

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 60024 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 9 2012

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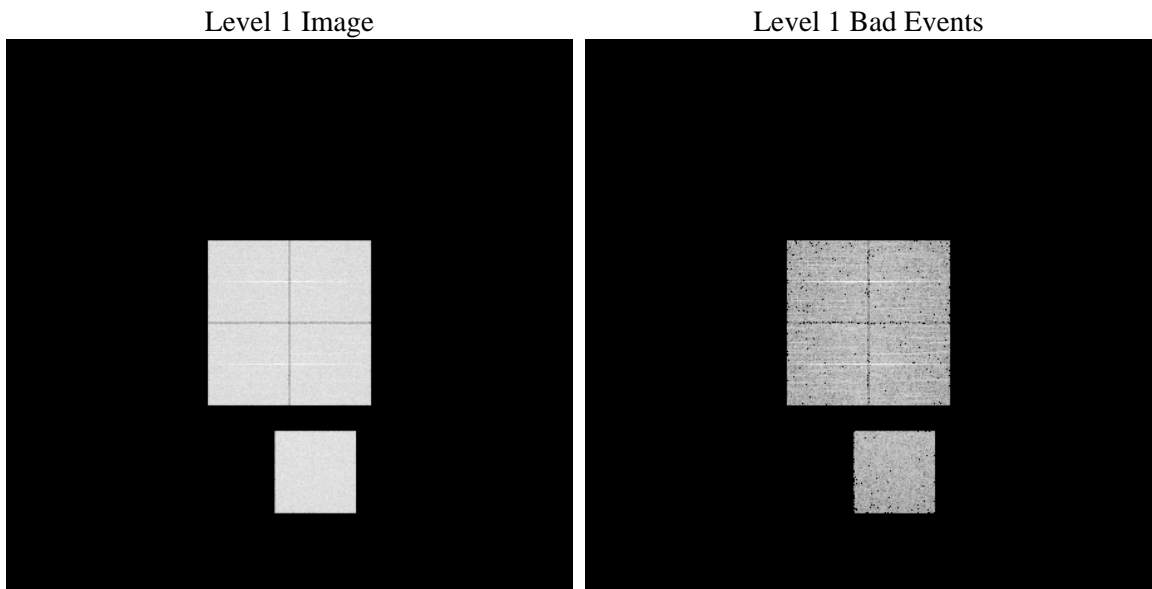
# 1 Front

seq_num	&#160	Sequence number
obs_id	60024	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	8.9872149546781	Nominal RA [deg]
dec_nom	16.991811212699	Nominal Dec [deg]
roll_nom	171.18653445419	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4382.8053504229	Sum of GTIs [s]
livetime	4338.2944493723	Livetime [s]
ontime0	4382.8053504229	Sum of GTIs [s]
ontime1	4382.8053504229	Sum of GTIs [s]
ontime2	4382.8053504229	Sum of GTIs [s]
ontime3	4382.8053504229	Sum of GTIs [s]
ontime7	4382.8053504229	Sum of GTIs [s]
l2events	592943	Number of level 2 events

