

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56997 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Jun 11 2012

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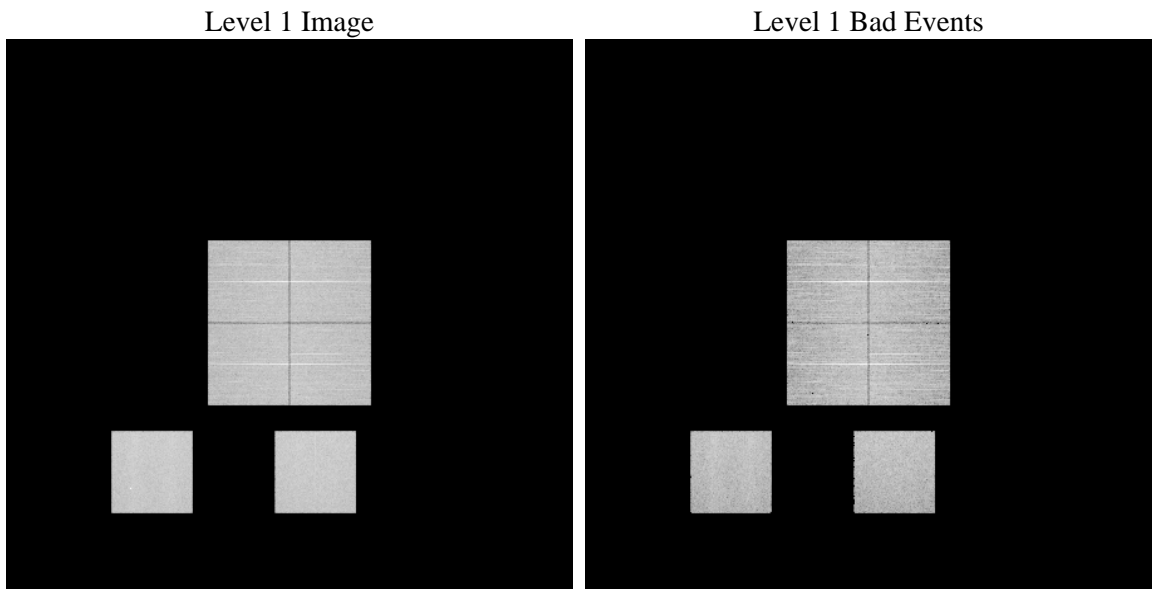
1 Front

seq_num	 	Sequence number
obs_id	56997	Observation id
title	ACIS-012357 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	266.79191517454	Nominal RA [deg]
dec_nom	-2.5303060226154	Nominal Dec [deg]
roll_nom	211.84087005719	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8373.3294183612	Sum of GTIs [s]
livetime	8267.3012794522	Livetime [s]
ontime0	8373.2883783579	Sum of GTIs [s]
ontime1	8373.2473383546	Sum of GTIs [s]
ontime2	8373.2062983513	Sum of GTIs [s]
ontime3	8373.3704583645	Sum of GTIs [s]
ontime5	8373.165258348	Sum of GTIs [s]
ontime7	8373.3294183612	Sum of GTIs [s]
l2events	510052	Number of level 2 events

