

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 61720 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Sep 12 2012

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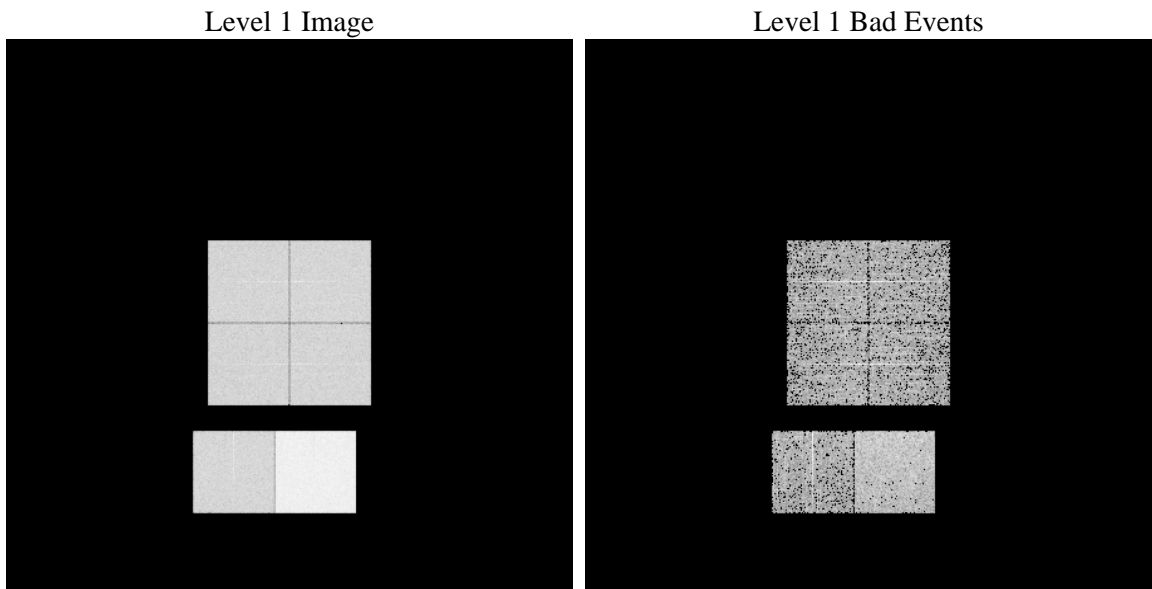
# 1 Front

seq_num	&#160	Sequence number
obs_id	61720	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	68.292127299313	Nominal RA [deg]
dec_nom	31.178447947871	Nominal Dec [deg]
roll_nom	278.63586783174	Nominal Roll [deg]
revision	4	Processing version of data
ontime	4096.5380997807	Sum of GTIs [s]
livetime	4054.934472097	Livetime [s]
ontime0	1611.4626577497	Sum of GTIs [s]
ontime1	1647.7909777761	Sum of GTIs [s]
ontime2	1522.4776976705	Sum of GTIs [s]
ontime3	1550.7239377052	Sum of GTIs [s]
ontime6	1623.380577758	Sum of GTIs [s]
ontime7	4096.5380997807	Sum of GTIs [s]
l2events	799568	Number of level 2 events

