

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 59427 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date : Mar 26 2006

Contents

1	Front	2
2	OBI	3
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	Aspect	6
2.4	Star Slots	8
2.5	FID Slots	8
A	Summary	9
A.1	Status	9
A.2	Comments	9

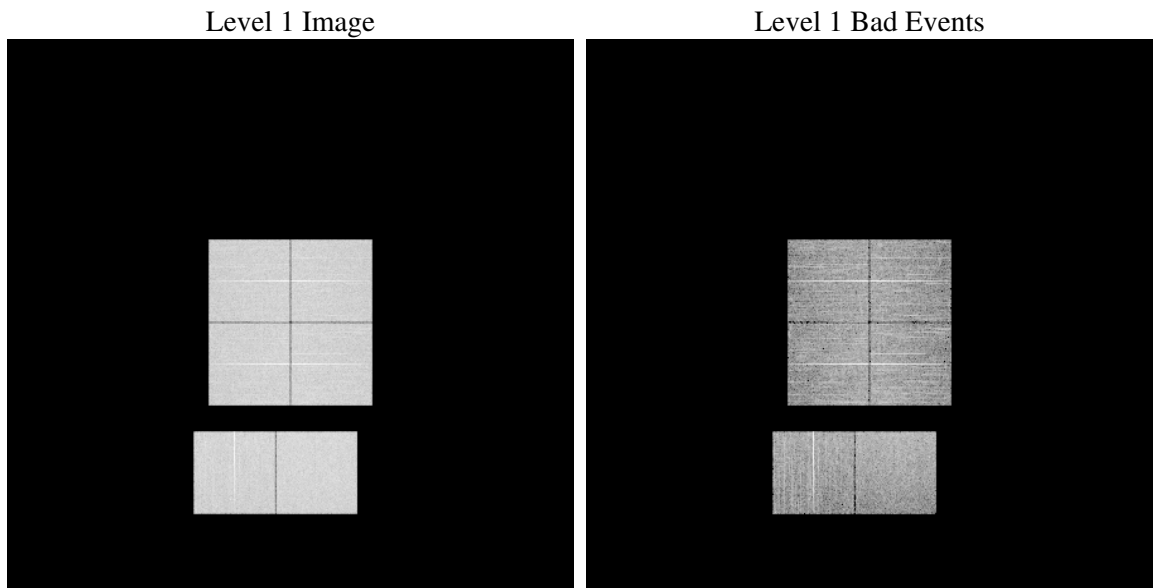
1 Front

seq_num	
obs_id	59427
title	ACIS-012367 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
dtcycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	358.98369251828
dec_nom	19.475969438219
roll_nom	204.74651317357
revision	2
ontime	7807.3436338007
livetime	7708.4823476916
ontime0	7807.384673804
ontime1	7804.1847435236
ontime2	7807.4667538106
ontime3	7807.3025937974
ontime6	7807.5077937841
ontime7	7807.3436338007
l2events	1001925

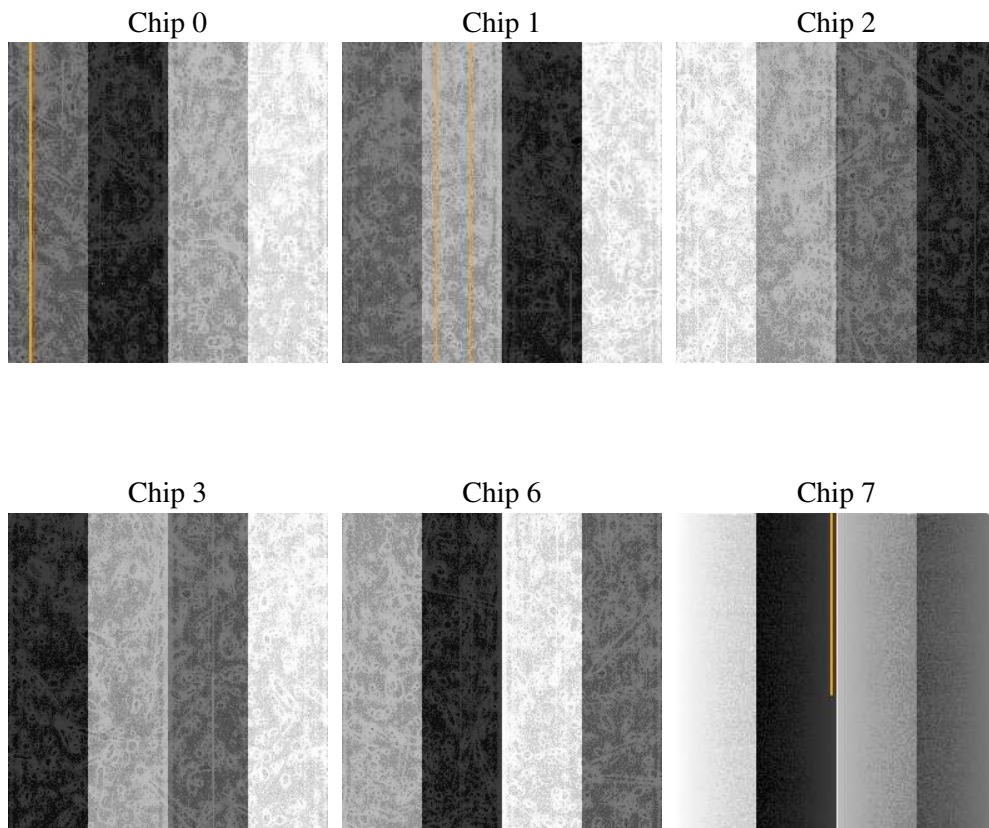
2 OBI

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	2006-03-26T08:52:56
revision	2

sched_exp_time	0.0
ontime	7807.577489078
ontime0	7807.577489078
ontime1	7804.3365187943
ontime2	7807.577489078
ontime3	7807.577489078
ontime6	7807.577489078
ontime7	7807.577489078
l1events	1376811

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	221858	222849	226593	228638	233949	242924
rejected events	51697	50825	54292	55495	54448	55754
rejected %	23%	22%	23%	24%	23%	22%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	93387	93535	95721	96062	96786	31321
	42%	41%	42%	42%	41%	12%
grade 1 events	536	492	635	626	520	119
	0%	0%	0%	0%	0%	0%
grade 2 events	29954	30861	29524	29995	31139	55937
	13%	13%	13%	13%	13%	23%
grade 3 events	10936	11024	11469	11513	11307	13323
	4%	4%	5%	5%	4%	5%
grade 4 events	11014	11197	11305	11503	11215	13204
	4%	5%	4%	5%	4%	5%
grade 5 events	3255	3370	3043	3601	3472	6496
	1%	1%	1%	1%	1%	2%
grade 6 events	24870	25407	24282	24070	29054	73385
	11%	11%	10%	10%	12%	30%
grade 7 events	47906	46963	50614	51268	50456	49139
	21%	21%	22%	22%	21%	20%

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	358.9836925182754	Alternating exposures requested	N	N
Pointing Dec	0	19.47596943821906	Primary exposure time	3.2	3.2
Pointing Roll	0.0	204.746513173569			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.7524282956875696			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	244448562.958576	244448561.93357			
Observation start date	2005-09-30T06:22:43	2005-09-30T06:22:41			
Observation end time	244466272.909391	244466271.88438			
Observation end date	2005-09-30T11:17:53	2005-09-30T11:17:51			
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	7.80734363

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.