

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 62191 - L2 Version 5  
Chandra X-Ray Center

L2 Processing Date : Oct 10 2012

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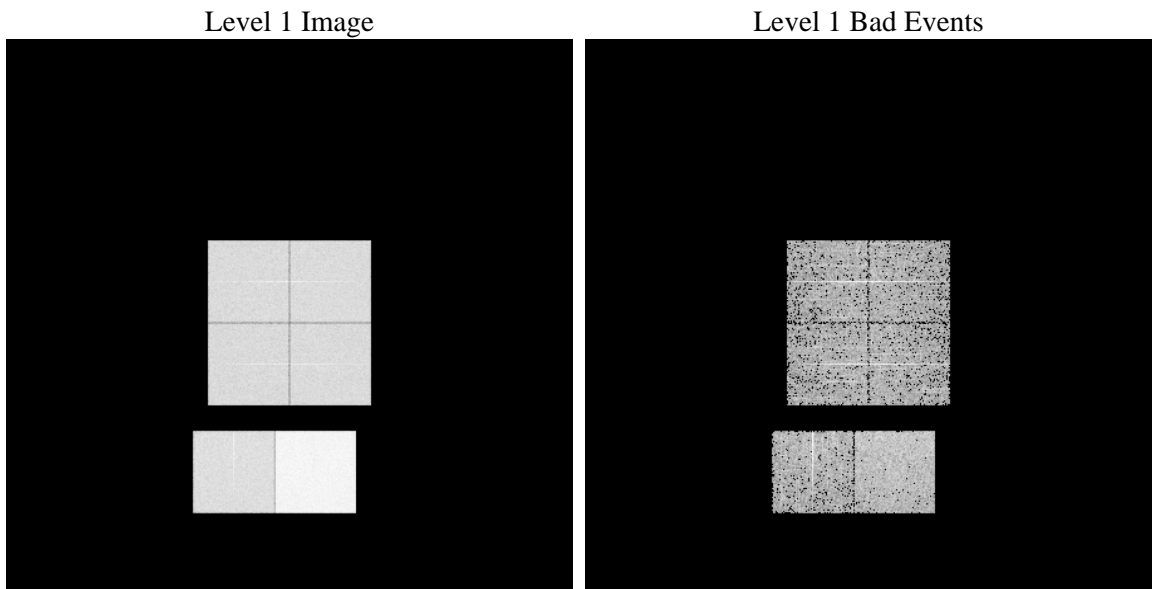
# 1 Front

seq_num	&#160	Sequence number
obs_id	62191	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	110.11084261701	Nominal RA [deg]
dec_nom	-31.43204832195	Nominal Dec [deg]
roll_nom	330.17634348678	Nominal Roll [deg]
revision	5	Processing version of data
ontime	3463.5218968615	Sum of GTIs [s]
livetime	3419.6646971209	Livetime [s]
ontime0	1395.7981033623	Sum of GTIs [s]
ontime1	1418.5263436139	Sum of GTIs [s]
ontime2	1327.8183432296	Sum of GTIs [s]
ontime3	1360.0645234287	Sum of GTIs [s]
ontime6	1506.1164539233	Sum of GTIs [s]
ontime7	3463.5218968615	Sum of GTIs [s]
l2events	920659	Number of level 2 events

