## V&V Summary Report L2 ASCDS Version : 8.3.3

## Observation 52 - L2 Version 6 Chandra X-Ray Center

L2 Processing Date : Nov 9 2010

See axaff00052N003\_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	1.28

## Comments

In spite of the title of this observation, the grating was not inserted during the exposure. While this exposure was being taken, the launch lock pins were removed from the HETG. This observation was stopped before the HETG was inserted. Very piled up: large portion of center screened as 'bad' events image shows crown-like spikes = mirror segments.

===

The bias map for CCD\_ID = 7 suffered from anomalously high bias values at the position of the target. The spacecraft was already at the position of the target when the bias maps were calculated and thus contaminated the bias map. Pixels in the event data were previously bias-corrected by one of the affected bias pixels may have an apparent energy shift. The bias map for CCD\_ID=7 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: (79.13203,46.00488),(79.13146,45.99437),(79.20841,45.99234),(79.20899,46 .00284) 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	290021	Sequence number	
obs_id	52	Observation id	
title	GRATINGS CALIBRATION OBSERVATION OF AN EMISSION LINE SOURCE: CAPELLA		
observer	Dr. CXC Calibration	Principal investigator	
object	CAPELLA	Source name	
dtycycle	0		
cycle	Р	events from which exps? Prim/Second/Both	
ra_targ	79.17625	Observer's specified target RA	
dec_targ	45.997889	Observer's specified target Dec	
ra_nom	79.179811192945	Nominal RA	
dec_nom	46.002682620423	Nominal Dec	
roll_nom	87.781563666675	Nominal Roll	
revision	6	Processing version of data	
ontime	1278.7101904228	Sum of GTIs [s]	
livetime	1262.5183920449	Livetime [s]	
ontime4	1278.6281104237	Sum of GTIs [s]	
ontime5	1278.6691504195	Sum of GTIs [s]	
ontime6	1278.5049904212	Sum of GTIs [s]	
ontime7	1278.7101904228	Sum of GTIs [s]	
ontime8	1278.5870704204	Sum of GTIs [s]	
ontime9	1278.5460304245	Sum of GTIs [s]	
12events	18232	Number of level 2 events	

		o = target
~ ~		x = nominal pointing
0.0	and a second	
		1 1
0.0	Law and Local Division of the	
0:00.0		
	and the second second	
		<u> </u>
0.0	<b>的复数形式</b>	
0.0	3237-32325-);523 3852-555-32276	
	Same Same	
	a statistic statistics and the	