V&V Summary Report L2 ASCDS Version: 8.3.3

Observation 65 - L2 Version 4 Chandra X-Ray Center

L2 Processing Date: Nov 8 2010

See axaff00065N002_VV001_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2010.11.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.035

Comments

ACIS boresight and plate scale series.

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The bias map for CCD_ID = 3 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data

were previously bias-corrected by one of the affected bias pixels may have

an apparent energy shift. While the change in energy is expected to be small

(~20~eV), it depends on many parameters that have not yet been fully explored

for this bias anomaly. The bias map for CCD_ID=3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:

(119.64234,-60.92203),(119.64766,-60.91818),(119.47375,-60.86150),(119.46842,-60.86534)

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The focal plane temperature is approximately $-100\ \text{C}$ 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 depend on the most accurate spectral response should not notice an effect.

seq_num	290034	Sequence number
obs_id	65	Observation id
title	CALIBRATION OBSERVATION NGC 2516 FOR BORESIGHTING AND PLATE SCALE	% #160
observer	Dr. CXC Calibration	Principal investigator
object	NGC 2516	Source name
dtycycle	0	& #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	119.59	Observer's specified target RA
dec_targ	-60.7939	Observer's specified target Dec
ra_nom	119.58402397627	Nominal RA
dec_nom	-60.7891306357	Nominal Dec
roll_nom	146.20405862626	Nominal Roll
revision	4	Processing version of data
ontime	10035.200009346	Sum of GTIs [s]
livetime	9908.1282643557	Livetime [s]
ontime0	10035.200009346	Sum of GTIs [s]
ontime1	10035.200009346	Sum of GTIs [s]
ontime2	10035.200009346	Sum of GTIs [s]
ontime3	10035.200009346	Sum of GTIs [s]
ontime6	10035.200009346	Sum of GTIs [s]
ontime7	10035.200009346	Sum of GTIs [s]
12events	212281	Number of level 2 events

