

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 59407 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Mar 8 2013

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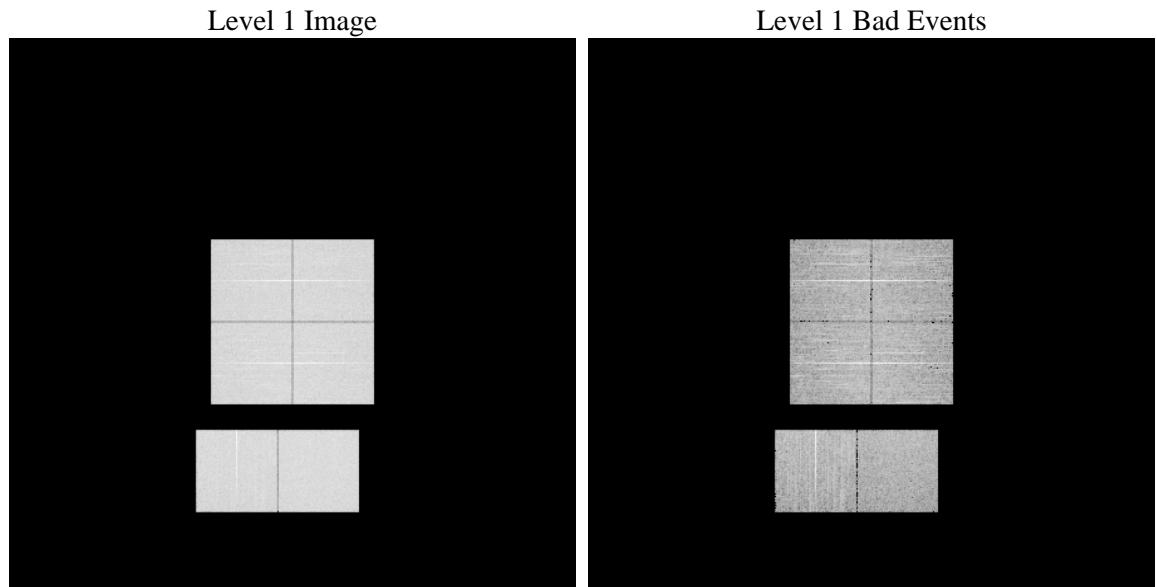
# 1 Front

seq_num	&#160	Sequence number
obs_id	59407	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtycycle	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	41.990728891176	Nominal RA [deg]
dec_nom	-0.97292478794421	Nominal Dec [deg]
roll_nom	76.033628305442	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7801.1167989373	Sum of GTIs [s]
livetime	7702.3343607606	Livetime [s]
ontime0	7801.1167989373	Sum of GTIs [s]
ontime1	7801.1167989373	Sum of GTIs [s]
ontime2	7803.3254341185	Sum of GTIs [s]
ontime3	7801.1167989373	Sum of GTIs [s]
ontime6	7803.284394145	Sum of GTIs [s]
ontime7	7801.1167989373	Sum of GTIs [s]
l2events	1005394	Number of level 2 events

