

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 60034 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 9 2012

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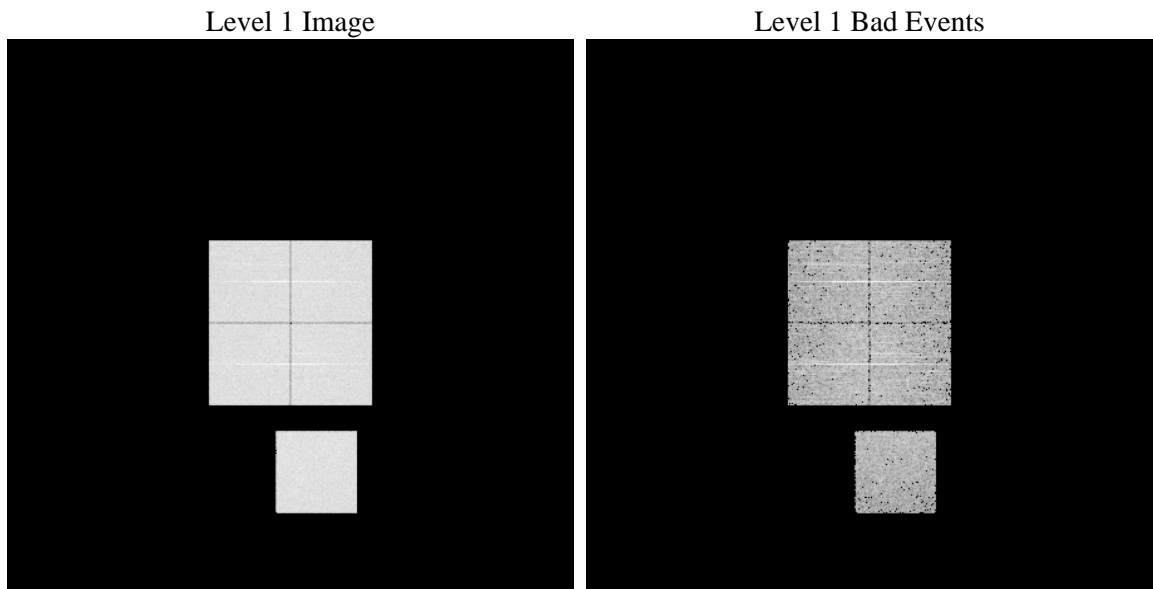
# 1 Front

seq_num	&#160	Sequence number
obs_id	60034	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	200.96472306631	Nominal RA [deg]
dec_nom	-61.023857582212	Nominal Dec [deg]
roll_nom	204.04767527427	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4148.5594481528	Sum of GTIs [s]
livetime	4100.4784098837	Livetime [s]
ontime0	4148.3953180611	Sum of GTIs [s]
ontime1	4148.4363779426	Sum of GTIs [s]
ontime2	4148.4773980677	Sum of GTIs [s]
ontime3	4148.518438071	Sum of GTIs [s]
ontime7	4148.5594481528	Sum of GTIs [s]
l2events	567121	Number of level 2 events

