

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 60647 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Nov 1 2012

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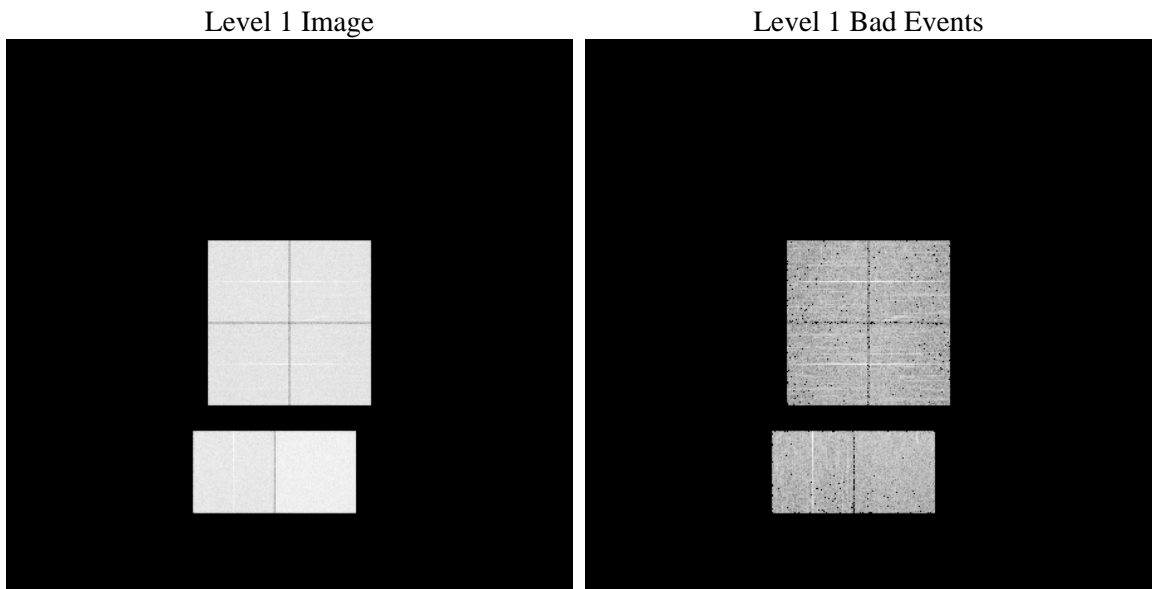
# 1 Front

seq_num	&#160	Sequence number
obs_id	60647	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	167.04600681495	Nominal RA [deg]
dec_nom	58.983976910706	Nominal Dec [deg]
roll_nom	293.09194999836	Nominal Roll [deg]
revision	3	Processing version of data
ontime	6658.9190741181	Sum of GTIs [s]
livetime	6591.292413951	Livetime [s]
ontime0	4779.8354725838	Sum of GTIs [s]
ontime1	4750.9022674263	Sum of GTIs [s]
ontime2	4444.4291523099	Sum of GTIs [s]
ontime3	4560.8913072646	Sum of GTIs [s]
ontime6	4985.9285127521	Sum of GTIs [s]
ontime7	6658.9190741181	Sum of GTIs [s]
l2events	1107466	Number of level 2 events

