

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 55208 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Feb 22 2012

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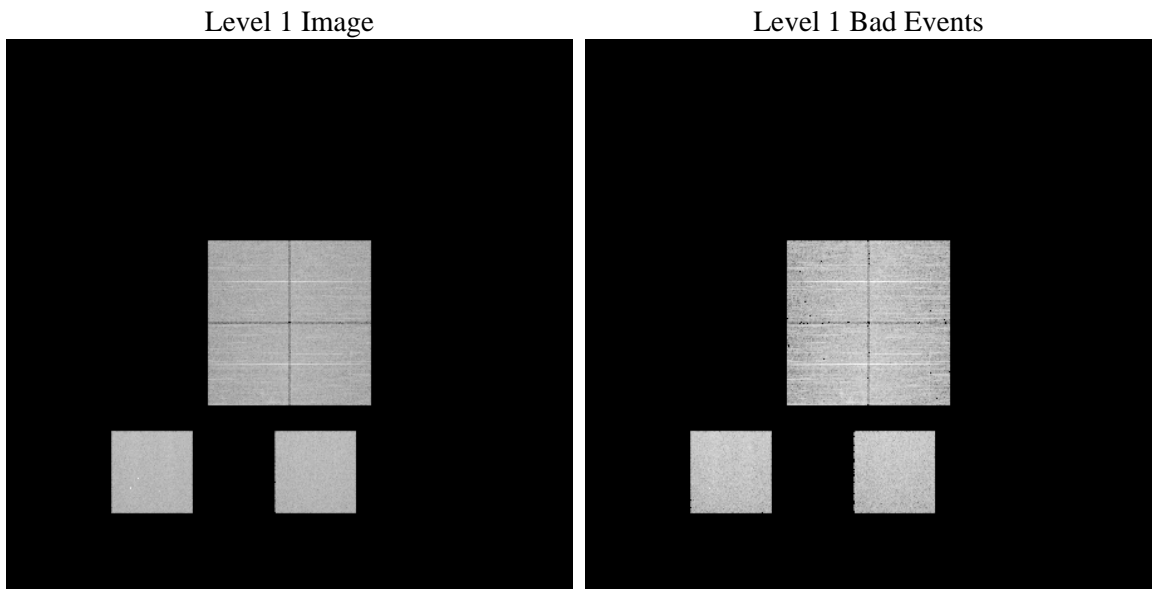
# 1 Front

seq_num	&#160	Sequence number
obs_id	55208	Observation id
title	ACIS-012357 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtcycle	0	&#160
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	315.9992063922	Nominal RA [deg]
dec_nom	9.9713527559785	Nominal Dec [deg]
roll_nom	235.43825050927	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8286.6546519995	Sum of GTIs [s]
livetime	8181.7240411715	Livetime [s]
ontime0	8286.6956920028	Sum of GTIs [s]
ontime1	8286.7367320061	Sum of GTIs [s]
ontime2	8286.7777720094	Sum of GTIs [s]
ontime3	8286.6136119962	Sum of GTIs [s]
ontime5	8287.9999691844	Sum of GTIs [s]
ontime7	8286.6546519995	Sum of GTIs [s]
l2events	329039	Number of level 2 events