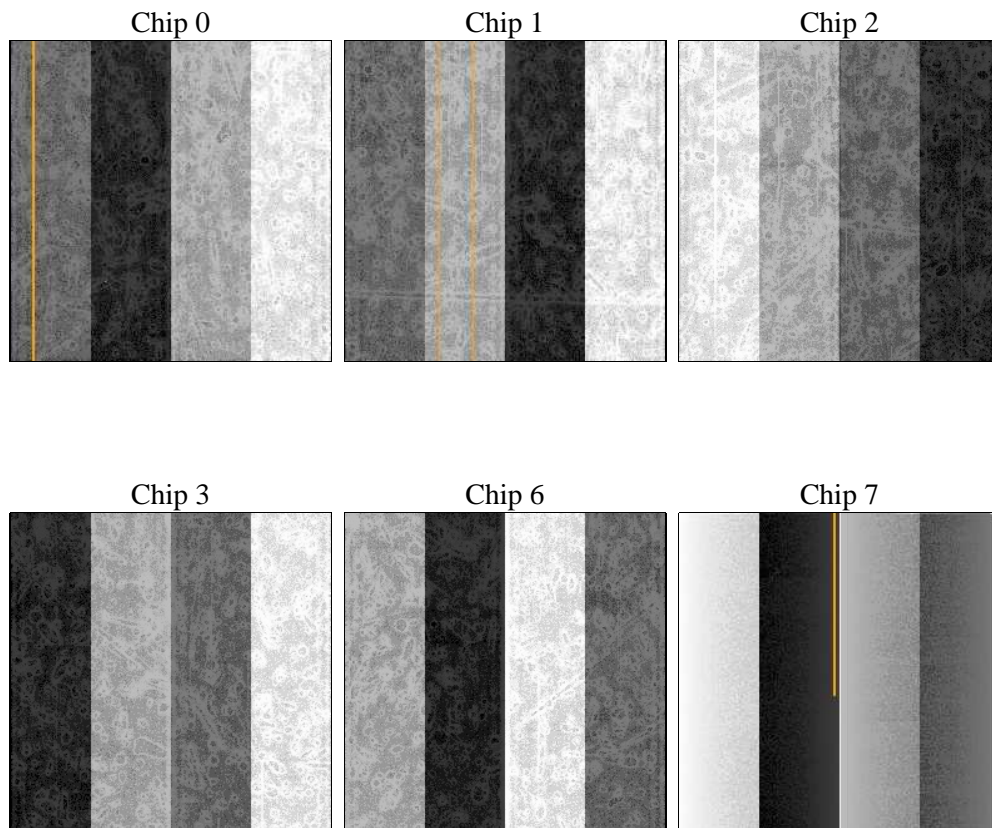
## 2 OBI Primary

### 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	4096.5380997807	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	1611.4626577497	Sum of GTIs [s]
date	2012-09-12T05:26:34	Date and time of file creation	ontime1	1647.7909777761	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	1522.4776976705	Sum of GTIs [s]
			ontime3	1550.7239377052	Sum of GTIs [s]
			ontime6	1623.380577758	Sum of GTIs [s]
			ontime7	4096.5380997807	Sum of GTIs [s]
			l1events	919421	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	121442	124284	116636	118595	128069	310395	grade 0 events	60226	61736	58122	59217	63004	74443
rejected events	12814	12696	12581	12847	13102	22485		49%	49%	49%	49%	49%	23%
rejected %	10%	10%	10%	10%	10%	7%	grade 1 events	354	418	383	407	375	208
								0%	0%	0%	0%	0%	0%
							grade 2 events	19216	19777	18532	18633	19912	64380
								15%	15%	15%	15%	15%	20%
							grade 3 events	6990	7082	6611	6722	7131	29718
								5%	5%	5%	5%	5%	9%
							grade 4 events	6905	7257	6565	6690	7058	29505
								5%	5%	5%	5%	5%	9%
							grade 5 events	983	1019	905	1000	1072	4537
								0%	0%	0%	0%	0%	1%
							grade 6 events	16115	16549	15047	14744	18421	91544
								13%	13%	12%	12%	14%	29%
							grade 7 events	10653	10446	10471	11182	11096	16060
								8%	8%	8%	9%	8%	5%

## 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	68.2921272993126	Alternating exposures requested	N	Y
[deg] Pointing Dec	0	31.17844794787146	[s] Primary exposure time	0.000000	4
[deg] Pointing Roll	0.0	278.6358678317388	[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)	99856419.05599999	99856418.28740001			
Observation start date	2001-03-01T17:53:39	2001-03-01T17:53:38			
[s] Observation end time (MET)	99884932.507	99884931.738501			
Observation end date	2001-03-02T01:48:53	2001-03-02T01:48:51			
Read mode	TIMED	TIMED			

