

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 61492 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Sep 23 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

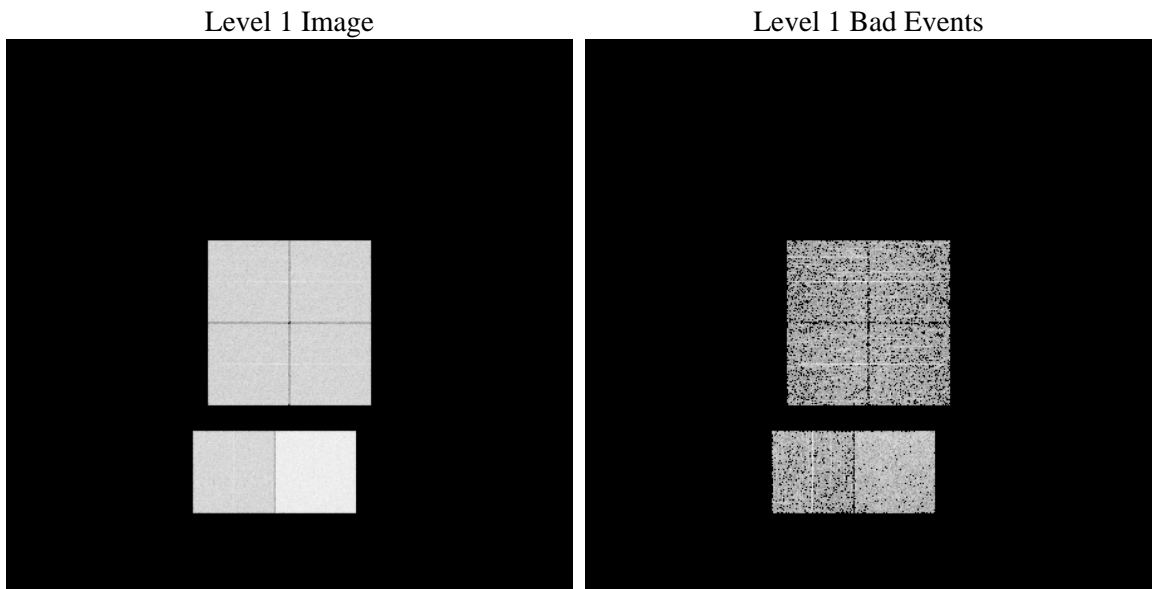
# 1 Front

seq_num	&#160	Sequence number
obs_id	61492	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	28.095656223275	Nominal RA [deg]
dec_nom	74.808574498943	Nominal Dec [deg]
roll_nom	129.9380074458	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3987.243304044	Sum of GTIs [s]
livetime	3946.7496526082	Livetime [s]
ontime0	1635.115547955	Sum of GTIs [s]
ontime1	1647.1976279616	Sum of GTIs [s]
ontime2	1582.8245020807	Sum of GTIs [s]
ontime3	1643.0745079666	Sum of GTIs [s]
ontime6	1748.507142216	Sum of GTIs [s]
ontime7	3987.243304044	Sum of GTIs [s]
l2events	721010	Number of level 2 events

