## V&V Summary Report L2 ASCDS Version: 10.3.3

Observation 17384 - L2 Version 1 Chandra X-Ray Center

L2 Processing Date : Mar 6 2015

See axaff17384N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.03.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	60.074402387142

## Comments

Zeroth order piled up. The zeroth order sky position was determined using a software tool developed by CXC called findzero, which is available in CIAO as part of the tgdetect2 tool. The tool calculates the point of intersection of the readout streak on the ACIS CCD and the meg dispersed spectral arm, rather than using a centroid position of the source. The findzero results are more accurate than source centroid in this case.

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	790275	Sequence number
obs_id	17384	Observation id
title	AO-16 Calibration Observations of Mkn421	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	MKN421	Source name
dtycycle	0	<b>&amp;</b> #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	166.1376474006	Nominal RA [deg]
dec_nom	38.205539283065	Nominal Dec [deg]
roll_nom	179.96488374378	Nominal Roll [deg]
revision	1	Processing version of data
ontime	60074.402387142	Sum of GTIs [s]
livetime	58087.799639473	Livetime [s]
ontime5	60074.402387142	Sum of GTIs [s]
ontime6	60074.402387142	Sum of GTIs [s]
ontime7	60074.402387142	Sum of GTIs [s]
ontime8	60074.402387142	Sum of GTIs [s]
ontime9	60073.161337018	Sum of GTIs [s]
12events	1856867	Number of level 2 events

