

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 62217 - L2 Version 3

Chandra X-Ray Center

L2 Processing Date : Dec 5 2009

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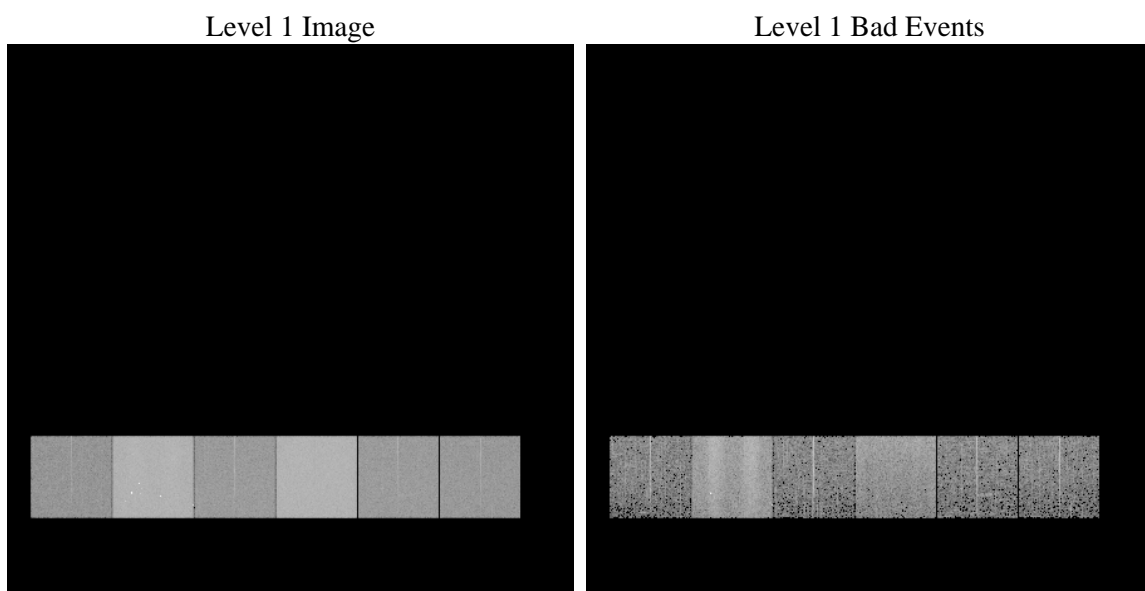
# 1 Front

seq_num	&#160	Sequence number
obs_id	62217	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
dec_targ	0.0	Observer's specified target Dec
ra_nom	25.025043307543	Nominal RA
dec_nom	24.980799450388	Nominal Dec
roll_nom	290.90653250152	Nominal Roll
revision	3	Processing version of data
ontime	2929.8277501613	Sum of GTIs [s]
livetime	2892.7285070583	Livetime [s]
ontime4	1069.3557260111	Sum of GTIs [s]
ontime5	3114.6262796298	Sum of GTIs [s]
ontime6	1254.1359067187	Sum of GTIs [s]
ontime7	2929.8277501613	Sum of GTIs [s]
ontime8	1238.0758161321	Sum of GTIs [s]
ontime9	1186.2193456069	Sum of GTIs [s]
l2events	886638	Number of level 2 events

