

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 55518 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Feb 8 2012

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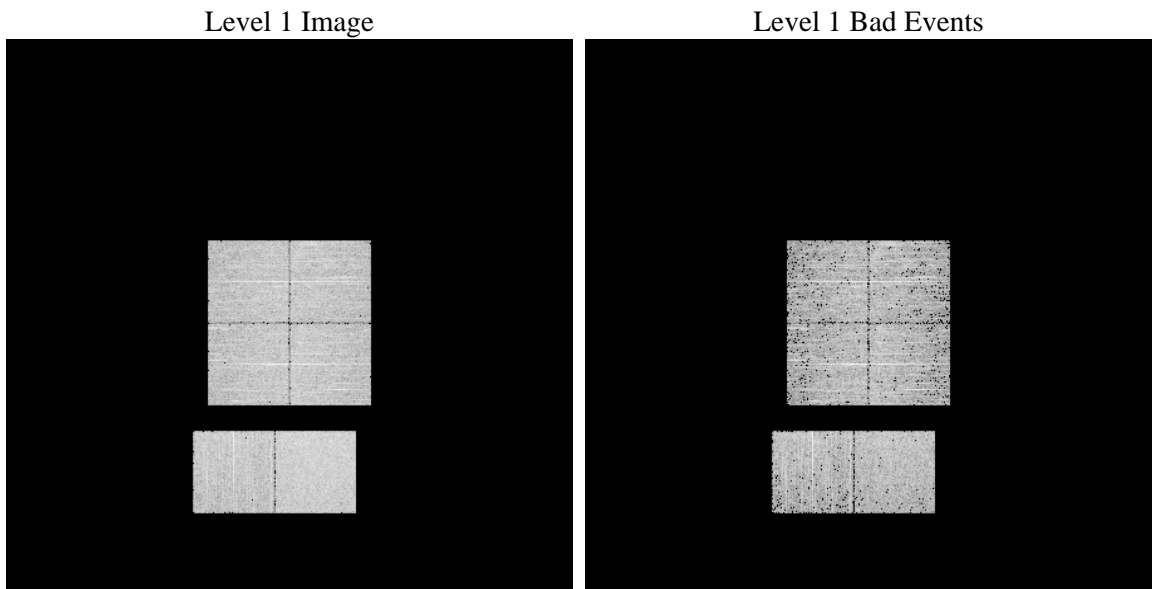
# 1 Front

seq_num	&#160	Sequence number
obs_id	55518	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	228.1533349512	Nominal RA [deg]
dec_nom	-10.050554246856	Nominal Dec [deg]
roll_nom	94.751618427684	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3052.799988687	Sum of GTIs [s]
livetime	3014.1435970548	Livetime [s]
ontime0	3052.799988687	Sum of GTIs [s]
ontime1	3052.799988687	Sum of GTIs [s]
ontime2	3052.799988687	Sum of GTIs [s]
ontime3	3052.799988687	Sum of GTIs [s]
ontime6	3052.799988687	Sum of GTIs [s]
ontime7	3052.799988687	Sum of GTIs [s]
l2events	118310	Number of level 2 events