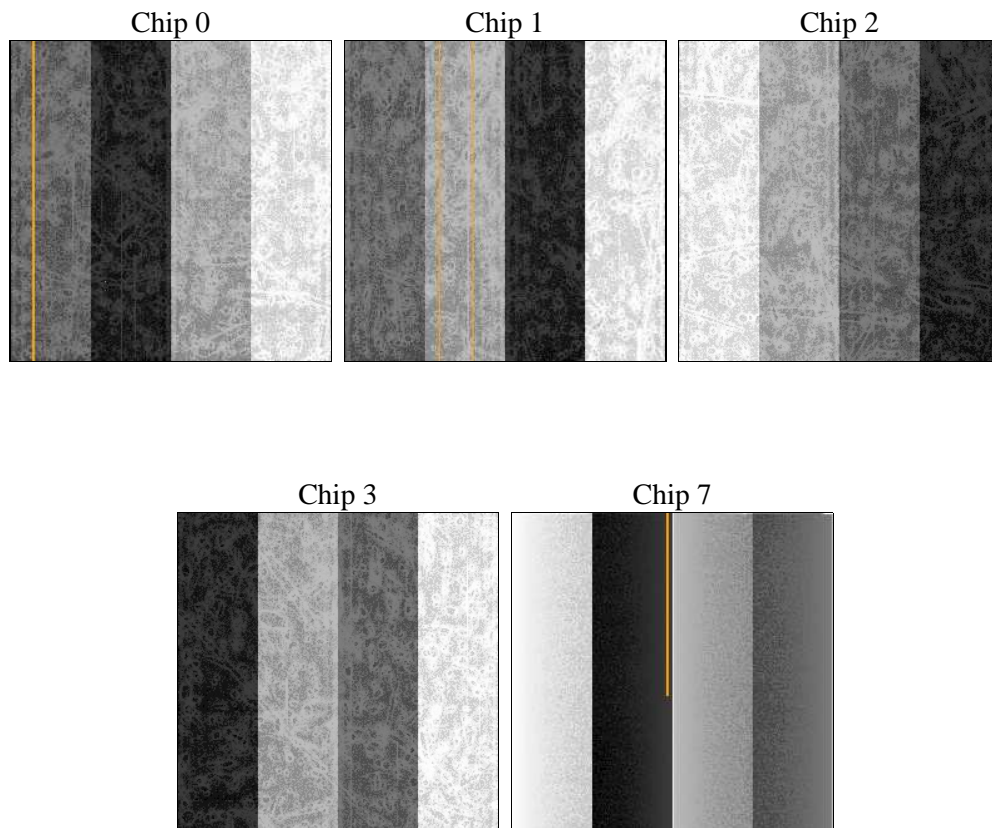
## 2 OBI Primary

### 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	4148.5594481528	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime0	4148.3953180611	Sum of GTIs [s]
date	2012-12-09T05:01:06	Date and time of file creation	ontime1	4148.4363779426	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4148.4773980677	Sum of GTIs [s]
			ontime3	4148.518438071	Sum of GTIs [s]
			ontime7	4148.5594481528	Sum of GTIs [s]
			l1events	728554	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	142167	141790	146339	146818	151440
rejected events	25918	25639	28833	28973	22809
rejected %	18%	18%	19%	19%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	64177	63785	65559	66279	31074
	45%	44%	44%	45%	20%
grade 1 events	347	330	429	414	90
	0%	0%	0%	0%	0%
grade 2 events	20320	20685	19953	19933	28380
	14%	14%	13%	13%	18%
grade 3 events	7593	7359	7602	7658	12850
	5%	5%	5%	5%	8%
grade 4 events	7386	7399	7775	7698	13023
	5%	5%	5%	5%	8%
grade 5 events	1715	1751	1748	1870	4299
	1%	1%	1%	1%	2%
grade 6 events	16773	16923	16617	16277	43304
	11%	11%	11%	11%	28%
grade 7 events	23856	23558	26656	26689	18420
	16%	16%	18%	18%	12%

## 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	200.9647230663125	Alternating exposures requested	Y	Y
[deg] Pointing Dec	0	-61.02385758221207	[s] Primary exposure time	3.5	3.5
[deg] Pointing Roll	0.0	204.0476752742652	[s] Secondary exposure time	3.2	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272	Duty cycle	1	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)	212235382.19716	212235381.17217			
Observation start date	2004-09-22T10:16:22	2004-09-22T10:16:21			
[s] Observation end time (MET)	212249926.94781	212249925.92282			
Observation end date	2004-09-22T14:18:47	2004-09-22T14:18:45			
Read mode	TIMED	TIMED			

