

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62341 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Nov 20 2009

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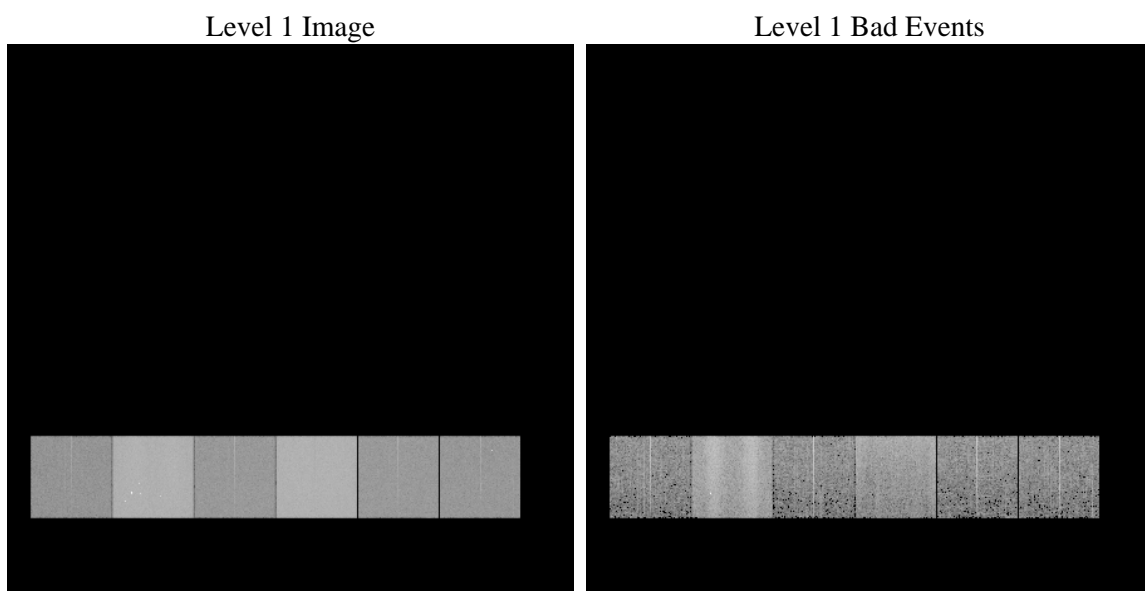
# 1 Front

seq_num	&#160	Sequence number
obs_id	62341	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	270.06558327062	Nominal RA
dec_nom	66.986460425963	Nominal Dec
roll_nom	300.60458591553	Nominal Roll
revision	4	Processing version of data
ontime	3924.8907083273	Sum of GTIs [s]
livetime	3875.191378893	Livetime [s]
ontime4	1468.1897258535	Sum of GTIs [s]
ontime5	4178.2965881526	Sum of GTIs [s]
ontime6	1652.9289164245	Sum of GTIs [s]
ontime7	3924.8907083273	Sum of GTIs [s]
ontime8	1678.8573262617	Sum of GTIs [s]
ontime9	1617.277506277	Sum of GTIs [s]
l2events	1289301	Number of level 2 events

