

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62331 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Nov 20 2009

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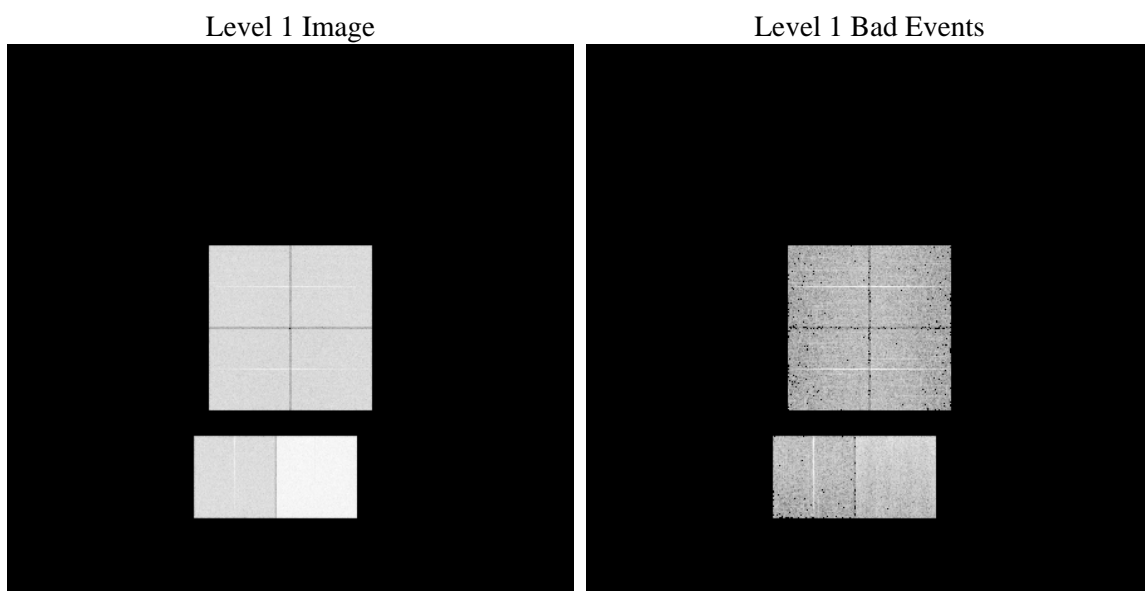
# 1 Front

seq_num	&#160	Sequence number
obs_id	62331	Observation id
title	ACIS-012367 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	101.30696219237	Nominal RA
dec_nom	-16.690618652967	Nominal Dec
roll_nom	70.604557437544	Nominal Roll
revision	4	Processing version of data
ontime	4835.6064547896	Sum of GTIs [s]
livetime	4774.3750942065	Livetime [s]
ontime0	1909.9150517657	Sum of GTIs [s]
ontime1	1934.8995571807	Sum of GTIs [s]
ontime2	1808.4990069345	Sum of GTIs [s]
ontime3	1819.2480913848	Sum of GTIs [s]
ontime6	2019.1665774062	Sum of GTIs [s]
ontime7	4835.6064547896	Sum of GTIs [s]
l2events	1301805	Number of level 2 events

