

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 59509 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Apr 18 2013

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

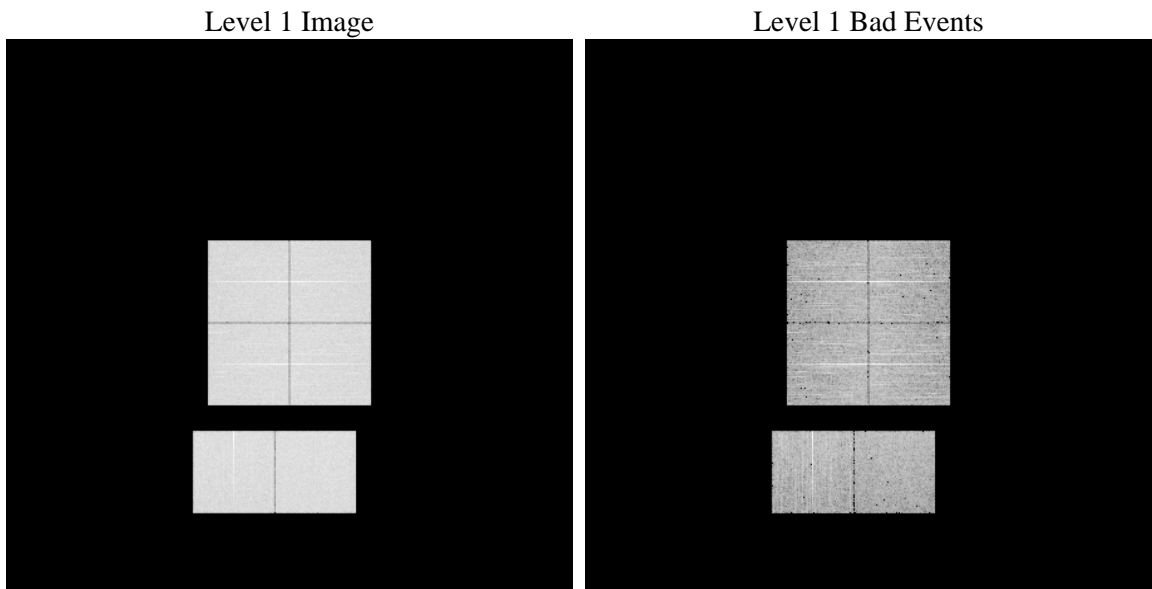
1 Front

seq_num	 	Sequence number
obs_id	59509	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	359.97617938549	Nominal RA [deg]
dec_nom	0.015863312009124	Nominal Dec [deg]
roll_nom	113.48449661252	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6911.9999742508	Sum of GTIs [s]
livetime	6824.4760686701	Livetime [s]
ontime0	6818.0113561451	Sum of GTIs [s]
ontime1	6911.9999742508	Sum of GTIs [s]
ontime2	6808.2884650528	Sum of GTIs [s]
ontime3	6860.144269228	Sum of GTIs [s]
ontime6	6911.9999742508	Sum of GTIs [s]
ontime7	6911.9999742508	Sum of GTIs [s]
l2events	917578	Number of level 2 events

