

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62281 - L2 Version 6

Chandra X-Ray Center

L2 Processing Date : Oct 20 2010

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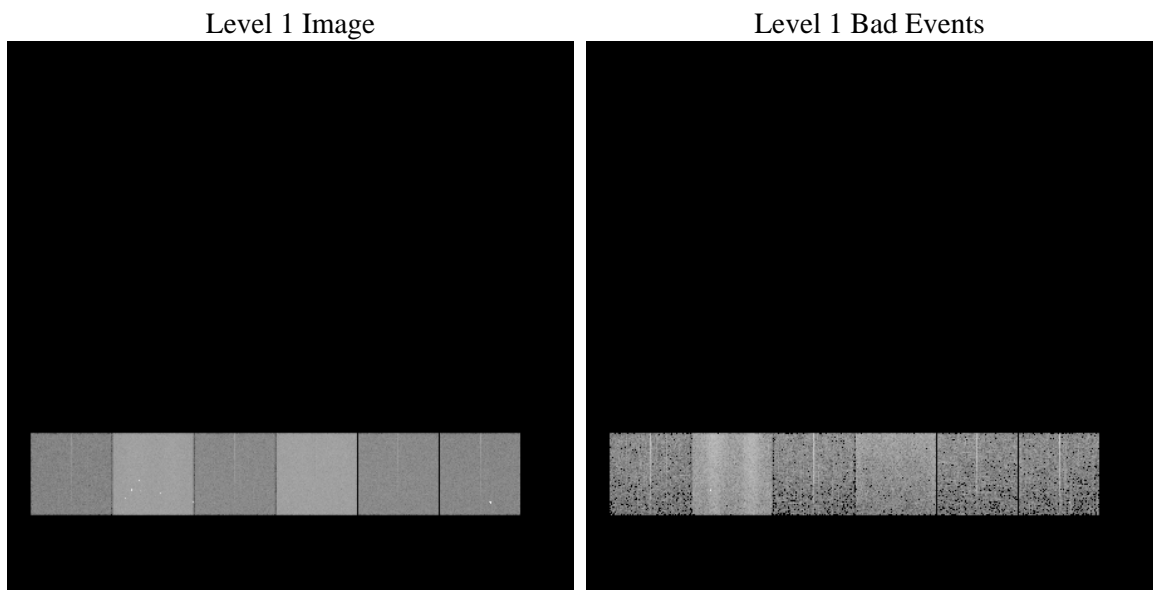
# 1 Front

seq_num	&#160	Sequence number
obs_id	62281	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	163.17198860113	Nominal RA
dec_nom	57.504223660575	Nominal Dec
roll_nom	82.576503043796	Nominal Roll
revision	6	Processing version of data
ontime	2771.0828919411	Sum of GTIs [s]
livetime	2735.9937718175	Livetime [s]
ontime4	1039.625014469	Sum of GTIs [s]
ontime5	2964.8767995909	Sum of GTIs [s]
ontime6	1202.4245457724	Sum of GTIs [s]
ontime7	2771.0828919411	Sum of GTIs [s]
ontime8	1201.6358451247	Sum of GTIs [s]
ontime9	1147.3268357366	Sum of GTIs [s]
l2events	897400	Number of level 2 events

