

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 60889 - L2 Version <sub>e</sub>1  
Chandra X-Ray Center

L2 Processing Date : Oct 18 2006

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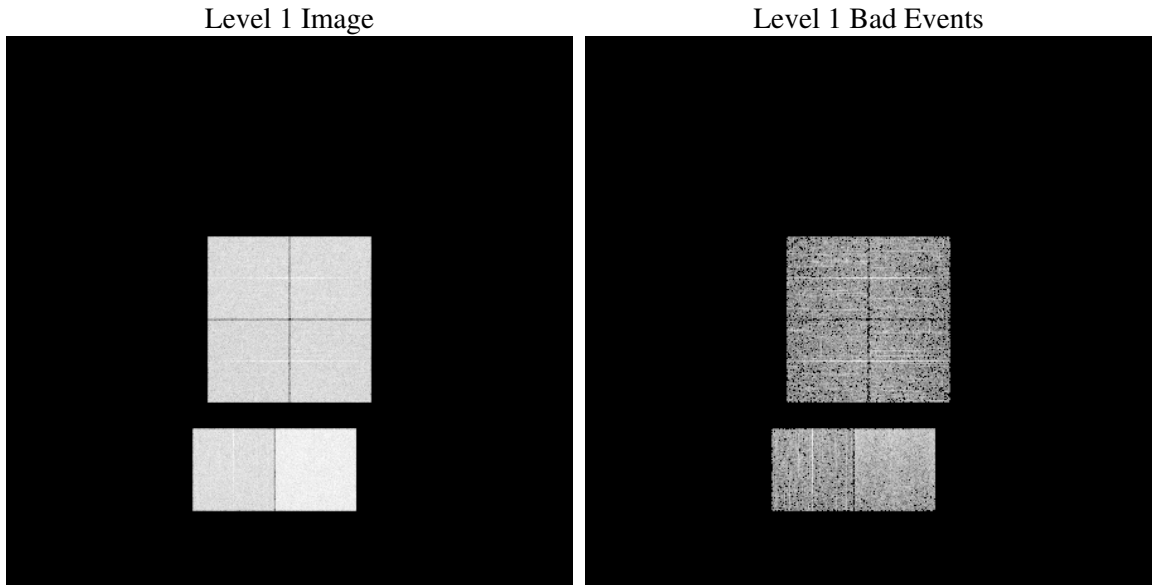
# 1 Front

seq_num	&#160
obs_id	60889
title	ACIS-012367 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	&#160
dtcycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	159.99733196488
dec_nom	0.028458186770589
roll_nom	62.437136254853
revision	2
ontime	4210.7971295714
livetime	4168.0331098642
ontime0	2582.3747348189
ontime1	2647.0313748717
ontime2	2356.0418480635
ontime3	2440.8626481295
ontime6	2630.7170421481
ontime7	4210.7971295714
l2events	697647

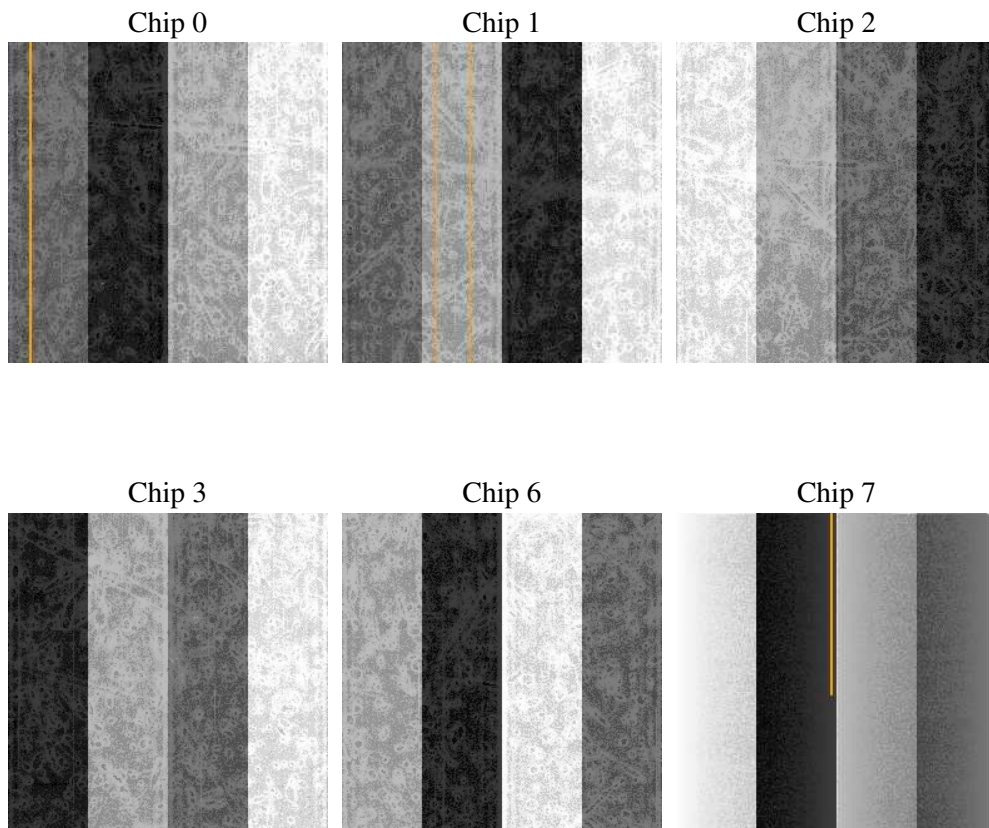
## 2 OBI Primary

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-19T01:32:21
revision	2

sched_exp_time	0.0
ontime	4214.8047234416
ontime0	2586.2656021118
ontime1	2650.9222421646
ontime2	2359.967361927
ontime3	2444.8292019963
ontime6	2634.7580821514
ontime7	4214.8047234416
l1events	839079

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	125706	128705	116530	121545	136196	210397
rejected events	16112	16080	15554	16601	18128	26577
rejected %	12%	12%	13%	13%	13%	12%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	60532	61990	57127	59223	64150	34417
	48%	48%	49%	48%	47%	16%
grade 1 events	359	374	363	365	370	95
	0%	0%	0%	0%	0%	0%
grade 2 events	19130	19920	16914	17752	20441	55369
	15%	15%	14%	14%	15%	26%
grade 3 events	7095	7178	6332	6843	7351	13874
	5%	5%	5%	5%	5%	6%
grade 4 events	7098	7142	6610	6961	7314	13720
	5%	5%	5%	5%	5%	6%
grade 5 events	1160	1229	1136	1181	1367	3608
	0%	0%	0%	0%	1%	1%
grade 6 events	15933	16565	14160	14364	18989	66642
	12%	12%	12%	11%	13%	31%
grade 7 events	14399	14307	13888	14856	16214	22672
	11%	11%	11%	12%	11%	10%

## 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	159.9973319648772	Alternating exposures requested	N	Y
Pointing Dec	0	0.02845818677058873	Primary exposure time	0.000000	4
Pointing Roll	0.0	62.43713625485261	Secondary exposure time	N/A	3.2
SIM focus pos (mm)	-0.782348	-0.6828225247311905	Duty cycle	N/A	1
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	158318311.415074	158318310.39035			
Observation start date	2003-01-07T09:18:31	2003-01-07T09:18:30			
Observation end time	158353142.966531	158353141.94181			
Observation end date	2003-01-07T18:59:03	2003-01-07T18:59:01			
Read mode	TIMED	TIMED			