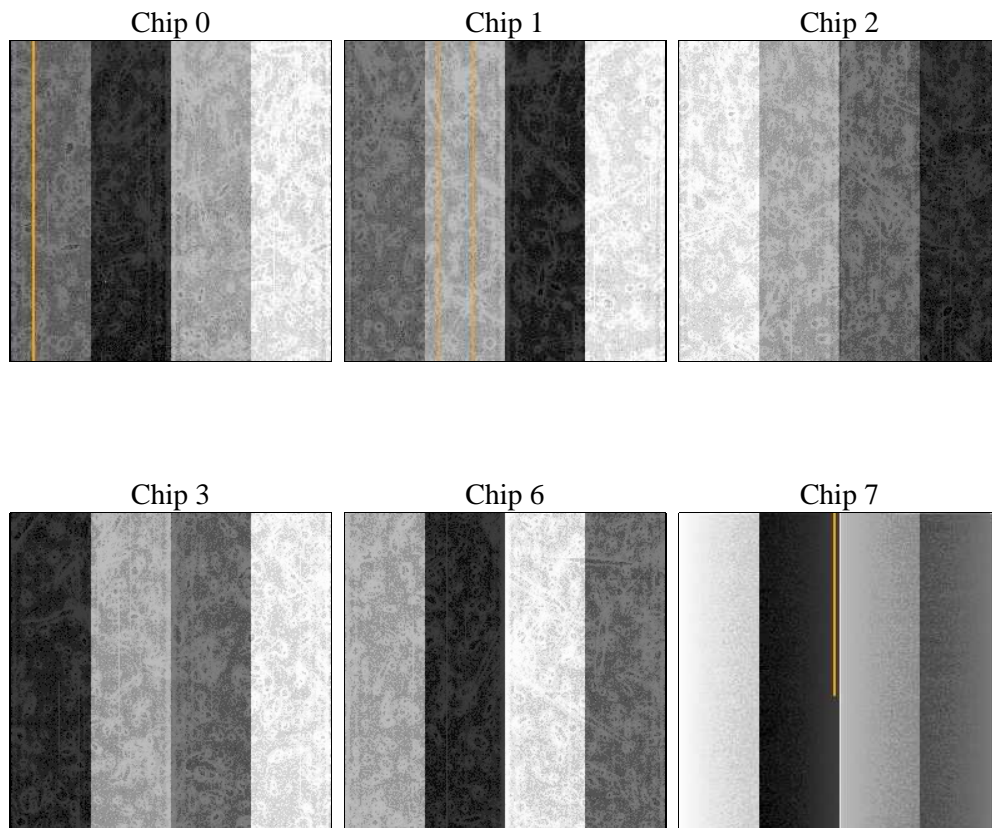
## 2 OBI Primary

### 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	6658.9190741181	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	4779.8354725838	Sum of GTIs [s]
date	2012-11-01T07:35:54	Date and time of file creation	ontime1	4750.9022674263	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4444.4291523099	Sum of GTIs [s]
			ontime3	4560.8913072646	Sum of GTIs [s]
			ontime6	4985.9285127521	Sum of GTIs [s]
			ontime7	6658.9190741181	Sum of GTIs [s]
			l1events	1334683	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	205819	205264	196949	201108	227263	298280	grade 0 events	98706	97672	94995	97060	106740	67867
rejected events	27539	27897	28021	28191	31217	31502		47%	47%	48%	48%	46%	22%
rejected %	13%	13%	14%	14%	13%	10%	grade 1 events	599	505	653	626	564	171
								0%	0%	0%	0%	0%	0%
							grade 2 events	30683	31333	28262	29635	33861	59521
								14%	15%	14%	14%	14%	19%
							grade 3 events	11457	11323	10909	11184	12249	27254
								5%	5%	5%	5%	5%	9%
							grade 4 events	11363	11182	11161	11360	12241	26811
								5%	5%	5%	5%	5%	8%
							grade 5 events	2027	2023	1932	2136	2280	6348
								0%	0%	0%	1%	1%	2%
							grade 6 events	26220	25857	23746	23678	31122	85484
								12%	12%	12%	11%	13%	28%
							grade 7 events	24764	25369	25291	25429	28206	24824
								12%	12%	12%	12%	12%	8%

## 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	167.0460068149484	Alternating exposures requested	N	Y
[deg] Pointing Dec	0	58.98397691070587	[s] Primary exposure time	0.000000	4
[deg] Pointing Roll	0.0	293.0919499983618	[s] Secondary exposure time	N/A	3.2
[mm] SIM focus pos	-0.782348	-0.6828225247311905	Duty cycle	N/A	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)	174759931.209278	174759930.18457			
Observation start date	2003-07-16T16:25:31	2003-07-16T16:25:30			
[s] Observation end time (MET)	174782196.260226	174782195.23552			
Observation end date	2003-07-16T22:36:36	2003-07-16T22:36:35			
Read mode	TIMED	TIMED			

