

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 62346 - L2 Version 3

Chandra X-Ray Center

L2 Processing Date : Nov 20 2009

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Star Slots	6
2.4	FID Slots	6
A	Summary	7
A.1	Status	7
A.2	Comments	7

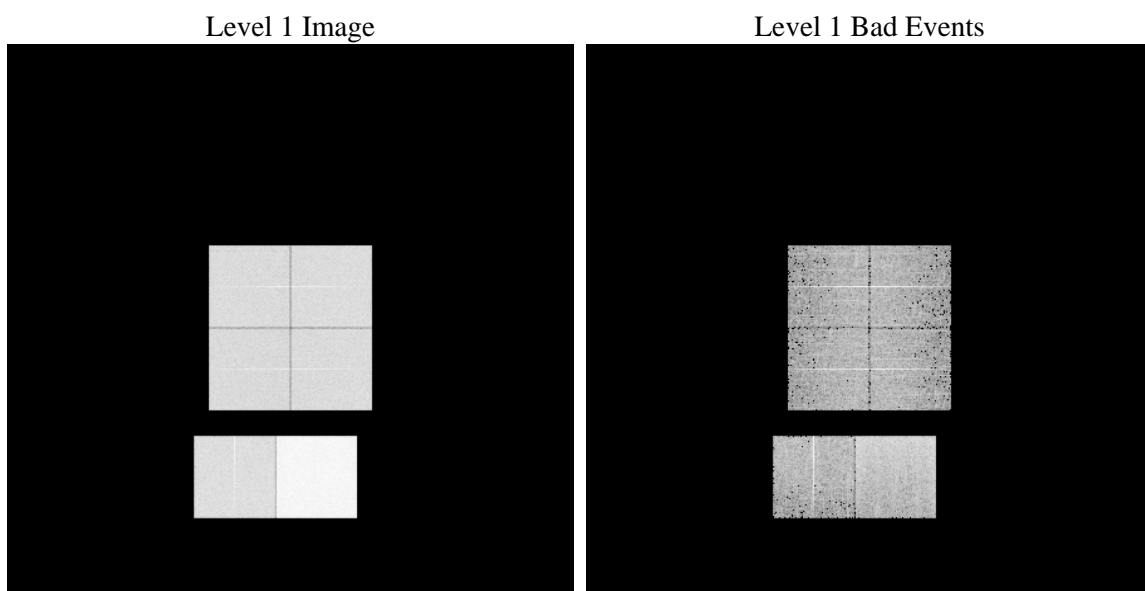
1 Front

seq_num	 	Sequence number
obs_id	62346	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
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	130.33163070561	Nominal RA
dec_nom	70.92328709006	Nominal Dec
roll_nom	71.090016848009	Nominal Roll
revision	3	Processing version of data
ontime	4817.7302472293	Sum of GTIs [s]
livetime	4756.72524595	Livetime [s]
ontime0	1887.0125249326	Sum of GTIs [s]
ontime1	1968.9614824727	Sum of GTIs [s]
ontime2	1802.7454847768	Sum of GTIs [s]
ontime3	1874.0483649075	Sum of GTIs [s]
ontime6	2033.9053228125	Sum of GTIs [s]
ontime7	4817.7302472293	Sum of GTIs [s]
l2events	1315791	Number of level 2 events

