

V&V Reference Report

L2 ASCDS Version : 8.3.3.1

Observation 62250 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Dec 3 2010

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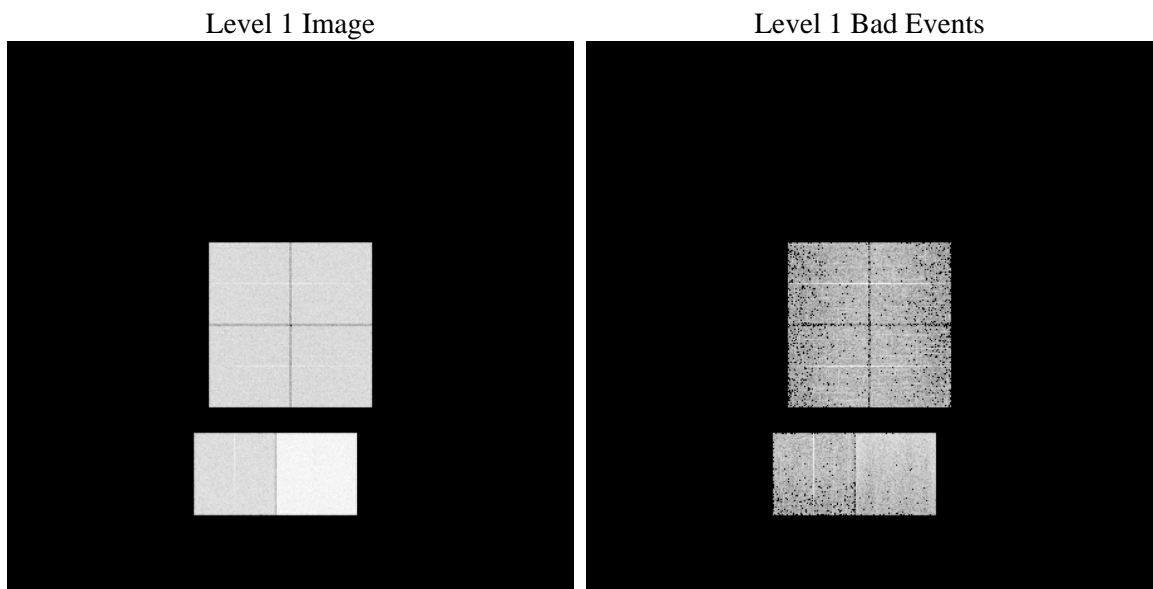
1 Front

seq_num	 	Sequence number
obs_id	62250	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA
dec_targ	0.0	Observer's specified target Dec
ra_nom	338.02092889612	Nominal RA
dec_nom	-35.025632951878	Nominal Dec
roll_nom	276.40456782911	Nominal Roll
revision	5	Processing version of data
ontime	3480.4027095959	Sum of GTIs [s]
livetime	3436.33175484	Livetime [s]
ontime0	1425.5627752542	Sum of GTIs [s]
ontime1	1448.7433864623	Sum of GTIs [s]
ontime2	1364.4763762355	Sum of GTIs [s]
ontime3	1367.7173264474	Sum of GTIs [s]
ontime6	1526.5283166766	Sum of GTIs [s]
ontime7	3480.4027095959	Sum of GTIs [s]
l2events	922716	Number of level 2 events

