

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 59881 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Apr 8 2013

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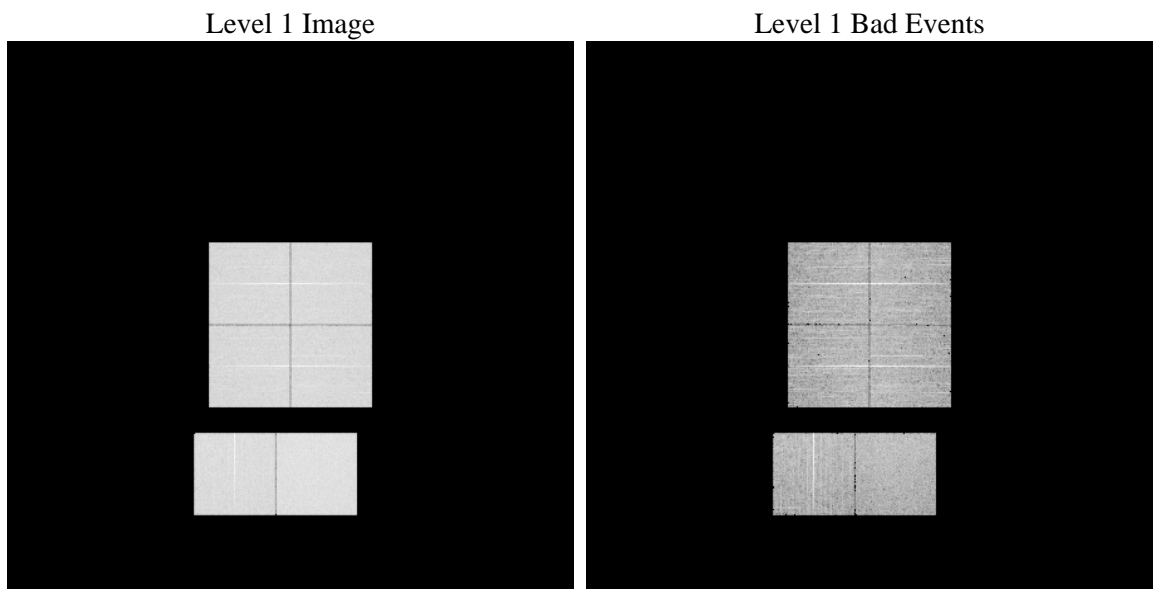
# 1 Front

seq_num	&#160	Sequence number
obs_id	59881	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	108.96514921337	Nominal RA [deg]
dec_nom	33.997956412578	Nominal Dec [deg]
roll_nom	148.87722691764	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8283.3235702217	Sum of GTIs [s]
livetime	8178.4351395569	Livetime [s]
ontime0	7064.6756297648	Sum of GTIs [s]
ontime1	7203.9959156513	Sum of GTIs [s]
ontime2	6870.1348340809	Sum of GTIs [s]
ontime3	6948.0823908448	Sum of GTIs [s]
ontime6	7472.9153072238	Sum of GTIs [s]
ontime7	8283.3235702217	Sum of GTIs [s]
l2events	1129803	Number of level 2 events

