

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 61935 - L2 Version 001  
Chandra X-Ray Center

L2 Processing Date : Jun 7 2007

## 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

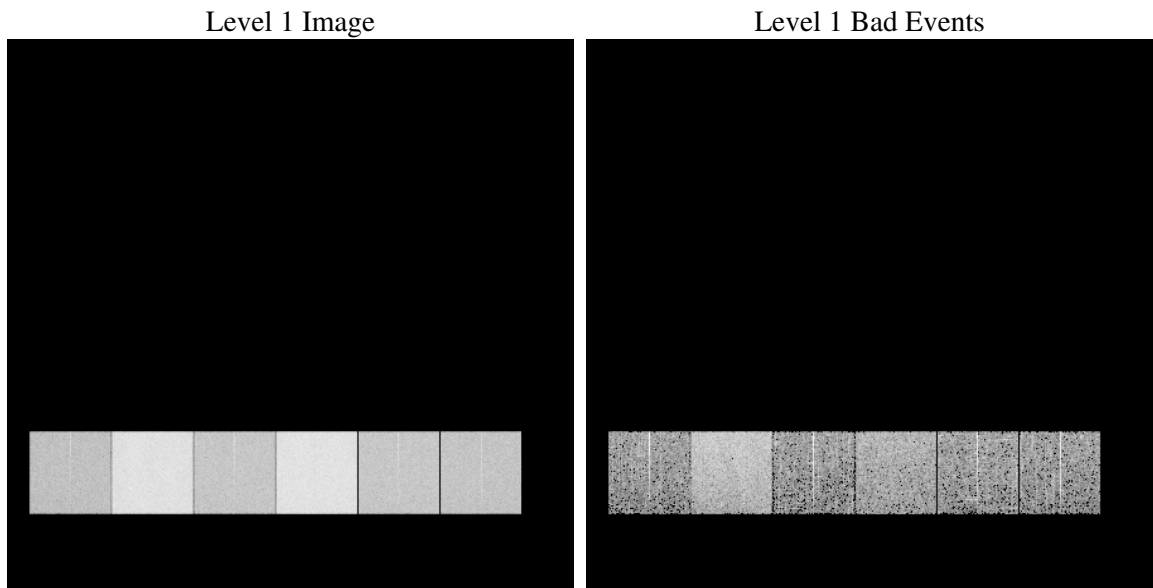
# 1 Front

seq_num	&#160
obs_id	61935
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	22.399637674954
dec_nom	26.689466241984
roll_nom	128.16243680602
revision	2
ontime	4878.6330442578
livetime	4816.8568550912
ontime4	2045.9849362224
ontime5	5274.0305218548
ontime6	2251.6689944416
ontime7	4878.6330442578
ontime8	2261.4740448743
ontime9	2175.6264262199
l2events	1363319

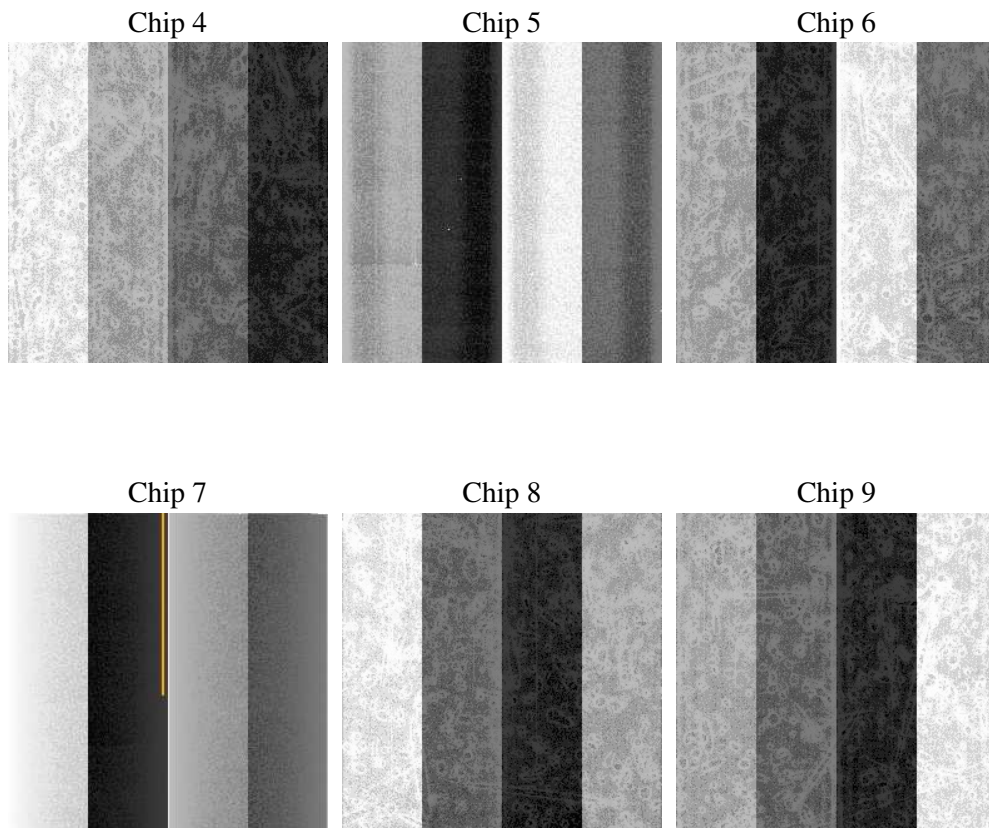
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldbver	3.4.0
date	2007-06-07T04:00:44
revision	2

sched_exp_time	0.0
ontime	4878.6330442578
ontime4	2045.9849362224
ontime5	5274.0305218548
ontime6	2251.6689944416
ontime7	4878.6330442578
ontime8	2261.4740448743
ontime9	2175.6264262199
l1events	1555471

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	168116	394736	197705	408999	200975	184940
rejected events	17843	38935	17771	23926	19030	17480
rejected %	10%	9%	8%	5%	9%	9%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	84516	84262	98334	98674	100661	91772
	50%	21%	49%	24%	50%	49%
grade 1 events	456	260	478	245	460	443
	0%	0%	0%	0%	0%	0%
grade 2 events	27563	131246	31128	84737	32152	29704
	16%	33%	15%	20%	15%	16%
grade 3 events	8921	22275	10999	39624	11189	10479
	5%	5%	5%	9%	5%	5%
grade 4 events	8868	21661	10933	39230	11335	10283
	5%	5%	5%	9%	5%	5%
grade 5 events	1292	7892	1509	5473	1511	1414
	0%	1%	0%	1%	0%	0%
grade 6 events	20405	96357	28540	122808	26608	25222
	12%	24%	14%	30%	13%	13%
grade 7 events	16095	30783	15784	18208	17059	15623
	9%	7%	7%	4%	8%	8%

## 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	22.39963767495392	Alternating exposures requested	N	N
Pointing Dec	0	26.6894662419841	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	128.1624368060218			
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	84795624.03200001	84795623.26320601			
Observation start date	2000-09-08T10:20:24	2000-09-08T10:20:23			
Observation end time	84806132.332	84806131.563601			
Observation end date	2000-09-08T13:15:32	2000-09-08T13:15:31			
Read mode	TIMED	TIMED			

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.87863304

## A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for the first 2 ksec of the observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.