

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 60124 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 6 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI Primary</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>3</b>	<b>OBI Secondary</b>	<b>6</b>
3.1	OBI . . . . .	6
3.1.1	Images . . . . .	6
3.1.2	Bias . . . . .	6
3.1.3	Parameters . . . . .	7
3.1.4	Events . . . . .	7
<b>A</b>	<b>Summary</b>	<b>8</b>
A.1	Status . . . . .	8
A.2	Comments . . . . .	8

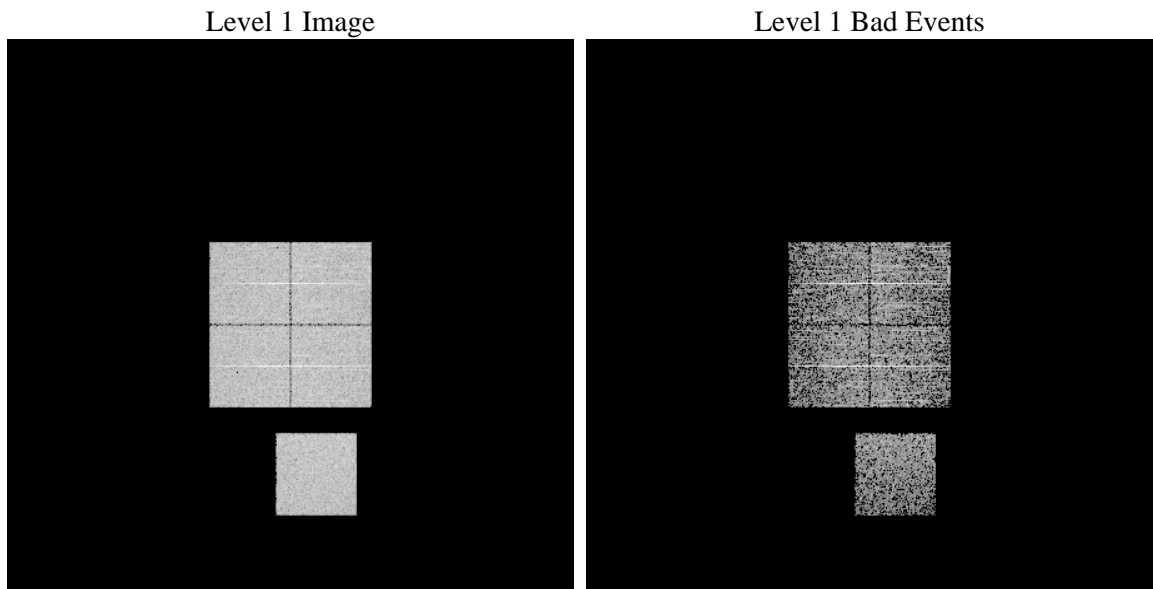
# 1 Front

seq_num	&#160	Sequence number
obs_id	60124	Observation id
title	ACIS-01237 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtcycle	0	&#160
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	221.00569535637	Nominal RA [deg]
dec_nom	25.972050351268	Nominal Dec [deg]
roll_nom	247.19878117236	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3690.1526042819	Sum of GTIs [s]
livetime	1185.2129454638	Livetime [s]
ontime0	3690.1526042819	Sum of GTIs [s]
ontime1	3690.1526241899	Sum of GTIs [s]
ontime2	3690.1526042819	Sum of GTIs [s]
ontime3	3690.1526241899	Sum of GTIs [s]
ontime7	3690.1526042819	Sum of GTIs [s]
l2events	179051	Number of level 2 events