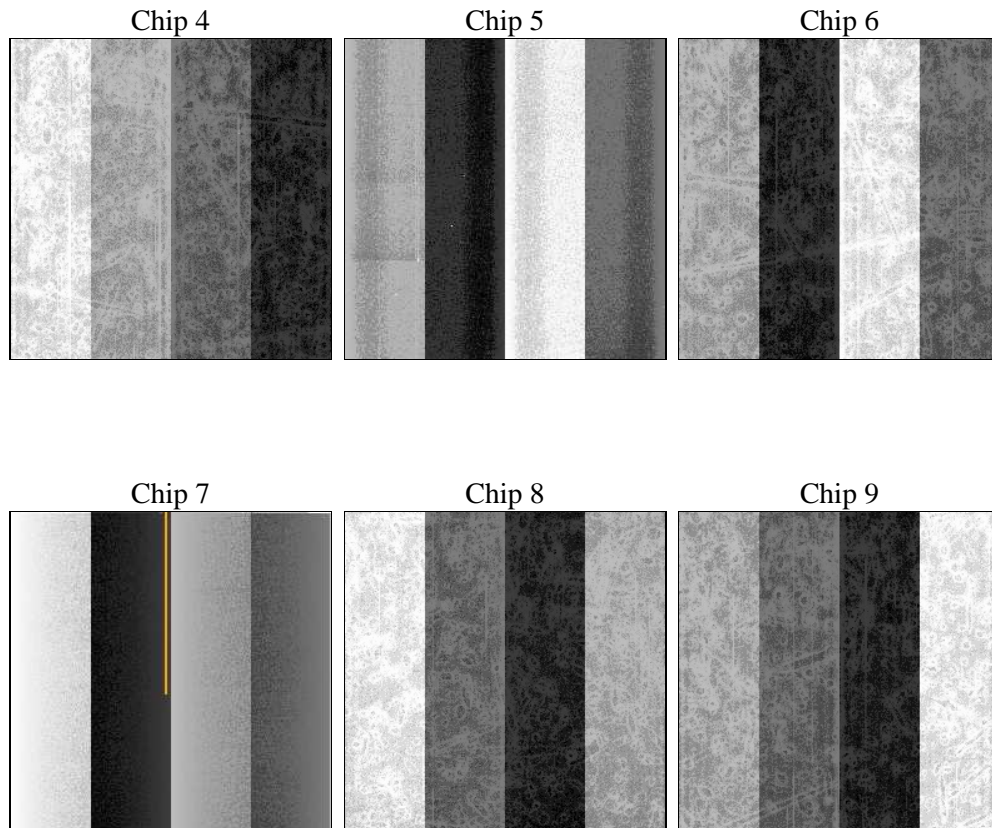
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.4 Events

obi_num	0	Obi number	sched_exp_time	0.0	Scheduled observation exposure time
ascdsver	8.3.2.1	ASCDS version number			
caldsver	4.3.1	&#160			
date	2010-10-20T11:16:27	Date and time of file creation			
revision	3	Processing version of data			
			ontime	2771.0828919411	Sum of GTIs [s]
			ontime4	1039.625014469	Sum of GTIs [s]
			ontime5	2964.8767995909	Sum of GTIs [s]
			ontime6	1202.4245457724	Sum of GTIs [s]
			ontime7	2771.0828919411	Sum of GTIs [s]
			ontime8	1201.6358451247	Sum of GTIs [s]
			ontime9	1147.3268357366	Sum of GTIs [s]
			l1events	1065167	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	104941	287834	128267	292904	130229	120992
rejected events	17788	46823	19129	27687	18483	17549
rejected %	16%	16%	14%	9%	14%	14%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	19970	27845	30442	49728	38754	33701
	19%	9%	23%	16%	29%	27%
grade 1 events	102	265	128	132	155	155
	0%	0%	0%	0%	0%	0%
grade 2 events	46843	93022	50703	73677	44637	44404
	44%	32%	39%	25%	34%	36%
grade 3 events	1957	12856	3144	23013	4202	3121
	1%	4%	2%	7%	3%	2%
grade 4 events	1982	10962	3182	20791	4170	3168
	1%	3%	2%	7%	3%	2%
grade 5 events	857	4911	1071	4123	1186	1023
	0%	1%	0%	1%	0%	0%
grade 6 events	16401	96326	21667	98008	19983	19049
	15%	33%	16%	33%	15%	15%
grade 7 events	16829	41647	17930	23432	17142	16371
	16%	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	163.1719886011295	Alternating exposures requested	N	N
Pointing Dec	0	57.5042236605754	Primary exposure time	3.2	3.2
Pointing Roll	0.0	82.57650304379558			
SIM focus pos (mm)	-0.684267	-1.038866356238299			
SIM defocus (mm)	0	0.4944702831659975			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	60991148.153777	60991147.385025			
Observation start date	1999-12-07T21:59:08	1999-12-07T21:59:07			
Observation end time	61032566.355289	61032565.586524			
Observation end date	1999-12-08T09:29:26	1999-12-08T09:29:25			
Read mode	TIMED	TIMED			

## 2.3 Star Slots

## 2.4 FID Slots

# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.10.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.7710828919411

## A.2 Comments

This observation is missing about 300 s in the middle.

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The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

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.