

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 62222 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 2 2009

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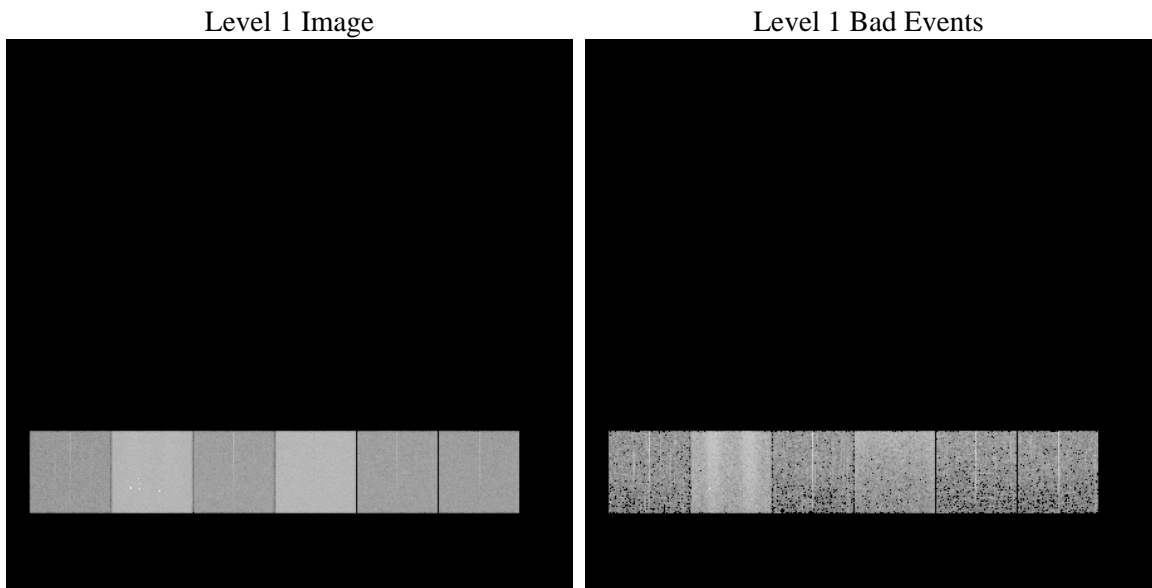
# 1 Front

seq_num	&#160	Sequence number
obs_id	62222	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtycle	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	213.29258982498	Nominal RA
dec_nom	-65.326929911625	Nominal Dec
roll_nom	86.068777224093	Nominal Roll
revision	3	Processing version of data
ontime	2923.7070611119	Sum of GTIs [s]
livetime	2886.6853218591	Livetime [s]
ontime4	1091.1014114097	Sum of GTIs [s]
ontime5	3105.2012416348	Sum of GTIs [s]
ontime6	1262.8353321701	Sum of GTIs [s]
ontime7	2923.7070611119	Sum of GTIs [s]
ontime8	1243.4711721316	Sum of GTIs [s]
ontime9	1230.3018918931	Sum of GTIs [s]
l2events	906162	Number of level 2 events