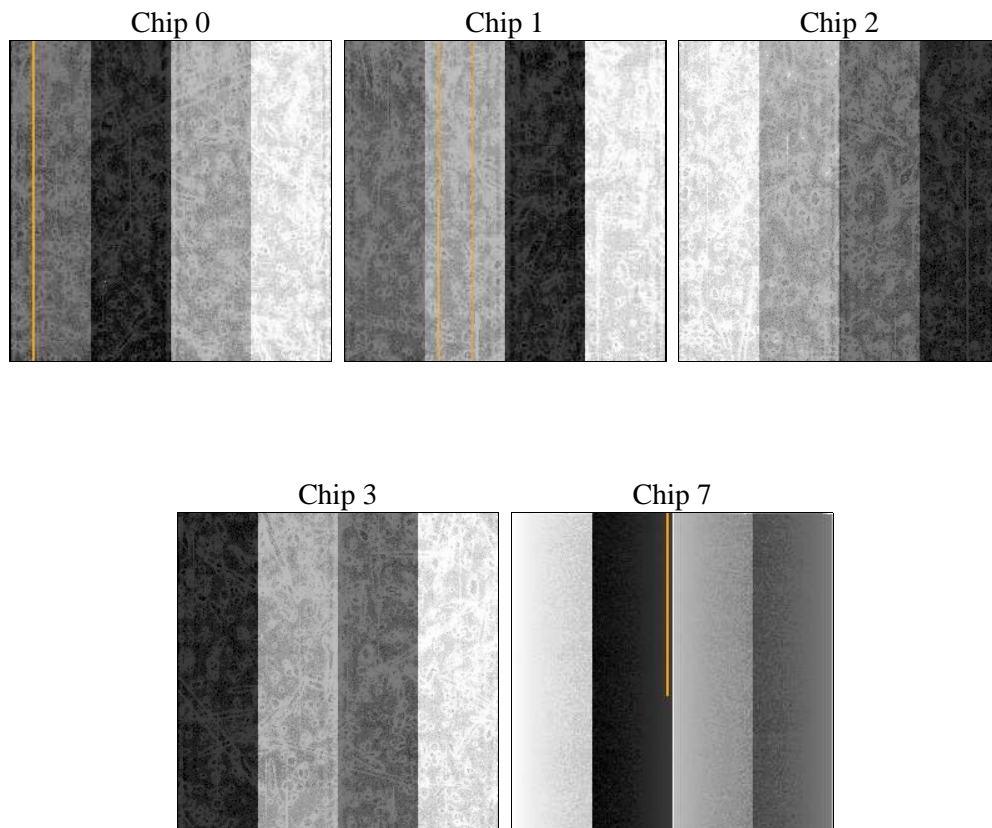
## 2 OBI Primary

### 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	8.5	Processing system revision	ontime	3690.1526042819	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime0	3690.1526042819	Sum of GTIs [s]
date	2012-12-06T11:49:59	Date and time of file creation	ontime1	3690.1526241899	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3690.1526042819	Sum of GTIs [s]
			ontime3	3690.1526241899	Sum of GTIs [s]
			ontime7	3690.1526042819	Sum of GTIs [s]
			l1events	248451	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	48045	49794	49836	50642	50134
rejected events	11174	12935	12419	13281	10099
rejected %	23%	25%	24%	26%	20%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	20222	20183	20957	20948	9980
	42%	40%	42%	41%	19%
grade 1 events	77	80	100	90	33
	0%	0%	0%	0%	0%
grade 2 events	6504	6519	6287	6409	8906
	13%	13%	12%	12%	17%
grade 3 events	2393	2462	2475	2468	4089
	4%	4%	4%	4%	8%
grade 4 events	2476	2379	2506	2495	3971
	5%	4%	5%	4%	7%
grade 5 events	631	653	631	694	1581
	1%	1%	1%	1%	3%
grade 6 events	5319	5365	5242	5079	13134
	11%	10%	10%	10%	26%
grade 7 events	10423	12153	11638	12459	8440
	21%	24%	23%	24%	16%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	221.0056953563665	Alternating exposures requested	Y	Y
[deg] Pointing Dec	0	25.97205035126805	[s] Primary exposure time	1.5	1.5
[deg] Pointing Roll	0.0	247.1987811723571	[s] Secondary exposure time	3.2	3.2
[mm] SIM focus pos	-0.782348	-0.6828225247311905	Duty cycle	1	1
[mm] SIM defocus	0	0.8505141146731063			
[mm] SIM translation stage pos	-233.592463	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	206749565.552889	206749564.52787			
Observation start date	2004-07-20T22:26:06	2004-07-20T22:26:04			
[s] Observation end time (MET)	206767611.703692	206767610.67867			
Observation end date	2004-07-21T03:26:52	2004-07-21T03:26:50			
Read mode	TIMED	TIMED			

