

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 62717 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Mar 31 2010

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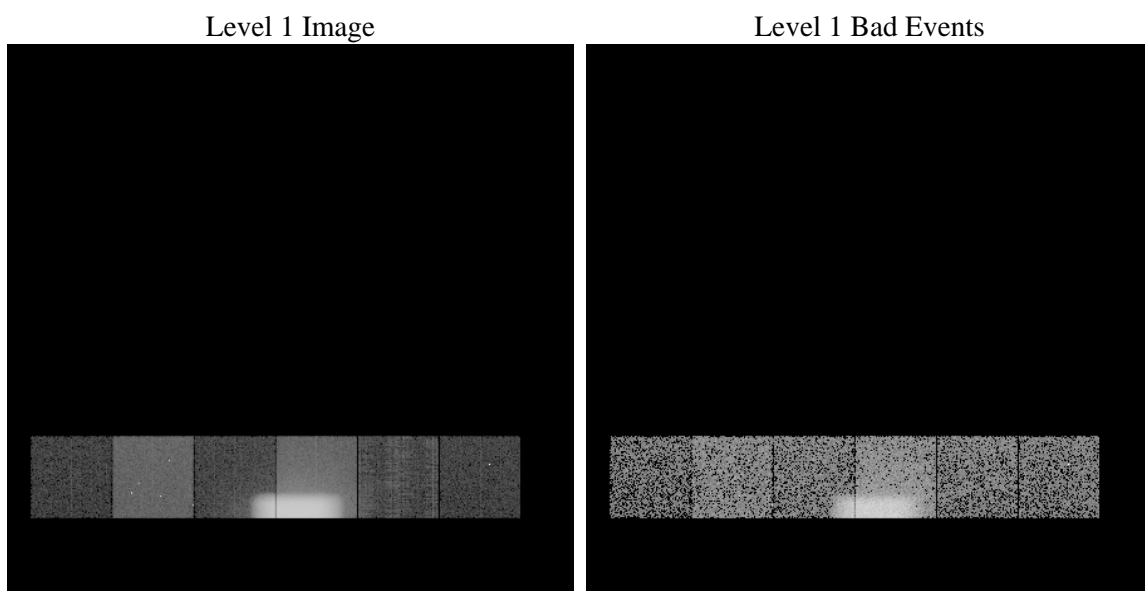
# 1 Front

seq_num	0	Sequence number
obs_id	62717	Observation id
title	ACIS internal cal; slosh test	Proposal title
observer	CHANDRA orbital activation and checkout	Principal investigator
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	224.06607338311	Nominal RA
dec_nom	-9.0520298529081	Nominal Dec
roll_nom	253.44839468874	Nominal Roll
revision	4	Processing version of data
ontime	7068.5180233121	Sum of GTIs [s]
livetime	6981.6911730868	Livetime [s]
ontime4	7071.8576921001	Sum of GTIs [s]
ontime5	7071.8590633124	Sum of GTIs [s]
ontime6	7071.7345720977	Sum of GTIs [s]
ontime7	7068.5180233121	Sum of GTIs [s]
ontime8	7071.8166520968	Sum of GTIs [s]
ontime9	7071.775612101	Sum of GTIs [s]
l2events	621748	Number of level 2 events

