

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 60861 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Oct 22 2012

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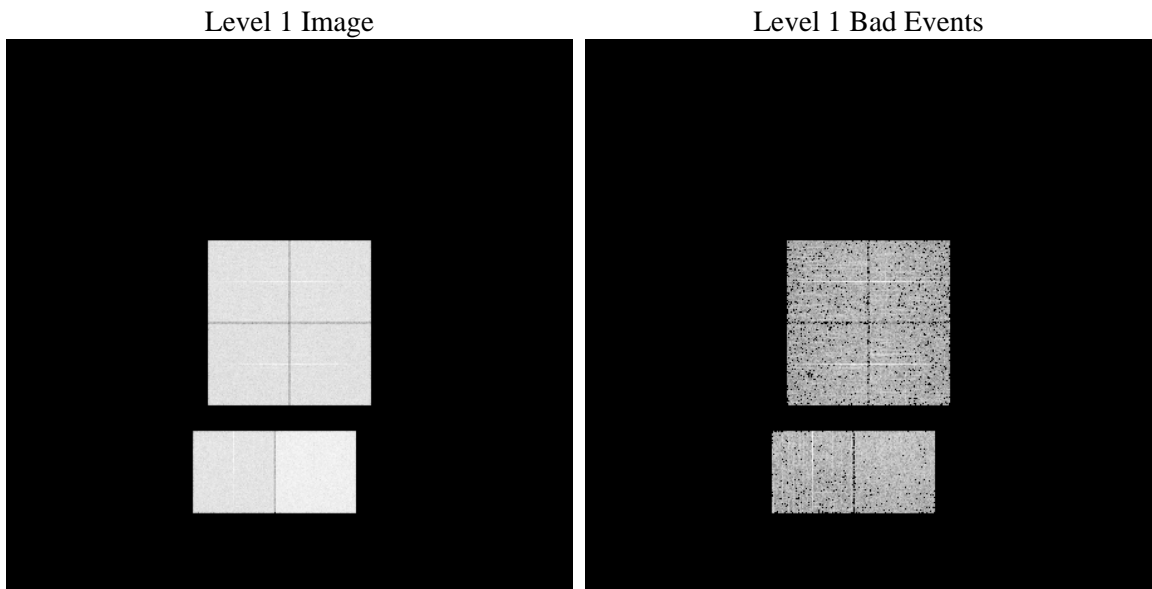
# 1 Front

seq_num	&#160	Sequence number
obs_id	60861	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	354.03500885643	Nominal RA [deg]
dec_nom	35.996189240789	Nominal Dec [deg]
roll_nom	319.33892923746	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4584.5636315942	Sum of GTIs [s]
livetime	4538.0037134937	Livetime [s]
ontime0	2945.9181624055	Sum of GTIs [s]
ontime1	3002.4927224517	Sum of GTIs [s]
ontime2	2768.1124022603	Sum of GTIs [s]
ontime3	2814.5470701456	Sum of GTIs [s]
ontime6	2972.2297102809	Sum of GTIs [s]
ontime7	4584.5636315942	Sum of GTIs [s]
l2events	780947	Number of level 2 events