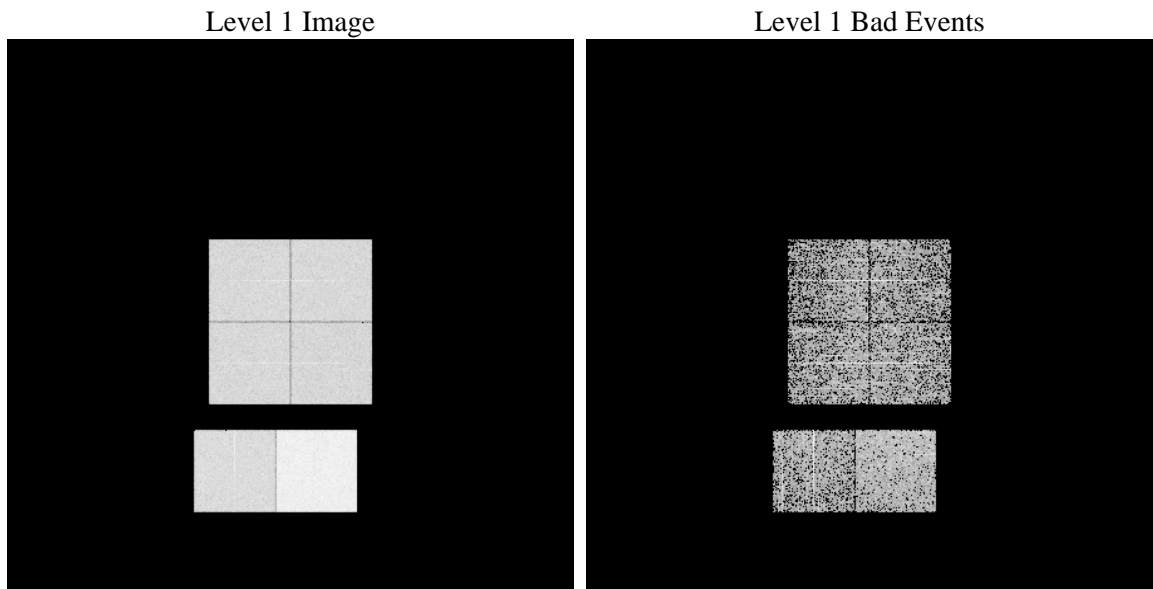
## 2.3 Star Slots

## 2.4 FID Slots

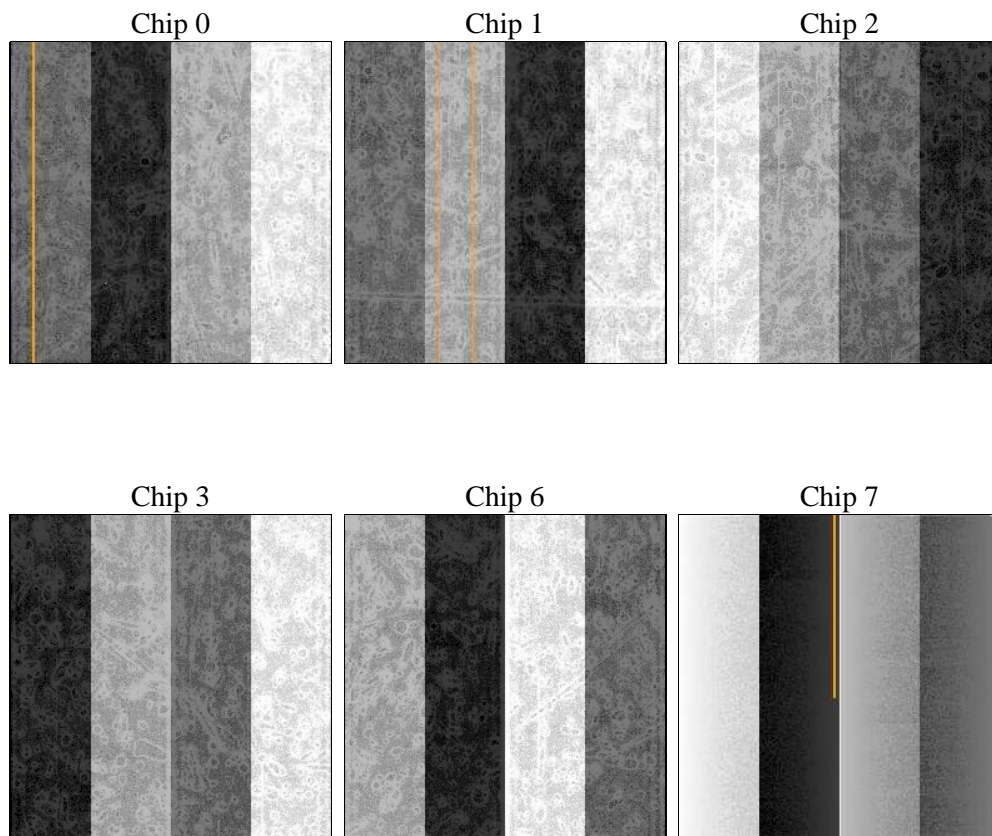
# 3 OBI Secondary

## 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						
caldsver	4.5.1.1	&#160						
date	2012-09-12T05:24:51	Date and time of file creation						
						ontime	2495.2833396345	Sum of GTIs [s]
						ontime0	1130.9696632624	Sum of GTIs [s]
ontime1	1124.4465432763	Sum of GTIs [s]						
ontime2	1091.9951033592	Sum of GTIs [s]						
ontime3	1040.0974235088	Sum of GTIs [s]						
ontime6	1198.8263030797	Sum of GTIs [s]						
ontime7	2495.2833396345	Sum of GTIs [s]						
revision	4	Processing version of data	l1events	621600	Number of level 1 events			

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	85193	85175	84673	80919	96469	189171
rejected events	8479	8463	9679	9671	10579	14074
rejected %	9%	9%	11%	11%	10%	7%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	42280	42421	42119	40102	47105	45020
	49%	49%	49%	49%	48%	23%
grade 1 events	229	211	218	251	256	129
	0%	0%	0%	0%	0%	0%
grade 2 events	13520	13521	13185	12671	14960	38971
	15%	15%	15%	15%	15%	20%
grade 3 events	4848	4894	4720	4467	5475	18268
	5%	5%	5%	5%	5%	9%
grade 4 events	4942	4880	4768	4501	5343	17897
	5%	5%	5%	5%	5%	9%
grade 5 events	655	654	581	657	769	2903
	0%	0%	0%	0%	0%	1%
grade 6 events	11124	11187	10633	10199	13714	55814
	13%	13%	12%	12%	14%	29%
grade 7 events	7595	7407	8449	8071	8847	10169
	8%	8%	9%	9%	9%	5%



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.5918214394152

### A.2 Comments