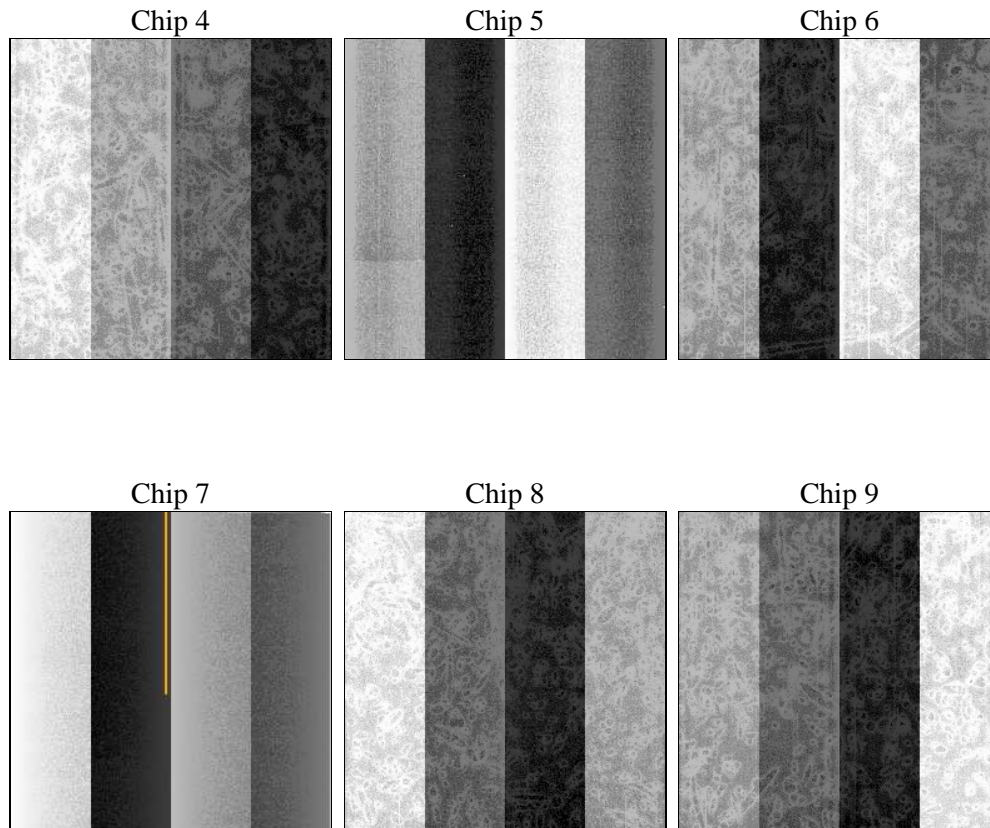
## 2 OBI

### 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>7068.5180233121</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime4</td><td>7071.8576921001</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime5</td><td>7071.8590633124</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime6</td><td>7071.7345720977</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime7</td><td>7068.5180233121</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime8</td><td>7071.8166520968</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime9</td><td>7071.775612101</td><td>Sum of GTIs [s]</td></tr><tr><td>l1events</td><td>704631</td><td>Number of level 1 events</td></tr></table>	sched_exp_time	0.0	Scheduled observation exposure time	ontime	7068.5180233121	Sum of GTIs [s]	ontime4	7071.8576921001	Sum of GTIs [s]	ontime5	7071.8590633124	Sum of GTIs [s]	ontime6	7071.7345720977	Sum of GTIs [s]	ontime7	7068.5180233121	Sum of GTIs [s]	ontime8	7071.8166520968	Sum of GTIs [s]	ontime9	7071.775612101	Sum of GTIs [s]	l1events	704631	Number of level 1 events
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ontime9	7071.775612101	Sum of GTIs [s]																												
l1events	704631	Number of level 1 events																												
ascdsver	8.2.1	ASCDS version number																												
caldsver	4.1.5	&#160																												
date	2010-03-31T19:56:19	Date and time of file creation																												
revision	4	Processing version of data																												

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	18097	69701	102737	460032	30717	23347
rejected events	5131	8625	9432	24801	6682	6102
rejected %	28%	12%	9%	5%	21%	26%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	3409	5189	39222	91510	6234	3269
	18%	7%	38%	19%	20%	14%
grade 1 events	35	157	296	449	56	35
	0%	0%	0%	0%	0%	0%
grade 2 events	2946	14667	17972	102880	5397	6827
	16%	21%	17%	22%	17%	29%
grade 3 events	1253	1022	7034	36367	2373	1321
	6%	1%	6%	7%	7%	5%
grade 4 events	1115	960	6991	35715	2230	1184
	6%	1%	6%	7%	7%	5%
grade 5 events	4716	6803	6521	11974	6108	5594
	26%	9%	6%	2%	19%	23%
grade 6 events	4623	40902	24701	181137	8319	5117
	25%	58%	24%	39%	27%	21%
grade 7 events	0	1	0	0	0	0
	0%	0%	0%	0%	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	OVERRIDE	OVERRIDE
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
Pointing RA	0	224.0660733831104	Alternating exposures requested	N	N
Pointing Dec	0	-9.052029852908136	Primary exposure time	3.3	3.3
Pointing Roll	0.0	253.4483946887417			
SIM focus pos (mm)	0.255451383487682	0.255451383487682			
SIM defocus (mm)	0.9397188504835428	0.9397188504835428			
SIM translation stage pos (mm)	-190.1325231039672	-190.1325231039672			
SIM translation stage offset (mm)	0	0			
Observation start time	50420051.009	50420051.009			
Observation start date	1999-08-07T13:34:11	1999-08-07T13:34:11			
Observation end time	50428800	50428800			
Observation end date	1999-08-07T16:00:00	1999-08-07T15:59:59			
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)	2010.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.0685180233121

## A.2 Comments

This ACIS internal calibration observation was acquired before the ACIS door was open. A reflection of the door is visible in the image.

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Focal plane temperature is warmer than -118.7 C degrees during this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation.