

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 62127 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Aug 24 2012

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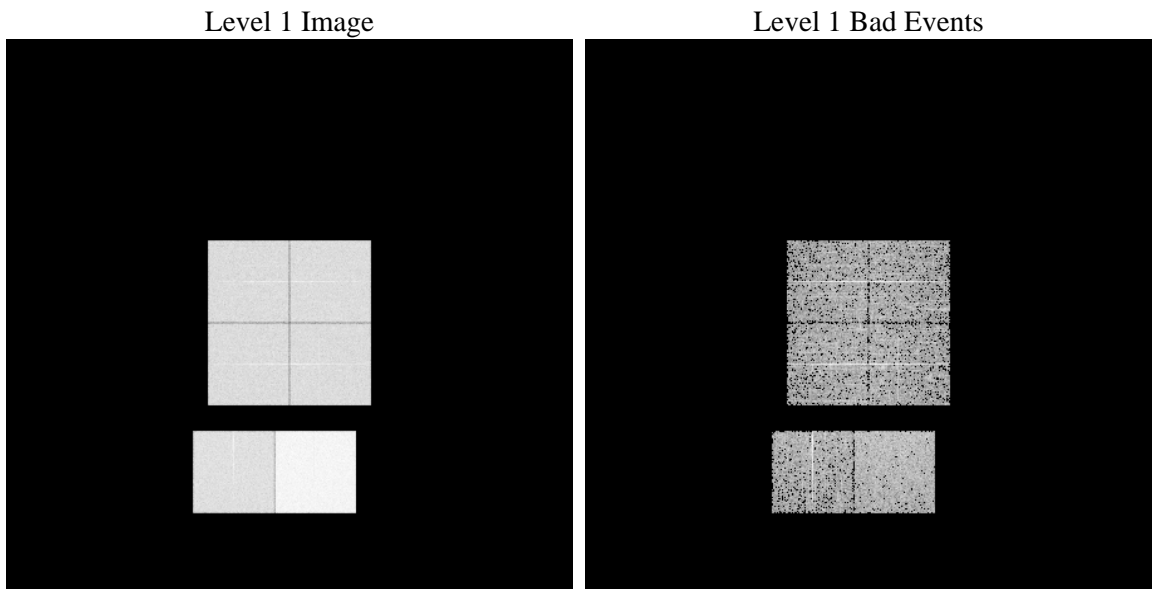
# 1 Front

seq_num	&#160	Sequence number
obs_id	62127	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 from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	82.375763134707	Nominal RA [deg]
dec_nom	0.99873404966842	Nominal Dec [deg]
roll_nom	273.58735574223	Nominal Roll [deg]
revision	4	Processing version of data
ontime	3516.6791451722	Sum of GTIs [s]
livetime	3472.1488363461	Livetime [s]
ontime0	1440.8650401086	Sum of GTIs [s]
ontime1	1486.2806299776	Sum of GTIs [s]
ontime2	1421.5009299964	Sum of GTIs [s]
ontime3	1427.8187403083	Sum of GTIs [s]
ontime6	1599.7990299165	Sum of GTIs [s]
ontime7	3516.6791451722	Sum of GTIs [s]
l2events	929750	Number of level 2 events