## 2.3 Aspect



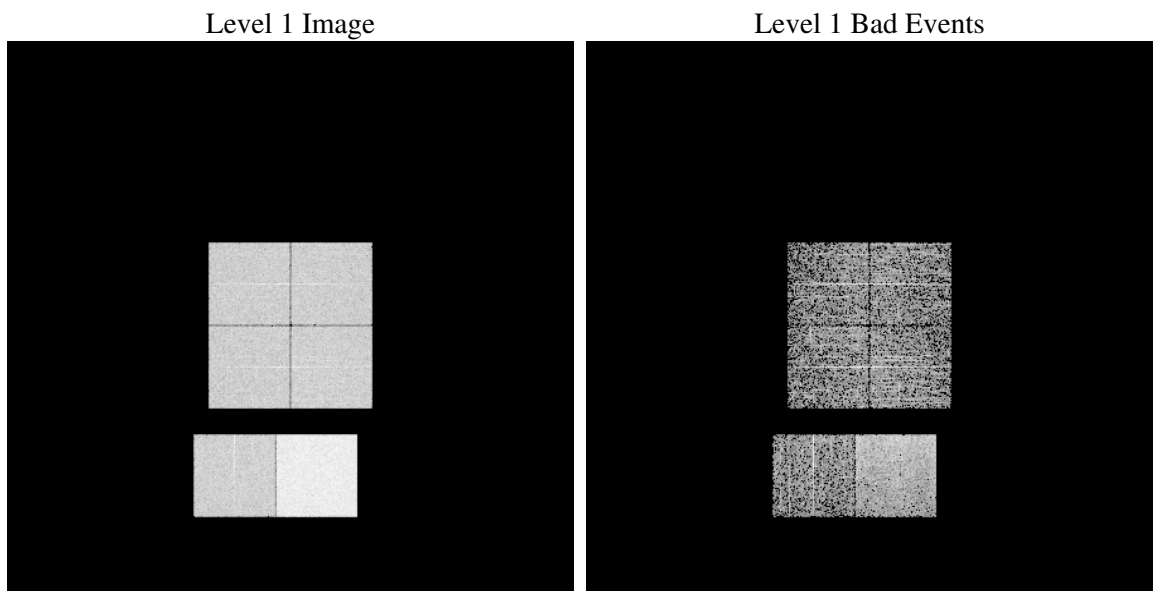
## 2.4 Star Slots

## 2.5 FID Slots

# 3 OBI Secondary

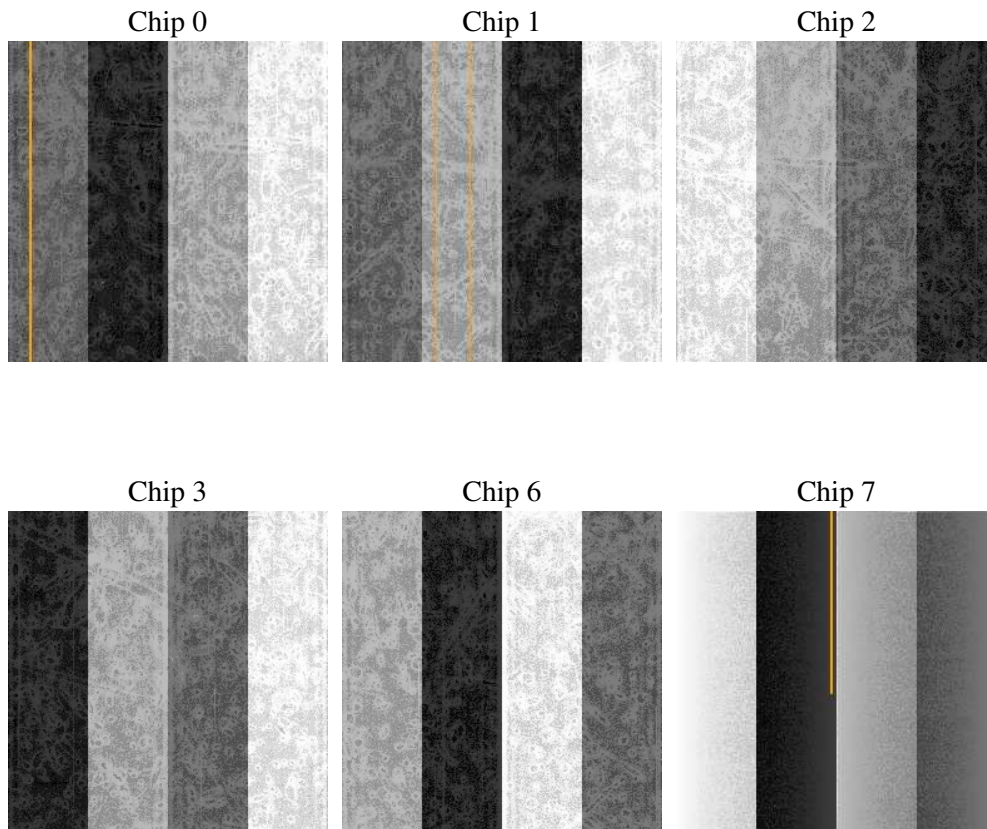
## 3.1 OBI

### 3.1.1 Images



### 3.1.2 Bias





### 3.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-19T01:44:25
revision	2

sched_exp_time	0.0
ontime	3383.6457509995
ontime0	1571.9043958187
ontime1	1529.7708759308
ontime2	1526.5298359394
ontime3	1584.8685557842
ontime6	1565.422315836
ontime7	3383.6457509995
l1events	563509

### 3.1.4 Events

	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>
level 1 events	77083	76789	77058	80883	81719	169977
rejected events	9917	10928	10935	11717	11269	22567
rejected %	12%	14%	14%	14%	13%	13%

	<b>ccd 0</b>	<b>ccd 1</b>	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>
grade 0 events	37145	36370	37353	39096	38587	26986
	48%	47%	48%	48%	47%	15%
grade 1 events	206	161	225	209	186	53
	0%	0%	0%	0%	0%	0%
grade 2 events	11801	11727	11018	11887	12169	44394
	15%	15%	14%	14%	14%	26%
grade 3 events	4304	4151	4380	4418	4381	11009
	5%	5%	5%	5%	5%	6%
grade 4 events	4348	4055	4229	4493	4275	10910
	5%	5%	5%	5%	5%	6%
grade 5 events	765	742	663	783	754	3091
	0%	0%	0%	0%	0%	1%
grade 6 events	9704	9681	9261	9448	11173	54228
	12%	12%	12%	11%	13%	31%
grade 7 events	8810	9902	9929	10549	10194	19306
	11%	12%	12%	13%	12%	11%

## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.59120184

### A.2 Comments

The ACIS focal plane temperature was above calibration limits for the entire observation.