

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 1703 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Aug 28 2012

See axaff01703N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.185

## Comments

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.

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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=4119.5`, `y=3876.42`) into the `*src1a.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 as `tg_findzo` (currently in ISIS as `findzo`). The tool calculates the point of intersection of the readout streak and the meg 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 `*src1a.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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Charge time for this ObsId remains at previous value of 26.185 ks, although with the current processing the charge time would be 26.218 ks.

seq_num	700261	Sequence number
obs_id	1703	Observation id
title	HETG OBSERVATIONS OF VARIOUS ACTIVE GALACTIC NUCLEI	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS 2155-304	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.72061404899	Nominal RA [deg]
dec_nom	-30.195499003067	Nominal Dec [deg]
roll_nom	97.770585593685	Nominal Roll [deg]
revision	4	Processing version of data
ontime	26218.499857932	Sum of GTIs [s]
livetime	25275.494148957	Livetime [s]
ontime4	26218.499857932	Sum of GTIs [s]
ontime5	26218.499857932	Sum of GTIs [s]
ontime6	26218.499857932	Sum of GTIs [s]
ontime7	26218.499857932	Sum of GTIs [s]
ontime8	26218.499857932	Sum of GTIs [s]
ontime9	26218.499857932	Sum of GTIs [s]
l2events	237411	Number of level 2 events