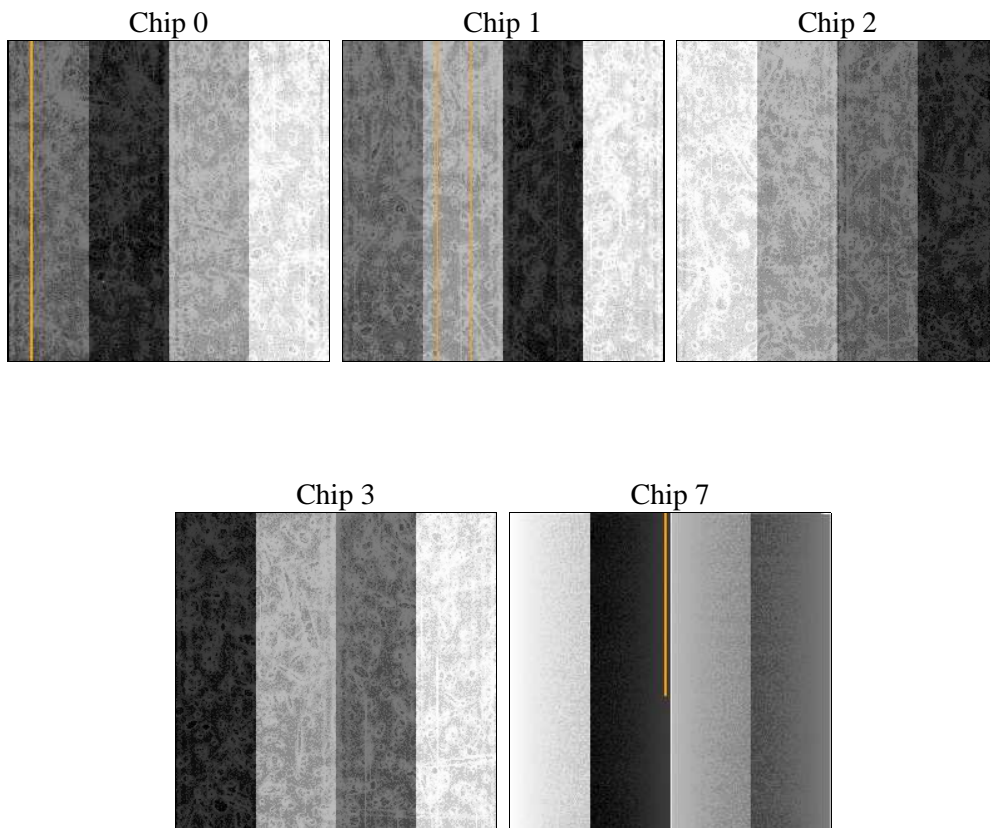
## 2 OBI Primary

### 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	4382.8053504229	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime0	4382.8053504229	Sum of GTIs [s]
date	2012-12-09T09:11:26	Date and time of file creation	ontime1	4382.8053504229	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4382.8053504229	Sum of GTIs [s]
			ontime3	4382.8053504229	Sum of GTIs [s]
			ontime7	4382.8053504229	Sum of GTIs [s]
			l1events	766700	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	149609	149376	153706	153909	160100
rejected events	28229	28663	31022	30836	24370
rejected %	18%	19%	20%	20%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	66955	65972	68083	68814	33203
	44%	44%	44%	44%	20%
grade 1 events	406	424	507	470	117
	0%	0%	0%	0%	0%
grade 2 events	21402	21535	20888	21046	30182
	14%	14%	13%	13%	18%
grade 3 events	7717	7787	8057	8020	13707
	5%	5%	5%	5%	8%
grade 4 events	7791	7695	8090	8207	13602
	5%	5%	5%	5%	8%
grade 5 events	1930	2030	1852	2018	4774
	1%	1%	1%	1%	2%
grade 6 events	17515	17724	17566	16986	45036
	11%	11%	11%	11%	28%
grade 7 events	25893	26209	28663	28348	19479
	17%	17%	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	8.987214954678052	Alternating exposures requested	Y	Y
[deg] Pointing Dec	0	16.99181121269878	[s] Primary exposure time	4	4
[deg] Pointing Roll	0.0	171.1865344541927	[s] Secondary exposure time	3.2	3.2
[mm] SIM focus pos	-0.782348	-0.6828225247311905	Duty cycle	1	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)	212920764.877838	212920763.85281			
Observation start date	2004-09-30T08:39:25	2004-09-30T08:39:23			
[s] Observation end time (MET)	212935022.628477	212935021.60345			
Observation end date	2004-09-30T12:37:03	2004-09-30T12:37:01			
Read mode	TIMED	TIMED			

