

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 62218 - L2 Version 3

Chandra X-Ray Center

L2 Processing Date : Dec 5 2009

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Star Slots . . . . .	6
2.4	FID Slots . . . . .	6
<b>A</b>	<b>Summary</b>	<b>7</b>
A.1	Status . . . . .	7
A.2	Comments . . . . .	7

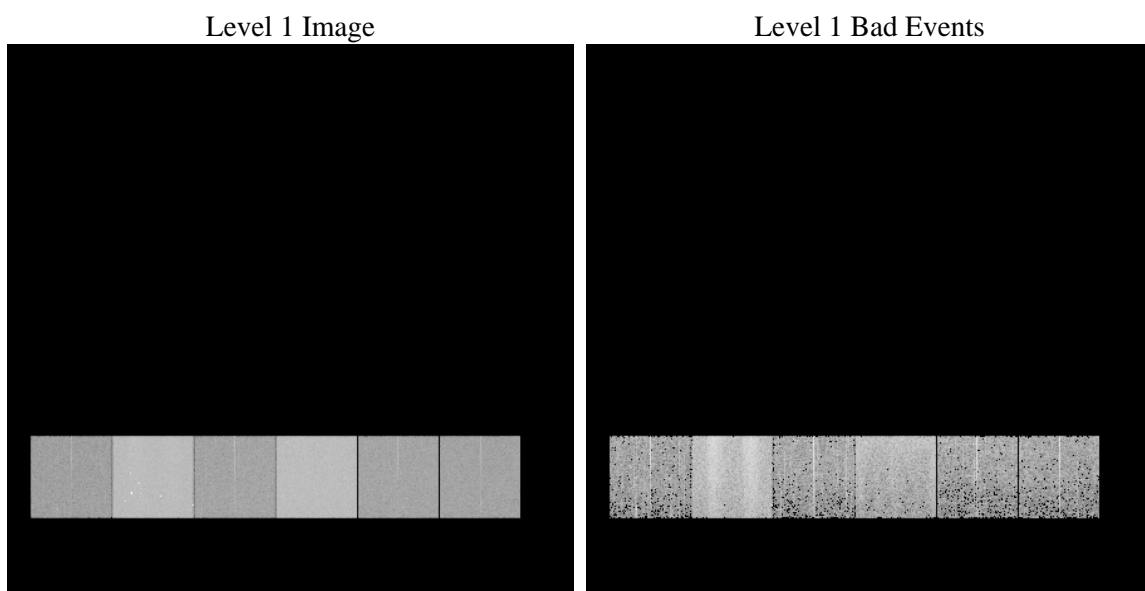
# 1 Front

seq_num	&#160	Sequence number
obs_id	62218	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	25.025192656963	Nominal RA
dec_nom	24.981679148441	Nominal Dec
roll_nom	290.90608335863	Nominal Roll
revision	3	Processing version of data
ontime	2945.8529357985	Sum of GTIs [s]
livetime	2908.5507721457	Livetime [s]
ontime4	1114.9164754674	Sum of GTIs [s]
ontime5	3143.796198532	Sum of GTIs [s]
ontime6	1234.8348759115	Sum of GTIs [s]
ontime7	2945.8529357985	Sum of GTIs [s]
ontime8	1257.5221060961	Sum of GTIs [s]
ontime9	1241.3169858605	Sum of GTIs [s]
l2events	901925	Number of level 2 events

