

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 60076 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 8 2012

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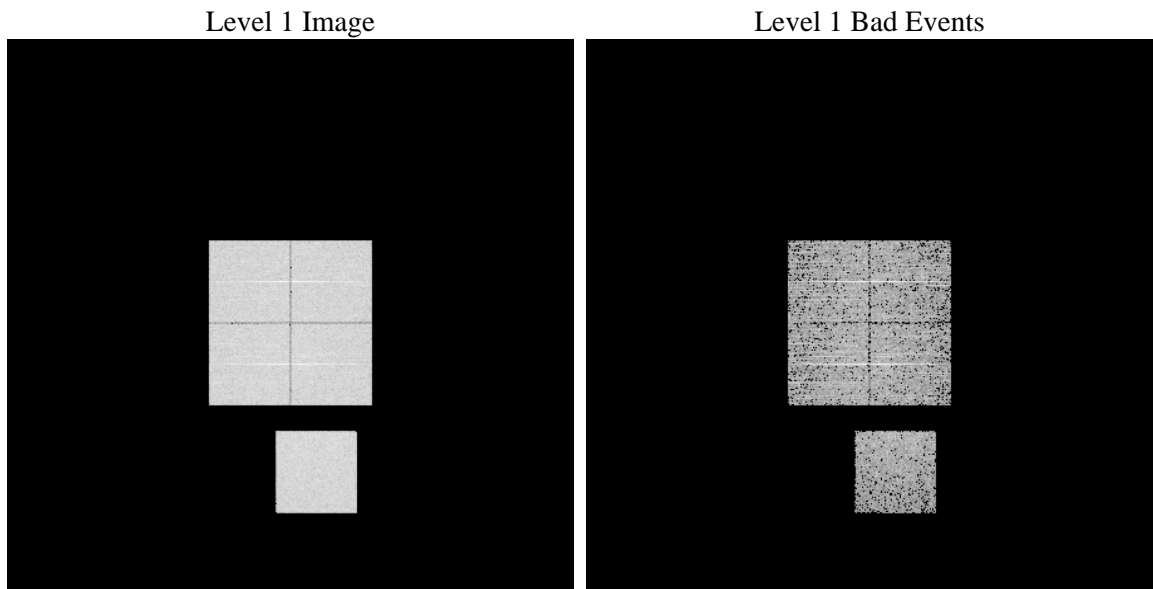
# 1 Front

seq_num	&#160	Sequence number
obs_id	60076	Observation id
title	ACIS-01237 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	280.01232264193	Nominal RA [deg]
dec_nom	-1.5296596275884	Nominal Dec [deg]
roll_nom	260.29737443284	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4895.5593201518	Sum of GTIs [s]
livetime	2158.4444927163	Livetime [s]
ontime0	4895.5593201518	Sum of GTIs [s]
ontime1	4895.55934003	Sum of GTIs [s]
ontime2	4895.559320122	Sum of GTIs [s]
ontime3	4895.55934003	Sum of GTIs [s]
ontime7	4895.5593201518	Sum of GTIs [s]
l2events	307160	Number of level 2 events