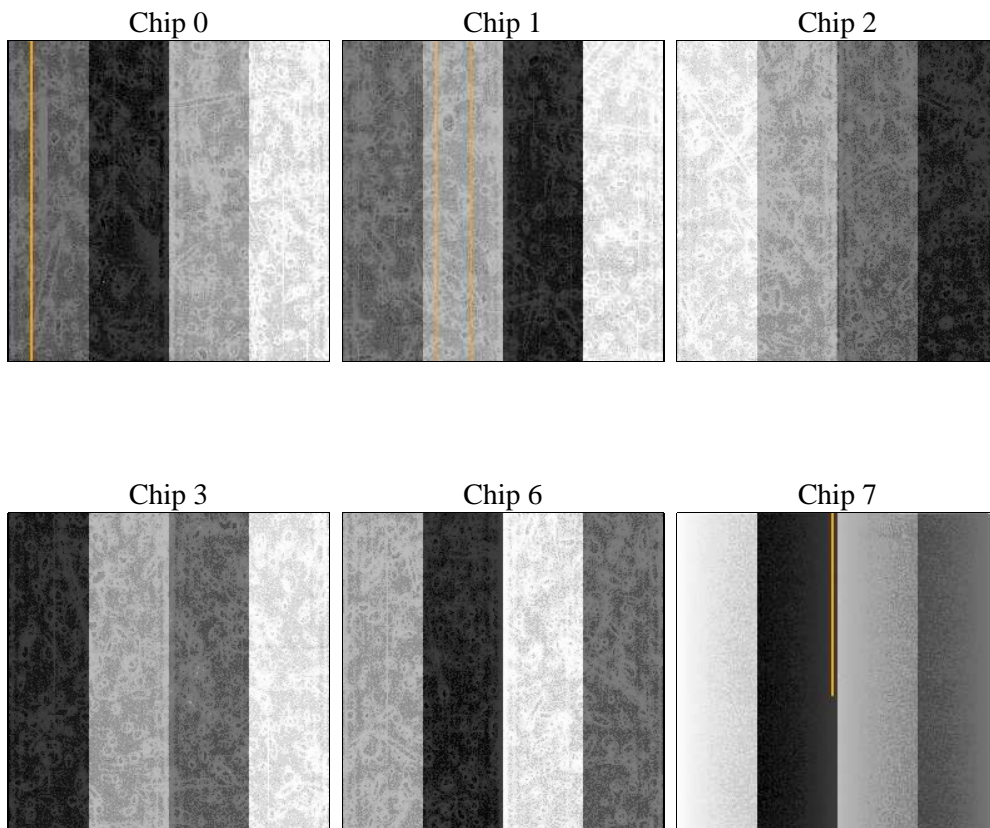
## 2 OBI Primary

### 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	3987.243304044	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	1635.115547955	Sum of GTIs [s]
date	2012-09-23T07:58:18	Date and time of file creation	ontime1	1647.1976279616	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	1582.8245020807	Sum of GTIs [s]
			ontime3	1643.0745079666	Sum of GTIs [s]
			ontime6	1748.507142216	Sum of GTIs [s]
			ontime7	3987.243304044	Sum of GTIs [s]
			l1events	827060	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	108516	109760	107511	111224	122388	267661	grade 0 events	53870	54337	53463	55642	60120	64554
rejected events	10798	11008	11665	11356	12646	18274		49%	49%	49%	50%	49%	24%
rejected %	9%	10%	10%	10%	10%	6%	grade 1 events	278	304	302	295	332	187
								0%	0%	0%	0%	0%	0%
							grade 2 events	17281	17583	16935	17671	19044	55833
								15%	16%	15%	15%	15%	20%
							grade 3 events	6214	6371	6007	6341	6899	25581
								5%	5%	5%	5%	5%	9%
							grade 4 events	6116	6316	6077	6294	6949	25727
								5%	5%	5%	5%	5%	9%
							grade 5 events	843	818	821	846	993	3979
								0%	0%	0%	0%	0%	1%
							grade 6 events	14237	14145	13621	13920	16987	78078
								13%	12%	12%	12%	13%	29%
							grade 7 events	9677	9886	10285	10215	11064	13722
								8%	9%	9%	9%	9%	5%

## 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	28.09565622327514
[deg] Pointing Dec	0	74.80857449894262
[deg] Pointing Roll	0.0	129.9380074458011
[mm] SIM focus pos	-0.782348	-0.6828225247311905
[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)	115362322.41	115362321.64172
Observation start date	2001-08-28T05:05:22	2001-08-28T05:05:21
[s] Observation end time (MET)	115385673.961	115385673.19264
Observation end date	2001-08-28T11:34:34	2001-08-28T11:34:33
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	Y
[s] Primary exposure time	0.000000	4
[s] Secondary exposure time	N/A	3.2
Duty cycle	N/A	1