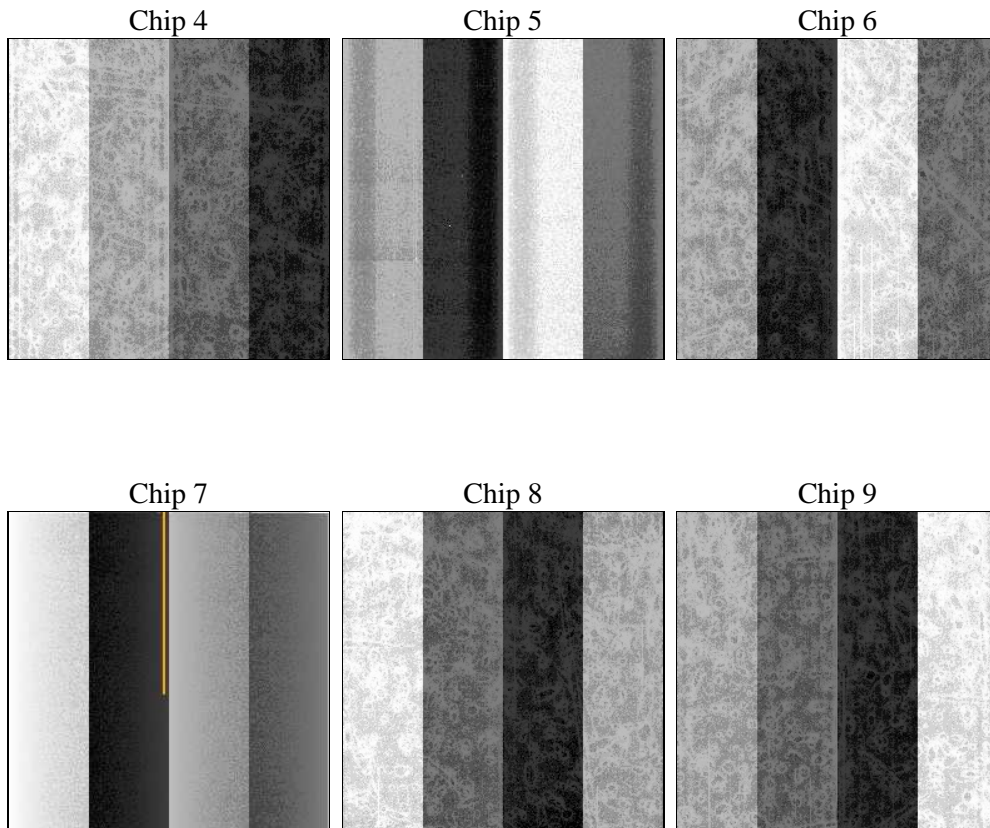
## 2 OBI

### 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	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	2923.7070611119	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime4	1091.1014114097	Sum of GTIs [s]
date	2009-12-02T21:05:48	Date and time of file creation	ontime5	3105.2012416348	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1262.8353321701	Sum of GTIs [s]
			ontime7	2923.7070611119	Sum of GTIs [s]
			ontime8	1243.4711721316	Sum of GTIs [s]
			ontime9	1230.3018918931	Sum of GTIs [s]
			l1events	1063266	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	104479	288188	128410	293849	127589	120751	grade 0 events	19704	27806	31113	50055	38333	31835
rejected events	17283	46407	18403	27208	17809	17073		18%	9%	24%	17%	30%	26%
rejected %	16%	16%	14%	9%	13%	14%	grade 1 events	86	233	114	107	162	113
								0%	0%	0%	0%	0%	0%
							grade 2 events	47612	93596	51042	73812	43879	45896
								45%	32%	39%	25%	34%	38%
							grade 3 events	1979	12717	3182	23566	3988	3239
								1%	4%	2%	8%	3%	2%
							grade 4 events	1914	10923	3128	21111	4083	3245
								1%	3%	2%	7%	3%	2%
							grade 5 events	880	4629	1024	3956	1036	1086
								0%	1%	0%	1%	0%	0%
							grade 6 events	15987	96988	21542	98360	19497	19463
								15%	33%	16%	33%	15%	16%
							grade 7 events	16317	41296	17265	22882	16611	15874
								15%	14%	13%	7%	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	213.2925898249831	Alternating exposures requested	N	N
Pointing Dec	0	-65.32692991162543	Primary exposure time	3.2	3.2
Pointing Roll	0.0	86.06877722409278			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	64416647.027629	64416646.259192			
Observation start date	2000-01-16T13:30:47	2000-01-16T13:30:46			
Observation end time	64461548.179258	64461547.410823			
Observation end date	2000-01-17T01:59:08	2000-01-17T01:59:07			
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	2.9237070611119

## 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.