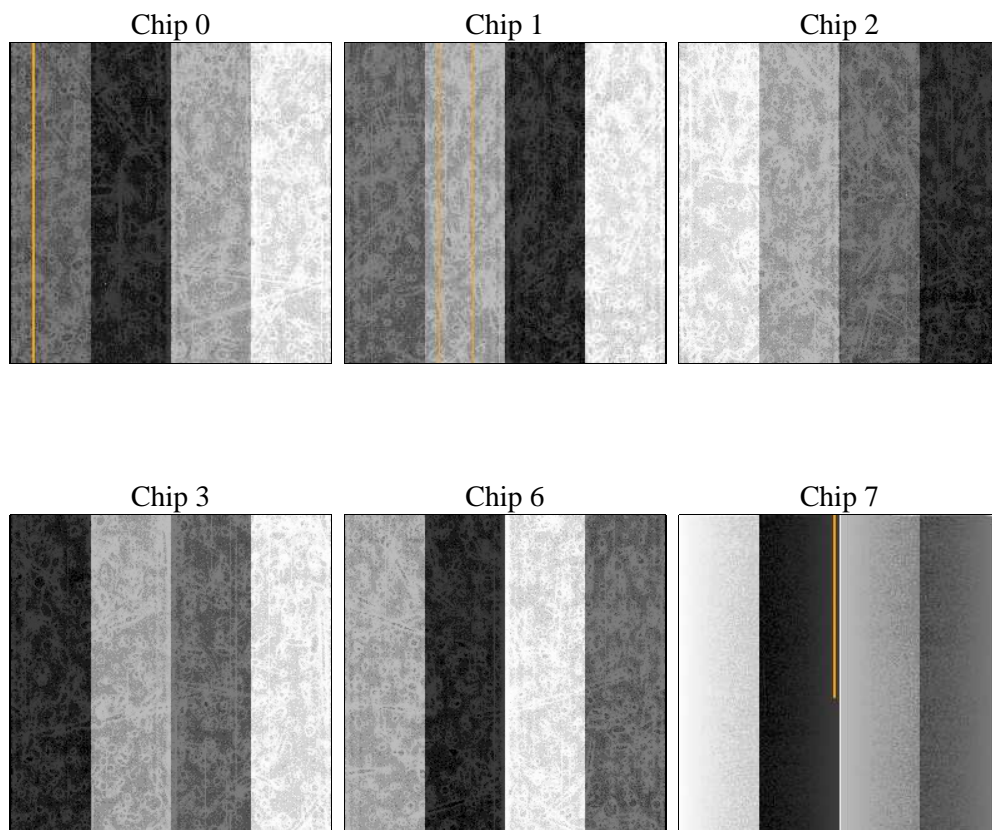
## 2 OBI

### 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	8.5.1.1	Processing system revision	ontime	8283.3235702217	Sum of GTIs [s]
caldsver	4.5.6	&#160	ontime0	7064.6756297648	Sum of GTIs [s]
date	2013-04-08T14:47:02	Date and time of file creation	ontime1	7203.9959156513	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	6870.1348340809	Sum of GTIs [s]
			ontime3	6948.0823908448	Sum of GTIs [s]
			ontime6	7472.9153072238	Sum of GTIs [s]
			ontime7	8283.3235702217	Sum of GTIs [s]
			l1events	1495779	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	234614	238942	231910	237293	258403	294617	grade 0 events	101578	103660	101522	103384	110733	57527
rejected events	50112	49817	50494	52687	54145	51547		43%	43%	43%	43%	42%	19%
rejected %	21%	20%	21%	22%	20%	17%	grade 1 events	612	516	645	693	579	186
								0%	0%	0%	0%	0%	0%
							grade 2 events	32304	33697	30841	31450	35067	53116
								13%	14%	13%	13%	13%	18%
							grade 3 events	11921	11895	11688	12122	12984	24284
								5%	4%	5%	5%	5%	8%
							grade 4 events	11944	12110	11854	11971	12787	24274
								5%	5%	5%	5%	4%	8%
							grade 5 events	3206	3268	2818	3233	3594	9128
								1%	1%	1%	1%	1%	3%
							grade 6 events	26755	27763	25511	25679	32687	83869
								11%	11%	11%	10%	12%	28%
							grade 7 events	46294	46033	47031	48761	49972	42233
								19%	19%	20%	20%	19%	14%

## 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	108.9651492133734
[deg] Pointing Dec	0	33.99795641257835
[deg] Pointing Roll	0.0	148.8772269176438
[mm] SIM focus pos	-0.782348	-0.6828225247311905
[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)	220952509.438247	220952508.41325
Observation start date	2005-01-01T07:41:49	2005-01-01T07:41:48
[s] Observation end time (MET)	220976250.489317	220976249.46432
Observation end date	2005-01-01T14:17:30	2005-01-01T14:17:29
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	3.2	3.2

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.04.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2833235702217

## A.2 Comments

The bias map for CCD\_ID = 2 suffered from anomalously high bias values in one region 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 has been recreated for this processing to remove this anomaly.