

# V&V Reference Report

## L2 ASCDS Version : 8.3.2.1

Observation 62537 - L2 Version 5  
Chandra X-Ray Center

L2 Processing Date : Sep 20 2010

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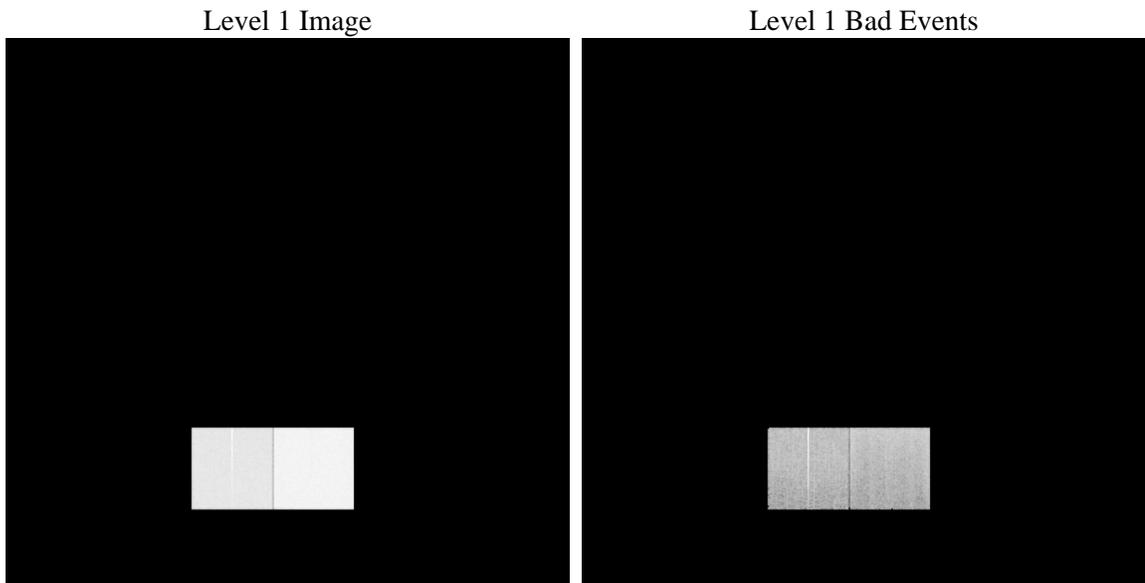
# 1 Front

seq_num	&#160	Sequence number
obs_id	62537	Observation id
title	ACIS-456789 diagnostics; pre radzone CTI	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtycle	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	54.196737510907	Nominal RA
dec_nom	0.59540653427392	Nominal Dec
roll_nom	100.34056273259	Nominal Roll
revision	5	Processing version of data
ontime	8670.9292354062	Sum of GTIs [s]
livetime	8561.1327084207	Livetime [s]
ontime4	4868.0198291913	Sum of GTIs [s]
ontime5	8670.8881954029	Sum of GTIs [s]
ontime6	5591.809453778	Sum of GTIs [s]
ontime7	8670.9292354062	Sum of GTIs [s]
ontime8	5581.0341694281	Sum of GTIs [s]
ontime9	5545.3848529458	Sum of GTIs [s]
l2events	1374462	Number of level 2 events

