V&V Summary Report
L2 ASCDS Version : 8.5.1.1

Observation 15476 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Dec 2 2014

See axaff15476N003_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.11.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.050401194096

Comments

These data have been reprocessed with new aspect alignment calibration
files that correct small mean offsets (up to 0.4 arcsecs) and improve
overall astrometric accuracy. The new calibration was determined using
data from the time period being reprocessed and was performed using
cross-correlation of X-ray sources with radio and optical counterparts.

====
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.
====This object has several isolated bright pixels in the central region

of the PSF. WARNING: Zeroth order selected by pipeline tools is one of these bright pixels in the eastern area of the PSF. 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. The spectral data supplied in this processing are only energy-calibrated for the particular emission knot or object selected.

seq_num	790252	Sequence number
obs_id	15476	Observation id
title	AO-14 Calibration Observations of Mkn421	Proposal title
observer	Dr. CXC 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	166.13698540993	Nominal RA [deg]
dec_nom	38.218661135301	Nominal Dec [deg]
roll_nom	215.10219983753	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30050.401194096	Sum of GTIs [s]
livetime	28126.545483055	Livetime [s]
ontime4	30050.401194096	Sum of GTIs [s]
ontime5	30050.401194096	Sum of GTIs [s]
ontime6	30050.401194096	Sum of GTIs [s]
ontime7	30050.401194096	Sum of GTIs [s]
ontime8	30050.401194096	Sum of GTIs [s]
ontime9	30050.38041091	Sum of GTIs [s]
l2events	871368	Number of level 2 events