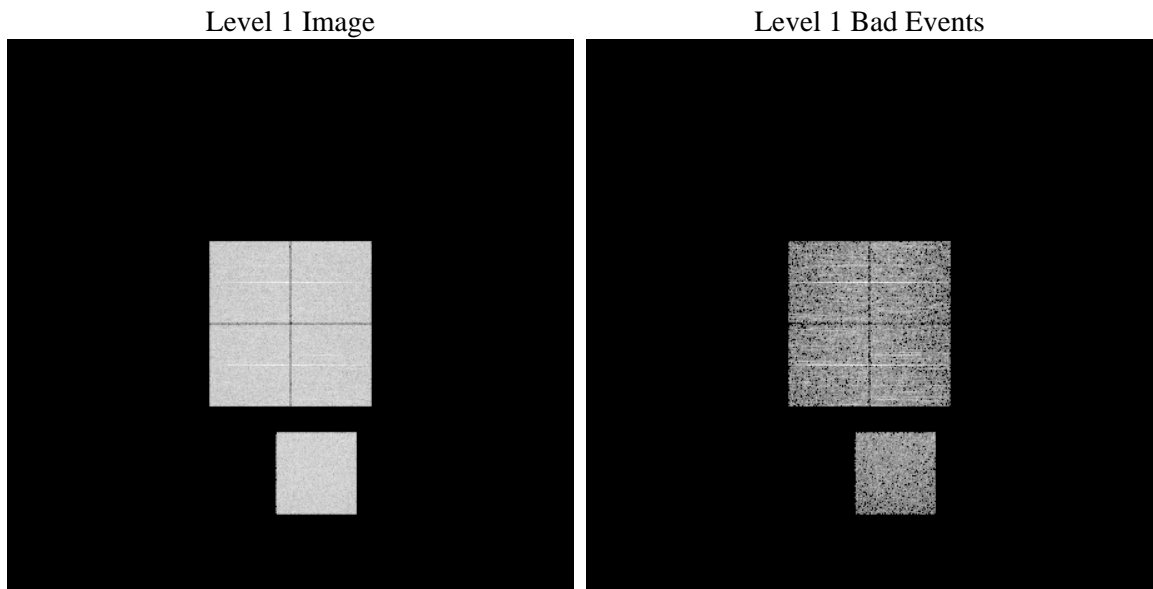
## 2.3 Star Slots

## 2.4 FID Slots

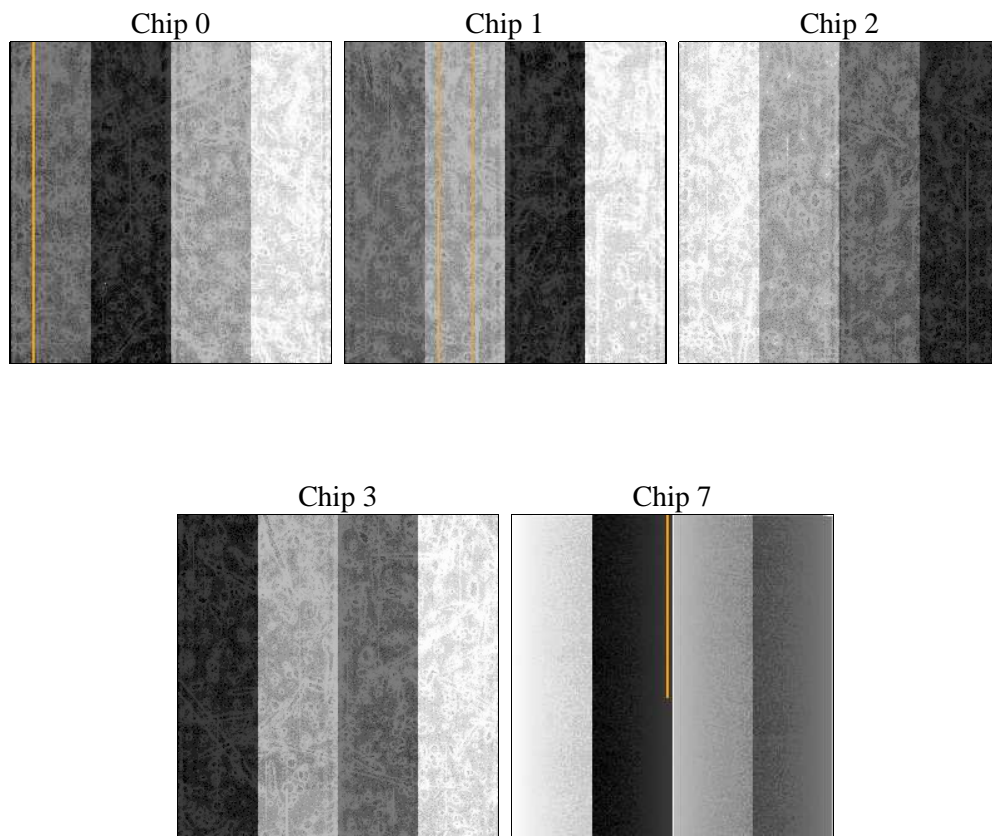
# 3 OBI Secondary

## 3.1 OBI

### 3.1.1 Images



### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	2563.91444543	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	2563.9145848453	Sum of GTIs [s]
date	2012-12-06T11:49:25	Date and time of file creation	ontime1	2563.9145649374	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2560.6734253466	Sum of GTIs [s]
			ontime3	2563.9145848453	Sum of GTIs [s]
			ontime7	2563.91444543	Sum of GTIs [s]
			l1events	475851	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	93593	93338	95115	95183	98622
rejected events	17327	17362	18522	18704	14794
rejected %	18%	18%	19%	19%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	41680	41587	42775	42595	20290
	44%	44%	44%	44%	20%
grade 1 events	254	190	297	275	70
	0%	0%	0%	0%	0%
grade 2 events	13400	13275	12900	13026	18541
	14%	14%	13%	13%	18%
grade 3 events	4968	4900	5024	5068	8369
	5%	5%	5%	5%	8%
grade 4 events	5047	4910	5061	5116	8311
	5%	5%	5%	5%	8%
grade 5 events	1110	1140	1159	1185	2705
	1%	1%	1%	1%	2%
grade 6 events	11263	11410	10940	10767	28438
	12%	12%	11%	11%	28%
grade 7 events	15871	15926	16959	17151	11898
	16%	17%	17%	18%	12%



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.2540670497119

### A.2 Comments

Interleave mode.