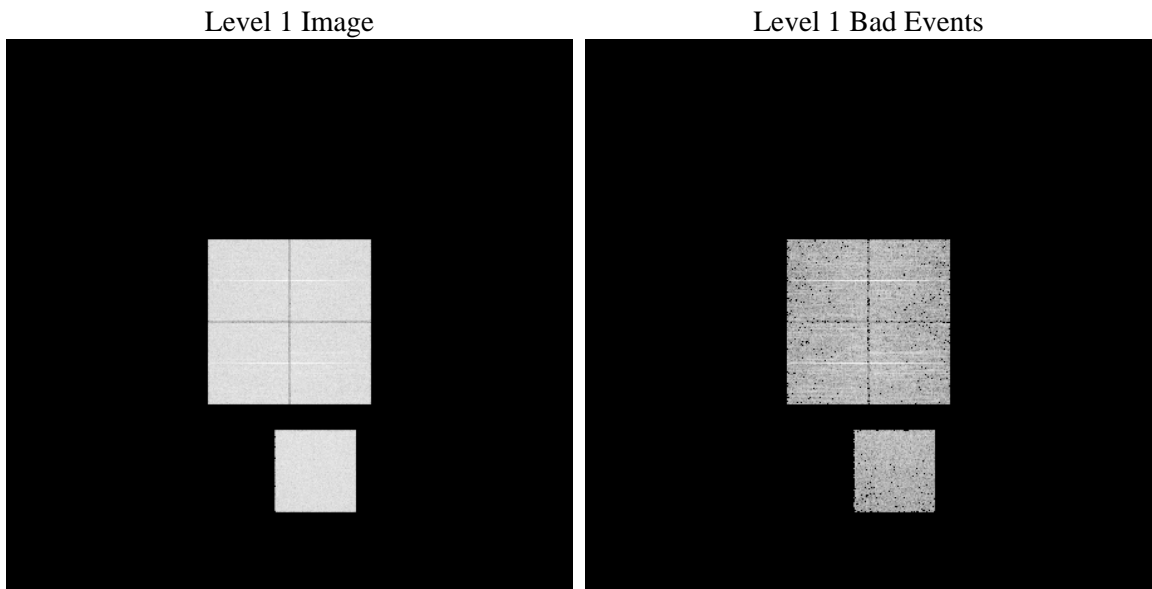
## 2.3 Star Slots

## 2.4 FID Slots

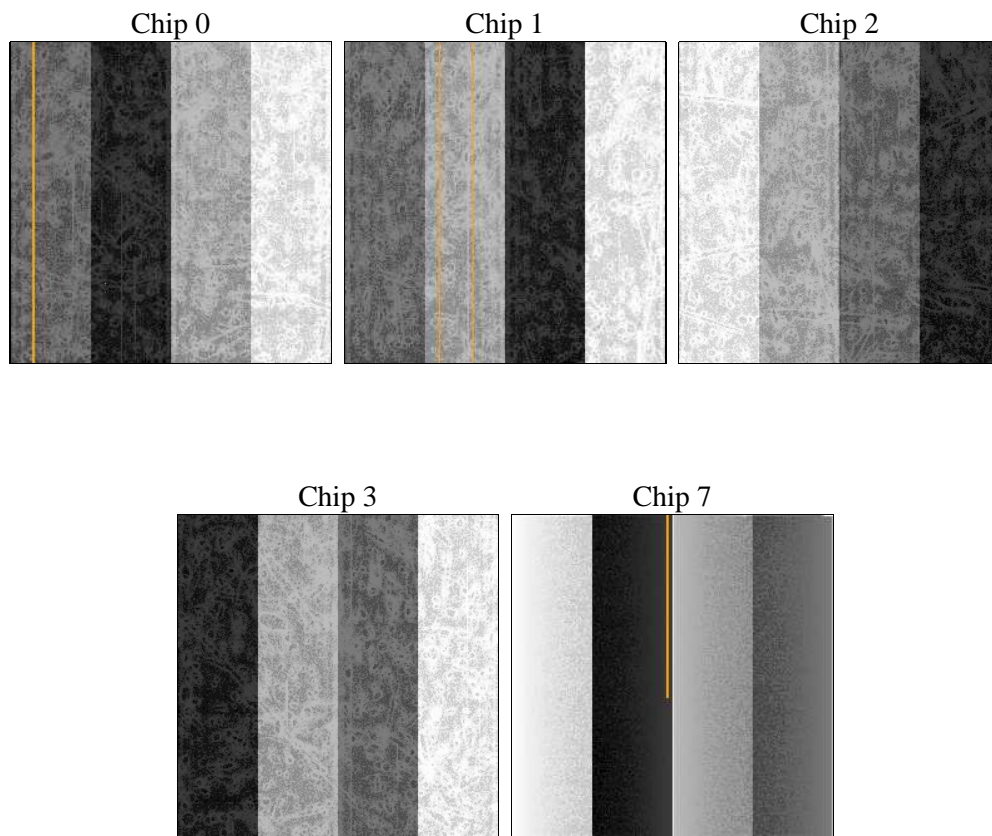
# 3 OBI Secondary

## 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	3798.5001041889	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	3795.2590941489	Sum of GTIs [s]
date	2012-12-09T05:00:54	Date and time of file creation	ontime1	3798.5001341403	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3798.500164032	Sum of GTIs [s]
			ontime3	3798.5001341403	Sum of GTIs [s]
			ontime7	3798.5001041889	Sum of GTIs [s]
			l1events	675081	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	131478	132188	136119	135798	139498
rejected events	24585	25263	28031	28111	22090
rejected %	18%	19%	20%	20%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	59148	58907	60735	60458	28556
	44%	44%	44%	44%	20%
grade 1 events	332	260	399	337	93
	0%	0%	0%	0%	0%
grade 2 events	18670	18735	18187	18488	25854
	14%	14%	13%	13%	18%
grade 3 events	6878	6908	7101	7017	11754
	5%	5%	5%	5%	8%
grade 4 events	6899	6825	7135	6920	11728
	5%	5%	5%	5%	8%
grade 5 events	1597	1665	1584	1724	3944
	1%	1%	1%	1%	2%
grade 6 events	15405	15648	15010	14903	39637
	11%	11%	11%	10%	28%
grade 7 events	22549	23240	25968	25951	17932
	17%	17%	19%	19%	12%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.9470595523417

### A.2 Comments