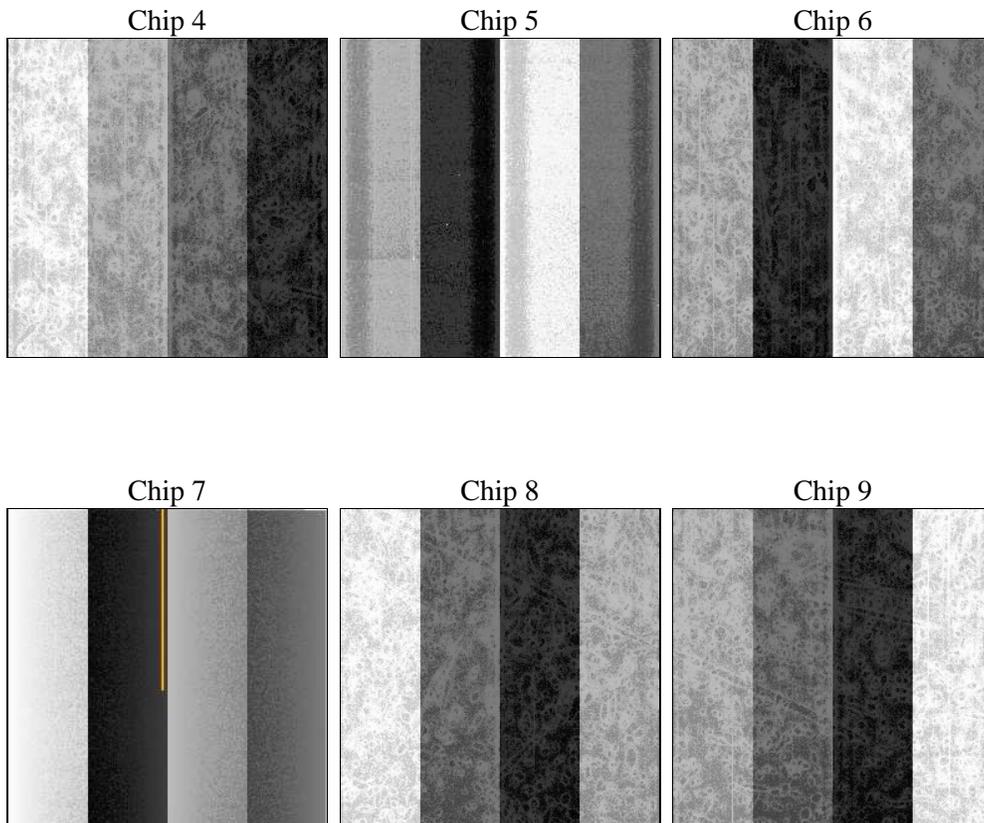
## 2 OBI

### 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	8.3.2.1	ASCDS version number	ontime	8670.9292354062	Sum of GTIs [s]
caldbver	4.3.0	&#160	ontime4	4868.0198291913	Sum of GTIs [s]
date	2010-09-20T15:31:00	Date and time of file creation	ontime5	8670.8881954029	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	5591.809453778	Sum of GTIs [s]
			ontime7	8670.9292354062	Sum of GTIs [s]
			ontime8	5581.0341694281	Sum of GTIs [s]
			ontime9	5545.3848529458	Sum of GTIs [s]
			l1events	1574363	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	616978	957385	0	0
rejected events	0	0	92385	93341	0	0
rejected %	0%	0%	14%	9%	0%	0%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	141077	157542	0	0
	0%	0%	22%	16%	0%	0%
grade 1 events	0	0	591	398	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	252721	242270	0	0
	0%	0%	40%	25%	0%	0%
grade 3 events	0	0	14489	74807	0	0
	0%	0%	2%	7%	0%	0%
grade 4 events	0	0	14426	67753	0	0
	0%	0%	2%	7%	0%	0%
grade 5 events	0	0	5061	13538	0	0
	0%	0%	0%	1%	0%	0%
grade 6 events	0	0	102207	322116	0	0
	0%	0%	16%	33%	0%	0%
grade 7 events	0	0	86406	78961	0	0
	0%	0%	14%	8%	0%	0%

## 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	54.19673751090699	Alternating exposures requested	N	N
Pointing Dec	0	0.5954065342739211	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	100.3405627325937			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.4459185577885			
SIM translation stage offset (mm)	0	0.01005983576618519			
Observation start time	53899320.492	53899319.723939			
Observation start date	1999-09-16T20:02:00	1999-09-16T20:01:59			
Observation end time	53911688.142	53911687.374383			
Observation end date	1999-09-16T23:28:08	1999-09-16T23:28:07			
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)	2010.09.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.6709292354062

## A.2 Comments

Comments for Obi 0

The ACIS focal plane temperature is warmer than -118.7 C degrees during the interval 53902822.12 - 53911500.52 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 C during the interval 53902822.12 - 53911500.52 (MET s) of this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. 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 (e.g., 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.

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A spatial exclusion window was specified for this observation. Although 6 CCD chips were active, only events from chips 6 and 7 were telemetered.

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A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.