

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 57819 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Jun 11 2012

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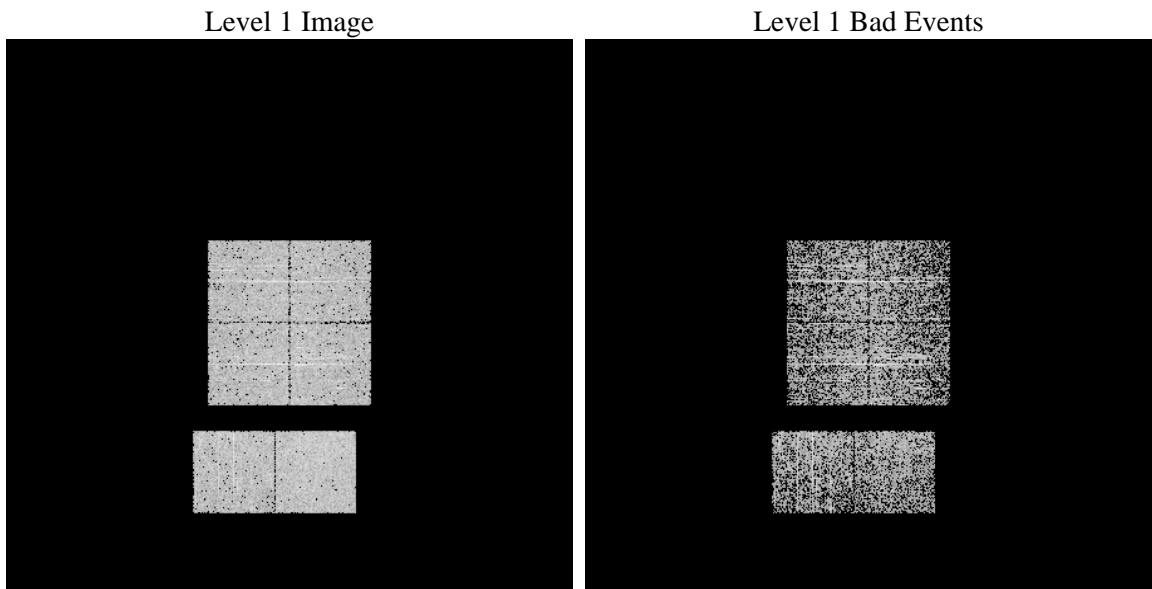
# 1 Front

seq_num	&#160	Sequence number
obs_id	57819	Observation id
title	ACIS-012367 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	225.97765683065	Nominal RA [deg]
dec_nom	7.2817595020106	Nominal Dec [deg]
roll_nom	186.75926669751	Nominal Roll [deg]
revision	3	Processing version of data
ontime	907.40740513802	Sum of GTIs [s]
livetime	895.91726619902	Livetime [s]
ontime0	907.36636513472	Sum of GTIs [s]
ontime1	907.32532513142	Sum of GTIs [s]
ontime2	907.28428512812	Sum of GTIs [s]
ontime3	907.44844514132	Sum of GTIs [s]
ontime6	907.24324512482	Sum of GTIs [s]
ontime7	907.40740513802	Sum of GTIs [s]
l2events	65915	Number of level 2 events