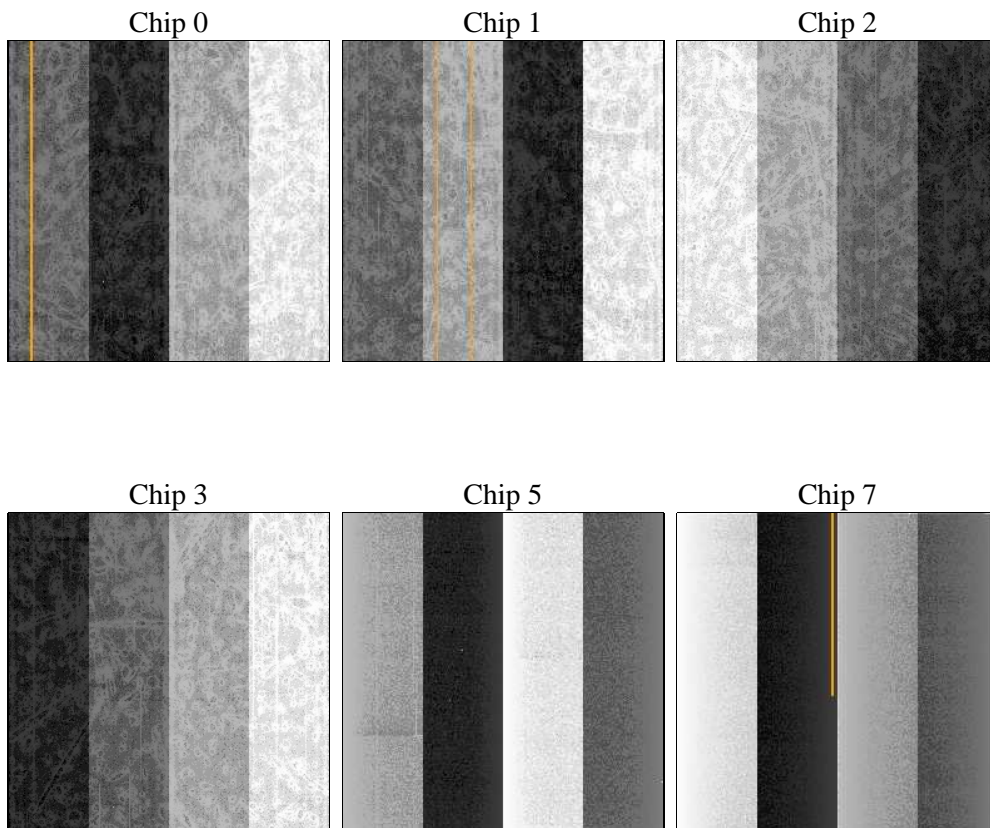
## 2 OBI

### 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	8.4.3	Processing system revision	ontime	8286.6546519995	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	8286.6956920028	Sum of GTIs [s]
date	2012-02-22T13:26:24	Date and time of file creation	ontime1	8286.7367320061	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8286.7777720094	Sum of GTIs [s]
			ontime3	8286.6136119962	Sum of GTIs [s]
			ontime5	8287.9999691844	Sum of GTIs [s]
			ontime7	8286.6546519995	Sum of GTIs [s]
			l1events	679048	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	96480	99545	103128	103876	139848	136171	grade 0 events	24970	23985	25194	25640	9142	12773
rejected events	49087	52281	56124	56303	60627	58787		25%	24%	24%	24%	6%	9%
rejected %	50%	52%	54%	54%	43%	43%	grade 1 events	160	130	155	167	158	113
								0%	0%	0%	0%	0%	0%
							grade 2 events	8741	9382	8396	8349	28324	16719
								9%	9%	8%	8%	20%	12%
							grade 3 events	3167	3143	3266	3284	3257	6773
								3%	3%	3%	3%	2%	4%
							grade 4 events	3220	3075	3265	3258	3092	6710
								3%	3%	3%	3%	2%	4%
							grade 5 events	3446	3596	3276	3657	7584	9158
								3%	3%	3%	3%	5%	6%
							grade 6 events	7295	7679	6883	7042	35437	34409
								7%	7%	6%	6%	25%	25%
							grade 7 events	45481	48555	52693	52479	52854	49516
								47%	48%	51%	50%	37%	36%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012357	ACIS-012357	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	315.9992063922045	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	9.971352755978501	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	235.4382505092657	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	431378819.387244	431378818.36223			
Observation start date	2011-09-02T19:26:59	2011-09-02T19:26:58			
[s] Observation end time (MET)	431388999.687779	431388998.66277			
Observation end date	2011-09-02T22:16:40	2011-09-02T22:16:38			
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)	2012.02.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2866546519995

## A.2 Comments

A spatial region of the original bias map for CCD = 0 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 ( $\sim 20$  eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 0 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:  
(819,183),(842,183),(842,532),(819,532)