

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 60305 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Nov 14 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

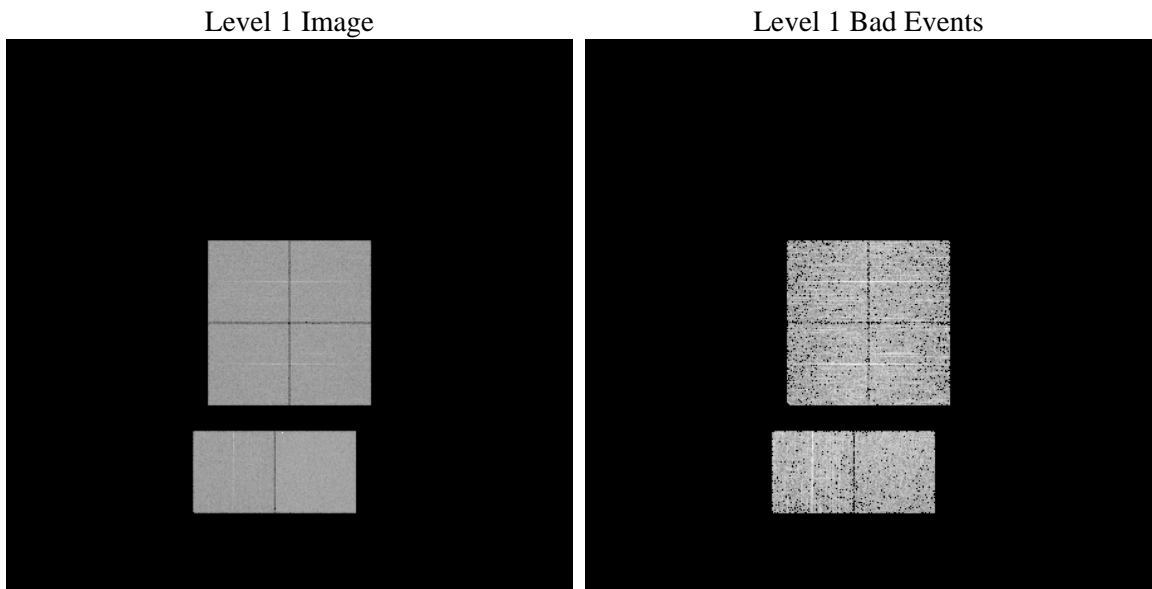
# 1 Front

seq_num	&#160	Sequence number
obs_id	60305	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 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	194.00043361969	Nominal RA [deg]
dec_nom	-7.9714090675416	Nominal Dec [deg]
roll_nom	56.268156539066	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3371.8736838698	Sum of GTIs [s]
livetime	3337.6296041314	Livetime [s]
ontime0	2808.5228022933	Sum of GTIs [s]
ontime1	2822.1691234112	Sum of GTIs [s]
ontime2	2747.9072022438	Sum of GTIs [s]
ontime3	2769.7176833749	Sum of GTIs [s]
ontime6	2842.5384834409	Sum of GTIs [s]
ontime7	3371.8736838698	Sum of GTIs [s]
l2events	535226	Number of level 2 events

