

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 62227 - L2 Version 4

Chandra X-Ray Center

L2 Processing Date : Dec 2 2009

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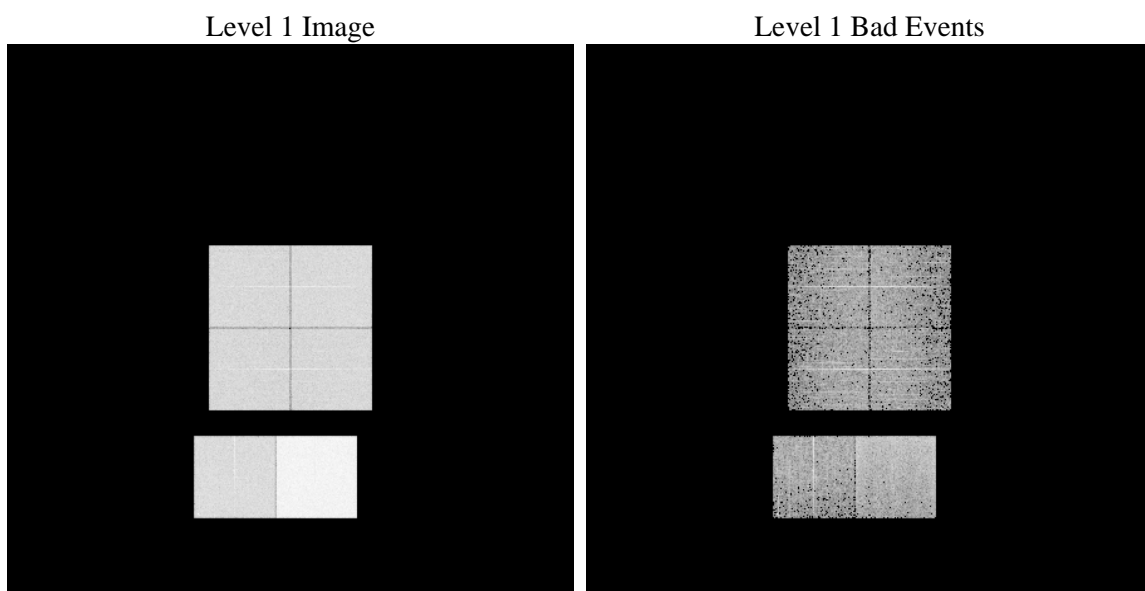
1 Front

seq_num	 	Sequence number
obs_id	62227	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	63.660754833065	Nominal RA
dec_nom	5.5678439586736	Nominal Dec
roll_nom	293.16645764171	Nominal Roll
revision	4	Processing version of data
ontime	3568.363853015	Sum of GTIs [s]
livetime	3523.1790812974	Livetime [s]
ontime0	1413.0598440096	Sum of GTIs [s]
ontime1	1481.1539264619	Sum of GTIs [s]
ontime2	1341.7892560512	Sum of GTIs [s]
ontime3	1351.51237607	Sum of GTIs [s]
ontime6	1539.4925667867	Sum of GTIs [s]
ontime7	3568.363853015	Sum of GTIs [s]
l2events	918180	Number of level 2 events