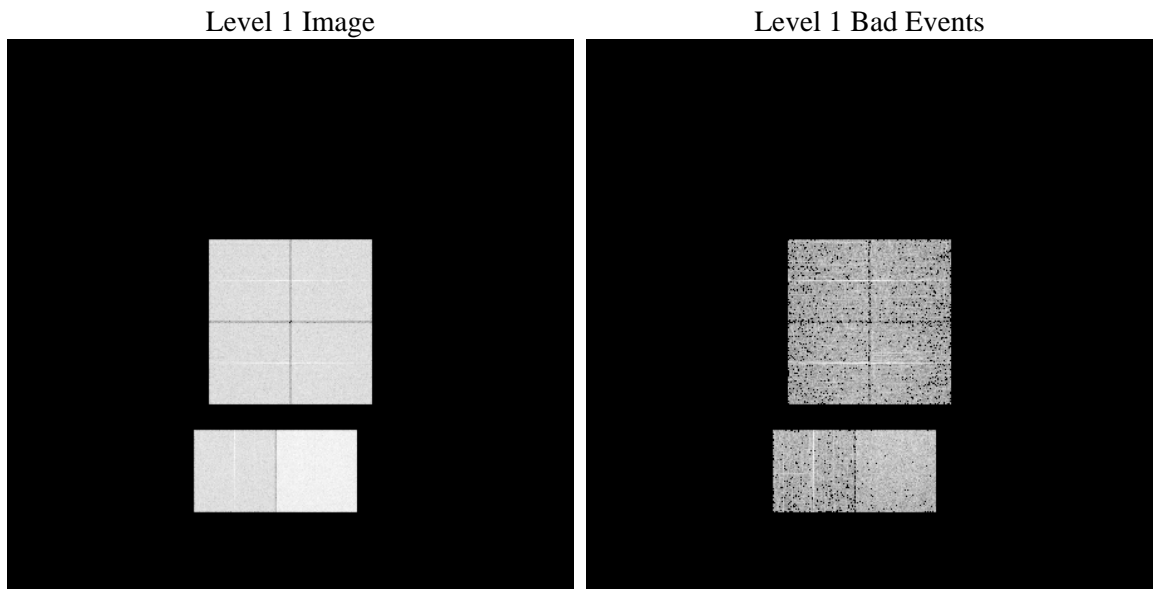
## 2.3 Star Slots

## 2.4 FID Slots

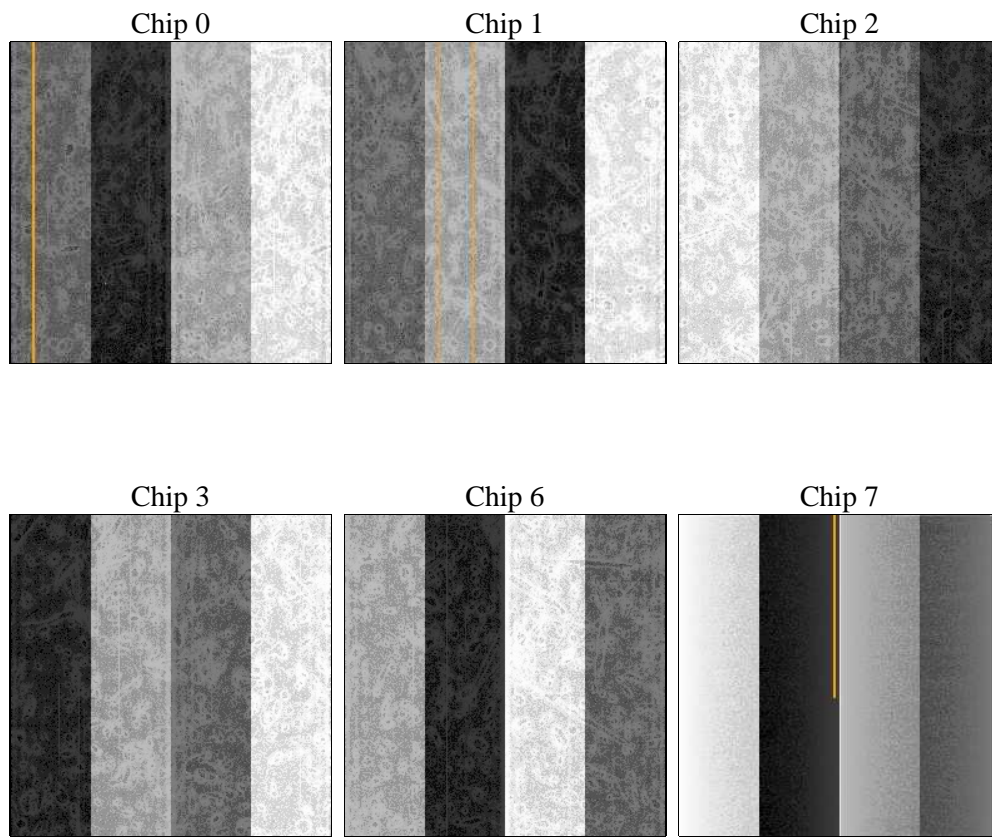
# 3 OBI Secondary

## 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			
caldbver	4.5.2	&#160			
date	2012-11-01T07:28:25	Date and time of file creation			
revision	3	Processing version of data			
			ontime	5344.4781140983	Sum of GTIs [s]
			ontime0	2702.4666261375	Sum of GTIs [s]
			ontime1	2751.0411860347	Sum of GTIs [s]
			ontime2	2608.3943864107	Sum of GTIs [s]
			ontime3	2745.1640410125	Sum of GTIs [s]
			ontime6	2822.1799058318	Sum of GTIs [s]
			ontime7	5344.4781140983	Sum of GTIs [s]
			l1events	849968	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	117735	120338	116585	122525	130991	241794
rejected events	16860	16541	17525	17974	18973	27060
rejected %	14%	13%	15%	14%	14%	11%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	55551	57012	55452	59074	61463	54181
	47%	47%	47%	48%	46%	22%
grade 1 events	313	282	345	327	303	150
	0%	0%	0%	0%	0%	0%
grade 2 events	17661	18316	16928	17745	19304	47529
	15%	15%	14%	14%	14%	19%
grade 3 events	6399	6545	6393	6866	6950	21812
	5%	5%	5%	5%	5%	9%
grade 4 events	6494	6594	6410	6818	6894	21738
	5%	5%	5%	5%	5%	8%
grade 5 events	1185	1241	1112	1277	1371	5156
	1%	1%	0%	1%	1%	2%
grade 6 events	14770	15330	13877	14180	17407	69604
	12%	12%	11%	11%	13%	28%
grade 7 events	15362	15018	16068	16238	17299	21624
	13%	12%	13%	13%	13%	8%



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.0033971882164

### A.2 Comments

Observation was done in interleaved mode.