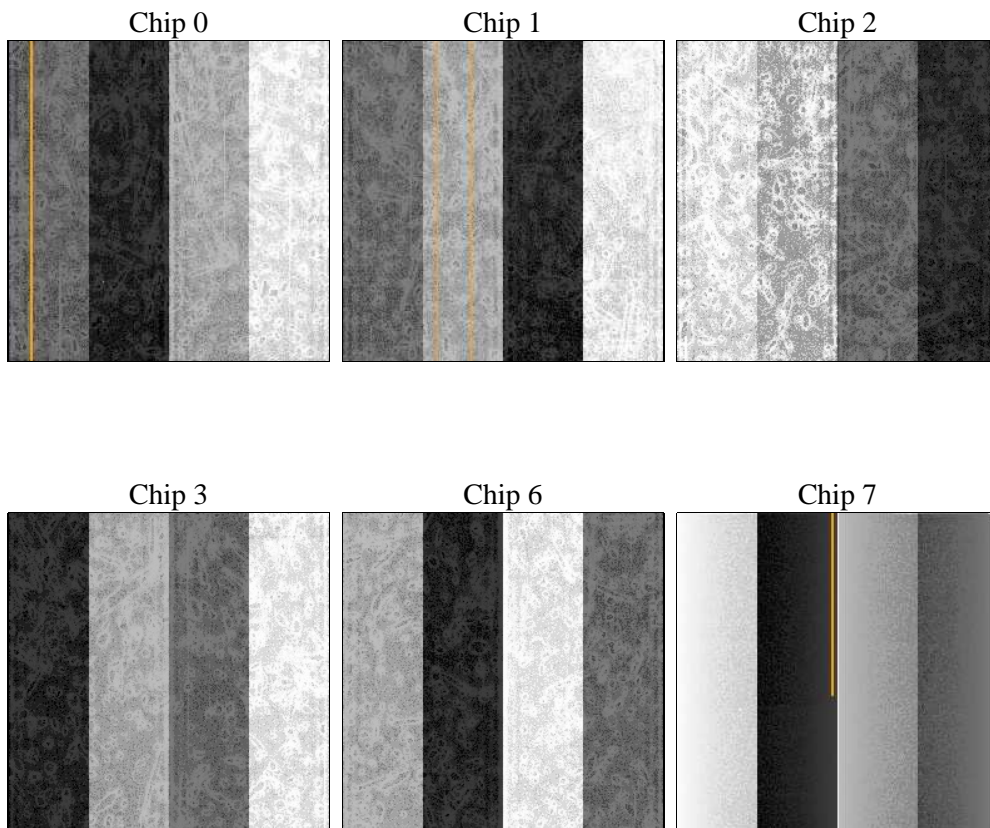
## 2 OBI Primary

### 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	4584.5636315942	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	2945.9181624055	Sum of GTIs [s]
date	2012-10-22T06:04:37	Date and time of file creation	ontime1	3002.4927224517	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2768.1124022603	Sum of GTIs [s]
			ontime3	2814.5470701456	Sum of GTIs [s]
			ontime6	2972.2297102809	Sum of GTIs [s]
			ontime7	4584.5636315942	Sum of GTIs [s]
			l1events	927356	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	140212	142339	133535	137157	150344	223769	grade 0 events	67901	68717	65375	67111	71215	50988
rejected events	17026	17389	16738	17643	19397	21661		48%	48%	48%	48%	47%	22%
rejected %	12%	12%	12%	12%	12%	9%	grade 1 events	415	364	426	438	406	147
								0%	0%	0%	0%	0%	0%
							grade 2 events	21434	21942	19766	20380	22457	44651
								15%	15%	14%	14%	14%	19%
							grade 3 events	8022	8042	7578	7835	8144	20465
								5%	5%	5%	5%	5%	9%
							grade 4 events	7876	7805	7712	7824	8102	20217
								5%	5%	5%	5%	5%	9%
							grade 5 events	1323	1381	1159	1296	1448	4380
								0%	0%	0%	0%	0%	1%
							grade 6 events	17953	18444	16366	16540	21029	65787
								12%	12%	12%	12%	13%	29%
							grade 7 events	15288	15644	15153	15733	17543	17134
								10%	10%	11%	11%	11%	7%

## 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	354.0350088564326	Alternating exposures requested	N	Y
[deg] Pointing Dec	0	35.99618924078874	[s] Primary exposure time	0.000000	4
[deg] Pointing Roll	0.0	319.338929237462	[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)	160645444.862539	160645443.83782			
Observation start date	2003-02-03T07:44:05	2003-02-03T07:44:03			
[s] Observation end time (MET)	160657300.013037	160657298.98832			
Observation end date	2003-02-03T11:01:40	2003-02-03T11:01:38			
Read mode	TIMED	TIMED			