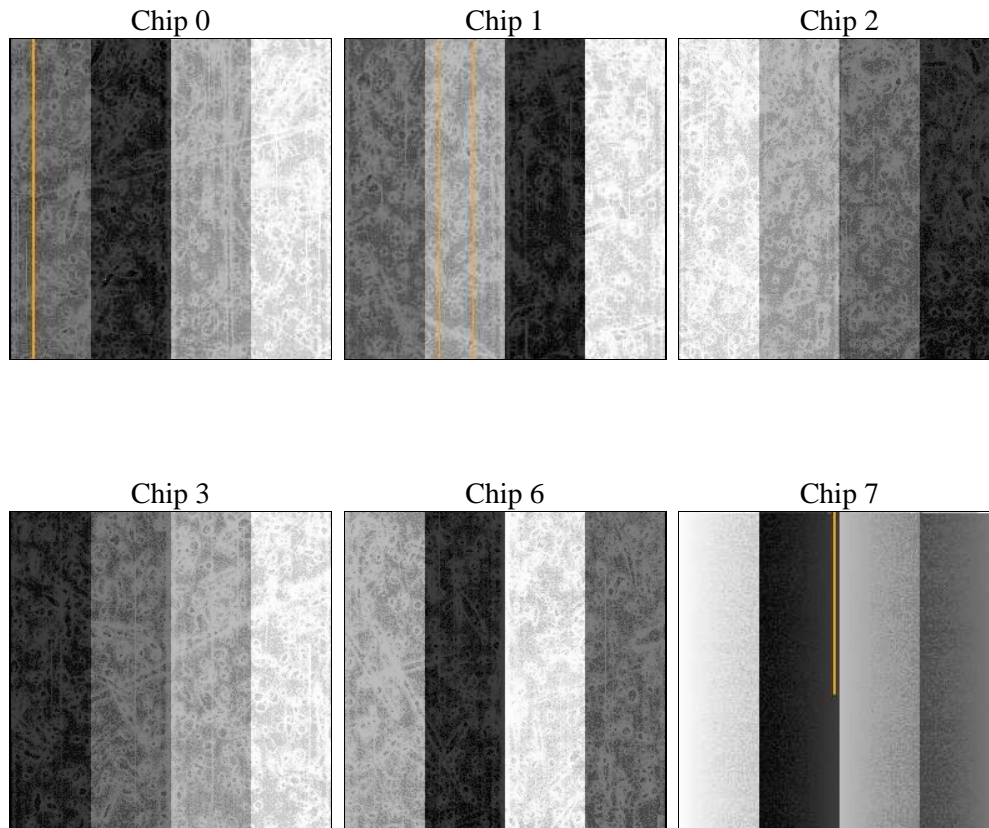
2 OBI

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>3568.363853015</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime0</td><td>1413.0598440096</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime1</td><td>1481.1539264619</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime2</td><td>1341.7892560512</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime3</td><td>1351.51237607</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime6</td><td>1539.4925667867</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime7</td><td>3568.363853015</td><td>Sum of GTIs [s]</td></tr><tr><td>l1events</td><td>1058851</td><td>Number of level 1 events</td></tr></table>	sched_exp_time	0.0	Scheduled observation exposure time	ontime	3568.363853015	Sum of GTIs [s]	ontime0	1413.0598440096	Sum of GTIs [s]	ontime1	1481.1539264619	Sum of GTIs [s]	ontime2	1341.7892560512	Sum of GTIs [s]	ontime3	1351.51237607	Sum of GTIs [s]	ontime6	1539.4925667867	Sum of GTIs [s]	ontime7	3568.363853015	Sum of GTIs [s]	l1events	1058851	Number of level 1 events
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ontime7	3568.363853015	Sum of GTIs [s]																												
l1events	1058851	Number of level 1 events																												
ascdsver	8.1.2	ASCDS version number																												
caldsver	4.1.4	 																												
date	2009-12-02T20:52:00	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	137941	143404	132598	133998	155063	355847
rejected events	18400	18155	19326	19438	22131	33678
rejected %	13%	12%	14%	14%	14%	9%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	43295	44931	35521	37848	36921	59518
	31%	31%	26%	28%	23%	16%
grade 1 events	153	187	160	150	249	138
	0%	0%	0%	0%	0%	0%
grade 2 events	45798	48593	50054	48698	62027	90141
	33%	33%	37%	36%	40%	25%
grade 3 events	4643	4830	3726	3997	3804	27868
	3%	3%	2%	2%	2%	7%
grade 4 events	4656	4744	3543	4137	3927	25286
	3%	3%	2%	3%	2%	7%
grade 5 events	1177	1201	1092	1148	1227	5021
	0%	0%	0%	0%	0%	1%
grade 6 events	21149	22151	20428	19880	26253	119356
	15%	15%	15%	14%	16%	33%
grade 7 events	17070	16767	18074	18140	20655	28519
	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	63.66075483306534	Alternating exposures requested	N	N
Pointing Dec	0	5.567843958673647	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	293.1664576417123			
SIM focus pos (mm)	-0.782348	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	64181085.619	64181084.850634			
Observation start date	2000-01-13T20:04:46	2000-01-13T20:04:44			
Observation end time	64188385.67	64188384.9009			
Observation end date	2000-01-13T22:06:26	2000-01-13T22:06:24			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.568363853015

A.2 Comments

The focal plane temperature is approximately -110 C 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.