

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 62293 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Nov 25 2009

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>7</b>
A.1	Status . . . . .	7
A.2	Comments . . . . .	7

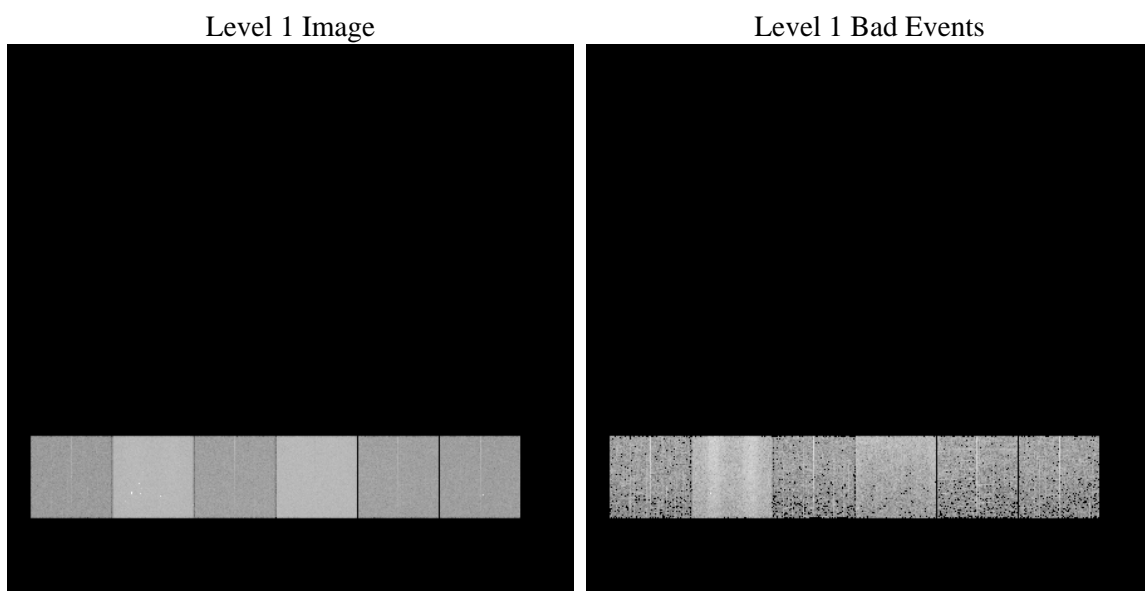
# 1 Front

seq_num	&#160	Sequence number
obs_id	62293	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	85.95367806483	Nominal RA
dec_nom	-68.37308503274	Nominal Dec
roll_nom	19.808007664573	Nominal Roll
revision	4	Processing version of data
ontime	2843.9953018054	Sum of GTIs [s]
livetime	2807.9829208456	Livetime [s]
ontime4	1076.3619403094	Sum of GTIs [s]
ontime5	3035.2550788671	Sum of GTIs [s]
ontime6	1210.6000415385	Sum of GTIs [s]
ontime7	2843.9953018054	Sum of GTIs [s]
ontime8	1200.9590015188	Sum of GTIs [s]
ontime9	1154.1468406022	Sum of GTIs [s]
l2events	903044	Number of level 2 events