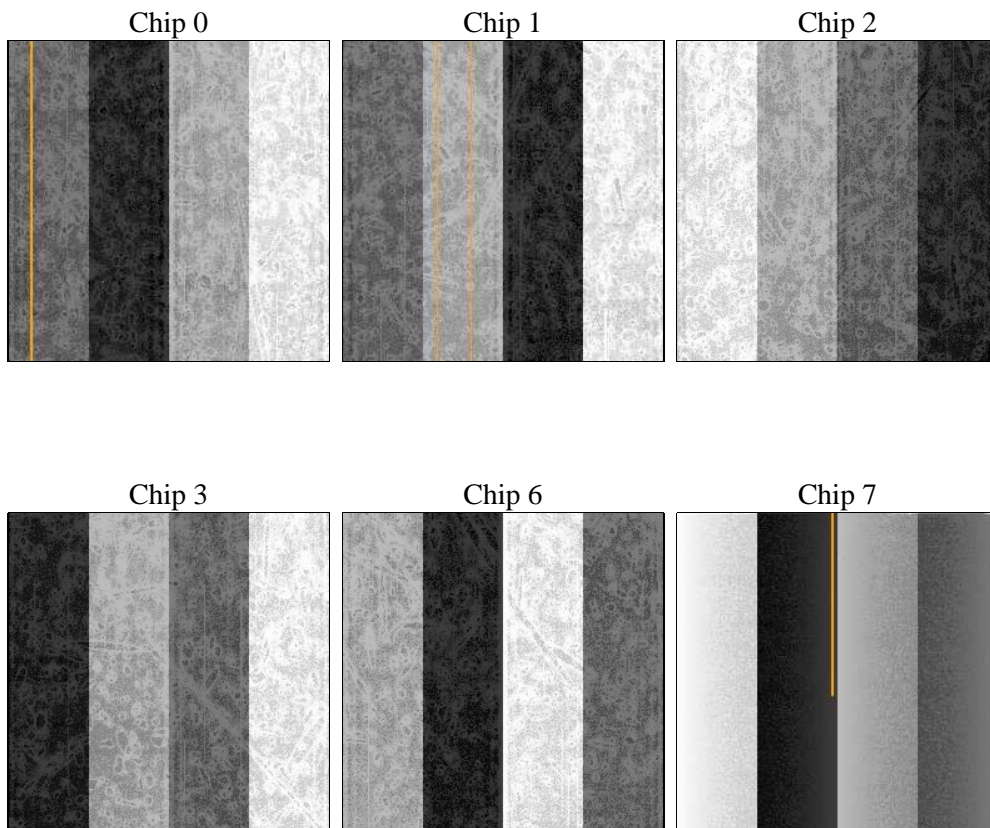
2 OBI

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	8.5.1.1	Processing system revision	ontime	6911.9999742508	Sum of GTIs [s]
caldsver	4.5.6	 	ontime0	6818.0113561451	Sum of GTIs [s]
date	2013-04-18T19:30:39	Date and time of file creation	ontime1	6911.9999742508	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	6808.2884650528	Sum of GTIs [s]
			ontime3	6860.144269228	Sum of GTIs [s]
			ontime6	6911.9999742508	Sum of GTIs [s]
			ontime7	6911.9999742508	Sum of GTIs [s]
			l1events	1241021	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	199111	201342	203973	206832	213073	216690	grade 0 events	84964	85380	86986	88067	89011	41636
rejected events	44618	44505	48050	49492	48566	40750		42%	42%	42%	42%	41%	19%
rejected %	22%	22%	23%	23%	22%	18%	grade 1 events	506	396	551	552	473	137
								0%	0%	0%	0%	0%	0%
							grade 2 events	26738	28121	26334	27001	28679	38639
								13%	13%	12%	13%	13%	17%
							grade 3 events	10052	9860	10247	10218	10284	17548
								5%	4%	5%	4%	4%	8%
							grade 4 events	10002	10111	10264	10111	10527	17246
								5%	5%	5%	4%	4%	7%
							grade 5 events	2780	3000	2627	2933	3047	7189
								1%	1%	1%	1%	1%	3%
							grade 6 events	22737	23365	22092	21943	26006	60871
								11%	11%	10%	10%	12%	28%
							grade 7 events	41332	41109	44872	46007	45046	33424
								20%	20%	21%	22%	21%	15%

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	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
[deg] Pointing RA	0	359.9761793854922	Alternating exposures requested	N	N
[deg] Pointing Dec	0	0.01586331200912426	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	113.48449661252			
[mm] SIM focus pos	-0.782348	-0.6828225247311905			
[mm] SIM defocus	0	0.8505141146731063			
[mm] SIM translation stage pos	-233.592463	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	240103120.359002	240103119.33401			
Observation start date	2005-08-10T23:18:40	2005-08-10T23:18:39			
[s] Observation end time (MET)	240142381.960801	240142380.93581			
Observation end date	2005-08-11T10:13:02	2005-08-11T10:13:00			
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)	2013.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.9119999742508

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:
(170,1),(251,1),(251,1024),(170,1024)