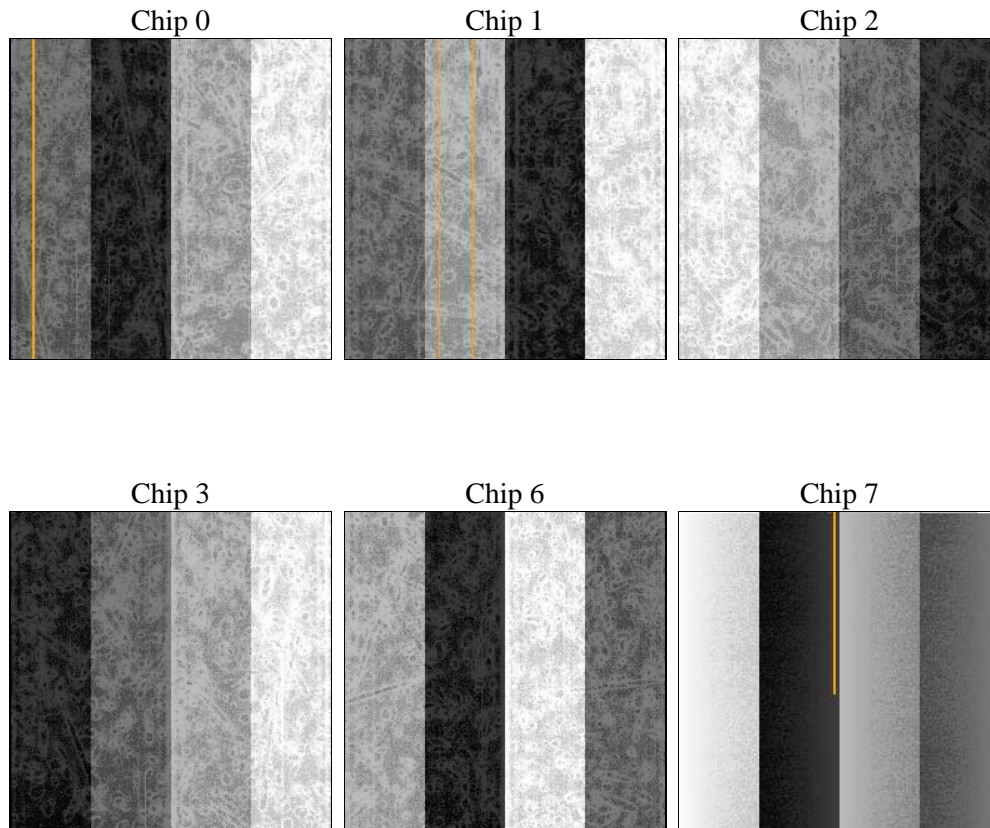
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	<table><tr><td>sched_exp_time</td><td>0.0</td><td>Scheduled observation exposure time</td></tr><tr><td>ontime</td><td>4817.7302472293</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime0</td><td>1887.0125249326</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime1</td><td>1968.9614824727</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime2</td><td>1802.7454847768</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime3</td><td>1874.0483649075</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime6</td><td>2033.9053228125</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime7</td><td>4817.7302472293</td><td>Sum of GTIs [s]</td></tr><tr><td>l1events</td><td>1517914</td><td>Number of level 1 events</td></tr></table>	sched_exp_time	0.0	Scheduled observation exposure time	ontime	4817.7302472293	Sum of GTIs [s]	ontime0	1887.0125249326	Sum of GTIs [s]	ontime1	1968.9614824727	Sum of GTIs [s]	ontime2	1802.7454847768	Sum of GTIs [s]	ontime3	1874.0483649075	Sum of GTIs [s]	ontime6	2033.9053228125	Sum of GTIs [s]	ontime7	4817.7302472293	Sum of GTIs [s]	l1events	1517914	Number of level 1 events
sched_exp_time	0.0	Scheduled observation exposure time																												
ontime	4817.7302472293	Sum of GTIs [s]																												
ontime0	1887.0125249326	Sum of GTIs [s]																												
ontime1	1968.9614824727	Sum of GTIs [s]																												
ontime2	1802.7454847768	Sum of GTIs [s]																												
ontime3	1874.0483649075	Sum of GTIs [s]																												
ontime6	2033.9053228125	Sum of GTIs [s]																												
ontime7	4817.7302472293	Sum of GTIs [s]																												
l1events	1517914	Number of level 1 events																												
ascdsver	8.1.1	ASCDS version number																												
caldsver	4.1.4	 																												
date	2009-11-20T11:07:55	Date and time of file creation																												
revision	3	Processing version of data																												

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	195933	202840	188774	196538	219074	514755
rejected events	26358	25893	27827	27738	31537	48939
rejected %	13%	12%	14%	14%	14%	9%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	64021	66087	51951	56512	52752	85781
	32%	32%	27%	28%	24%	16%
grade 1 events	278	333	222	279	202	194
	0%	0%	0%	0%	0%	0%
grade 2 events	62410	65826	69234	71111	86885	130049
	31%	32%	36%	36%	39%	25%
grade 3 events	6942	7169	5497	5798	5401	40564
	3%	3%	2%	2%	2%	7%
grade 4 events	6763	7142	5426	5950	5314	36695
	3%	3%	2%	3%	2%	7%
grade 5 events	1660	1649	1557	1675	1725	7184
	0%	0%	0%	0%	0%	1%
grade 6 events	29702	30723	28839	29429	37185	173047
	15%	15%	15%	14%	16%	33%
grade 7 events	24157	23911	26048	25784	29610	41241
	12%	11%	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	130.3316307056113	Alternating exposures requested	N	N
Pointing Dec	0	70.9232870900596	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	71.09001684800933			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.7524282956875696			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	56703581.199	56703580.430175			
Observation start date	1999-10-19T06:59:41	1999-10-19T06:59:40			
Observation end time	56713380.199	56713379.430528			
Observation end date	1999-10-19T09:43:00	1999-10-19T09:42:59			
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	4.8177302472293

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.