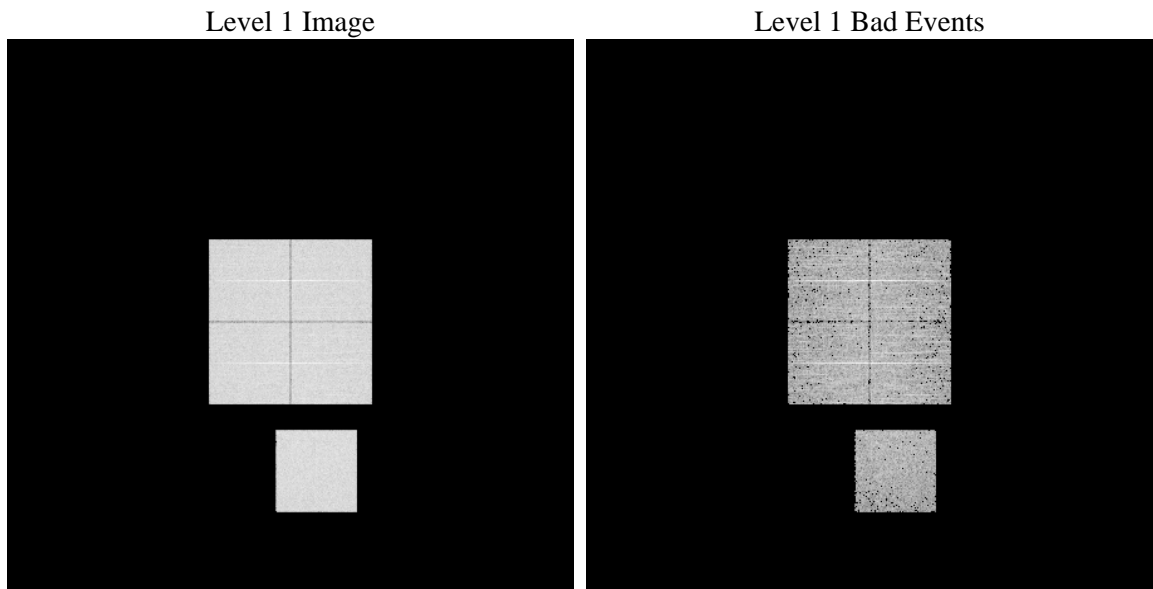
## 2.3 Star Slots

## 2.4 FID Slots

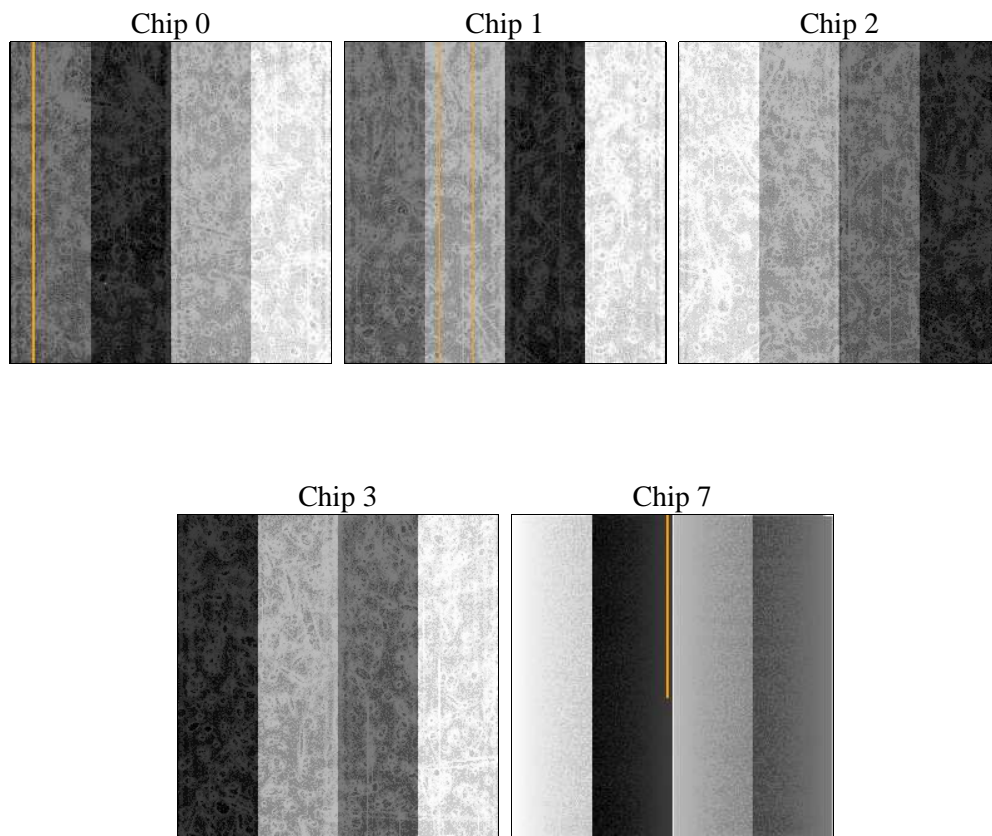
# 3 OBI Secondary

## 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	3515.9111312628	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime0	3512.5059611797	Sum of GTIs [s]
date	2012-12-09T09:10:38	Date and time of file creation	ontime1	3515.7880112529	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3515.8290811777	Sum of GTIs [s]
			ontime3	3515.8700912595	Sum of GTIs [s]
			ontime7	3515.9111312628	Sum of GTIs [s]
			l1events	627619	Number of level 1 events

### 3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	122367	123178	125072	126373	130629
rejected events	24756	25285	26387	26873	21432
rejected %	20%	20%	21%	21%	16%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	53489	53665	55294	55859	26372
	43%	43%	44%	44%	20%
grade 1 events	322	292	389	323	83
	0%	0%	0%	0%	0%
grade 2 events	17123	17381	16681	16966	24255
	13%	14%	13%	13%	18%
grade 3 events	6419	6311	6417	6472	11099
	5%	5%	5%	5%	8%
grade 4 events	6522	6227	6543	6540	10924
	5%	5%	5%	5%	8%
grade 5 events	1563	1579	1516	1695	4029
	1%	1%	1%	1%	3%
grade 6 events	14154	14404	13849	13755	36659
	11%	11%	11%	10%	28%
grade 7 events	22775	23319	24383	24763	17208
	18%	18%	19%	19%	13%



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.8987164816857

### A.2 Comments