

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 60358 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Nov 12 2012

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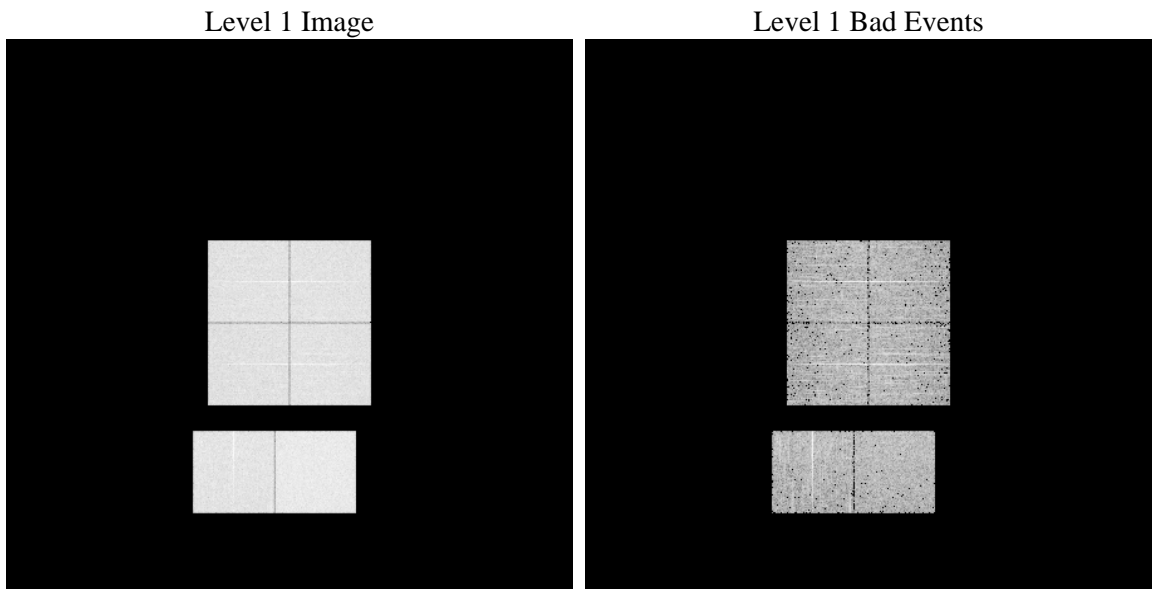
# 1 Front

seq_num	&#160	Sequence number
obs_id	60358	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	172.97740977734	Nominal RA [deg]
dec_nom	15.018512858686	Nominal Dec [deg]
roll_nom	106.82860665543	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4520.6053572595	Sum of GTIs [s]
livetime	4474.694986696	Livetime [s]
ontime0	3667.9459165633	Sum of GTIs [s]
ontime1	3692.1921565831	Sum of GTIs [s]
ontime2	3433.5655963719	Sum of GTIs [s]
ontime3	3595.2071965039	Sum of GTIs [s]
ontime6	3704.315276593	Sum of GTIs [s]
ontime7	4520.6053572595	Sum of GTIs [s]
l2events	711495	Number of level 2 events

