

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62358 - 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

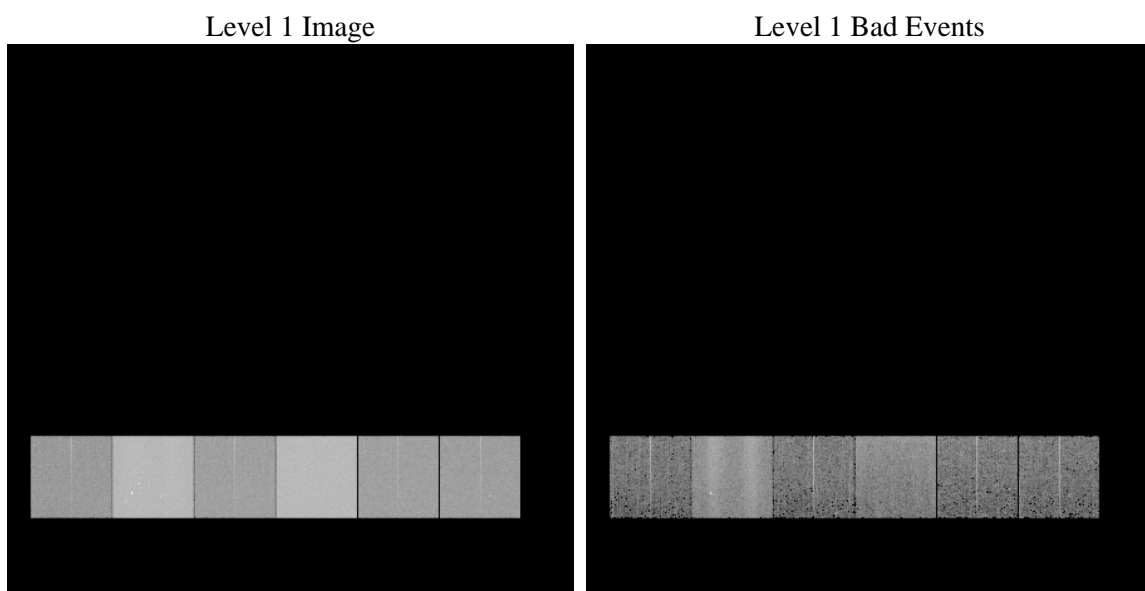
# 1 Front

seq_num	&#160	Sequence number
obs_id	62358	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	112.13651347886	Nominal RA
dec_nom	80.026832145128	Nominal Dec
roll_nom	80.718918557363	Nominal Roll
revision	3	Processing version of data
ontime	3920.1637089923	Sum of GTIs [s]
livetime	3870.5242356698	Livetime [s]
ontime4	1370.8939181045	Sum of GTIs [s]
ontime5	4190.5468410179	Sum of GTIs [s]
ontime6	1614.0366363451	Sum of GTIs [s]
ontime7	3920.1637089923	Sum of GTIs [s]
ontime8	1601.0486888289	Sum of GTIs [s]
ontime9	1588.1083062887	Sum of GTIs [s]
l2events	1274381	Number of level 2 events

