

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 55067 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Feb 26 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>7</b>
A.1	Status . . . . .	7
A.2	Comments . . . . .	7

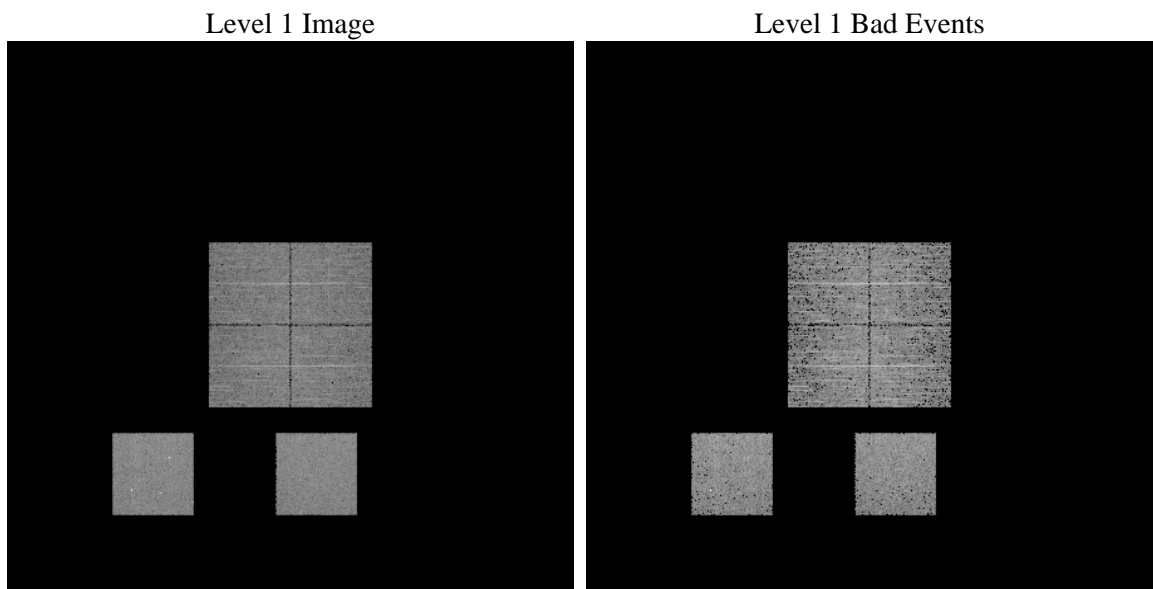
# 1 Front

seq_num	&#160	Sequence number
obs_id	55067	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	27.688489084074	Nominal RA [deg]
dec_nom	38.972763139197	Nominal Dec [deg]
roll_nom	219.09407500495	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3145.5739073157	Sum of GTIs [s]
livetime	3105.7427564641	Livetime [s]
ontime0	3145.5328673124	Sum of GTIs [s]
ontime1	3145.4918273091	Sum of GTIs [s]
ontime2	3145.4507873058	Sum of GTIs [s]
ontime3	3145.5999883413	Sum of GTIs [s]
ontime5	3145.4097473025	Sum of GTIs [s]
ontime7	3145.5739073157	Sum of GTIs [s]
l2events	121510	Number of level 2 events