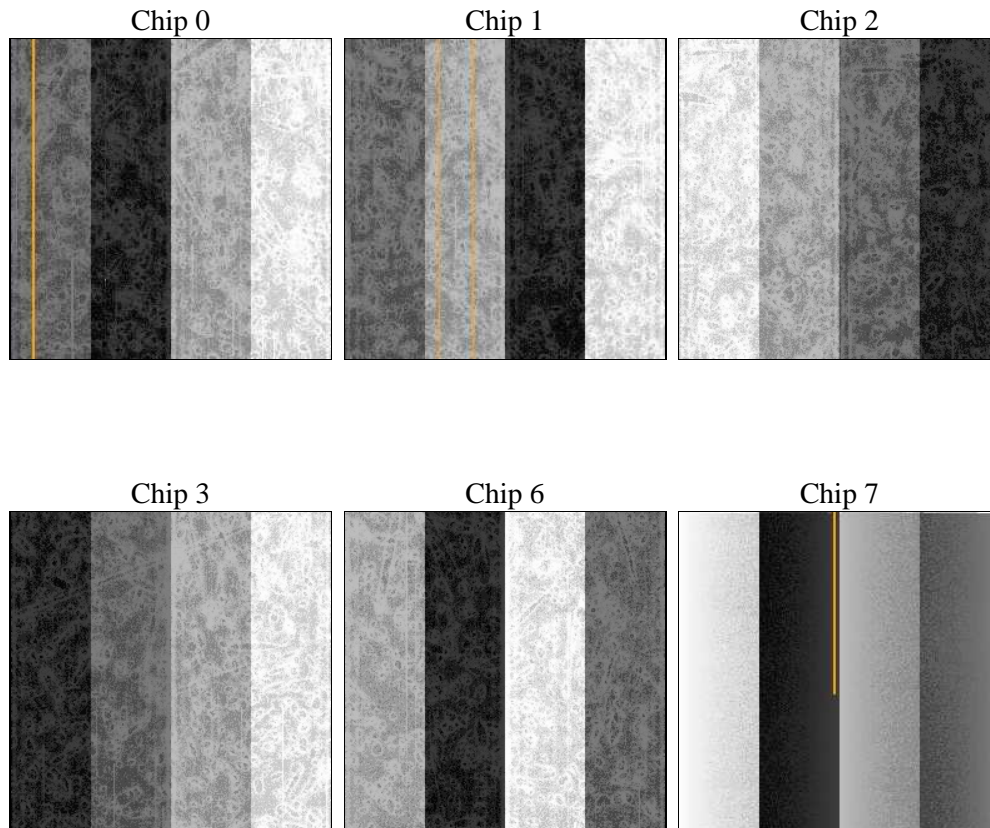
## 2 OBI

### 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	2009-11-20T20:32:35	Date and time of file creation	ontime	4835.6064547896
revision	3	Processing version of data	ontime0	1909.9150517657
			ontime1	1934.8995571807
			ontime2	1808.4990069345
			ontime3	1819.2480913848
			ontime6	2019.1665774062
			ontime7	4835.6064547896
			l1events	1518845
				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 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	199663	201448	189570	192000	217503	518661	grade 0 events	65220	66212	52164	54767	53026	86970
rejected events	29257	28966	28654	29139	33541	53971		32%	32%	27%	28%	24%	16%
rejected %	14%	14%	15%	15%	15%	10%	grade 1 events	263	268	216	252	214	200
								0%	0%	0%	0%	0%	0%
							grade 2 events	63280	63901	70070	69705	85545	131129
								31%	31%	36%	36%	39%	25%
							grade 3 events	6961	7032	5508	5594	5555	40735
								3%	3%	2%	2%	2%	7%
							grade 4 events	7237	7177	5492	5738	5541	37018
								3%	3%	2%	2%	2%	7%
							grade 5 events	1778	1755	1591	1703	1781	7297
								0%	0%	0%	0%	0%	1%
							grade 6 events	29760	30156	29082	28787	36438	173770
								14%	14%	15%	14%	16%	33%
							grade 7 events	25164	24947	25447	25454	29403	41542
								12%	12%	13%	13%	13%	8%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	101.3069621923741	Alternating exposures requested	N	N
Pointing Dec	0	-16.69061865296699	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	70.60455743754353			
SIM focus pos (mm)	-0.782348	-1.508139491973113			
SIM defocus (mm)	0	0.02519714743118384			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	57613024.781	57613024.012966			
Observation start date	1999-10-29T19:37:05	1999-10-29T19:37:04			
Observation end time	57622825.832	57622825.06332			
Observation end date	1999-10-29T22:20:26	1999-10-29T22:20:25			
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	4.8356064547896

## 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 chip (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.