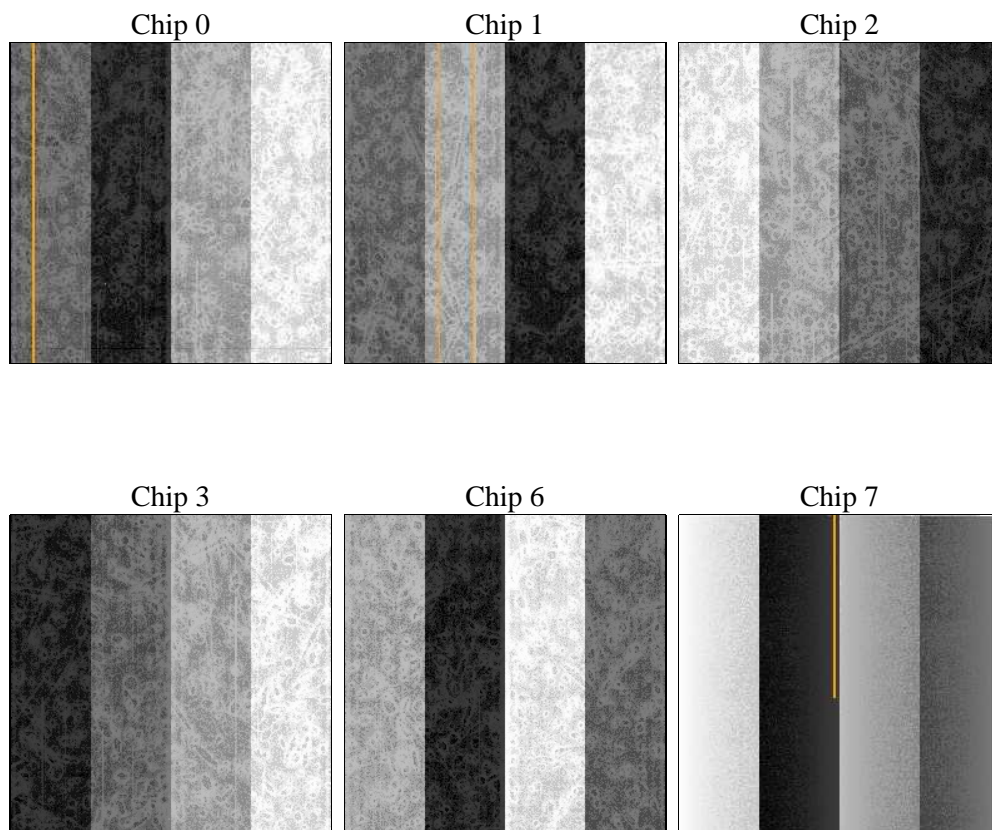
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	0.0	Scheduled observation exposure time
ascdsver	8.3.3.1	ASCDS version number	ontime	3480.4027095959	Sum of GTIs [s]
caldsver	4.4.0	 	ontime0	1425.5627752542	Sum of GTIs [s]
date	2010-12-03T23:17:12	Date and time of file creation	ontime1	1448.7433864623	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	1364.4763762355	Sum of GTIs [s]
			ontime3	1367.7173264474	Sum of GTIs [s]
			ontime6	1526.5283166766	Sum of GTIs [s]
			ontime7	3480.4027095959	Sum of GTIs [s]
			l1events	1060053	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	139234	141668	135764	136718	155444	351225	grade 0 events	44488	44846	36283	38419	37228	58500
rejected events	17679	18125	18659	19271	21094	32987		31%	31%	26%	28%	23%	16%
rejected %	12%	12%	13%	14%	13%	9%	grade 1 events	174	186	149	173	155	116
								0%	0%	0%	0%	0%	0%
							grade 2 events	45977	47342	51879	50062	62831	89435
								33%	33%	38%	36%	40%	25%
							grade 3 events	4790	4843	3777	4130	3924	27394
								3%	3%	2%	3%	2%	7%
							grade 4 events	4766	4851	3741	4072	3787	24498
								3%	3%	2%	2%	2%	6%
							grade 5 events	1128	1154	1157	1180	1180	4937
								0%	0%	0%	0%	0%	1%
							grade 6 events	21534	21661	21425	20764	26580	118411
								15%	15%	15%	15%	17%	33%
							grade 7 events	16377	16785	17353	17918	19759	27934
								11%	11%	12%	13%	12%	7%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
Pointing RA	0	338.0209288961204	Alternating exposures requested	N	N
Pointing Dec	0	-35.02563295187801	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	276.4045678291054			
SIM focus pos (mm)	-0.782348	-1.428180813131781			
SIM defocus (mm)	0	0.1051558262725154			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	62640453.163	62640452.394746			
Observation start date	1999-12-27T00:07:33	1999-12-27T00:07:32			
Observation end time	62648044.314	62648043.545021			
Observation end date	1999-12-27T02:14:04	1999-12-27T02:14:03			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.4804027095959

A.2 Comments

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original 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 = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.

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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 chip (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.