

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 56055 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Jul 2 2012

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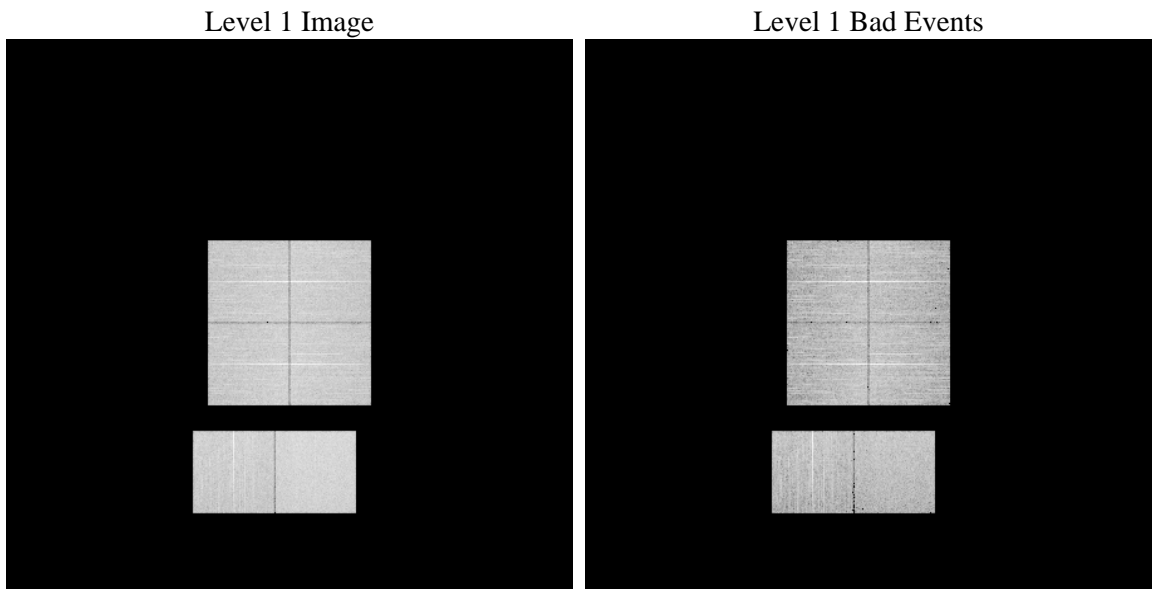
# 1 Front

seq_num	&#160	Sequence number
obs_id	56055	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	314.4998430243	Nominal RA [deg]
dec_nom	4.4786946791554	Nominal Dec [deg]
roll_nom	236.89766178392	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8198.3999695182	Sum of GTIs [s]
livetime	8094.5868926203	Livetime [s]
ontime0	8198.3999695182	Sum of GTIs [s]
ontime1	8198.3999695182	Sum of GTIs [s]
ontime2	8198.3999695182	Sum of GTIs [s]
ontime3	8198.3999695182	Sum of GTIs [s]
ontime6	8198.3999695182	Sum of GTIs [s]
ontime7	8198.3999695182	Sum of GTIs [s]
l2events	390640	Number of level 2 events

