

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 57420 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 29 2012

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	Star Slots	6
2.4	FID Slots	6
A	Summary	7
A.1	Status	7
A.2	Comments	7

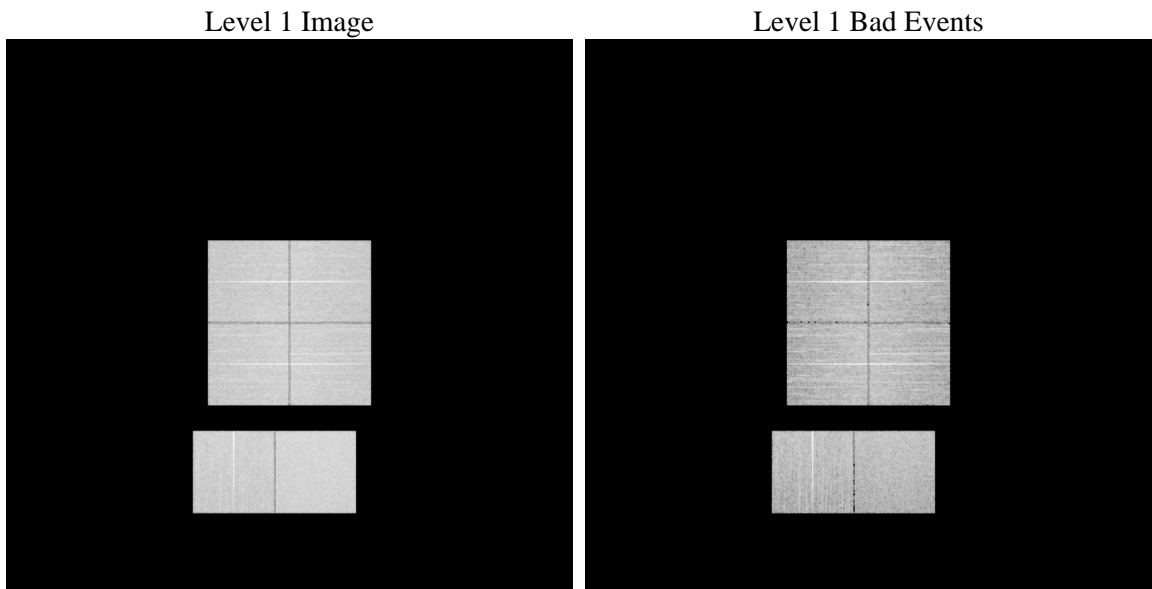
1 Front

seq_num	 	Sequence number
obs_id	57420	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	94.966495061898	Nominal RA [deg]
dec_nom	47.982106870443	Nominal Dec [deg]
roll_nom	185.7618223036	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8275.1999692321	Sum of GTIs [s]
livetime	8170.4144044945	Livetime [s]
ontime0	8275.1999692321	Sum of GTIs [s]
ontime1	8275.1999692321	Sum of GTIs [s]
ontime2	8275.1999692321	Sum of GTIs [s]
ontime3	8271.9589589834	Sum of GTIs [s]
ontime6	8275.1999692321	Sum of GTIs [s]
ontime7	8275.1999692321	Sum of GTIs [s]
l2events	525631	Number of level 2 events

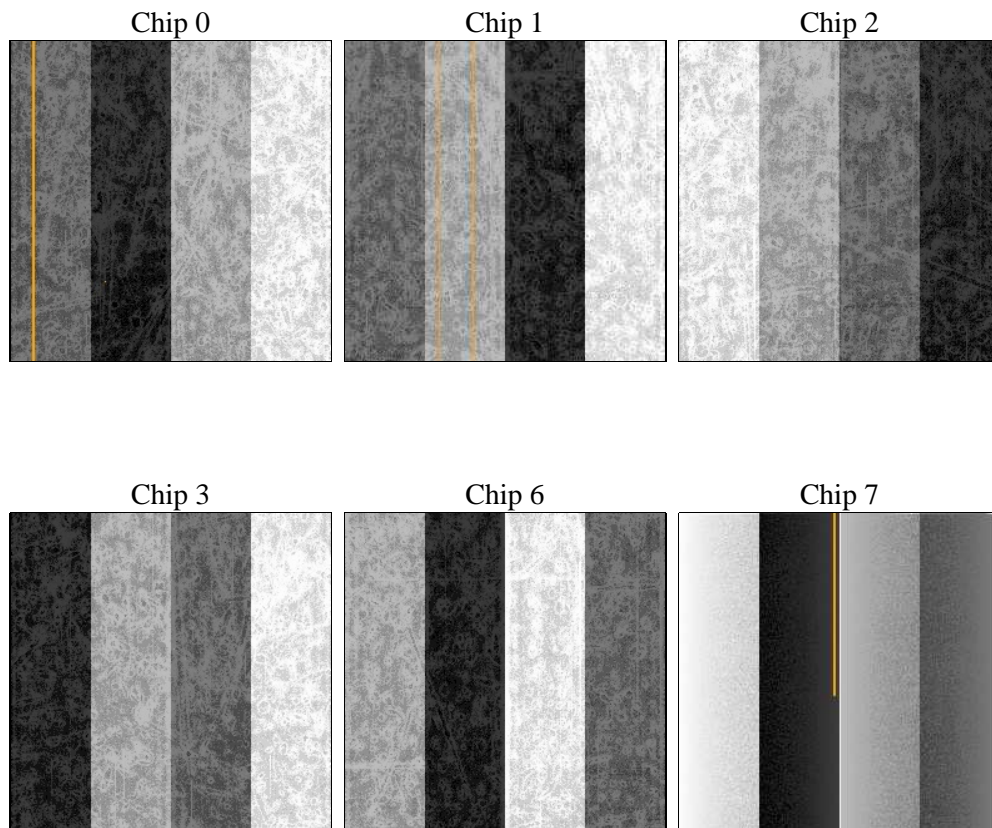
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	8275.1999692321	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	8275.1999692321	Sum of GTIs [s]
date	2012-05-29T18:19:37	Date and time of file creation	ontime1	8275.1999692321	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8275.1999692321	Sum of GTIs [s]
			ontime3	8271.9589589834	Sum of GTIs [s]
			ontime6	8275.1999692321	Sum of GTIs [s]
			ontime7	8275.1999692321	Sum of GTIs [s]
			l1events	996705	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	156329	156492	162186	163441	164036	194221	grade 0 events	45834	44943	46486	47121	46976	23637
rejected events	70921	70906	76603	77238	75397	70410		29%	28%	28%	28%	28%	12%
rejected %	45%	45%	47%	47%	45%	36%	grade 1 events	331	300	359	401	316	146
								0%	0%	0%	0%	0%	0%
							grade 2 events	15238	15945	14984	15048	15617	27112
								9%	10%	9%	9%	9%	13%
							grade 3 events	5748	5486	5836	5867	5785	11509
								3%	3%	3%	3%	3%	5%
							grade 4 events	5703	5770	5751	5885	5764	11415
								3%	3%	3%	3%	3%	5%
							grade 5 events	4107	4261	3904	4545	4446	11304
								2%	2%	2%	2%	2%	5%
							grade 6 events	12922	13480	12553	12311	14537	50192
								8%	8%	7%	7%	8%	25%
							grade 7 events	66446	66307	72313	72263	70595	58906
								42%	42%	44%	44%	43%	30%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	94.96649506189837	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	47.9821068704431	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	185.7618223035993	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.6828225247311905			
[mm] SIM defocus	0.1037507710433287	0.8505141146731063			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	346847881.357487	346847880.33249			
Observation start date	2008-12-28T10:38:01	2008-12-28T10:38:00			
[s] Observation end time (MET)	346859732.408073	346859731.38308			
Observation end date	2008-12-28T13:55:32	2008-12-28T13:55:31			
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)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2751999692321

A.2 Comments

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by chip coords:
(188,263),(214,263),(214,666),(188,666)