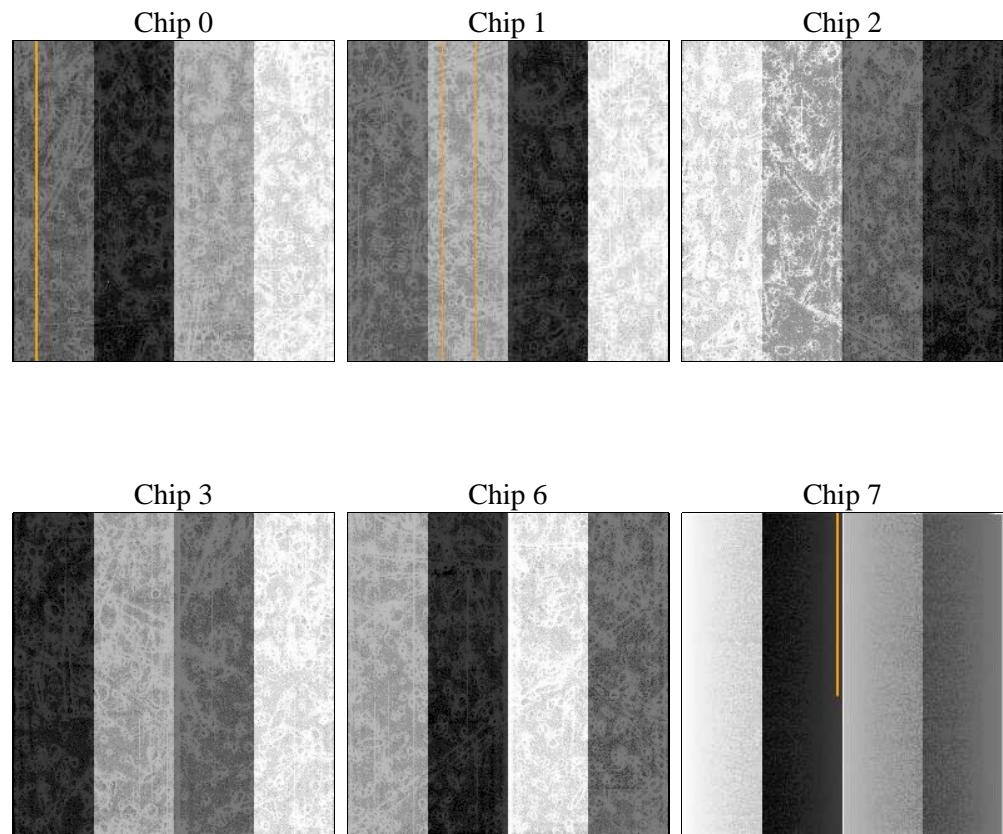
## 2 OBI

### 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
ascdsvr	8.5.1.1	Processing system revision	ontime	7801.1167989373	Sum of GTIs [s]
caldbver	4.5.6	&#160	ontime0	7801.1167989373	Sum of GTIs [s]
date	2013-03-08T21:07:15	Date and time of file creation	ontime1	7801.1167989373	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	7803.3254341185	Sum of GTIs [s]
			ontime3	7801.1167989373	Sum of GTIs [s]
			ontime6	7803.284394145	Sum of GTIs [s]
			ontime7	7801.1167989373	Sum of GTIs [s]
			l1events	1382597	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	222720	221952	229657	230548	234878	242842
rejected events	52679	51686	57251	58493	57112	47894
rejected %	23%	23%	24%	25%	24%	19%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	93175	92699	95942	96057	95951	45642
	41%	41%	41%	41%	40%	18%
grade 1 events	570	485	636	590	473	155
	0%	0%	0%	0%	0%	0%
grade 2 events	29624	30188	29105	29414	30813	42701
	13%	13%	12%	12%	13%	17%
grade 3 events	11066	10909	11298	11435	11207	19303
	4%	4%	4%	4%	4%	7%
grade 4 events	11075	10901	11311	11337	11178	19040
	4%	4%	4%	4%	4%	7%
grade 5 events	3265	3281	3062	3574	3622	8359
	1%	1%	1%	1%	1%	3%
grade 6 events	25101	25569	24750	23812	28617	68262
	11%	11%	10%	10%	12%	28%
grade 7 events	48844	47920	53553	54329	53017	39380
	21%	21%	23%	23%	22%	16%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	41.99072889117619	Alternating exposures requested	N	N
[deg] Pointing Dec	0	-0.9729247879442066	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	76.03362830544157			
[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)	245133921.040111	245133920.01511			
Observation start date	2005-10-08T04:45:21	2005-10-08T04:45:20			
[s] Observation end time (MET)	245147887.690754	245147886.66575			
Observation end date	2005-10-08T08:38:08	2005-10-08T08:38:06			
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)	2013.03.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.8011167989373

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. The value for FP temperature reported in the headers of the Level 2 event file and the Mission Timeline files are incorrect by this amount for this processing. However, the temperature is corrected in the processing in order to obtain the correct temperature for the CTI correction. So the calibrated data are correct. If using the FP temp values in the headers of data files (some CIAO tools require this information), investigators should subtract 1.3 degrees from the reported temperature to determine the true temperature.