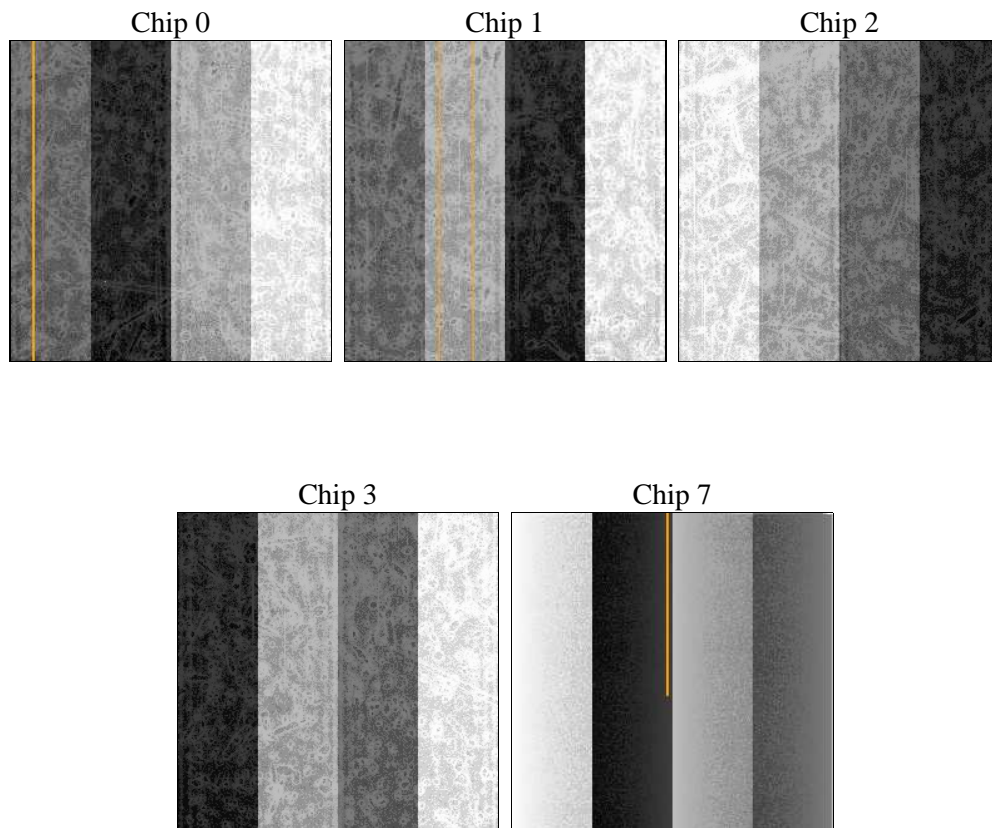
## 2 OBI Primary

### 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	8.5	Processing system revision	ontime	4895.5593201518	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime0	4895.5593201518	Sum of GTIs [s]
date	2012-12-08T09:42:38	Date and time of file creation	ontime1	4895.55934003	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4895.559320122	Sum of GTIs [s]
			ontime3	4895.55934003	Sum of GTIs [s]
			ontime7	4895.5593201518	Sum of GTIs [s]
			l1events	410325	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	80708	80508	82882	82131	84096
rejected events	17942	16974	19103	18352	14578
rejected %	22%	21%	23%	22%	17%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	34436	34699	35666	35699	17090
	42%	43%	43%	43%	20%
grade 1 events	178	168	215	175	44
	0%	0%	0%	0%	0%
grade 2 events	10931	11314	10780	10900	15594
	13%	14%	13%	13%	18%
grade 3 events	4134	4075	4224	4220	7100
	5%	5%	5%	5%	8%
grade 4 events	4086	4147	4102	4317	6810
	5%	5%	4%	5%	8%
grade 5 events	998	1011	984	1020	2489
	1%	1%	1%	1%	2%
grade 6 events	9179	9299	9007	8643	22924
	11%	11%	10%	10%	27%
grade 7 events	16766	15795	17904	17157	12045
	20%	19%	21%	20%	14%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	280.0123226419323	Alternating exposures requested	Y	Y
[deg] Pointing Dec	0	-1.529659627588401	[s] Primary exposure time	2.5	2.5
[deg] Pointing Roll	0.0	260.297374432837	[s] Secondary exposure time	3.2	3.2
[mm] SIM focus pos	-0.782348	-1.428180813131781	Duty cycle	1	1
[mm] SIM defocus	0	0.1051558262725154			
[mm] SIM translation stage pos	-233.592463	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	210179250.555409	210179249.53044			
Observation start date	2004-08-29T15:07:31	2004-08-29T15:07:29			
[s] Observation end time (MET)	210194547.65609	210194546.63112			
Observation end date	2004-08-29T19:22:28	2004-08-29T19:22:26			
Read mode	TIMED	TIMED			

