

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 53109 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jan 7 2014

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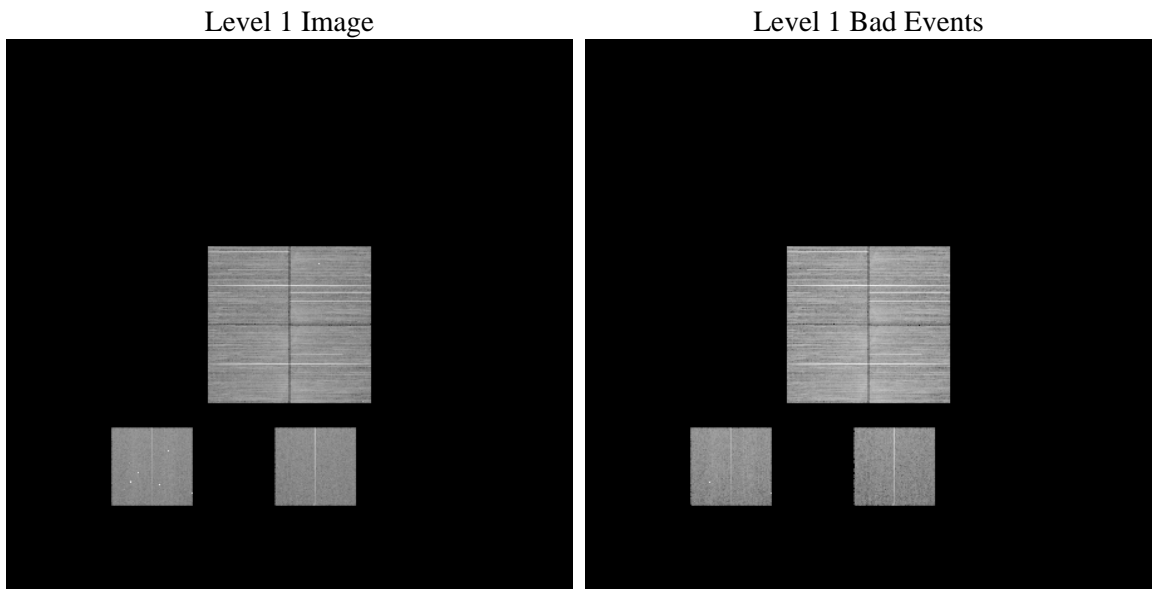
1 Front

seq_num	 	Sequence number
obs_id	53109	Observation id
title	ACIS-012357 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 [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	131.9682665769	Nominal RA [deg]
dec_nom	35.013799303013	Nominal Dec [deg]
roll_nom	113.24742925415	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8284.7999691963	Sum of GTIs [s]
livetime	8179.8928434787	Livetime [s]
ontime0	7575.0039314628	Sum of GTIs [s]
ontime1	7623.6202270389	Sum of GTIs [s]
ontime2	7647.665468514	Sum of GTIs [s]
ontime3	7694.9240854979	Sum of GTIs [s]
ontime5	8284.7999691963	Sum of GTIs [s]
ontime7	8284.7999691963	Sum of GTIs [s]
l2events	265007	Number of level 2 events

