

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 57427 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 29 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Star Slots	6
2.4	FID Slots	6
A	Summary	7
A.1	Status	7
A.2	Comments	7

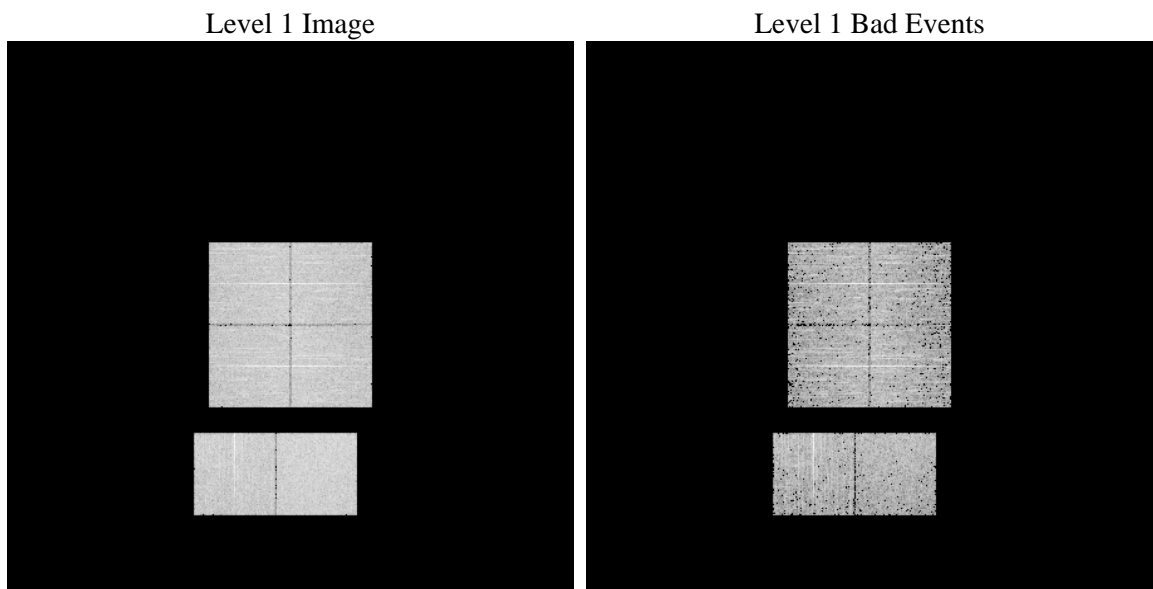
1 Front

seq_num	 	Sequence number
obs_id	57427	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 [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	106.00931771465	Nominal RA [deg]
dec_nom	12.027221971513	Nominal Dec [deg]
roll_nom	38.565410502419	Nominal Roll [deg]
revision	3	Processing version of data
ontime	2792.3528305292	Sum of GTIs [s]
livetime	2756.994377636	Livetime [s]
ontime0	2792.3117905259	Sum of GTIs [s]
ontime1	2792.2707505226	Sum of GTIs [s]
ontime2	2792.2297105193	Sum of GTIs [s]
ontime3	2792.3938705325	Sum of GTIs [s]
ontime6	2792.188670516	Sum of GTIs [s]
ontime7	2792.3528305292	Sum of GTIs [s]
l2events	191491	Number of level 2 events