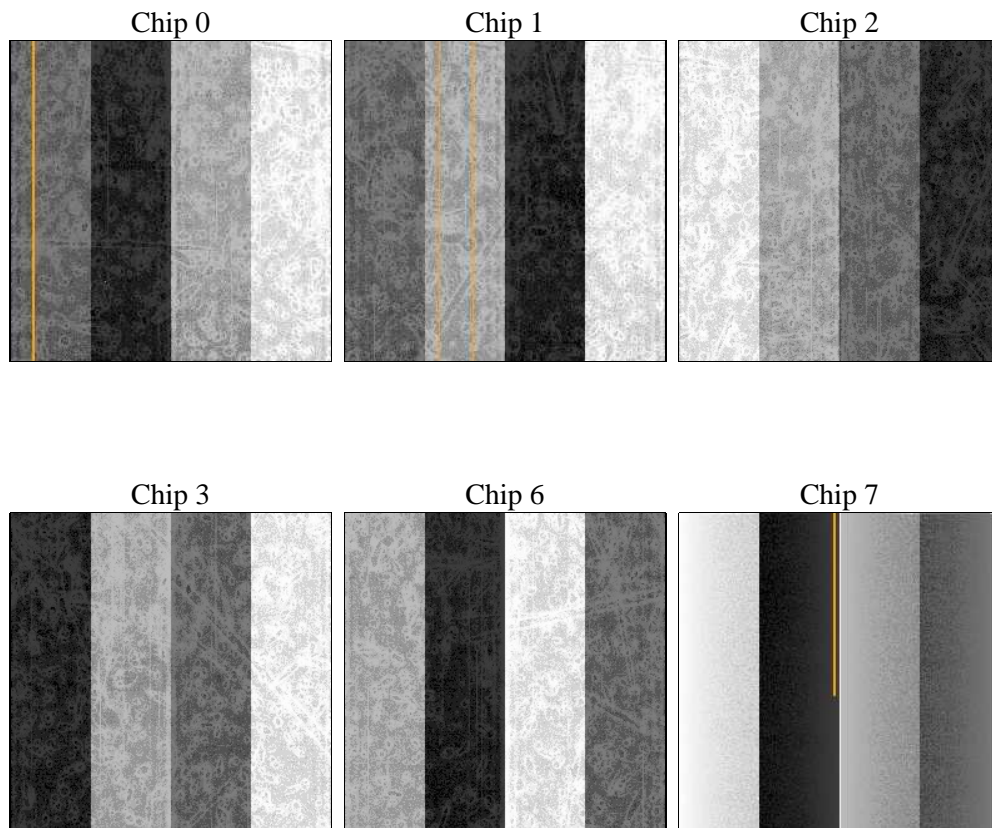
## 2 OBI Primary

### 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	4520.6053572595	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	3667.9459165633	Sum of GTIs [s]
date	2012-11-12T07:12:43	Date and time of file creation	ontime1	3692.1921565831	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3433.5655963719	Sum of GTIs [s]
			ontime3	3595.2071965039	Sum of GTIs [s]
			ontime6	3704.315276593	Sum of GTIs [s]
			ontime7	4520.6053572595	Sum of GTIs [s]
			l1events	893489	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	142229	142196	134333	141855	151067	181809	grade 0 events	65770	65935	62824	66334	69003	39404
rejected events	24450	22926	23502	25136	26181	25007		46%	46%	46%	46%	45%	21%
rejected %	17%	16%	17%	17%	17%	13%	grade 1 events	381	358	425	414	391	102
								0%	0%	0%	0%	0%	0%
							grade 2 events	20702	21658	19014	20174	22004	35442
								14%	15%	14%	14%	14%	19%
							grade 3 events	7622	7747	7365	7715	7914	15952
								5%	5%	5%	5%	5%	8%
							grade 4 events	7751	7762	7309	7715	7847	15811
								5%	5%	5%	5%	5%	8%
							grade 5 events	1577	1626	1465	1629	1791	4555
								1%	1%	1%	1%	1%	2%
							grade 6 events	17589	17856	15777	16211	20135	52507
								12%	12%	11%	11%	13%	28%
							grade 7 events	20837	19254	20154	21663	21982	18036
								14%	13%	15%	15%	14%	9%

## 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	172.9774097773446	Alternating exposures requested	N	Y
[deg] Pointing Dec	0	15.01851285868602	[s] Primary exposure time	0.000000	4
[deg] Pointing Roll	0.0	106.8286066554283	[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)	193995902.040065	193995901.01534			
Observation start date	2004-02-24T07:45:02	2004-02-24T07:45:01			
[s] Observation end time (MET)	194017798.091023	194017797.0663			
Observation end date	2004-02-24T13:49:58	2004-02-24T13:49:57			
Read mode	TIMED	TIMED			