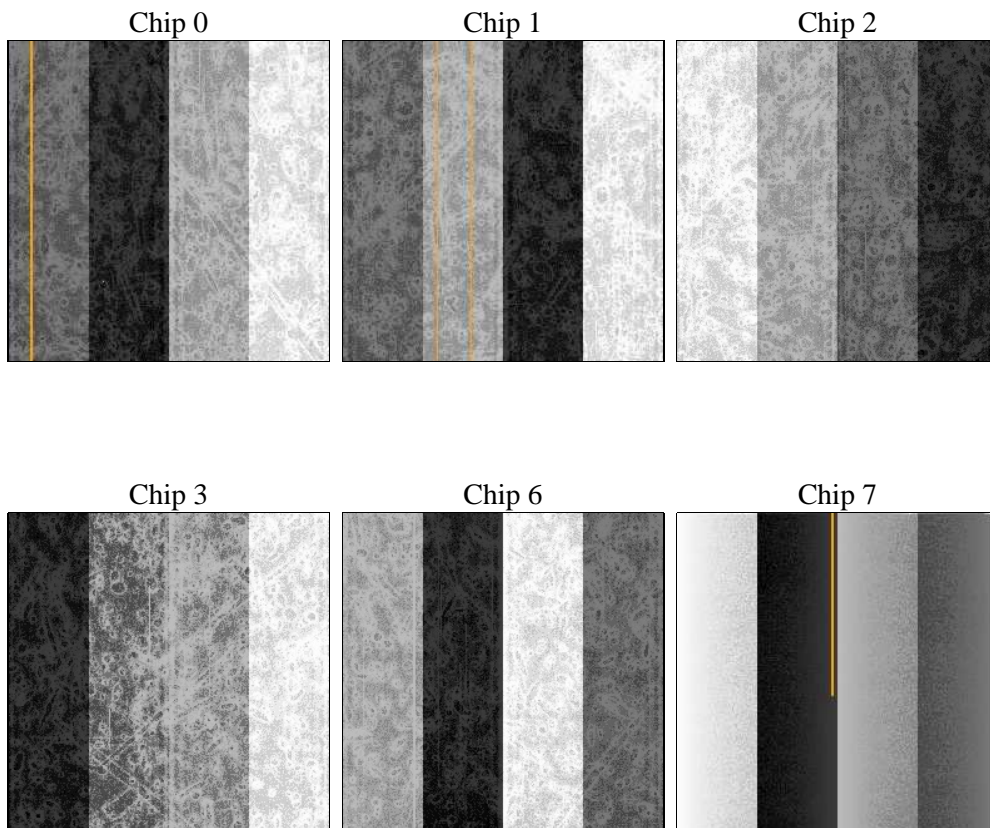
## 2 OBI

### 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	3463.5218968615	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	1395.7981033623	Sum of GTIs [s]
date	2012-10-10T17:10:15	Date and time of file creation	ontime1	1418.5263436139	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	1327.8183432296	Sum of GTIs [s]
			ontime3	1360.0645234287	Sum of GTIs [s]
			ontime6	1506.1164539233	Sum of GTIs [s]
			ontime7	3463.5218968615	Sum of GTIs [s]
			l1events	1056926	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	138922	140710	135048	137825	157853	346568	grade 0 events	68655	69784	66901	68678	77322	83913
rejected events	15055	14420	15052	15096	16650	22347		49%	49%	49%	49%	48%	24%
rejected %	10%	10%	11%	10%	10%	6%	grade 1 events	472	427	444	441	466	235
								0%	0%	0%	0%	0%	0%
							grade 2 events	21878	22289	21096	21560	24415	72501
								15%	15%	15%	15%	15%	20%
							grade 3 events	7941	7975	7683	7766	8882	33340
								5%	5%	5%	5%	5%	9%
							grade 4 events	7809	8192	7574	7772	8823	33298
								5%	5%	5%	5%	5%	9%
							grade 5 events	1028	1020	1036	1068	1227	4778
								0%	0%	0%	0%	0%	1%
							grade 6 events	18159	18621	17053	17255	22354	102251
								13%	13%	12%	12%	14%	29%
							grade 7 events	12980	12402	13261	13285	14364	16252
								9%	8%	9%	9%	9%	4%

## 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	110.1108426170076	Alternating exposures requested	N	N
[deg] Pointing Dec	0	-31.43204832194976	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	330.1763434867764			
[mm] SIM focus pos	-0.782348	-1.428180813131781			
[mm] SIM defocus	0	0.1051558262725154			
[mm] SIM translation stage pos	-233.592463	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	65839964.129472	65839963.360939			
Observation start date	2000-02-02T00:52:44	2000-02-02T00:52:43			
[s] Observation end time (MET)	65847264.179737	65847263.411205			
Observation end date	2000-02-02T02:54:24	2000-02-02T02:54:23			
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)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.4635218968615

## 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:  
(308,1),(346,1),(346,362),(308,362)