

# V&V Summary Report

## L2 ASCDS Version : 10.6.3

Observation 20724 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Jun 18 2018

See axaff20724N001\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.06.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	54.784802176952

## Comments

Custom dither parameters

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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 or leg dispersed spectral arm, rather than using a centroid position of the source. The findzero results are more accurate than source centroid in this case.

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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	790322	Sequence number
obs_id	20724	Observation id
title	AO-19 Big Dither Observation of Mkn421	Proposal title
observer	CXC Calibration	Principal investigator
object	MKN421	Source name
dtcycle	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	166.12868786858	Nominal RA [deg]
dec_nom	38.222621955133	Nominal Dec [deg]
roll_nom	245.14714712328	Nominal Roll [deg]
revision	1	Processing version of data
ontime	54784.802176952	Sum of GTIs [s]
livetime	52973.121424244	Livetime [s]
ontime5	54784.802176952	Sum of GTIs [s]
ontime6	54784.802176952	Sum of GTIs [s]
ontime7	54784.802176952	Sum of GTIs [s]
ontime8	54784.802176952	Sum of GTIs [s]
ontime9	54784.802176952	Sum of GTIs [s]
l2events	866545	Number of level 2 events

