

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 57548 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Jun 20 2012

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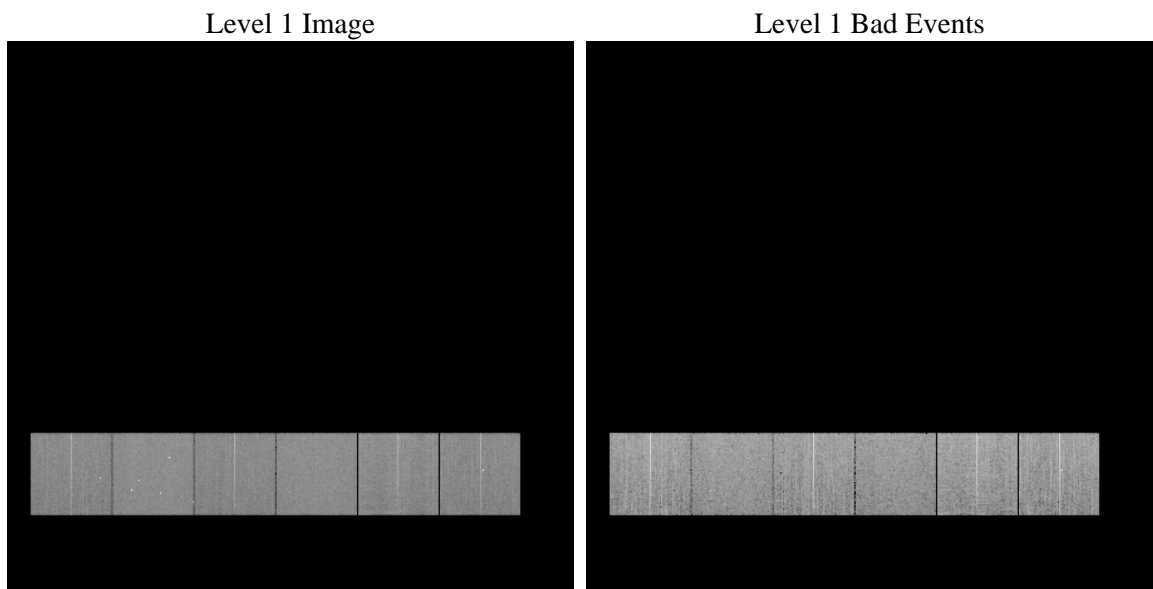
# 1 Front

seq_num	&#160	Sequence number
obs_id	57548	Observation id
title	ACIS-456789 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	3.9963703409154	Nominal RA [deg]
dec_nom	25.771506188747	Nominal Dec [deg]
roll_nom	230.55818657114	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7791.9999710321	Sum of GTIs [s]
livetime	7693.3329756198	Livetime [s]
ontime4	7791.9999710321	Sum of GTIs [s]
ontime5	7791.9999710321	Sum of GTIs [s]
ontime6	7791.9999710321	Sum of GTIs [s]
ontime7	7791.9999710321	Sum of GTIs [s]
ontime8	7791.9999710321	Sum of GTIs [s]
ontime9	7790.2970024943	Sum of GTIs [s]
l2events	565386	Number of level 2 events

