

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 59435 - L2 Version 002  
Chandra X-Ray Center

L2 Processing Date : Mar 26 2006

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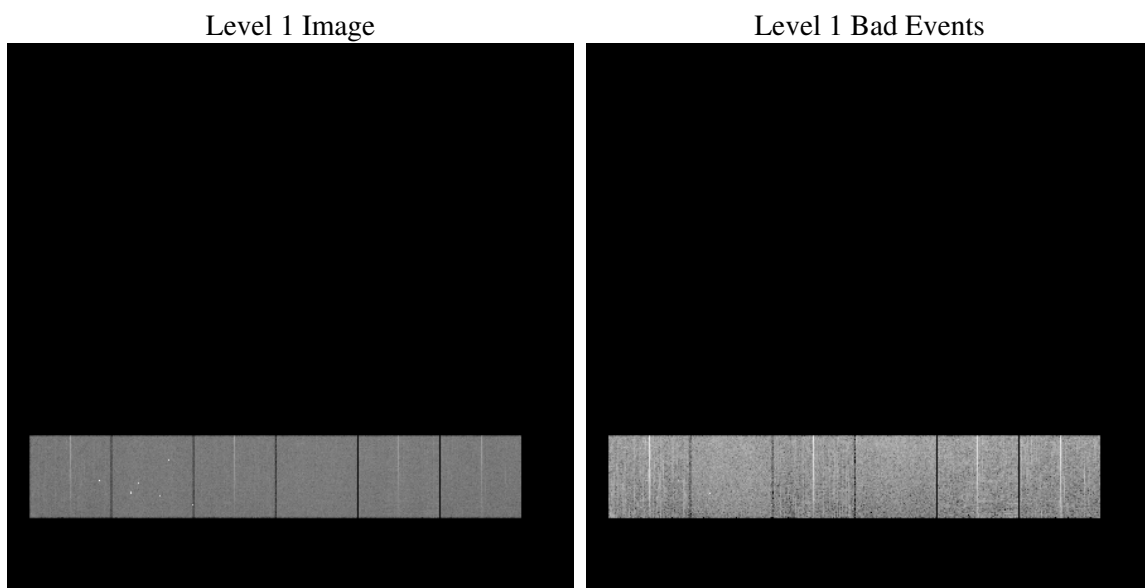
# 1 Front

seq_num	&#160
obs_id	59435
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	&#160
dtcycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	339.97607916649
dec_nom	23.972405918243
roll_nom	225.33434534232
revision	2
ontime	7800.1699087024
livetime	7701.3994606199
ontime4	7605.8336510658
ontime5	7800.2109487057
ontime6	7800.251988709
ontime7	7800.1699087024
ontime8	7800.3340686858
ontime9	7767.7189757228
l2events	989885

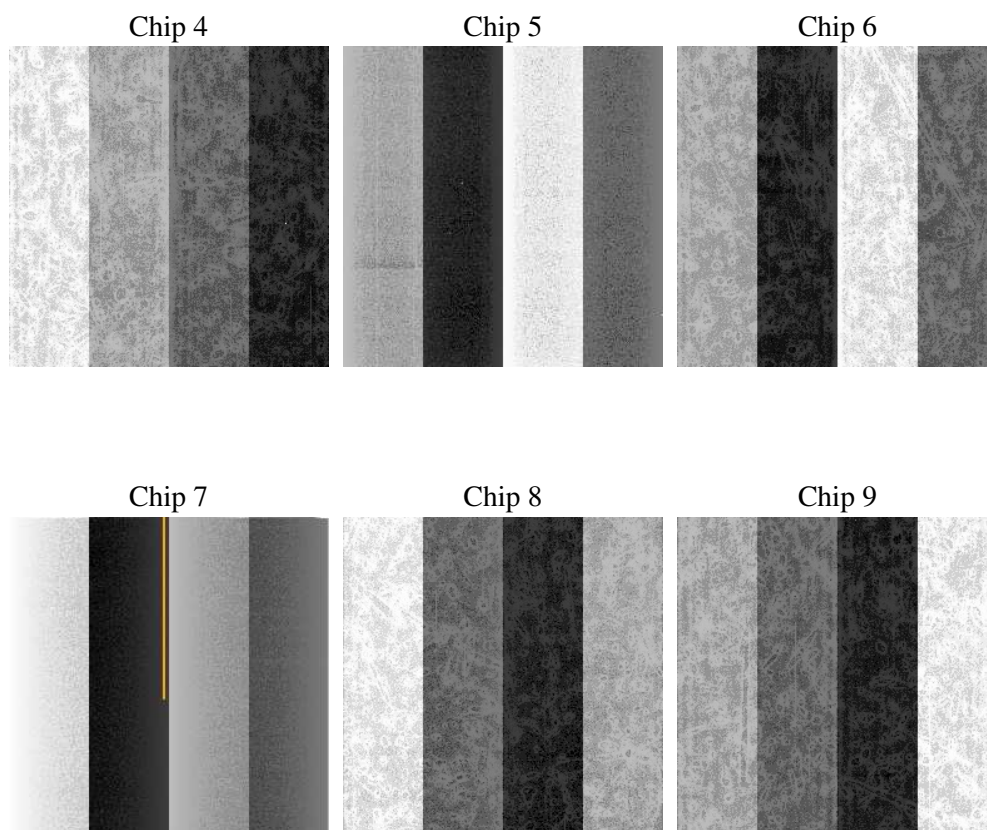
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-26T08:15:47
revision	2

sched_exp_time	0.0
ontime	7801.1221686304
ontime4	7606.6627909839
ontime5	7801.1221686304
ontime6	7801.1221686304
ontime7	7801.1221686304
ontime8	7801.1221686304
ontime9	7768.7122756541
l1events	1395670

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	221613	233343	232377	239780	242935	225622
rejected events	58250	56558	53347	53914	57476	54162
rejected %	26%	24%	22%	22%	23%	24%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	95716	22590	97251	31250	100667	94315
	43%	9%	41%	13%	41%	41%
grade 1 events	693	341	483	93	460	501
	0%	0%	0%	0%	0%	0%
grade 2 events	25557	80908	30931	56415	32422	29395
	11%	34%	13%	23%	13%	13%
grade 3 events	10760	5249	11136	13113	12142	10966
	4%	2%	4%	5%	4%	4%
grade 4 events	10782	5295	11355	12775	12017	11074
	4%	2%	4%	5%	4%	4%
grade 5 events	3113	5427	3512	6304	4131	3652
	1%	2%	1%	2%	1%	1%
grade 6 events	20548	62743	28357	72313	28211	25710
	9%	26%	12%	30%	11%	11%
grade 7 events	54444	50790	49352	47517	52885	50009
	24%	21%	21%	19%	21%	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	339.9760791664909	Alternating exposures requested	N	N
Pointing Dec	0	23.97240591824322	Primary exposure time	3.2	3.2
Pointing Roll	0.0	225.3343453423228			
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	243986466.287331	243986465.26231			
Observation start date	2005-09-24T22:01:06	2005-09-24T22:01:05			
Observation end time	244006679.288262	244006678.26324			
Observation end date	2005-09-25T03:37:59	2005-09-25T03:37:58			
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	7.8001699

## A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the 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.