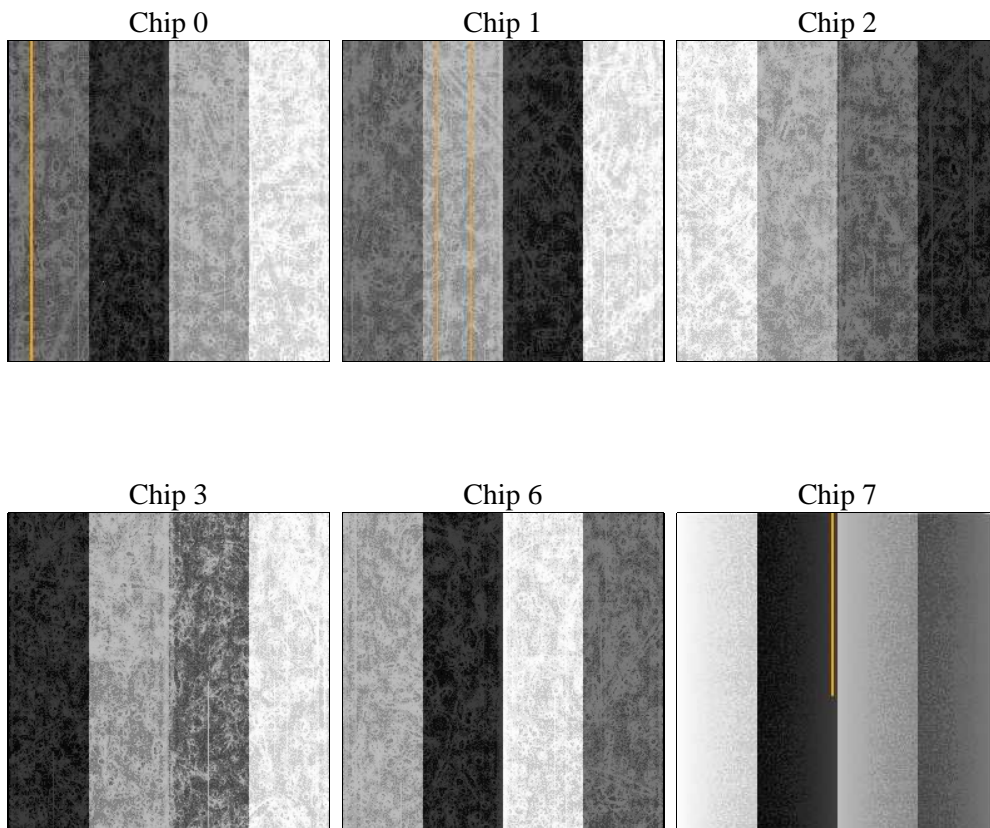
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	907.40740513802	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime0	907.36636513472	Sum of GTIs [s]
date	2012-06-11T16:05:52	Date and time of file creation	ontime1	907.32532513142	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	907.28428512812	Sum of GTIs [s]
			ontime3	907.44844514132	Sum of GTIs [s]
			ontime6	907.24324512482	Sum of GTIs [s]
			ontime7	907.40740513802	Sum of GTIs [s]
			l1events	114198	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	18125	17463	18629	18841	19151	21989
rejected events	7328	6555	7821	8000	7857	7089
rejected %	40%	37%	41%	42%	41%	32%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	5800	5806	5899	5976	5914	3041
	32%	33%	31%	31%	30%	13%
grade 1 events	45	36	46	46	32	17
	0%	0%	0%	0%	0%	0%
grade 2 events	1958	1934	1810	1908	2025	3358
	10%	11%	9%	10%	10%	15%
grade 3 events	682	763	767	688	701	1443
	3%	4%	4%	3%	3%	6%
grade 4 events	748	738	798	765	752	1382
	4%	4%	4%	4%	3%	6%
grade 5 events	455	444	416	476	457	1141
	2%	2%	2%	2%	2%	5%
grade 6 events	1609	1667	1534	1504	1902	5676
	8%	9%	8%	7%	9%	25%
grade 7 events	6828	6075	7359	7478	7368	5931
	37%	34%	39%	39%	38%	26%

## 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	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
[deg] Pointing RA	0	225.9776568306533	Alternating exposures requested	N	N
[deg] Pointing Dec	0	7.281759502010591	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	186.7592666975088			
[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)	326930019.619223	326930018.59422			
Observation start date	2008-05-11T21:53:40	2008-05-11T21:53:38			
[s] Observation end time (MET)	326936101.969519	326936100.94452			
Observation end date	2008-05-11T23:35:02	2008-05-11T23:35:00			
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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.90740740513802

## 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 ( $\sim 20$  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. The pixels affected by the anomaly are bounded by chip coords:  
(63,1),(84,1),(84,1024),(63,1024)