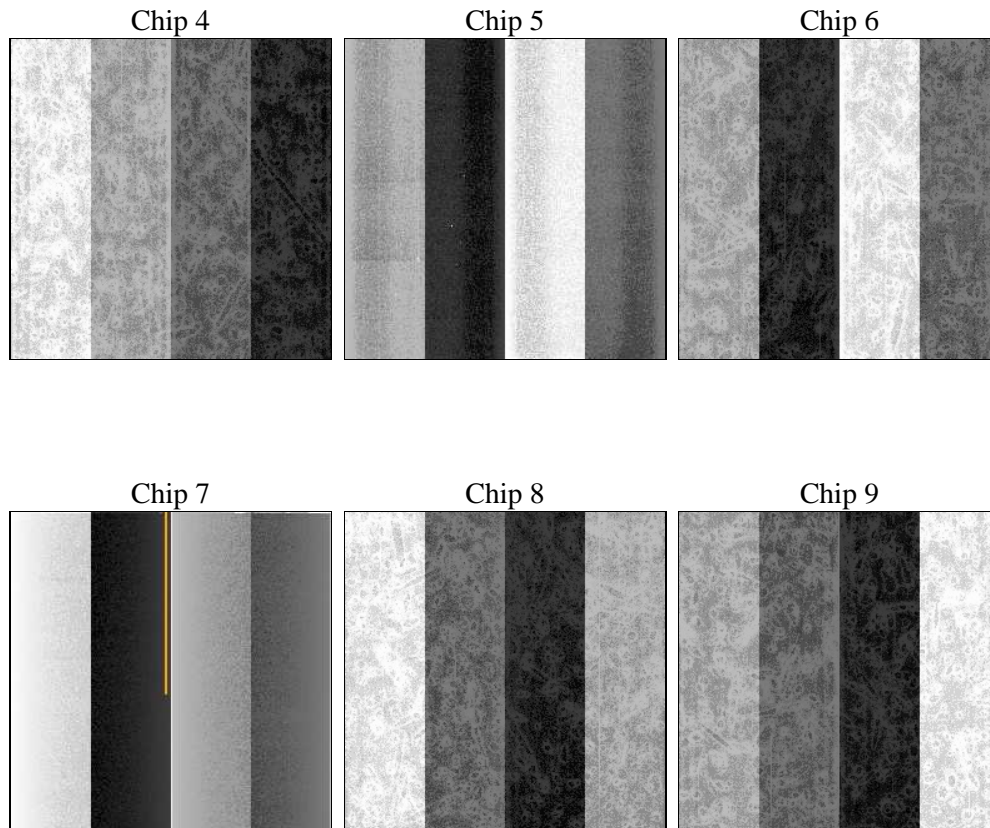
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number		
ascdsver	8.1.2	ASCDS version number	sched_exp_time	0.0
caldbver	4.1.4	&#160		Scheduled observation exposure time
date	2009-12-05T15:47:35	Date and time of file creation	ontime	2929.8277501613
revision	3	Processing version of data	ontime4	1069.3557260111
			ontime5	3114.6262796298
			ontime6	1254.1359067187
			ontime7	2929.8277501613
			ontime8	1238.0758161321
			ontime9	1186.2193456069
			l1events	1063034
				Sum of GTIs [s]
				Sum of GTIs [s]
				Sum of GTIs [s]
				Sum of GTIs [s]
				Sum of GTIs [s]
				Sum of GTIs [s]
				Sum of GTIs [s]
				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	103423	290759	127271	296498	127972	117111	grade 0 events	19397	26077	28993	46916	38156	30711
rejected events	18368	51226	19914	32959	19287	18519		18%	8%	22%	15%	29%	26%
rejected %	17%	17%	15%	11%	15%	15%	grade 1 events	75	146	129	113	156	131
								0%	0%	0%	0%	0%	0%
							grade 2 events	46861	94233	51864	75166	44131	44242
								45%	32%	40%	25%	34%	37%
							grade 3 events	1976	12571	2941	22970	4122	3278
								1%	4%	2%	7%	3%	2%
							grade 4 events	1955	10748	3069	20616	4012	3221
								1%	3%	2%	6%	3%	2%
							grade 5 events	865	4939	1090	4264	1115	1007
								0%	1%	0%	1%	0%	0%
							grade 6 events	15908	98958	21605	101095	19631	18490
								15%	34%	16%	34%	15%	15%
							grade 7 events	16386	43087	17580	25358	16649	16031
								15%	14%	13%	8%	13%	13%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	0	25.02504330754277	Alternating exposures requested	N	N
Pointing Dec	0	24.98079945038751	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	290.9065325015214			
SIM focus pos (mm)	-0.684267	-0.7809083437167272			
SIM defocus (mm)	0	0.7524282956875696			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	64687117.888	64687117.119019			
Observation start date	2000-01-19T16:38:38	2000-01-19T16:38:37			
Observation end time	64694417.938	64694417.169284			
Observation end date	2000-01-19T18:40:18	2000-01-19T18:40:17			
Read mode	TIMED	TIMED			

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.9298277501613

## A.2 Comments

The focal plane temperature is approximately -110C during this observation. The ACIS CTI correction has not been calibrated at this temperature because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front- and back-illuminated chips are affected. However, a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.