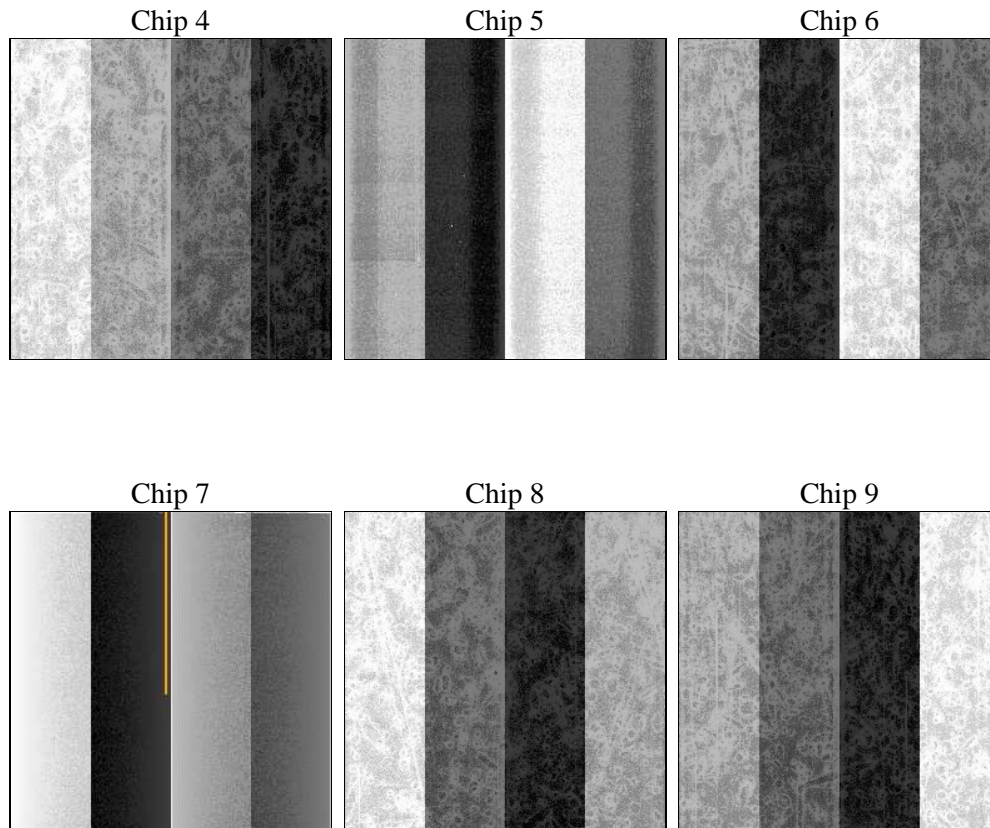
## 2 OBI

### 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	8.1.1	ASCDS version number	ontime	3920.1637089923	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime4	1370.8939181045	Sum of GTIs [s]
date	2009-11-19T23:22:56	Date and time of file creation	ontime5	4190.5468410179	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1614.0366363451	Sum of GTIs [s]
			ontime7	3920.1637089923	Sum of GTIs [s]
			ontime8	1601.0486888289	Sum of GTIs [s]
			ontime9	1588.1083062887	Sum of GTIs [s]
			l1events	1521916	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	143270	423000	178190	429804	178987	168665	grade 0 events	28094	37785	41490	68907	53425	44517
rejected events	26582	74430	28458	46830	28369	26414		19%	8%	23%	16%	29%	26%
rejected %	18%	17%	15%	10%	15%	15%	grade 1 events	115	181	171	180	242	176
								0%	0%	0%	0%	0%	0%
							grade 2 events	62226	136472	71367	107898	60174	62866
								43%	32%	40%	25%	33%	37%
							grade 3 events	2840	18156	4223	33620	5691	4696
								1%	4%	2%	7%	3%	2%
							grade 4 events	2737	15848	4327	30268	5781	4674
								1%	3%	2%	7%	3%	2%
							grade 5 events	1272	7451	1464	6175	1648	1486
								0%	1%	0%	1%	0%	0%
							grade 6 events	21936	143798	29781	146189	27052	26921
								15%	33%	16%	34%	15%	15%
							grade 7 events	24050	63309	25367	36567	24974	23329
								16%	14%	14%	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	112.1365134788615	Alternating exposures requested	N	N
Pointing Dec	0	80.02683214512847	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	80.71891855736312			
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	55778043.065	55778042.296848			
Observation start date	1999-10-08T13:54:03	1999-10-08T13:54:02			
Observation end time	55788032.716	55788031.947208			
Observation end date	1999-10-08T16:40:33	1999-10-08T16:40:31			
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	3.9201637089923

## 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.