bad-events image, meaning pileup might be an issue. Zeroth order piled up. Standard data processing software did not correctly locate the zeroth order due to pileup. Manual intervention was used to input the correct sky coordinates (x=4246.2, y=4083.03) into the \*srcla.fits file table. These corrected coordinates were determined using a software tool developed by CXC called findzero, which is expected to be released in CIAO (currently in ISIS). The tool calculates the point of intersection of the readout streak and the meg arm (preferred position), or the readout streak and the heg arm. The zeroth order source position determined by the standard pipeline processing using the tool tgdetect was not used in this processing. The newly determined zeroth order coordinates have been placed in the \*srcla.fits file, replacing the coordinates determined by tgdetect. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.

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Gain and CTI correction are not well calibrated on CCD\_ID 5 (ACIS-S1). Default order sorting can clip some regions, particularly longward of 30A (first order). User-specified custom processing parameters may be required in tg\_resolve\_events (osipfile=none, osort\_lo, osort\_hi ~0.5) though this can allow more zeroth order background at short wavelengths.

seq_num	790224	Sequence number
obs_id	12121	Observation id
title	AO-11 Calibration Observations of Mkn 421	Proposal title
observer	Calibration Calibration	Principal investigator
object	MKN421	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	166.113333	Observer's specified target RA [deg]
dec_targ	38.208806	Observer's specified target Dec [deg]
ra_nom	166.1399243867	Nominal RA [deg]
dec_nom	38.210704338325	Nominal Dec [deg]
roll_nom	192.37861377421	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10065.046581089	Sum of GTIs [s]
livetime	9507.6279374428	Livetime [s]
ontime4	10065.087621093	Sum of GTIs [s]
ontime5	10065.005541086	Sum of GTIs [s]
ontime6	10064.964501083	Sum of GTIs [s]
ontime7	10065.046581089	Sum of GTIs [s]
ontime8	10064.92346108	Sum of GTIs [s]
ontime9	10064.882421076	Sum of GTIs [s]
l2events	405596	Number of level 2 events

