

V&V Summary Report

L2 ASCDS Version : 8.1.1

Observation 18 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Nov 19 2009

See [axaff00018N001_VV001_vvref2.pdf](#) for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.435

Comments

The front-end processor designated FEPO suffered from a rare problem. As a result, the top half of the bias-map for CCD_ID 7 (the CCD associated with FEPO) was corrupted for part of the observation and

many invalid events were telemetered for this region. The standard pipeline processing tools identify the problem and remove the spurious events from the Level 2 event file during the interval in question.

Therefore, the effective exposure for the top half of CCD_ID 7 is much less than the exposure time for the bottom of CCD_ID 7.

The problem began at 1999-10-12T13:56:06. Data on CCD_ID 7 are not affected

before that time. Data after that time on CCD-ID are not included in the GTI. The target was on the ACIS-I chips, which were not adversely affected.

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The focal plane temperature is approximately -110C 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	200016	Sequence number
obs_id	18	Observation id
title	YOUNG STARS IN THE ORION TRAPEZIUM CLUSTER	Proposal title
observer	Prof Gordon Garmire	Principal investigator
object	TRAPEZIUM CLUSTER	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.8125	Observer's specified target RA
dec_targ	-5.388889	Observer's specified target Dec
ra_nom	83.815410390113	Nominal RA
dec_nom	-5.3844436012454	Nominal Dec
roll_nom	79.991212580123	Nominal Roll
revision	4	Processing version of data
ontime	47434.406520352	Sum of GTIs [s]
livetime	46833.763503421	Livetime [s]
ontime0	47586.854750633	Sum of GTIs [s]
ontime1	47667.837616265	Sum of GTIs [s]
ontime2	46552.906830966	Sum of GTIs [s]
ontime3	47434.406520352	Sum of GTIs [s]
ontime6	47768.184222996	Sum of GTIs [s]
ontime7	13481.911163352	Sum of GTIs [s]
l2events	684648	Number of level 2 events