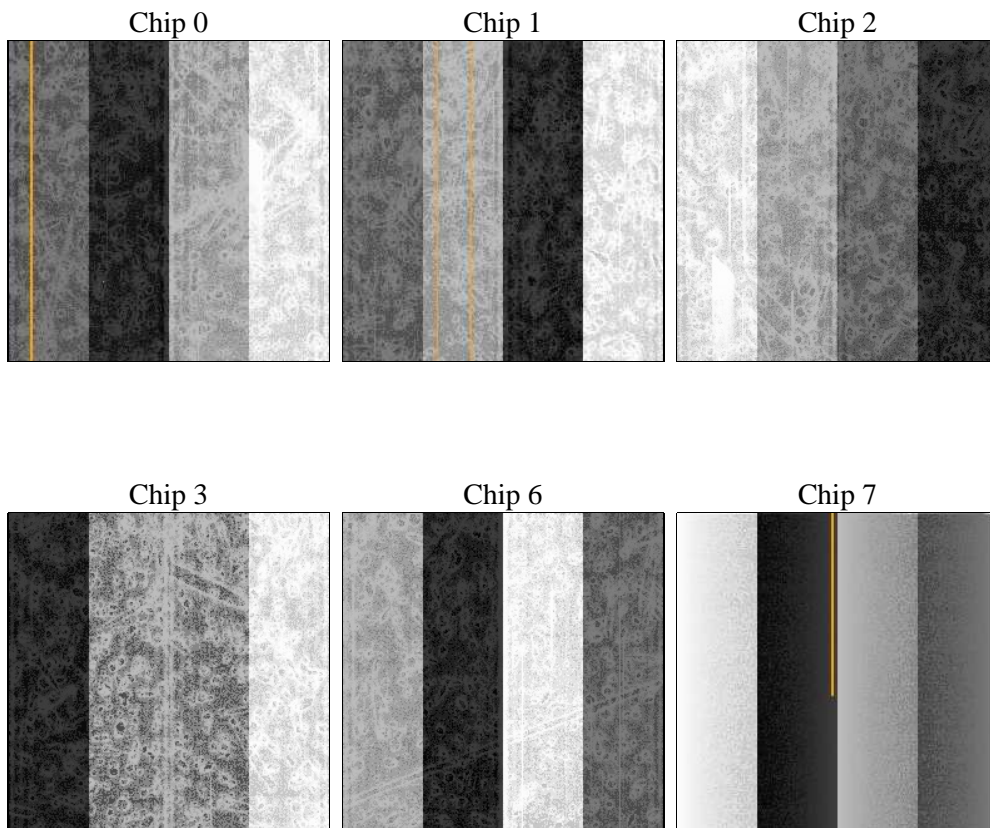
## 2 OBI

### 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	3516.6791451722	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	1440.8650401086	Sum of GTIs [s]
date	2012-08-24T09:20:53	Date and time of file creation	ontime1	1486.2806299776	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	1421.5009299964	Sum of GTIs [s]
			ontime3	1427.8187403083	Sum of GTIs [s]
			ontime6	1599.7990299165	Sum of GTIs [s]
			ontime7	3516.6791451722	Sum of GTIs [s]
			l1events	1060921	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	138505	142544	139781	140268	161028	338795	grade 0 events	68792	70985	69626	70313	79325	83256
rejected events	13722	14033	15204	14808	15267	19774		49%	49%	49%	50%	49%	24%
rejected %	9%	9%	10%	10%	9%	5%	grade 1 events	415	422	423	466	449	207
								0%	0%	0%	0%	0%	0%
							grade 2 events	21966	22584	21766	21819	25475	71338
								15%	15%	15%	15%	15%	21%
							grade 3 events	7984	8150	7895	8063	9126	32923
								5%	5%	5%	5%	5%	9%
							grade 4 events	7985	8203	7857	8030	9096	32573
								5%	5%	5%	5%	5%	9%
							grade 5 events	1043	1088	1014	1039	1193	4583
								0%	0%	0%	0%	0%	1%
							grade 6 events	18056	18589	17433	17235	22739	99235
								13%	13%	12%	12%	14%	29%
							grade 7 events	12264	12523	13767	13303	13625	14680
								8%	8%	9%	9%	8%	4%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	82.37576313470662
[deg] Pointing Dec	0	0.9987340496684218
[deg] Pointing Roll	0.0	273.5873557422298
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.7524282956875696
[mm] SIM translation stage pos	-233.592463	250.4635187648994
[mm] SIM translation stage offset	0	-0.007540371344731511
[s] Observation start time (MET)	69204002.006	69204001.23754001
Observation start date	2000-03-11T23:20:02	2000-03-11T23:20:01
[s] Observation end time (MET)	69212825.206	69212824.43786199
Observation end date	2000-03-12T01:47:05	2000-03-12T01:47:04
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.08.27
V&V Edition	1
V&V Disposition and Status	Repr+DD
V&V Charge Time	3.5166791451722

## A.2 Comments

SAP: please reprocess with a replacement bias for CCD\_ID = 2.

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The bias map for CCD\_ID = 2 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data that have been bias-corrected by one of the affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD\_ID = 2 will be recreated to remove this anomaly and the data will be reprocessed.