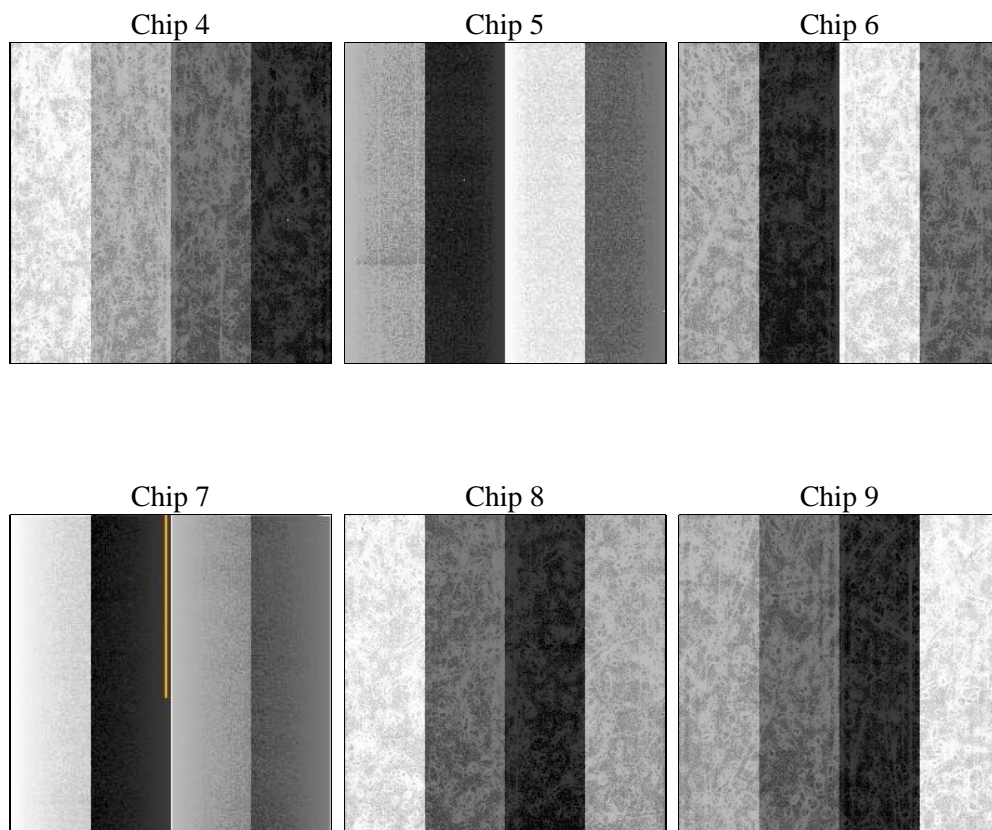
## 2 OBI

### 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	7791.9999710321	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	7791.9999710321	Sum of GTIs [s]
date	2012-06-20T13:27:37	Date and time of file creation	ontime5	7791.9999710321	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	7791.9999710321	Sum of GTIs [s]
			ontime7	7791.9999710321	Sum of GTIs [s]
			ontime8	7791.9999710321	Sum of GTIs [s]
			ontime9	7790.2970024943	Sum of GTIs [s]
			l1events	1061053	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	164750	192916	164619	186152	184406	168210	grade 0 events	49610	22183	47695	23818	51713	49332
rejected events	77849	68683	73773	64198	80463	77505		30%	11%	28%	12%	28%	29%
rejected %	47%	35%	44%	34%	43%	46%	grade 1 events	505	298	300	154	363	906
								0%	0%	0%	0%	0%	0%
							grade 2 events	13839	43403	16182	26527	19206	15330
								8%	22%	9%	14%	10%	9%
							grade 3 events	6052	5930	5861	11426	7587	6152
								3%	3%	3%	6%	4%	3%
							grade 4 events	5898	5714	6013	11171	7343	5835
								3%	2%	3%	6%	3%	3%
							grade 5 events	4068	9539	4270	10516	5429	4672
								2%	4%	2%	5%	2%	2%
							grade 6 events	11559	47003	15141	49012	18146	14056
								7%	24%	9%	26%	9%	8%
							grade 7 events	73219	58846	69157	53528	74619	71927
								44%	30%	42%	28%	40%	42%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	3.996370340915405	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	25.77150618874671	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	230.558186571143	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.7809083437167272			
[mm] SIM defocus	0.1037507710433287	0.7524282956875696			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	340632943.200625	340632942.17563			
Observation start date	2008-10-17T12:15:43	2008-10-17T12:15:42			
[s] Observation end time (MET)	340648318.201382	340648317.17638			
Observation end date	2008-10-17T16:31:58	2008-10-17T16:31:57			
Read mode	TIMED	TIMED			

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.7919999710321

## A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small ( $\sim 20$  eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by chip coords:  
(701,1),(734,1),(734,1024),(701,1024)