

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 59433 - L2 Version 002  
Chandra X-Ray Center

L2 Processing Date : Mar 26 2006

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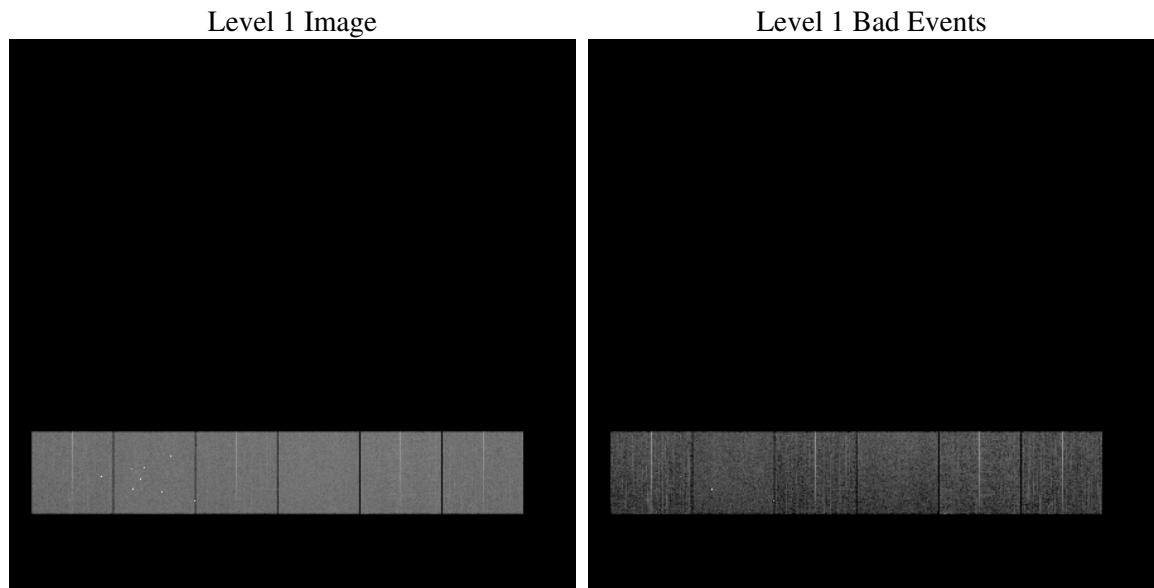
# 1 Front

seq_num	&#160
obs_id	59433
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	&#160
dtycycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	349.98236241535
dec_nom	29.275912871538
roll_nom	204.50907776859
revision	2
ontime	8284.7999691367
livetime	8179.8928434199
ontime4	7895.8823730946
ontime5	8284.7999691367
ontime6	8207.0164718032
ontime7	8284.7999691367
ontime8	8275.0770282745
ontime9	8067.6543086767
l2events	1045064

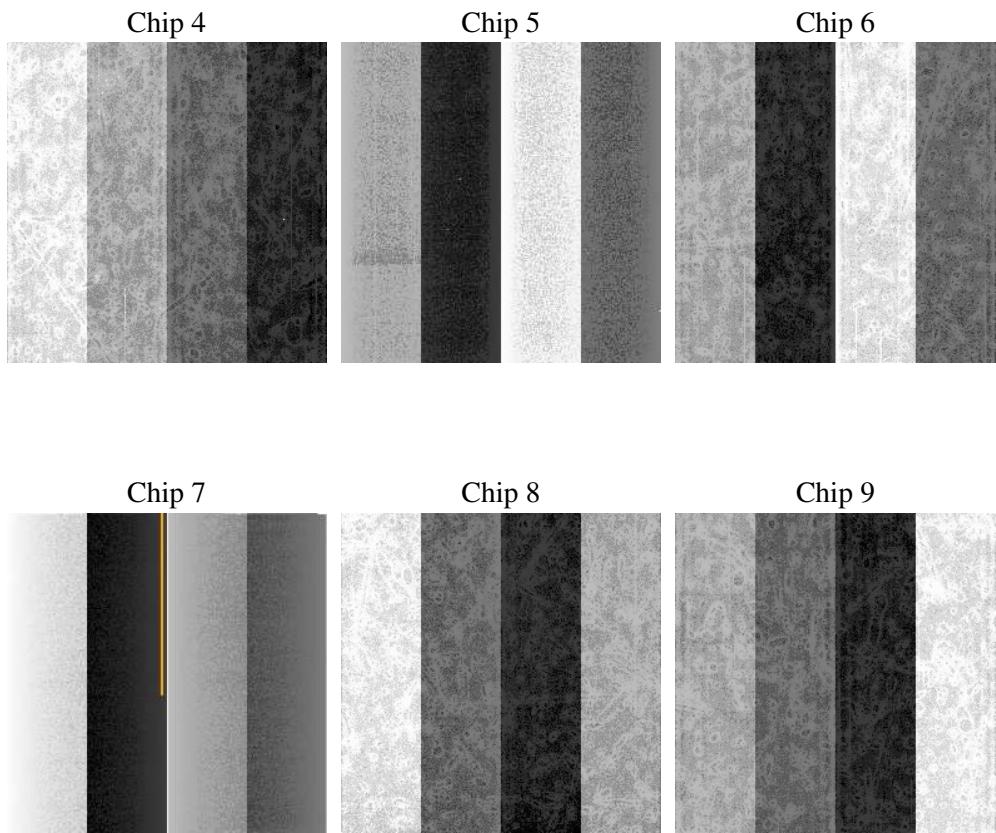
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-26T08:17:01
revision	2