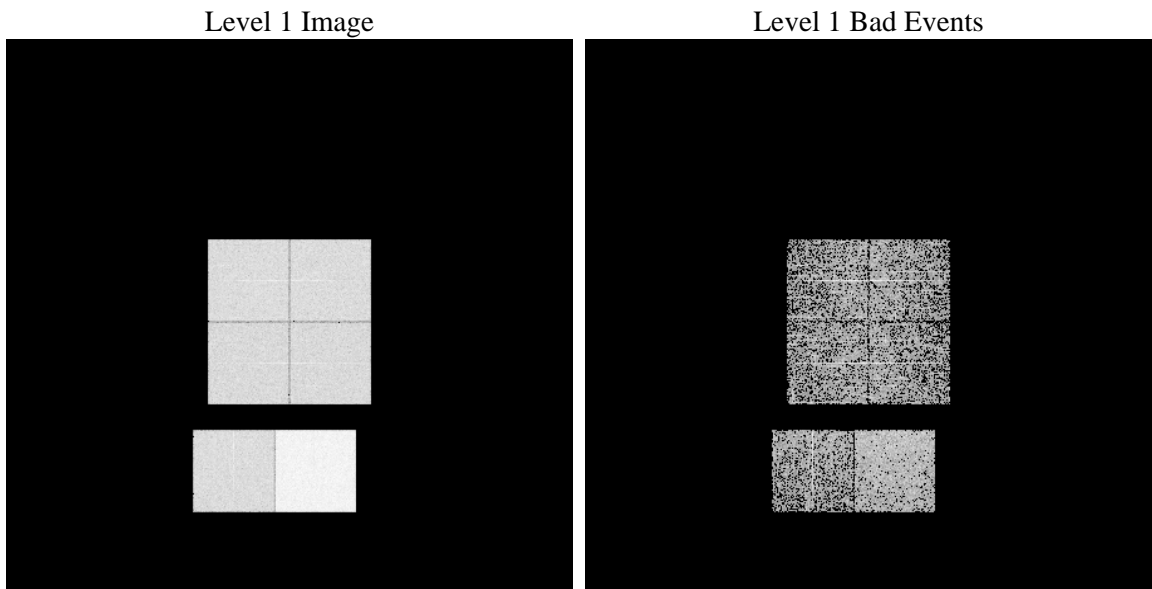
## 2.3 Star Slots

## 2.4 FID Slots

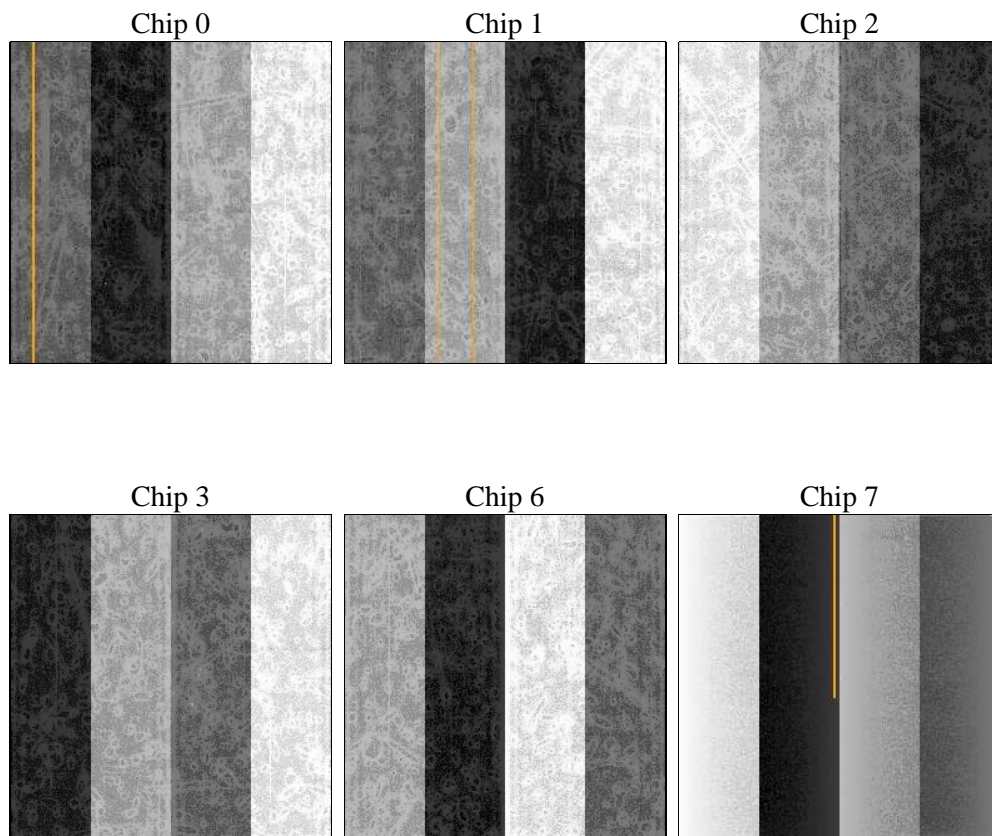
# 3 OBI Secondary

## 3.1 OBI

### 3.1.1 Images



### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	0	Obi number		
ascdsver	8.4.5	Processing system revision	sched_exp_time	0.0
caldbver	4.5.1.1	&#160	ontime	2799.7133331746
date	2012-09-23T07:57:10	Date and time of file creation	ontime0	1243.8126832396
revision	3	Processing version of data	ontime1	1231.0499773473
			ontime2	1133.5352435261
			ontime3	1136.7352435291
			ontime6	1198.2329233587
			ontime7	2799.7133331746
			l1events	595491

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	83838	82996	77651	77829	84476	188701
rejected events	8497	8611	8572	8373	8390	14048
rejected %	10%	10%	11%	10%	9%	7%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	41523	41334	38389	38836	41528	44942
	49%	49%	49%	49%	49%	23%
grade 1 events	191	201	173	187	196	112
	0%	0%	0%	0%	0%	0%
grade 2 events	13361	13046	12321	12177	13205	38663
	15%	15%	15%	15%	15%	20%
grade 3 events	4829	4726	4358	4398	4703	17886
	5%	5%	5%	5%	5%	9%
grade 4 events	4704	4624	4370	4423	4680	17783
	5%	5%	5%	5%	5%	9%
grade 5 events	578	599	572	615	644	2919
	0%	0%	0%	0%	0%	1%
grade 6 events	10924	10838	9641	9622	11970	55591
	13%	13%	12%	12%	14%	29%
grade 7 events	7728	7628	7827	7571	7550	10805
	9%	9%	10%	9%	8%	5%

## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.7869566372186

### A.2 Comments