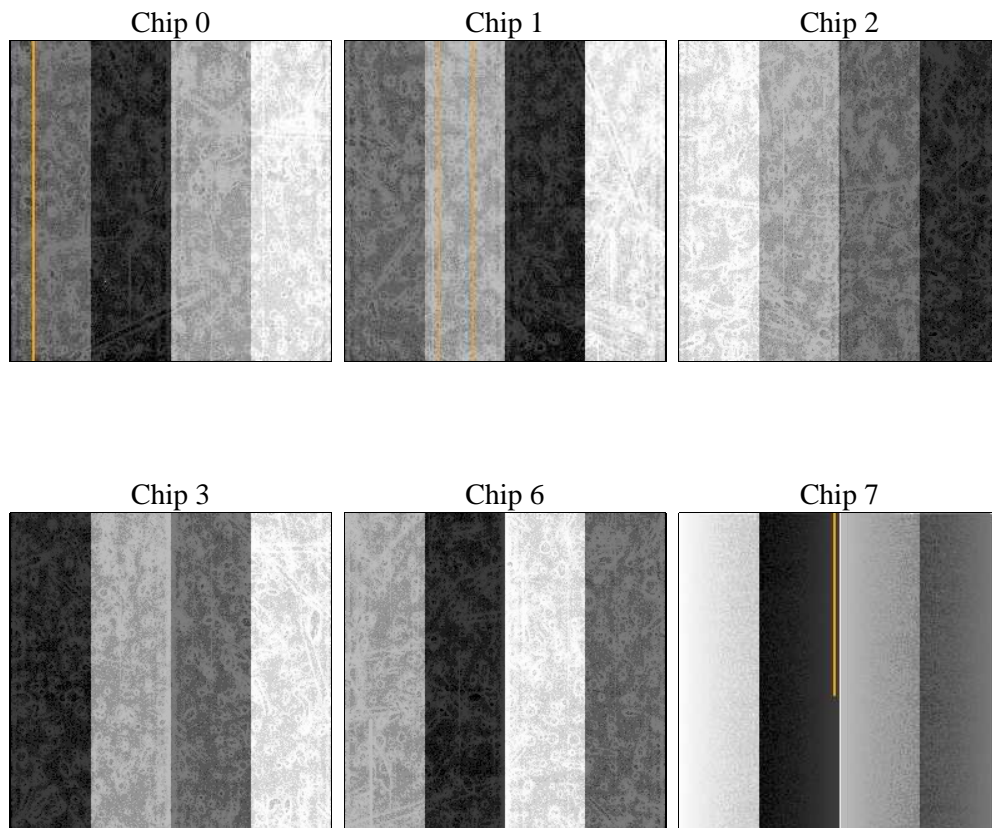
## 2 OBI Primary

### 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	8.4.5	Processing system revision	ontime	3371.8736838698	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	2808.5228022933	Sum of GTIs [s]
date	2012-11-14T02:20:39	Date and time of file creation	ontime1	2822.1691234112	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2747.9072022438	Sum of GTIs [s]
			ontime3	2769.7176833749	Sum of GTIs [s]
			ontime6	2842.5384834409	Sum of GTIs [s]
			ontime7	3371.8736838698	Sum of GTIs [s]
			l1events	672245	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	105138	106242	105290	106737	114145	134693	grade 0 events	48220	48851	48734	49507	50718	28475
rejected events	17109	17567	18266	18660	20527	17642		45%	45%	46%	46%	44%	21%
rejected %	16%	16%	17%	17%	17%	13%	grade 1 events	312	301	349	350	309	97
								0%	0%	0%	0%	0%	0%
							grade 2 events	15355	15808	14673	14942	16321	26836
								14%	14%	13%	13%	14%	19%
							grade 3 events	5772	5561	5697	5845	5916	11881
								5%	5%	5%	5%	5%	8%
							grade 4 events	5639	5620	5756	5694	5923	11693
								5%	5%	5%	5%	5%	8%
							grade 5 events	1209	1234	1233	1236	1362	3376
								1%	1%	1%	1%	1%	2%
							grade 6 events	13043	12960	12164	12218	14889	38312
								12%	12%	11%	11%	13%	28%
							grade 7 events	15588	15907	16684	16945	18707	14023
								14%	14%	15%	15%	16%	10%

## 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	194.000433619694	Alternating exposures requested	N	Y
[deg] Pointing Dec	0	-7.971409067541574	[s] Primary exposure time	0.000000	4
[deg] Pointing Roll	0.0	56.2681565390662	[s] Secondary exposure time	N/A	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272	Duty cycle	N/A	1
[mm] SIM defocus	0	0.7524282956875696			
[mm] SIM translation stage pos	-233.592463	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	196734033.860462	196734032.83546			
Observation start date	2004-03-27T00:20:34	2004-03-27T00:20:32			
[s] Observation end time (MET)	196754552.311365	196754551.28636			
Observation end date	2004-03-27T06:02:32	2004-03-27T06:02:31			
Read mode	TIMED	TIMED			