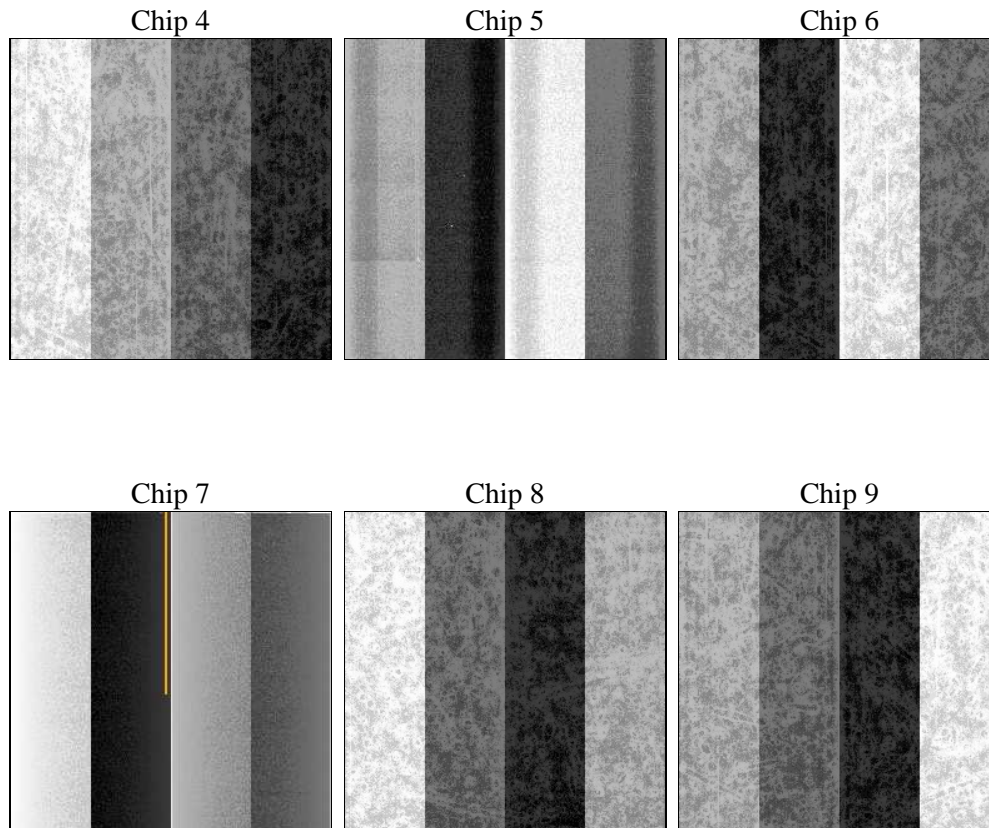
## 2 OBI

### 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	8.1.1	ASCDS version number						
caldsver	4.1.4	&#160						
date	2009-11-20T20:13:51	Date and time of file creation						
revision	3	Processing version of data						
						ontime	3924.8907083273	Sum of GTIs [s]
						ontime4	1468.1897258535	Sum of GTIs [s]
						ontime5	4178.2965881526	Sum of GTIs [s]
						ontime6	1652.9289164245	Sum of GTIs [s]
						ontime7	3924.8907083273	Sum of GTIs [s]
			ontime8	1678.8573262617	Sum of GTIs [s]			
			ontime9	1617.277506277	Sum of GTIs [s]			
			l1events	1517932	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	150473	413719	179032	420815	183347	170546	grade 0 events	29981	37342	42235	67264	56657	45558
rejected events	25177	67800	26276	41682	25651	25056		19%	9%	23%	15%	30%	26%
rejected %	16%	16%	14%	9%	13%	14%	grade 1 events	135	150	187	161	231	228
								0%	0%	0%	0%	0%	0%
							grade 2 events	66500	134371	71623	107082	60991	63244
								44%	32%	40%	25%	33%	37%
							grade 3 events	2953	17899	4356	32656	5862	4821
								1%	4%	2%	7%	3%	2%
							grade 4 events	2967	15534	4436	29134	6071	4745
								1%	3%	2%	6%	3%	2%
							grade 5 events	1289	7103	1538	6074	1621	1521
								0%	1%	0%	1%	0%	0%
							grade 6 events	22895	141022	30106	142997	28115	27122
								15%	34%	16%	33%	15%	15%
							grade 7 events	23753	60298	24551	35447	23799	23307
								15%	14%	13%	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	270.0655832706165	Alternating exposures requested	N	N
Pointing Dec	0	66.98646042596307	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	300.6045859155307			
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	57148857.615	57148856.846224			
Observation start date	1999-10-24T10:40:58	1999-10-24T10:40:56			
Observation end time	57159536.065	57159535.296609			
Observation end date	1999-10-24T13:38:56	1999-10-24T13:38:55			
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	3.9248907083273

## 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.