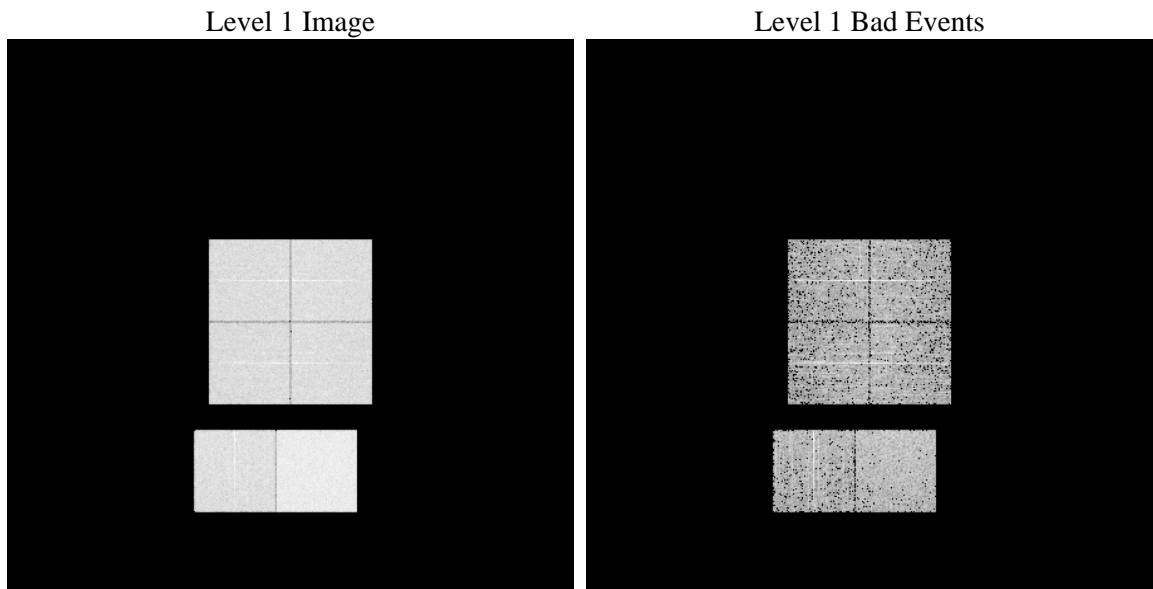
## 2.3 Star Slots

## 2.4 FID Slots

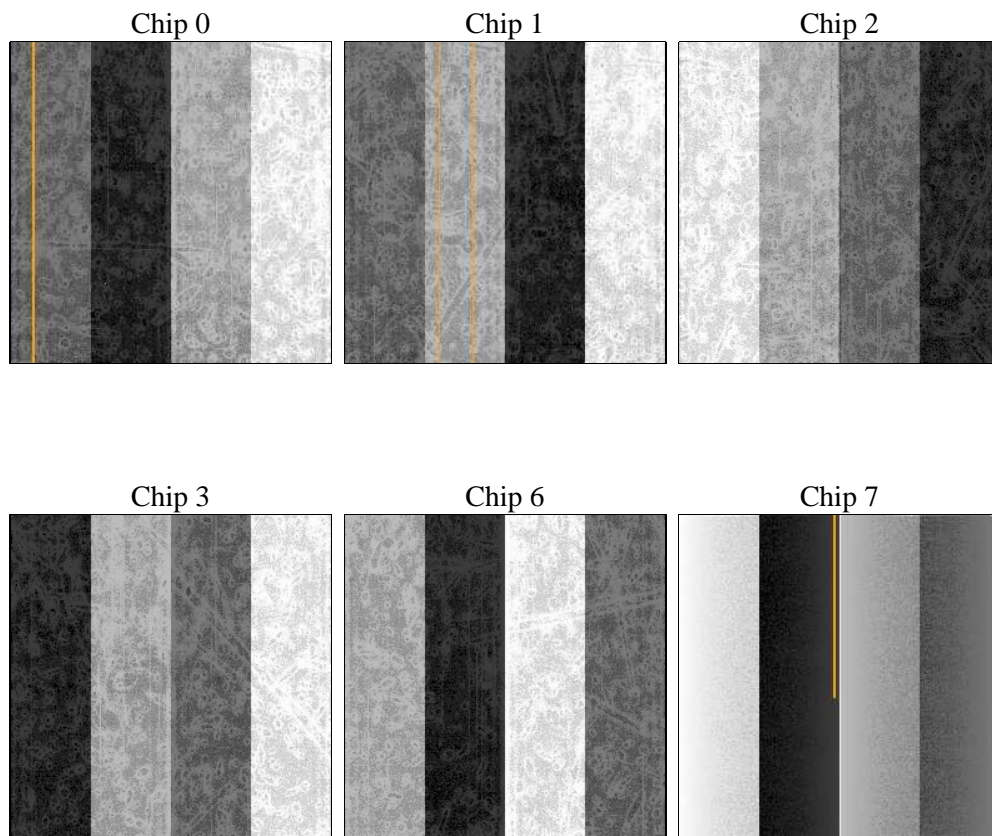
# 3 OBI Secondary

## 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
caldsver	4.5.2	&#160	ontime	3623.4827103615
date	2012-11-12T07:11:38	Date and time of file creation	ontime0	2314.1025538445
revision	3	Processing version of data	ontime1	2391.8875136375
			ontime2	2171.4967942238
			ontime3	2262.2459139824
			ontime6	2382.1643936634
			ontime7	3623.4827103615
			l1events	610697

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	90582	94174	86925	91292	99063	148661
rejected events	15792	16624	15850	17077	17960	22192
rejected %	17%	17%	18%	18%	18%	14%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	41679	43218	40384	42399	44721	31766
	46%	45%	46%	46%	45%	21%
grade 1 events	233	221	225	221	240	91
	0%	0%	0%	0%	0%	0%
grade 2 events	13416	13838	12127	12954	14147	28215
	14%	14%	13%	14%	14%	18%
grade 3 events	4828	4985	4761	4943	5228	12928
	5%	5%	5%	5%	5%	8%
grade 4 events	4900	5163	4614	4977	5148	12673
	5%	5%	5%	5%	5%	8%
grade 5 events	980	1131	971	1049	1110	3768
	1%	1%	1%	1%	1%	2%
grade 6 events	10855	11595	9921	10309	12998	42805
	11%	12%	11%	11%	13%	28%
grade 7 events	13691	14023	13922	14440	15471	16415
	15%	14%	16%	15%	15%	11%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.144088067621

### A.2 Comments