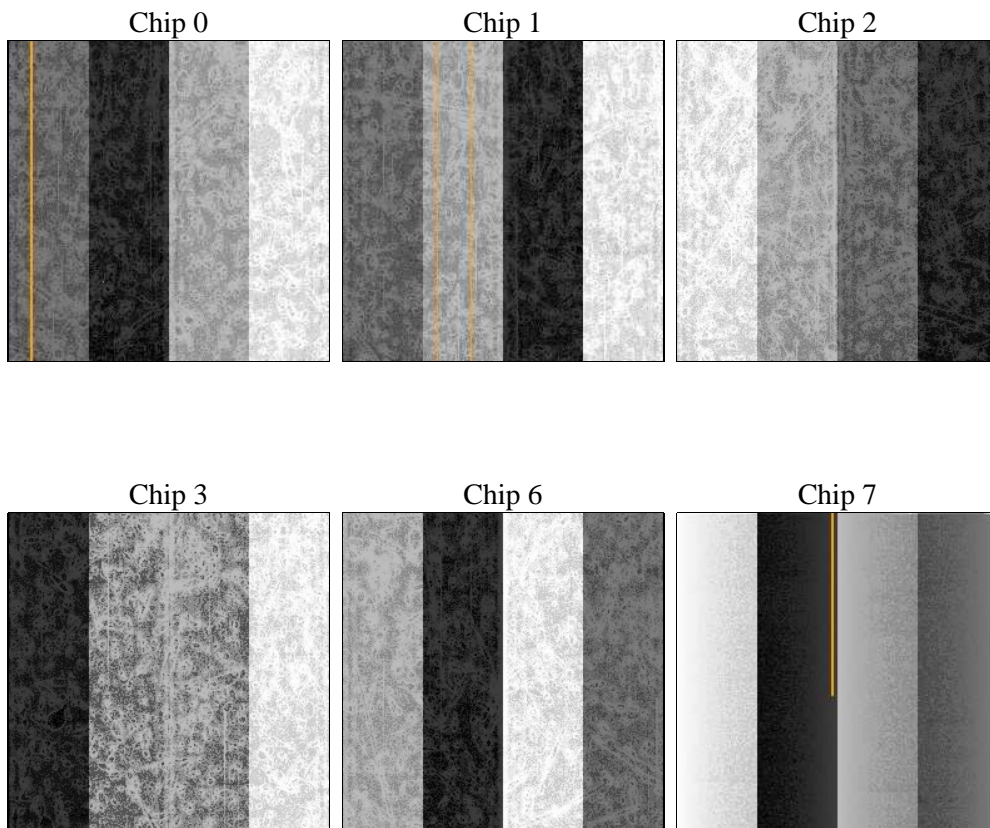
## 2 OBI

### 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	8198.3999695182	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime0	8198.3999695182	Sum of GTIs [s]
date	2012-07-02T12:15:34	Date and time of file creation	ontime1	8198.3999695182	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8198.3999695182	Sum of GTIs [s]
			ontime3	8198.3999695182	Sum of GTIs [s]
			ontime6	8198.3999695182	Sum of GTIs [s]
			ontime7	8198.3999695182	Sum of GTIs [s]
			l1events	802368	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	124353	125084	127356	130624	132375	162576	grade 0 events	33448	33134	34239	34499	33814	17288
rejected events	61616	61316	64715	67746	67189	66537		26%	26%	26%	26%	25%	10%
rejected %	49%	49%	50%	51%	50%	40%	grade 1 events	210	188	263	246	187	138
								0%	0%	0%	0%	0%	0%
							grade 2 events	11852	12580	10994	11147	12165	21066
								9%	10%	8%	8%	9%	12%
							grade 3 events	4263	4324	4398	4217	4297	8717
								3%	3%	3%	3%	3%	5%
							grade 4 events	4196	4161	4348	4323	4266	8707
								3%	3%	3%	3%	3%	5%
							grade 5 events	3809	3779	3505	4197	4144	10459
								3%	3%	2%	3%	3%	6%
							grade 6 events	9955	10600	9557	9663	11677	41506
								8%	8%	7%	7%	8%	25%
							grade 7 events	56620	56318	60052	62332	61825	54695
								45%	45%	47%	47%	46%	33%

## 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	314.4998430242967
[deg] Pointing Dec	0	4.478694679155446
[deg] Pointing Roll	0.0	236.8976617839177
[mm] SIM focus pos	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
[mm] SIM translation stage pos	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	399356840.250721	399356840.250721
Observation start date	2010-08-28T04:27:20	2010-08-28T04:27:20
[s] Observation end time (MET)	399366388.419051	399366388.419051
Observation end date	2010-08-28T07:06:28	2010-08-28T07:06:28
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
Number of optional ACIS chips dropped	0	0
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	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1983999695182

## A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:  
(303,1),(337,1),(337,288),(303,288)