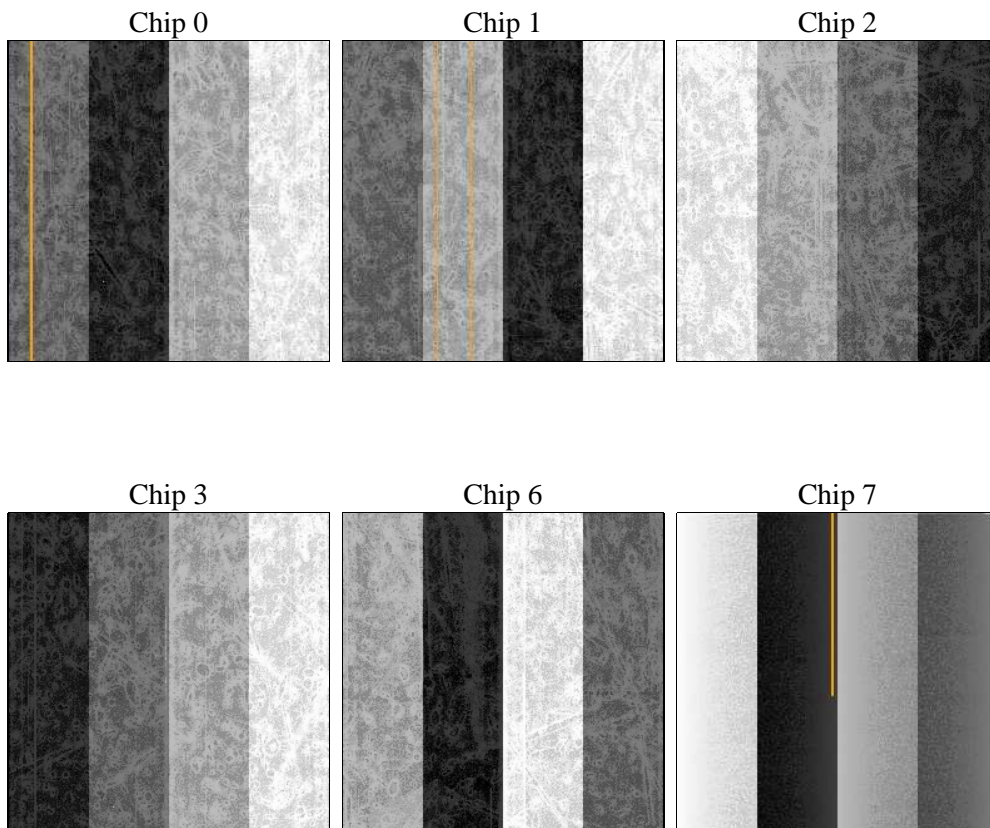
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	3052.799988687	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime0	3052.799988687	Sum of GTIs [s]
date	2012-02-08T07:07:29	Date and time of file creation	ontime1	3052.799988687	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3052.799988687	Sum of GTIs [s]
			ontime3	3052.799988687	Sum of GTIs [s]
			ontime6	3052.799988687	Sum of GTIs [s]
			ontime7	3052.799988687	Sum of GTIs [s]
			l1events	267468	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	40553	41720	41859	43565	44286	55485	grade 0 events	10730	10441	10928	11082	10793	5627
rejected events	21647	22713	23153	24265	24967	25588		26%	25%	26%	25%	24%	10%
rejected %	53%	54%	55%	55%	56%	46%	grade 1 events	89	58	71	68	60	47
								0%	0%	0%	0%	0%	0%
							grade 2 events	3757	4029	3499	3621	3728	7020
								9%	9%	8%	8%	8%	12%
							grade 3 events	1297	1407	1384	1439	1378	2966
								3%	3%	3%	3%	3%	5%
							grade 4 events	1432	1343	1457	1417	1325	2932
								3%	3%	3%	3%	2%	5%
							grade 5 events	1377	1388	1274	1514	1487	3682
								3%	3%	3%	3%	3%	6%
							grade 6 events	3107	3263	2918	3180	3530	13700
								7%	7%	6%	7%	7%	24%
							grade 7 events	18764	19791	20328	21244	21985	19511
								46%	47%	48%	48%	49%	35%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	228.1533349511964
[deg] Pointing Dec	0	-10.05055424685631
[deg] Pointing Roll	0.0	94.75161842768367
[mm] SIM focus pos	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
[mm] SIM translation stage pos	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	419239088.126601	419239088.126601
Observation start date	2011-04-15T07:18:08	2011-04-15T07:18:08
[s] Observation end time (MET)	419243635.882277	419243635.882277
Observation end date	2011-04-15T08:33:56	2011-04-15T08:33:55
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
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)	2012.02.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.052799988687

## 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 ( $\sim 20$  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 coordinates:  
(87,1),(304,1),(304,177),(87,69)