

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 57539 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 25 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

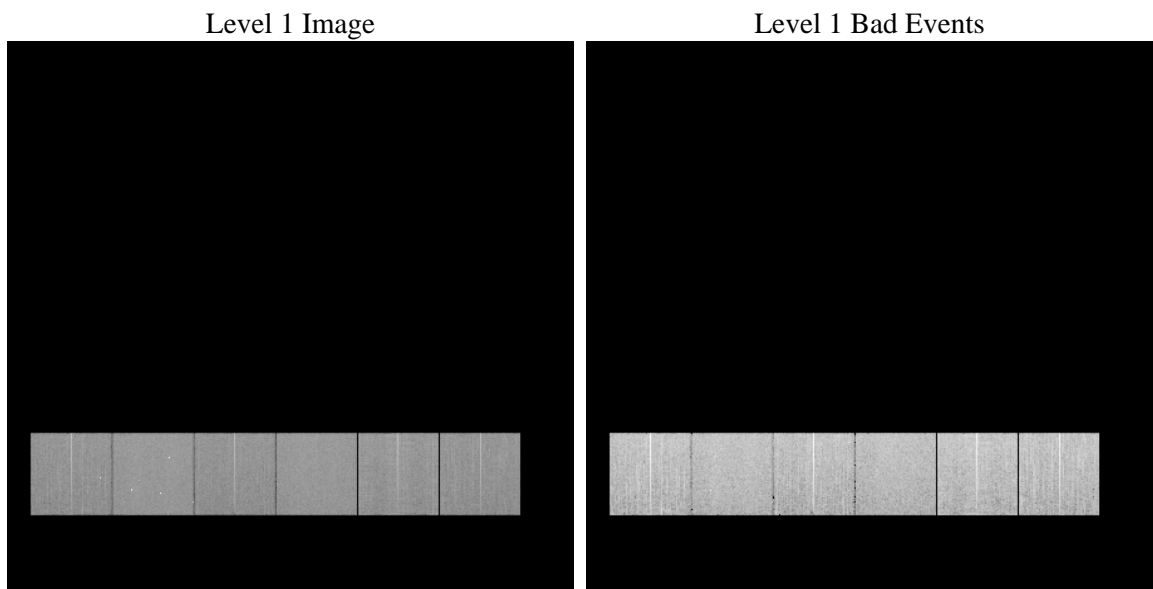
1 Front

seq_num	 	Sequence number
obs_id	57539	Observation id
title	ACIS-456789 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	32.023740236189	Nominal RA [deg]
dec_nom	-11.983062382557	Nominal Dec [deg]
roll_nom	3.2489934440883	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8195.1999695301	Sum of GTIs [s]
livetime	8091.4274129589	Livetime [s]
ontime4	8195.1999695301	Sum of GTIs [s]
ontime5	8195.1999695301	Sum of GTIs [s]
ontime6	8195.1999695301	Sum of GTIs [s]
ontime7	8195.1999695301	Sum of GTIs [s]
ontime8	8195.1999695301	Sum of GTIs [s]
ontime9	8195.1999695301	Sum of GTIs [s]
l2events	572311	Number of level 2 events

