

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 59390 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Mar 7 2013

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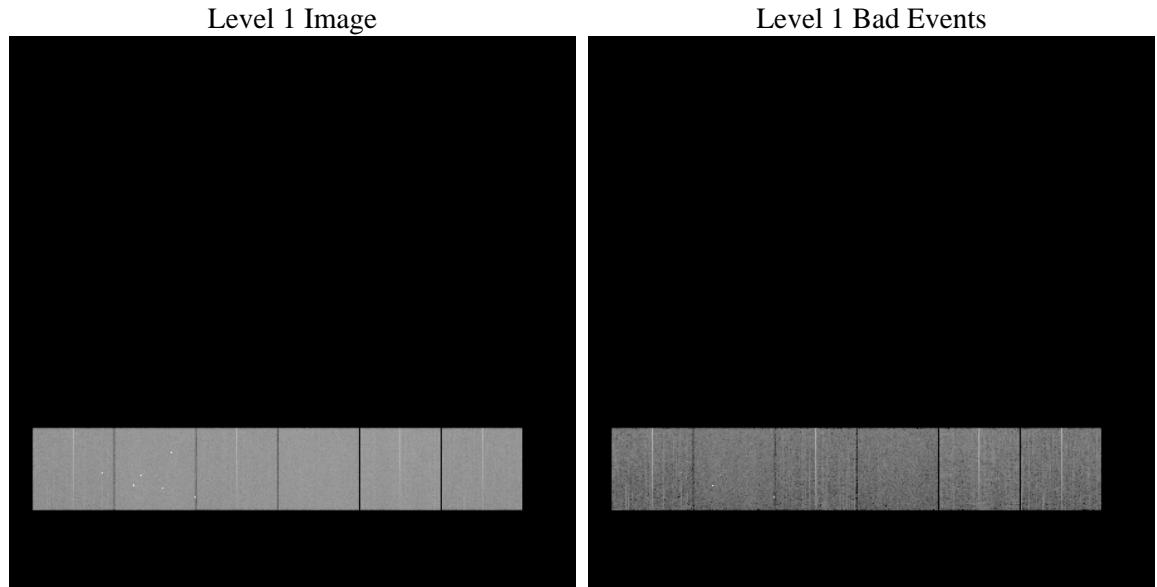
# 1 Front

seq_num	&#160	Sequence number
obs_id	59390	Observation id
title	ACIS-456789 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	15.972598379913	Nominal RA [deg]
dec_nom	36.181814844296	Nominal Dec [deg]
roll_nom	186.53048210241	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8166.3999695778	Sum of GTIs [s]
livetime	8062.9920959473	Livetime [s]
ontime4	7514.8666839004	Sum of GTIs [s]
ontime5	8166.3856650293	Sum of GTIs [s]
ontime6	8023.7415215373	Sum of GTIs [s]
ontime7	8166.3999695778	Sum of GTIs [s]
ontime8	8124.1298110485	Sum of GTIs [s]
ontime9	7754.7952523232	Sum of GTIs [s]
l2events	1027382	Number of level 2 events