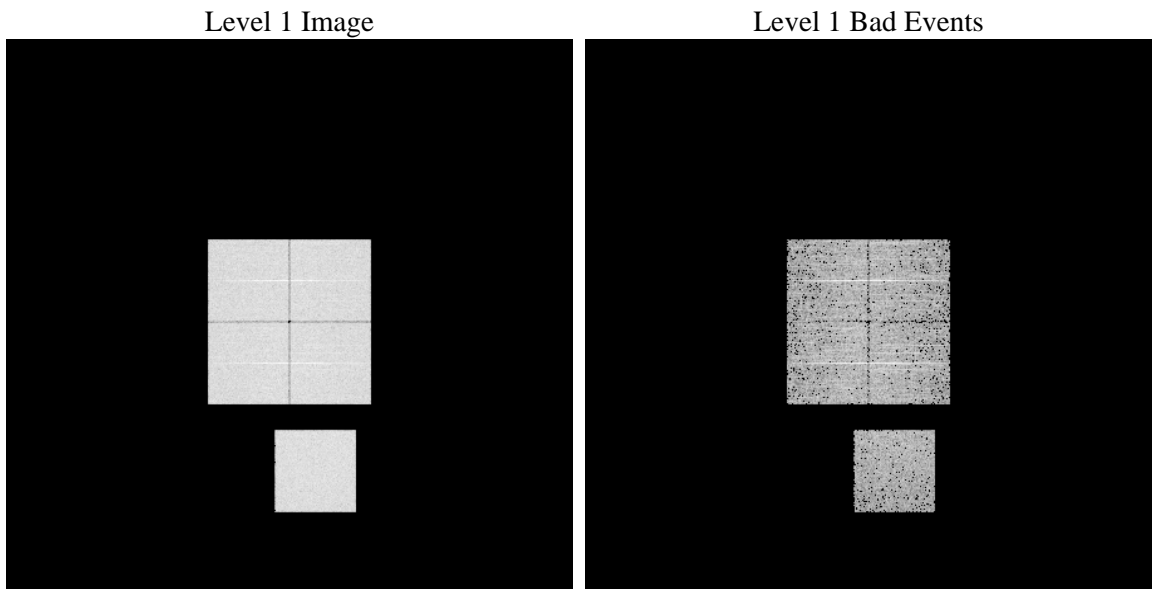
## 2.3 Star Slots

## 2.4 FID Slots

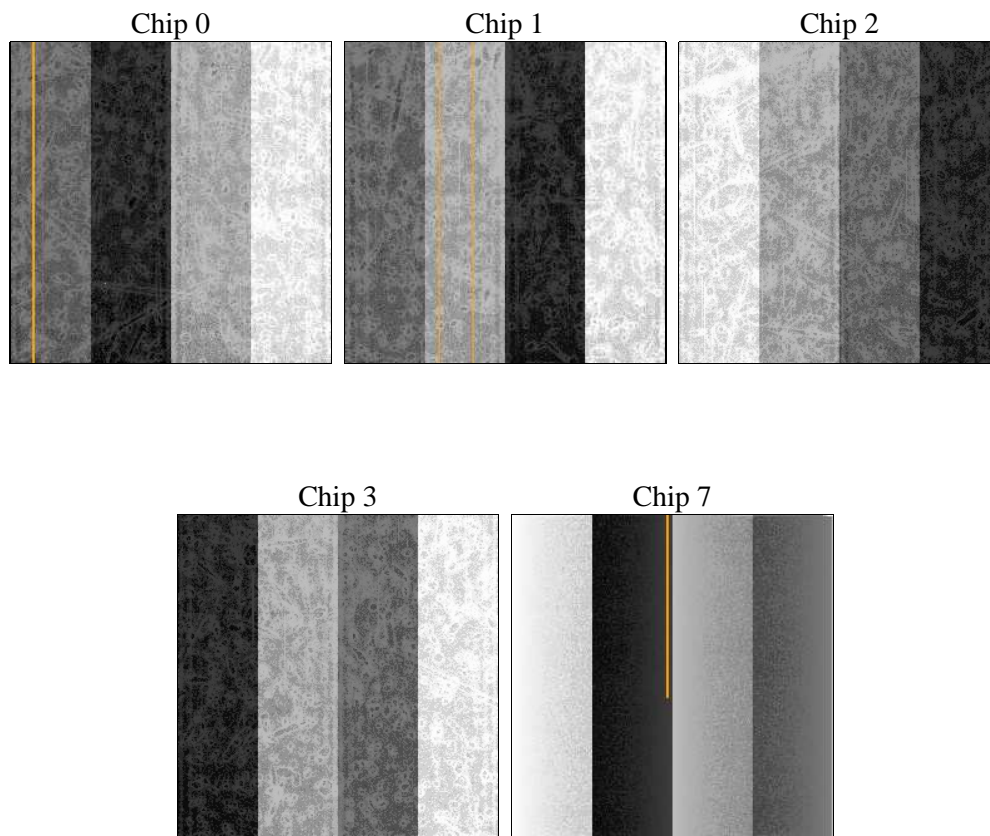
# 3 OBI Secondary

## 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	8.5	Processing system revision	ontime	2796.6596999466	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	2796.6596999168	Sum of GTIs [s]
date	2012-12-08T09:43:48	Date and time of file creation	ontime1	2796.6596999168	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	2796.6597198248	Sum of GTIs [s]
			ontime3	2796.6596999168	Sum of GTIs [s]
			ontime7	2796.6596999466	Sum of GTIs [s]
			l1events	508398	Number of level 1 events

### 3.1.4 Events

	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 7</b>
level 1 events	99292	99455	101708	101960	105983
rejected events	19536	19676	21704	21158	17200
rejected %	19%	19%	21%	20%	16%

	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 7</b>
grade 0 events	43751	43474	44924	45309	21540
	44%	43%	44%	44%	20%
grade 1 events	241	220	277	272	78
	0%	0%	0%	0%	0%
grade 2 events	14095	14229	13534	13857	19526
	14%	14%	13%	13%	18%
grade 3 events	5242	5344	5133	5323	8908
	5%	5%	5%	5%	8%
grade 4 events	5264	5076	5283	5330	8984
	5%	5%	5%	5%	8%
grade 5 events	1250	1273	1220	1359	3271
	1%	1%	1%	1%	3%
grade 6 events	11494	11736	11213	11079	29930
	11%	11%	11%	10%	28%
grade 7 events	17955	18103	20124	19431	13746
	18%	18%	19%	19%	12%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.6922190200984

### A.2 Comments