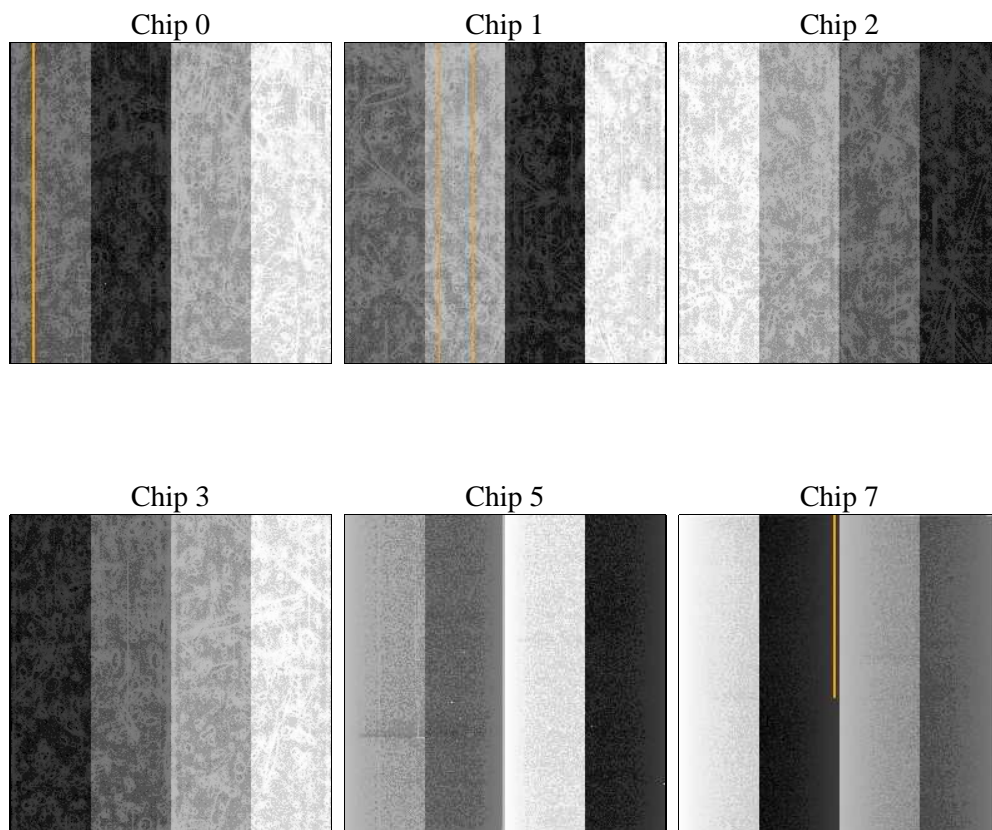
## 2 OBI

### 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	3145.5739073157	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime0	3145.5328673124	Sum of GTIs [s]
date	2012-02-27T01:16:49	Date and time of file creation	ontime1	3145.4918273091	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3145.4507873058	Sum of GTIs [s]
			ontime3	3145.5999883413	Sum of GTIs [s]
			ontime5	3145.4097473025	Sum of GTIs [s]
			ontime7	3145.5739073157	Sum of GTIs [s]
			l1events	267796	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	38473	38814	40365	40783	56226	53135	grade 0 events	9554	9326	9804	9731	4786	4978
rejected events	21181	21468	22911	23395	25284	24589		24%	24%	24%	23%	8%	9%
rejected %	55%	55%	56%	57%	44%	46%	grade 1 events	52	48	57	64	91	42
								0%	0%	0%	0%	0%	0%
							grade 2 events	3276	3487	3119	3138	11371	6408
								8%	8%	7%	7%	20%	12%
							grade 3 events	1227	1225	1306	1317	1333	2770
								3%	3%	3%	3%	2%	5%
							grade 4 events	1212	1190	1326	1249	1303	2687
								3%	3%	3%	3%	2%	5%
							grade 5 events	1328	1400	1374	1417	3133	3621
								3%	3%	3%	3%	5%	6%
							grade 6 events	2795	2913	2711	2770	13586	13018
								7%	7%	6%	6%	24%	24%
							grade 7 events	19029	19225	20668	21097	20623	19611
								49%	49%	51%	51%	36%	36%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012357	ACIS-012357
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	27.68848908407361
[deg] Pointing Dec	0	38.97276313919723
[deg] Pointing Roll	0.0	219.0940750049472
SIM focus pos (mm)	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
SIM translation stage pos (mm)	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	437289098.634848	437289098.634848
Observation start date	2011-11-10T05:11:39	2011-11-10T05:11:38
[s] Observation end time (MET)	437293647.483678	437293647.483678
Observation end date	2011-11-10T06:27:27	2011-11-10T06:27:27
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)	2012.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.1455739073157

## 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 coordinates: (916,1),(942,1),(942,606),(916,606)