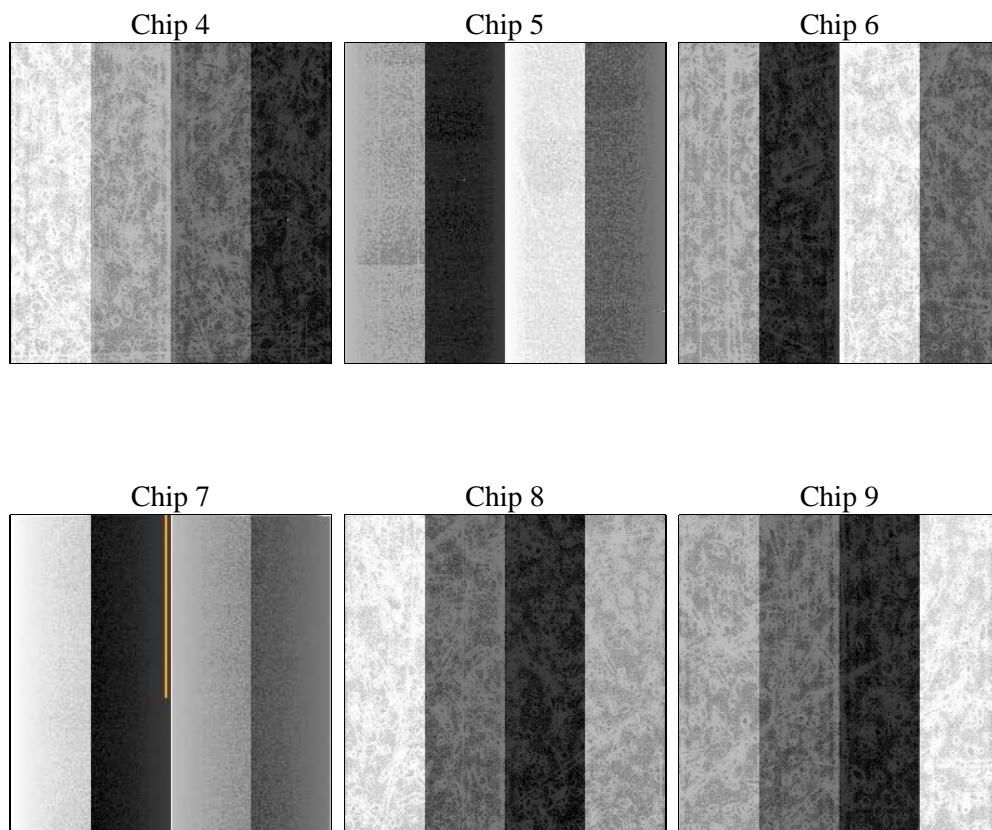
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	8195.1999695301	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	8195.1999695301	Sum of GTIs [s]
date	2012-05-25T19:55:50	Date and time of file creation	ontime5	8195.1999695301	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	8195.1999695301	Sum of GTIs [s]
			ontime7	8195.1999695301	Sum of GTIs [s]
			ontime8	8195.1999695301	Sum of GTIs [s]
			ontime9	8195.1999695301	Sum of GTIs [s]
			l1events	1099337	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	170541	201163	168268	195861	191942	171562	grade 0 events	50422	22354	48807	24370	52984	48009
rejected events	83368	74341	76981	70524	85741	82568		29%	11%	29%	12%	27%	27%
rejected %	48%	36%	45%	36%	44%	48%	grade 1 events	484	286	283	181	374	395
								0%	0%	0%	0%	0%	0%
							grade 2 events	14143	44728	16376	27193	20096	15594
								8%	22%	9%	13%	10%	9%
							grade 3 events	5995	6199	5995	12050	7734	6102
								3%	3%	3%	6%	4%	3%
							grade 4 events	6037	5903	5995	11885	7557	6039
								3%	2%	3%	6%	3%	3%
							grade 5 events	4179	10116	4379	11233	5782	4876
								2%	5%	2%	5%	3%	2%
							grade 6 events	11432	48818	15058	51096	18845	14116
								6%	24%	8%	26%	9%	8%
							grade 7 events	77849	62759	71375	57853	78570	76431
								45%	31%	42%	29%	40%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	32.02374023618881	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-11.98306238255722	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	3.248993444088253	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.7809083437167272			
[mm] SIM defocus	0.1037507710433287	0.7524282956875696			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	341364817.836725	341364816.81172			
Observation start date	2008-10-25T23:33:38	2008-10-25T23:33:36			
[s] Observation end time (MET)	341378064.937379	341378063.91237			
Observation end date	2008-10-26T03:14:25	2008-10-26T03:14:23			
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)	2012.06.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1951999695301

A.2 Comments

A spatial region of the original bias map for CCD = 9 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 = 9 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:
(304,1),(329,1),(329,550),(304,550)