

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62277 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Nov 25 2009

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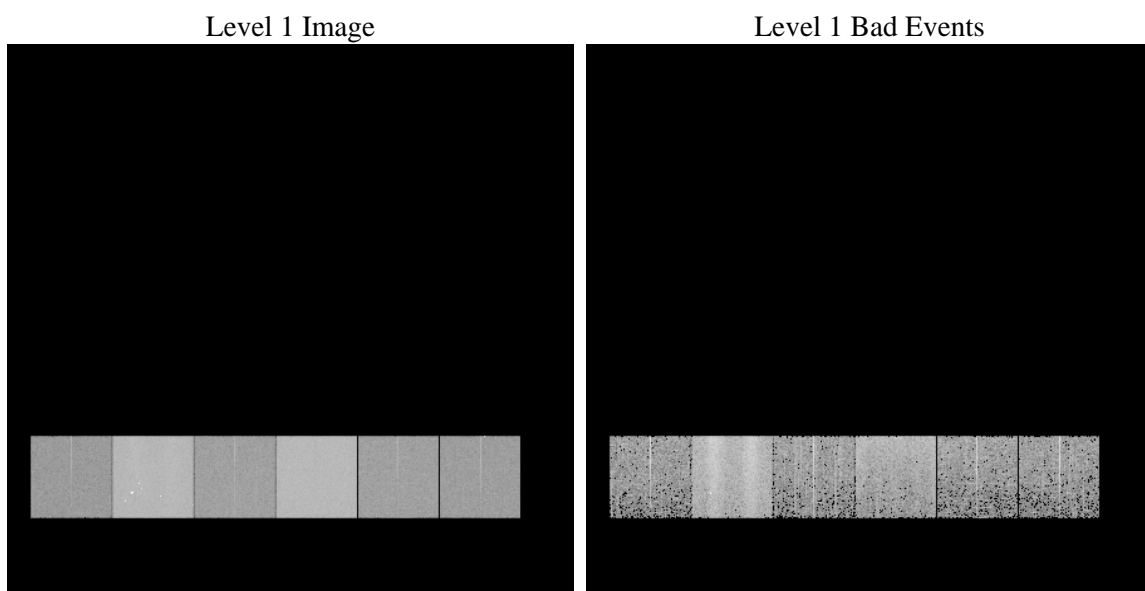
# 1 Front

seq_num	&#160	Sequence number
obs_id	62277	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	0.031328093274258	Nominal RA
dec_nom	59.965717361022	Nominal Dec
roll_nom	270.88093419083	Nominal Roll
revision	4	Processing version of data
ontime	2865.4875025898	Sum of GTIs [s]
livetime	2829.2029744426	Livetime [s]
ontime4	1072.1122409329	Sum of GTIs [s]
ontime5	3037.2606082112	Sum of GTIs [s]
ontime6	1228.7693908364	Sum of GTIs [s]
ontime7	2865.4875025898	Sum of GTIs [s]
ontime8	1221.2411212251	Sum of GTIs [s]
ontime9	1152.9741309434	Sum of GTIs [s]
l2events	896852	Number of level 2 events

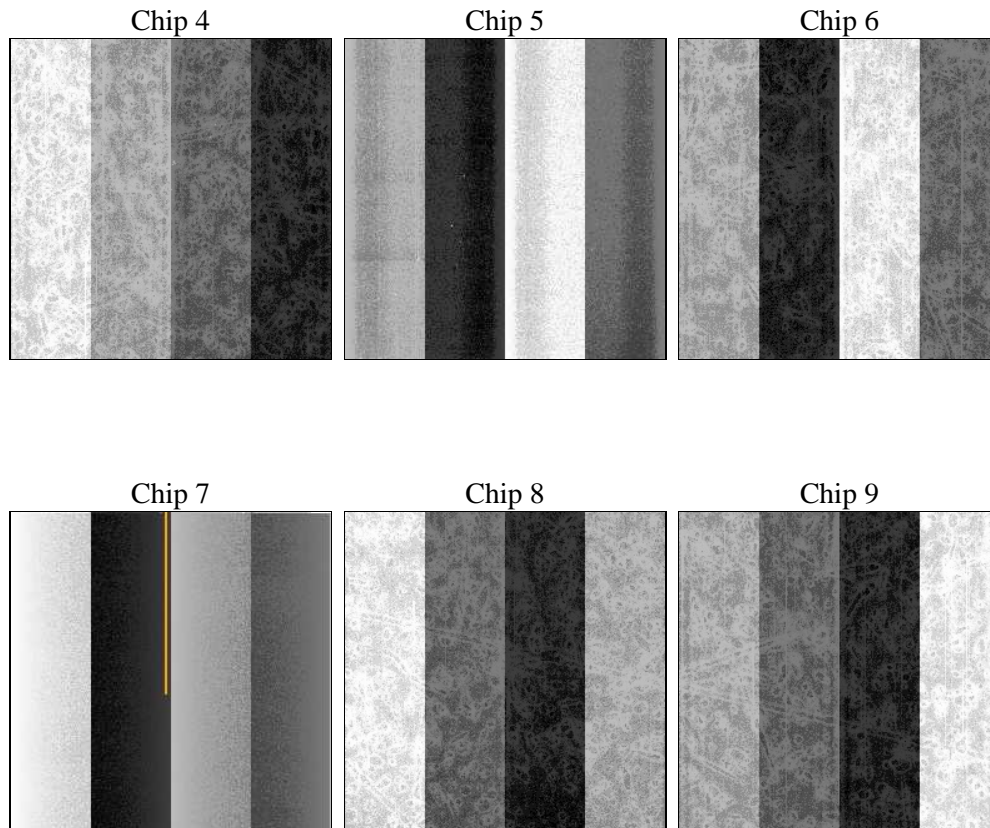
## 2 OBI

### 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	2009-11-25T14:40:58	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	104835	289278	128552	294481	128622	116295
rejected events	17680	46263	19550	28277	18193	17485
rejected %	16%	15%	15%	9%	14%	15%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	19757	29093	30640	49079	38764	30042
	18%	10%	23%	16%	30%	25%
grade 1 events	75	196	116	124	152	142
	0%	0%	0%	0%	0%	0%
grade 2 events	47226	93754	51085	74566	43726	44077
	45%	32%	39%	25%	33%	37%
grade 3 events	1949	12958	3183	23126	4227	3064
	1%	4%	2%	7%	3%	2%
grade 4 events	1970	11050	3114	20911	4156	3155
	1%	3%	2%	7%	3%	2%
grade 5 events	903	4846	1027	4142	1149	1049
	0%	1%	0%	1%	0%	0%
grade 6 events	16253	96414	21284	98838	19556	18472
	15%	33%	16%	33%	15%	15%
grade 7 events	16702	40967	18103	23695	16892	16294
	15%	14%	14%	8%	13%	14%

## 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	0.0313280932742584	Alternating exposures requested	N	N
Pointing Dec	0	59.96571736102219	Primary exposure time	3.2	3.2
Pointing Roll	0.0	270.8809341908344			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	61216756.812017	61216756.043191			
Observation start date	1999-12-10T12:39:17	1999-12-10T12:39:16			
Observation end time	61262857.213306	61262856.444859			
Observation end date	1999-12-11T01:27:37	1999-12-11T01:27:36			
Read mode	TIMED	TIMED			

## 2.3 Star Slots

## 2.4 FID Slots

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2010.01.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.8654875025898

## A.2 Comments

The focal plane temperature is approximately -110C 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.