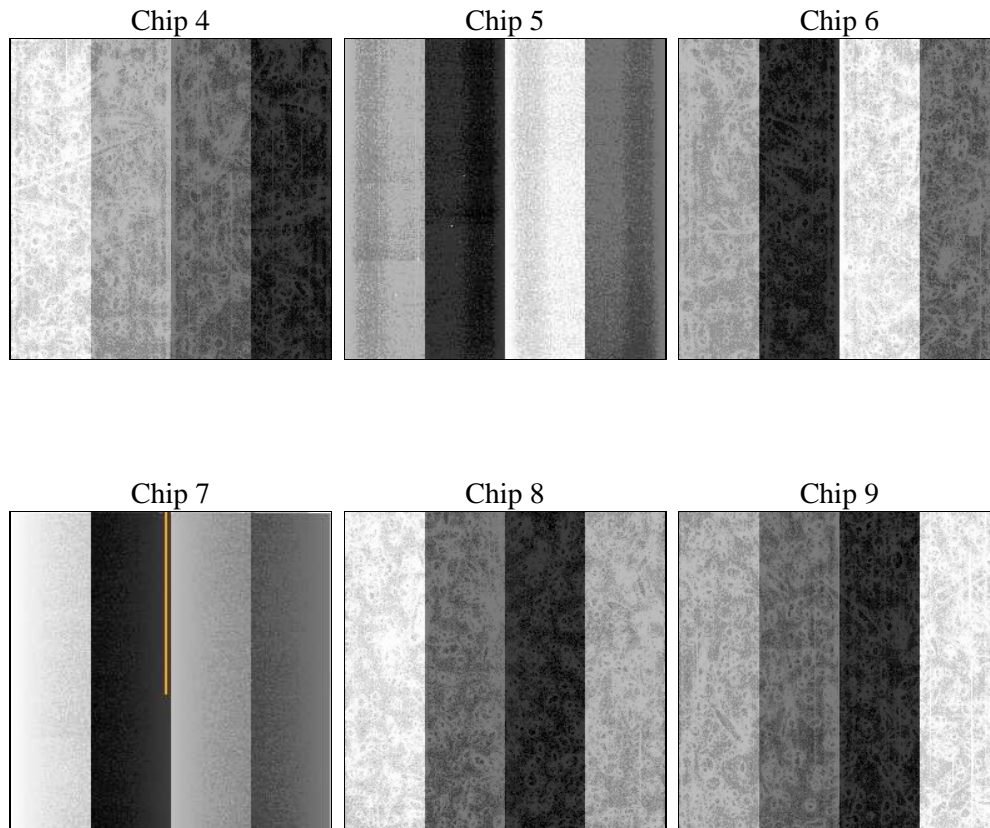
## 2 OBI

### 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	2009-12-05T15:48:50	Date and time of file creation	ontime	2945.8529357985
revision	3	Processing version of data	ontime4	1114.9164754674
			ontime5	3143.796198532
			ontime6	1234.8348759115
			ontime7	2945.8529357985
			ontime8	1257.5221060961
			ontime9	1241.3169858605
			l1events	1062412
				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	106016	289073	125981	293703	128013	119626	grade 0 events	20546	27379	29704	48012	37878	31305
rejected events	17416	46685	19413	29063	17992	16847		19%	9%	23%	16%	29%	26%
rejected %	16%	16%	15%	9%	14%	14%	grade 1 events	80	190	98	129	160	121
								0%	0%	0%	0%	0%	0%
							grade 2 events	47678	94189	50429	74271	44589	45545
								44%	32%	40%	25%	34%	38%
							grade 3 events	2135	12835	3051	22723	4037	3146
								2%	4%	2%	7%	3%	2%
							grade 4 events	2026	11041	2981	20470	3997	3344
								1%	3%	2%	6%	3%	2%
							grade 5 events	831	4854	1017	4240	1063	1044
								0%	1%	0%	1%	0%	0%
							grade 6 events	16215	96944	20914	99164	19662	19439
								15%	33%	16%	33%	15%	16%
							grade 7 events	16505	41641	17787	24694	16627	15682
								15%	14%	14%	8%	12%	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	25.02519265696333	Alternating exposures requested	N	N
Pointing Dec	0	24.98167914844083	Primary exposure time	3.2	3.2
Pointing Roll	0.0	290.9060833586325			
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	64643536.93586	64643536.167435			
Observation start date	2000-01-19T04:32:17	2000-01-19T04:32:16			
Observation end time	64687117.887441	64687117.119019			
Observation end date	2000-01-19T16:38:38	2000-01-19T16:38:37			
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	2.9458529357985

## 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.