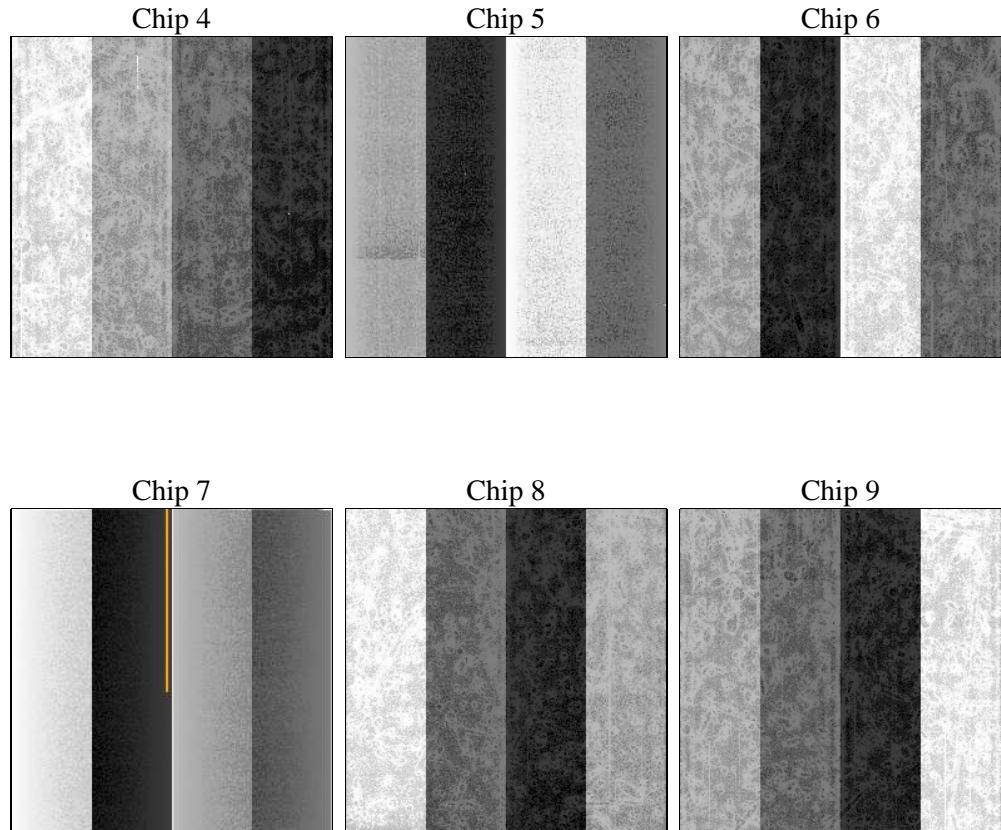
## 2 OBI

### 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	8166.3999695778	Sum of GTIs [s]
caldbver	4.5.6	&#160	ontime4	7514.8666839004	Sum of GTIs [s]
date	2013-03-08T00:37:46	Date and time of file creation	ontime5	8166.3856650293	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	8023.7415215373	Sum of GTIs [s]
			ontime7	8166.3999695778	Sum of GTIs [s]
			ontime8	8124.1298110485	Sum of GTIs [s]
			ontime9	7754.7952523232	Sum of GTIs [s]
			l1events	1484103	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	224537	257884	245100	258381	264979	233222	grade 0 events	95258	44060	100241	47794	104963	95114
rejected events	63243	64648	62423	55040	72017	62096		42%	17%	40%	18%	39%	40%
rejected %	28%	25%	25%	21%	27%	26%	grade 1 events	754	412	503	162	560	588
								0%	0%	0%	0%	0%	0%
							grade 2 events	25156	69331	32199	45211	34521	29765
								11%	26%	13%	17%	13%	12%
							grade 3 events	10970	10488	11497	20380	12939	11141
								4%	4%	4%	7%	4%	4%
							grade 4 events	10959	10471	11513	20449	12959	11298
								4%	4%	4%	7%	4%	4%
							grade 5 events	3372	9332	3827	9105	4698	4064
								1%	3%	1%	3%	1%	1%
							grade 6 events	20952	61575	29772	72355	30168	26330
								9%	23%	12%	28%	11%	11%
							grade 7 events	57116	52215	55548	42925	64171	54922
								25%	20%	22%	16%	24%	23%

## 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	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
[deg] Pointing RA	0	15.9725983799129	Alternating exposures requested	N	N
[deg] Pointing Dec	0	36.18181484429567	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	186.5304821024062			
[mm] SIM focus pos	-0.684267	-0.7809083437167272			
[mm] SIM defocus	0	0.7524282956875696			
[mm] SIM translation stage pos	-190.132523	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	245631886.563045	245631885.53803			
Observation start date	2005-10-13T23:04:47	2005-10-13T23:04:45			
[s] Observation end time (MET)	245653196.314027	245653195.28902			
Observation end date	2005-10-14T04:59:56	2005-10-14T04:59:55			
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)	2013.03.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1663999695778

## 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.