

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62360 - L2 Version 3

Chandra X-Ray Center

L2 Processing Date : Nov 19 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

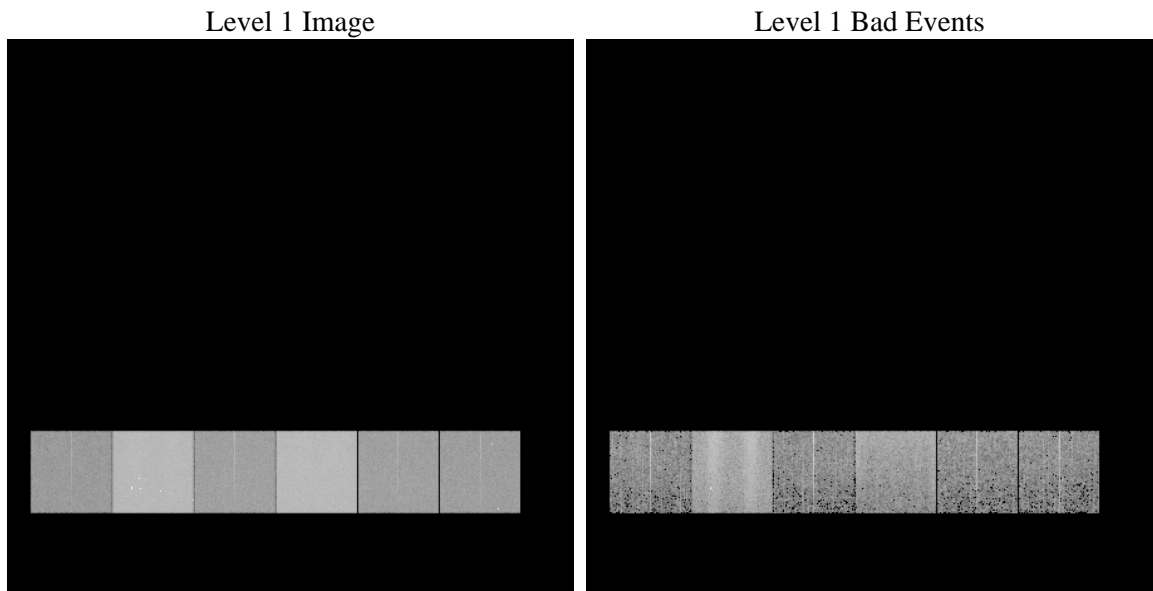
# 1 Front

seq_num	&#160	Sequence number
obs_id	62360	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	112.13737322624	Nominal RA
dec_nom	80.026878842746	Nominal Dec
roll_nom	80.253014340723	Nominal Roll
revision	3	Processing version of data
ontime	3484.0153804868	Sum of GTIs [s]
livetime	3439.8986799169	Livetime [s]
ontime4	1244.5581155494	Sum of GTIs [s]
ontime5	3717.3250814751	Sum of GTIs [s]
ontime6	1455.2255763039	Sum of GTIs [s]
ontime7	3484.0153804868	Sum of GTIs [s]
ontime8	1426.0562461838	Sum of GTIs [s]
ontime9	1387.1638259664	Sum of GTIs [s]
l2events	1135478	Number of level 2 events