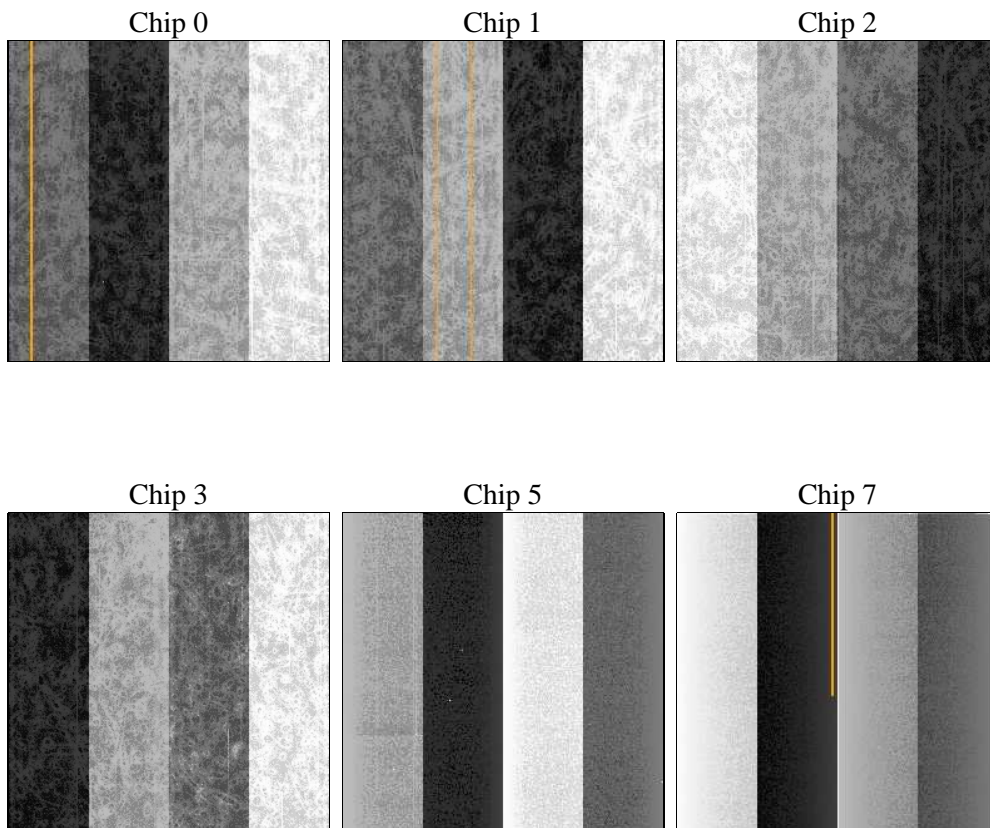
2 OBI

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	8.4.5	Processing system revision	ontime	8373.3294183612	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	8373.2883783579	Sum of GTIs [s]
date	2012-06-11T13:09:50	Date and time of file creation	ontime1	8373.2473383546	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8373.2062983513	Sum of GTIs [s]
			ontime3	8373.3704583645	Sum of GTIs [s]
			ontime5	8373.165258348	Sum of GTIs [s]
			ontime7	8373.3294183612	Sum of GTIs [s]
			l1events	1008469	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	153972	155110	156959	160836	191277	190315	grade 0 events	40550	39534	42396	43068	12365	20189
rejected events	78426	78116	80452	83354	78017	75418		26%	25%	27%	26%	6%	10%
rejected %	50%	50%	51%	51%	40%	39%	grade 1 events	315	250	356	321	264	148
								0%	0%	0%	0%	0%	0%
							grade 2 events	13820	16034	12846	13284	43318	25690
								8%	10%	8%	8%	22%	13%
							grade 3 events	5016	4875	5256	5277	4405	10165
								3%	3%	3%	3%	2%	5%
							grade 4 events	5094	4861	5256	5262	4203	10048
								3%	3%	3%	3%	2%	5%
							grade 5 events	4021	4111	3904	4481	9059	11323
								2%	2%	2%	2%	4%	5%
							grade 6 events	11787	12366	11405	11282	50007	49828
								7%	7%	7%	7%	26%	26%
							grade 7 events	73369	73079	75540	77861	67656	62924
								47%	47%	48%	48%	35%	33%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012357	ACIS-012357	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	266.7919151745402	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-2.530306022615354	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	211.8408700571943	[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)	362836570.152325	362836569.12731			
Observation start date	2009-07-01T11:56:10	2009-07-01T11:56:09			
[s] Observation end time (MET)	362849962.802995	362849961.77798			
Observation end date	2009-07-01T15:39:23	2009-07-01T15:39:21			
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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.3733294183612

A.2 Comments

Spatial regions of the original bias maps for CCD = 1 and 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 maps for CCD = 1 and 2 have 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 coordinates:

CCD 1: (88,1),(107,1),(107,60),(88,99)

CCD 2: (530,1),(554,1),(554,401),(530,449)