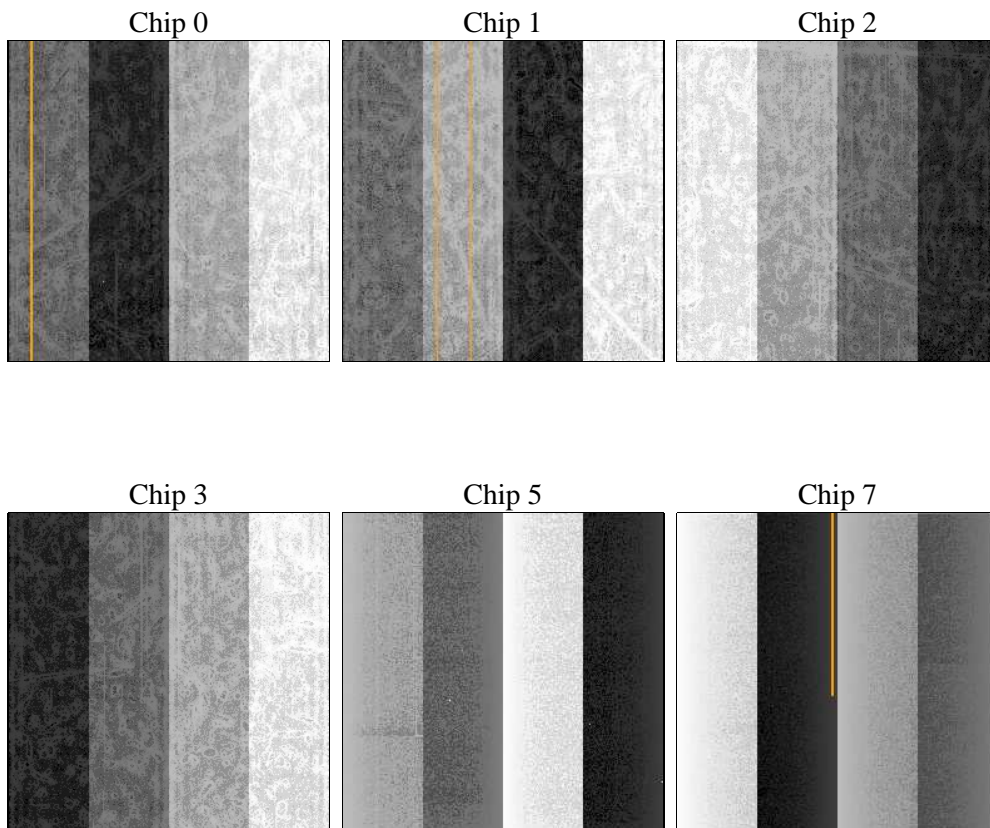
2 OBI

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	[s] Scheduled observation exposure time
ascdsver	10.1.1	Processing system revision	ontime	8284.7999691963	Sum of GTIs [s]
caldbver	4.6.0	 	ontime0	7575.0039314628	Sum of GTIs [s]
date	2014-01-07T18:12:07	Date and time of file creation	ontime1	7623.6202270389	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	7647.665468514	Sum of GTIs [s]
			ontime3	7694.9240854979	Sum of GTIs [s]
			ontime5	8284.7999691963	Sum of GTIs [s]
			ontime7	8284.7999691963	Sum of GTIs [s]
			l1events	1356281	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	228118	256851	251248	257602	194056	168406	grade 0 events	15528	16388	15957	16905	14014	9821
rejected events	197212	223729	220196	225634	104420	94194		6%	6%	6%	6%	7%	5%
rejected %	86%	87%	87%	87%	53%	55%	grade 1 events	168	149	211	160	742	199
								0%	0%	0%	0%	0%	0%
							grade 2 events	6297	7187	6006	5984	32812	19696
								2%	2%	2%	2%	16%	11%
							grade 3 events	2241	2209	2195	2284	3524	5911
								0%	0%	0%	0%	1%	3%
							grade 4 events	2149	2236	2262	2229	3445	5820
								0%	0%	0%	0%	1%	3%
							grade 5 events	2940	3028	2807	3254	8516	9177
								1%	1%	1%	1%	4%	5%
							grade 6 events	4691	5102	4632	4566	35841	32964
								2%	1%	1%	1%	18%	19%
							grade 7 events	194104	220552	217178	222220	95162	84818
								85%	85%	86%	86%	49%	50%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012357	ACIS-012357
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	131.9682665768965
[deg] Pointing Dec	0	35.01379930301306
[deg] Pointing Roll	0.0	113.2474292541537
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.4635187648994
[mm] SIM translation stage offset	0	-0.007540371344731511
[s] Observation start time (MET)	505381153.01925	505381151.99425
Observation start date	2014-01-06T07:39:13	2014-01-06T07:39:11
[s] Observation end time (MET)	505402296.720412	505402295.69541
Observation end date	2014-01-06T13:31:37	2014-01-06T13:31:35
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	3.2	3.2

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.01.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2847999691963

A.2 Comments

Spatial regions of the original bias maps for CCD = 0 and 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 maps for CCD = 0 and 3 have 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 chip coords:

CCD 0: (884,1),(904,1),(904,434),(884,364)

CCD 3: (821,1),(843,1),(843,484),(821,410)