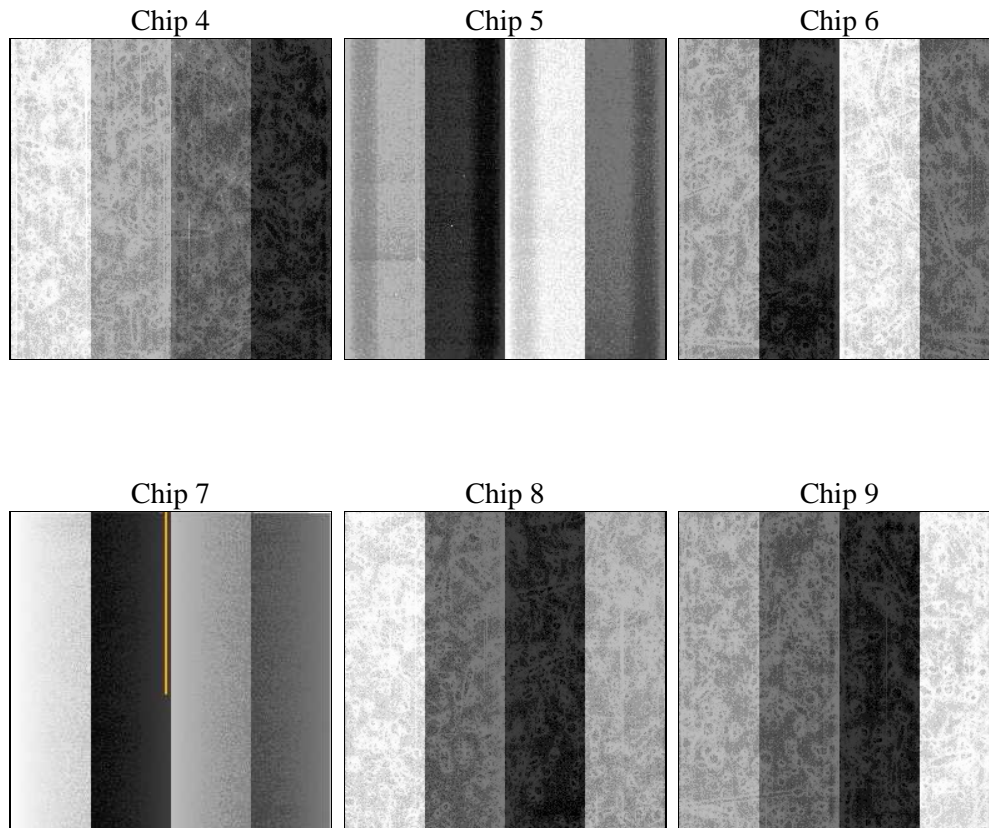
## 2 OBI

### 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>2843.9953018054</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime4</td><td>1076.3619403094</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime5</td><td>3035.2550788671</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime6</td><td>1210.6000415385</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime7</td><td>2843.9953018054</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime8</td><td>1200.9590015188</td><td>Sum of GTIs [s]</td></tr><tr><td>ontime9</td><td>1154.1468406022</td><td>Sum of GTIs [s]</td></tr><tr><td>l1events</td><td>1063738</td><td>Number of level 1 events</td></tr></table>	sched_exp_time	0.0	Scheduled observation exposure time	ontime	2843.9953018054	Sum of GTIs [s]	ontime4	1076.3619403094	Sum of GTIs [s]	ontime5	3035.2550788671	Sum of GTIs [s]	ontime6	1210.6000415385	Sum of GTIs [s]	ontime7	2843.9953018054	Sum of GTIs [s]	ontime8	1200.9590015188	Sum of GTIs [s]	ontime9	1154.1468406022	Sum of GTIs [s]	l1events	1063738	Number of level 1 events
sched_exp_time	0.0	Scheduled observation exposure time																												
ontime	2843.9953018054	Sum of GTIs [s]																												
ontime4	1076.3619403094	Sum of GTIs [s]																												
ontime5	3035.2550788671	Sum of GTIs [s]																												
ontime6	1210.6000415385	Sum of GTIs [s]																												
ontime7	2843.9953018054	Sum of GTIs [s]																												
ontime8	1200.9590015188	Sum of GTIs [s]																												
ontime9	1154.1468406022	Sum of GTIs [s]																												
l1events	1063738	Number of level 1 events																												
ascdsver	8.1.1	ASCDS version number																												
caldsver	4.1.4	&#160																												
date	2009-11-25T08:50:58	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	106706	289772	126758	294797	127927	117778
rejected events	17899	47056	18221	28136	19148	17834
rejected %	16%	16%	14%	9%	14%	15%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	20583	26382	30584	49632	38266	30814
	19%	9%	24%	16%	29%	26%
grade 1 events	96	151	134	132	182	131
	0%	0%	0%	0%	0%	0%
grade 2 events	47730	94973	50396	74677	43149	44512
	44%	32%	39%	25%	33%	37%
grade 3 events	2115	12488	3210	23379	3853	3041
	1%	4%	2%	7%	3%	2%
grade 4 events	2043	10636	3131	20816	4105	3184
	1%	3%	2%	7%	3%	2%
grade 5 events	889	4918	991	3975	1074	1026
	0%	1%	0%	1%	0%	0%
grade 6 events	16336	98237	21216	98470	19406	18686
	15%	33%	16%	33%	15%	15%
grade 7 events	16914	41987	17096	23716	17892	16384
	15%	14%	13%	8%	13%	13%

## 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	85.95367806482982	Alternating exposures requested	N	N
Pointing Dec	0	-68.37308503273955	Primary exposure time	3.2	3.2
Pointing Roll	0.0	19.80800766457309			
SIM focus pos (mm)	-0.684267	-1.428180813131781			
SIM defocus (mm)	0	0.1051558262725154			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	60305457.978792	60305457.21022			
Observation start date	1999-11-29T23:30:58	1999-11-29T23:30:57			
Observation end time	60346759.330294	60346758.561713			
Observation end date	1999-11-30T10:59:19	1999-11-30T10:59:18			
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)	2010.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.8439953018054

## A.2 Comments

This observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period. This reprocessing of the data applies no CTI correction because none is available for that temperature.