sched_exp_time	0.0
ontime	8287.2592810094
ontime4	7898.3416849673
ontime5	8287.2592810094
ontime6	8209.4757836759
ontime7	8287.2592810094
ontime8	8277.5363401473
ontime9	8070.1136205494
l1events	1482956

### 2.1.4 Events

	<b>ccd 4</b>	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>	<b>ccd 9</b>
level 1 events	230695	253543	244669	255094	262480	236475
rejected events	59214	62636	55505	57896	64243	57911
rejected %	25%	24%	22%	22%	24%	24%

	<b>ccd 4</b>	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>	<b>ccd 9</b>
grade 0 events	100364	25283	102543	32306	106797	97929
	43%	9%	41%	12%	40%	41%
grade 1 events	703	127	470	90	567	520
	0%	0%	0%	0%	0%	0%
grade 2 events	26759	86047	32799	60110	35165	30732
	11%	33%	13%	23%	13%	12%
grade 3 events	11537	5563	11785	13629	12988	11593
	5%	2%	4%	5%	4%	4%
grade 4 events	11163	5527	11670	13399	12969	11448
	4%	2%	4%	5%	4%	4%
grade 5 events	3365	6445	3568	6676	4567	3909
	1%	2%	1%	2%	1%	1%
grade 6 events	21658	68487	30367	77754	30318	26862
	9%	27%	12%	30%	11%	11%
grade 7 events	55146	56064	51467	51130	59109	53482
	23%	22%	21%	20%	22%	22%

## 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	349.982362415346	Alternating exposures requested	N	N
Pointing Dec	0	29.27591287153844	Primary exposure time	3.2	3.2
Pointing Roll	0.0	204.5090777685883			
SIM focus pos (mm)	-0.684267	-0.7809083437167272			
SIM defocus (mm)	0	0.7524282956875696			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	244027667.189228	244027666.16421			
Observation start date	2005-09-25T09:27:47	2005-09-25T09:27:46			
Observation end time	244050085.990261	244050084.96524			
Observation end date	2005-09-25T15:41:26	2005-09-25T15:41:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect



## **2.4 Star Slots**

## **2.5 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.28479996

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. GOs should subtract 1.3 degrees from the reported temperature to determine the true temperature. In addition the FP temperature was not regulating during this period. The FP temperature fluctuated between -121.3 C and -118.8 C during this time. For analysis of line-dominated spectra from the FI CCDs, GOs might notice a systematic gain shift by up to 0.5%, either towards higher/lower energies depending on if the FP temperature was colder/warmer than -119.7 C. Analysis of line-dominated spectra on S3 are mostly unaffected (where mostly unaffected means that the changes are smaller than the current uncertainties in the calibration). Analysis of continuum-dominated spectra on both the FI and BI CCDs are mostly unaffected. Imaging analysis on both the FI and BI CCDs are mostly unaffected.