

# V&V Summary Report

## L2 ASCDS Version : 8.1.2

Observation 166 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Dec 14 2009

See [axaff00166N001\\_VV001\\_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.035

## Comments

Off-axis effective area measurement on chip S4.

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Count rate is elevated by about a factor of 5 due to a high radiation environment

during the first 2 ksec of this observation and again between 4.5 and 5.5 ksec into the observation.

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The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not

effect.

seq_num	590034	Sequence number
obs_id	166	Observation id
title	ACIS CHIP RESPONSE TO A CONTINUUM SOURCE	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip S4, T=100, Offsets=-10,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.36016	Observer's specified target RA
dec_targ	-10.741123	Observer's specified target Dec
ra_nom	278.36974326832	Nominal RA
dec_nom	-10.767181280777	Nominal Dec
roll_nom	261.03641563186	Nominal Roll
revision	4	Processing version of data
ontime	10033.882263519	Sum of GTIs [s]
livetime	9906.8272046196	Livetime [s]
ontime2	10033.841223516	Sum of GTIs [s]
ontime3	10033.80018352	Sum of GTIs [s]
ontime6	10033.677063517	Sum of GTIs [s]
ontime7	10033.882263519	Sum of GTIs [s]
ontime8	10033.759143516	Sum of GTIs [s]
ontime9	10033.718103521	Sum of GTIs [s]
l2events	231599	Number of level 2 events