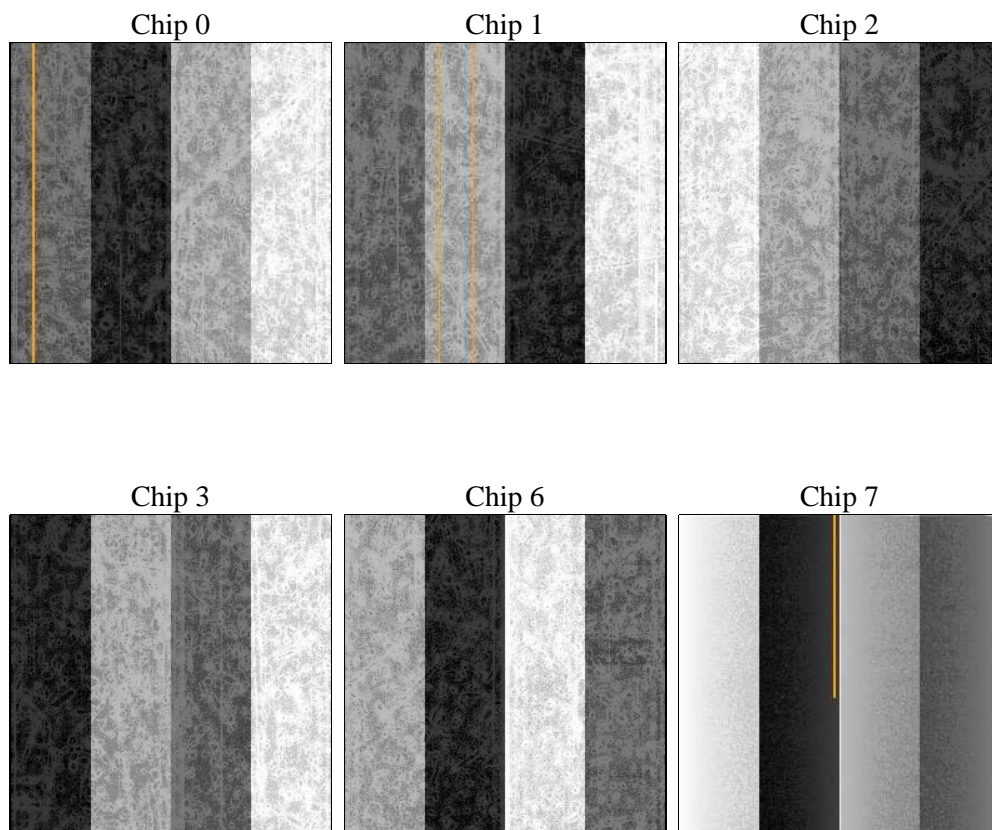
2 OBI

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	8.4.4	Processing system revision	ontime	2792.3528305292	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	2792.3117905259	Sum of GTIs [s]
date	2012-05-29T17:20:23	Date and time of file creation	ontime1	2792.2707505226	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2792.2297105193	Sum of GTIs [s]
			ontime3	2792.3938705325	Sum of GTIs [s]
			ontime6	2792.188670516	Sum of GTIs [s]
			ontime7	2792.3528305292	Sum of GTIs [s]
			l1events	346614	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	55799	53908	54707	56634	58823	66743	grade 0 events	16802	16515	16953	17372	17151	8718
rejected events	24364	22579	23702	24953	25909	22881		30%	30%	30%	30%	29%	13%
rejected %	43%	41%	43%	44%	44%	34%	grade 1 events	139	88	136	152	115	47
								0%	0%	0%	0%	0%	0%
							grade 2 events	5652	5826	5183	5443	5859	9492
								10%	10%	9%	9%	9%	14%
							grade 3 events	2038	2028	2124	2193	2090	4087
								3%	3%	3%	3%	3%	6%
							grade 4 events	2063	2052	2033	2128	2036	4064
								3%	3%	3%	3%	3%	6%
							grade 5 events	1351	1406	1269	1492	1484	3909
								2%	2%	2%	2%	2%	5%
							grade 6 events	4880	4908	4712	4545	5778	17501
								8%	9%	8%	8%	9%	26%
							grade 7 events	22874	21085	22297	23309	24310	18925
								40%	39%	40%	41%	41%	28%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	106.0093177146482	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	12.02722197151253	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	38.56541050241876	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.6828225247311905			
[mm] SIM defocus	0.1037507710433287	0.8505141146731063			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	346577631.894128	346577630.86913			
Observation start date	2008-12-25T07:33:52	2008-12-25T07:33:50			
[s] Observation end time (MET)	346591783.044827	346591782.01983			
Observation end date	2008-12-25T11:29:43	2008-12-25T11:29:42			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.7923528305292

A.2 Comments

A spatial region of the original bias map for CCD = 6 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 = 6 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 chip coords:
(784,1),(997,1),(997,492),(784,492)