

V&V Summary Report

L2 ASCDS Version : 8.2.1

Observation 1192 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Jan 13 2010

See axaff01192N001_VV001_vvref2.pdf for the full report

V&V Scientist	Glenn Allen
V&V Date (YYYY-MM-DD)	2010.08.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.871

Comments

Folks,

Yes. The bias looks odd. Most of the bias values are 4095, which normally means that the pixel is identified as bad in the onboard bad-pixel list. However, this observation was performed using the FAINT_BIAS mode. In this case, bias information is not telemetered as an image before the observation is performed. Instead the bias information for a 3 pixel x 3 pixel event island is telemetered with each event. Therefore, when the bias image is constructed, it will only have information for the 3x3 regions around the events. There will be no information for the regions where no events occurred. A comparison of the bias file and the event file shows that the regions around each event have bias information and that the other regions of the CCD do not. Therefore, the locations at which bias information is available are the regions for which bias information are expected. A casual inspection of the spectrum of the source suggest the the spectrum is OK. Therefore, the values of the bias near the source should be fairly accurate.

Glenn

Glenn, the bias map for this observation seems corrupted in some way. There are many 4095 values in the bias, and the target is clearly visible on the bias. Can you have a look at this observation and see if we can improve the results somehow?

Thanks,

Joy

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ACIS very off-axis PSF and effective area measurement on I3.

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Bad bias.

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Slot 7 was not utilized in this 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 depend on the most accurate spectral response should not notice an effect.

seq_num	280142	Sequence number
obs_id	1192	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HR1099	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.197083	Observer's specified target RA
dec_targ	0.589972	Observer's specified target Dec
ra_nom	54.251379838055	Nominal RA
dec_nom	0.66218839610757	Nominal Dec
roll_nom	96.964078524086	Nominal Roll
revision	3	Processing version of data
ontime	1871.0	Sum of GTIs [s]
livetime	1729.0773325447	Livetime [s]
ontime3	1871.0	Sum of GTIs [s]
l2events	12392	Number of level 2 events