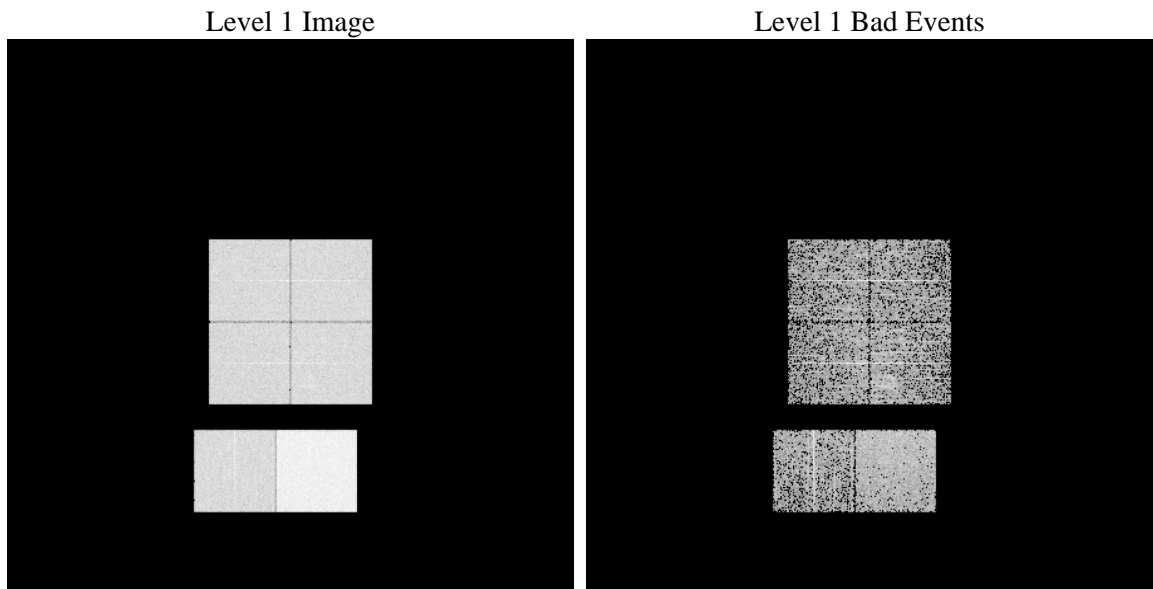
## 2.3 Star Slots

## 2.4 FID Slots

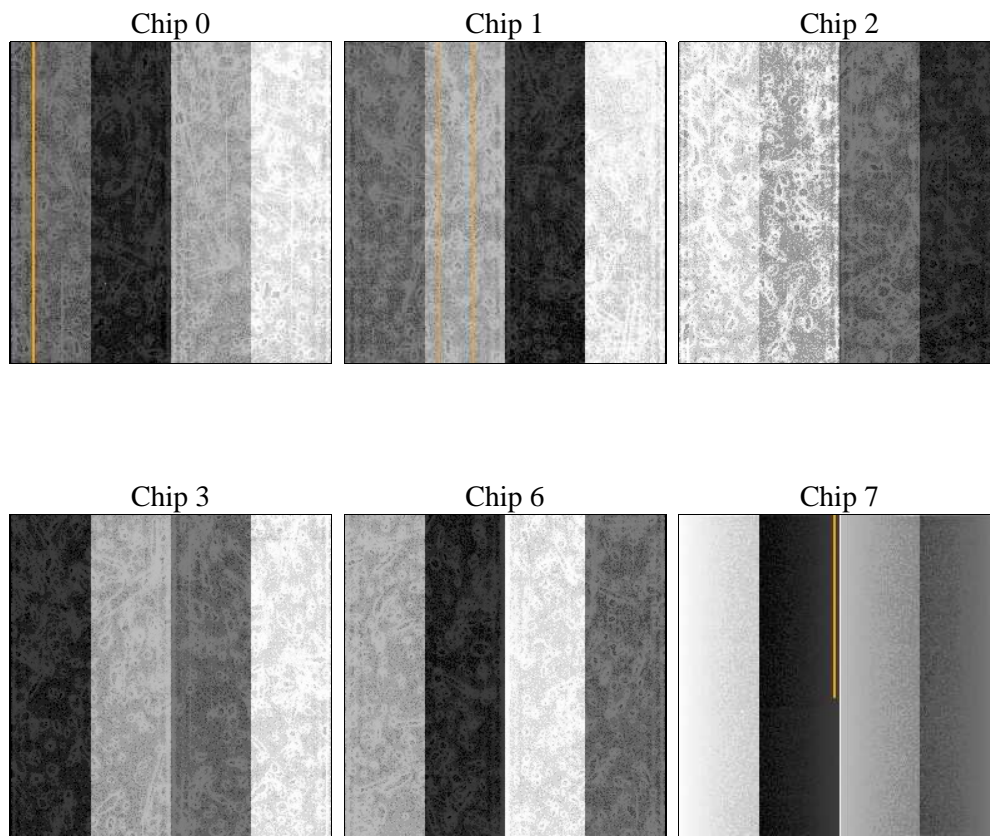
# 3 OBI Secondary

## 3.1 OBI

### 3.1.1 Images



### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	0	Obi number			
ascdsver	8.4.5	Processing system revision	sched_exp_time	0.0	[s] Scheduled observation exposure time
caldsver	4.5.2	&#160	ontime	3675.5432755649	Sum of GTIs [s]
date	2012-10-22T05:56:08	Date and time of file creation	ontime0	1677.8048785627	Sum of GTIs [s]
revision	3	Processing version of data	ontime1	1688.9088808596	Sum of GTIs [s]
			ontime2	1611.0828810632	Sum of GTIs [s]
			ontime3	1659.6574409306	Sum of GTIs [s]
			ontime6	1688.7447208464	Sum of GTIs [s]
			ontime7	3675.5432755649	Sum of GTIs [s]
			l1events	592596	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	81498	81615	79094	83039	86311	181039
rejected events	10754	10420	10730	12474	12197	18712
rejected %	13%	12%	13%	15%	14%	10%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	39286	39241	38512	39946	40777	40565
	48%	48%	48%	48%	47%	22%
grade 1 events	218	193	218	235	201	117
	0%	0%	0%	0%	0%	0%
grade 2 events	12231	12716	11653	11871	12695	35833
	15%	15%	14%	14%	14%	19%
grade 3 events	4704	4422	4514	4633	4492	16465
	5%	5%	5%	5%	5%	9%
grade 4 events	4457	4548	4420	4548	4522	16039
	5%	5%	5%	5%	5%	8%
grade 5 events	715	794	706	814	882	3574
	0%	0%	0%	0%	1%	1%
grade 6 events	10209	10389	9407	9686	11763	53597
	12%	12%	11%	11%	13%	29%
grade 7 events	9678	9312	9664	11306	10979	14849
	11%	11%	12%	13%	12%	8%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2601069071591

### A.2 Comments