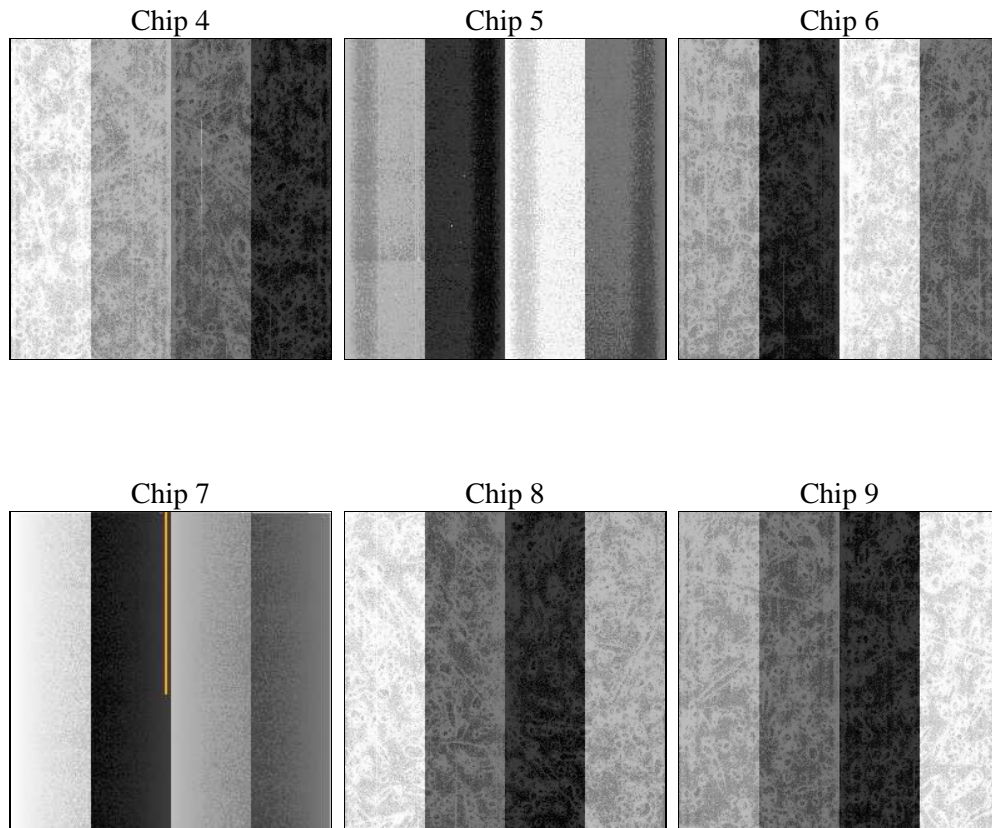
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number		
ascdsver	8.1.1	ASCDS version number	sched_exp_time	0.0
caldsver	4.1.4	&#160		Scheduled observation exposure time
date	2009-11-19T23:26:22	Date and time of file creation	ontime	3484.0153804868
revision	3	Processing version of data	ontime4	1244.5581155494
			ontime5	3717.3250814751
			ontime6	1455.2255763039
			ontime7	3484.0153804868
			ontime8	1426.0562461838
			ontime9	1387.1638259664
			l1events	1338210
				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	127484	372486	158159	377342	156761	145978	grade 0 events	25500	36806	38091	62348	46954	38399
rejected events	22347	59255	22717	36729	22930	21808		20%	9%	24%	16%	29%	26%
rejected %	17%	15%	14%	9%	14%	14%	grade 1 events	129	188	159	179	181	170
								0%	0%	0%	0%	0%	0%
							grade 2 events	55415	122372	62889	95275	52934	54710
								43%	32%	39%	25%	33%	37%
							grade 3 events	2572	16582	4003	29316	5005	4058
								2%	4%	2%	7%	3%	2%
							grade 4 events	2524	14549	3982	26511	4949	3978
								1%	3%	2%	7%	3%	2%
							grade 5 events	1071	6377	1270	5271	1414	1274
								0%	1%	0%	1%	0%	0%
							grade 6 events	19126	122922	26477	127163	23989	23025
								15%	33%	16%	33%	15%	15%
							grade 7 events	21147	52690	21288	31279	21335	20364
								16%	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	112.1373732262363	Alternating exposures requested	N	N
Pointing Dec	0	80.02687884274627	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	80.25301434072293			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.4635187648994			
SIM translation stage offset (mm)	0	-0.007540371344731511			
Observation start time	55731813.514	55731812.745184			
Observation start date	1999-10-08T01:03:34	1999-10-08T01:03:32			
Observation end time	55748381.614	55748380.84578			
Observation end date	1999-10-08T05:39:42	1999-10-08T05:39:40			
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)	2010.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.4840153804868

## 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.