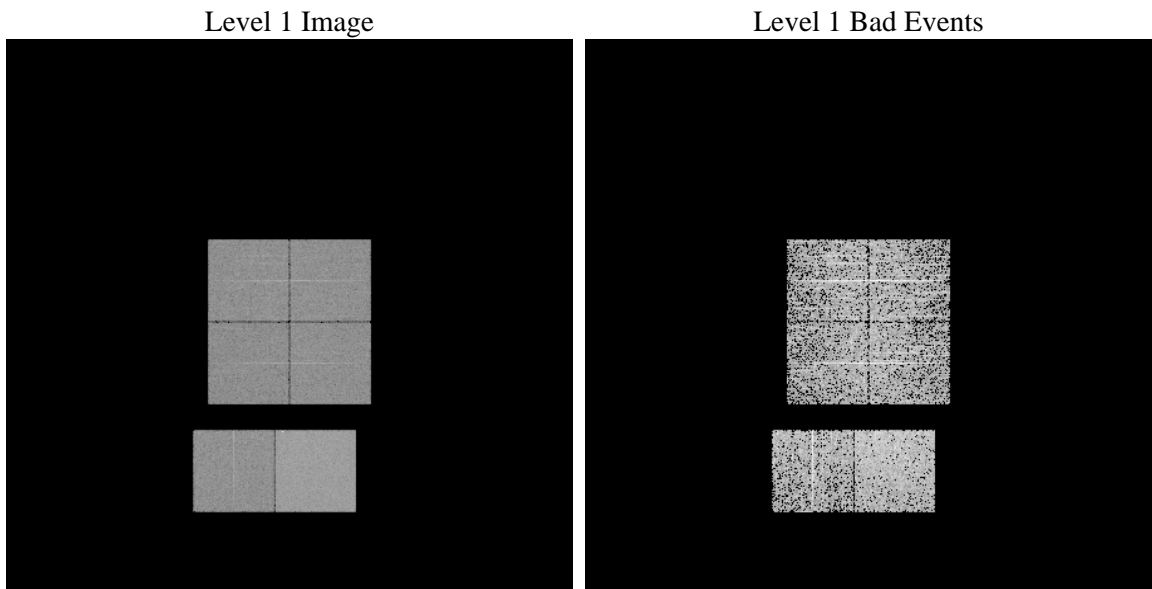
## 2.3 Star Slots

## 2.4 FID Slots

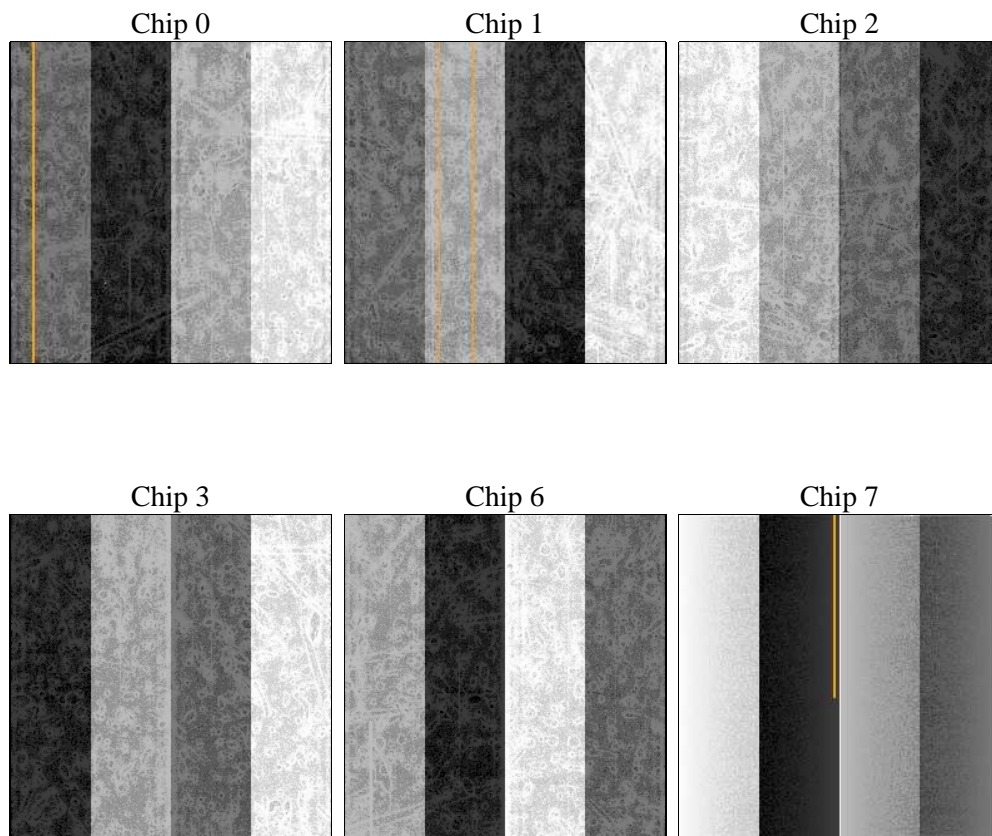
# 3 OBI Secondary

## 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	8.4.5	Processing system revision	ontime	2705.8007057011	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	1778.8632681668	Sum of GTIs [s]
date	2012-11-14T02:19:06	Date and time of file creation	ontime1	1761.1758572459	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	1587.6419086754	Sum of GTIs [s]
			ontime3	1722.2012973428	Sum of GTIs [s]
			ontime6	1728.6012973189	Sum of GTIs [s]
			ontime7	2705.8007057011	Sum of GTIs [s]
			l1events	441950	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	67552	67357	61620	66471	69709	109241
rejected events	11562	11788	10738	11729	12248	15742
rejected %	17%	17%	17%	17%	17%	14%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	31030	30612	28592	30584	31179	22592
	45%	45%	46%	46%	44%	20%
grade 1 events	160	151	191	182	177	77
	0%	0%	0%	0%	0%	0%
grade 2 events	9745	9979	8656	9484	9986	21239
	14%	14%	14%	14%	14%	19%
grade 3 events	3610	3523	3354	3617	3583	9384
	5%	5%	5%	5%	5%	8%
grade 4 events	3682	3521	3302	3638	3619	9411
	5%	5%	5%	5%	5%	8%
grade 5 events	757	824	685	786	848	2822
	1%	1%	1%	1%	1%	2%
grade 6 events	8105	8025	7185	7522	9205	31111
	11%	11%	11%	11%	13%	28%
grade 7 events	10463	10722	9655	10658	11112	12605
	15%	15%	15%	16%	15%	11%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.0776743895709

### A.2 Comments