

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 57349 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 30 2012

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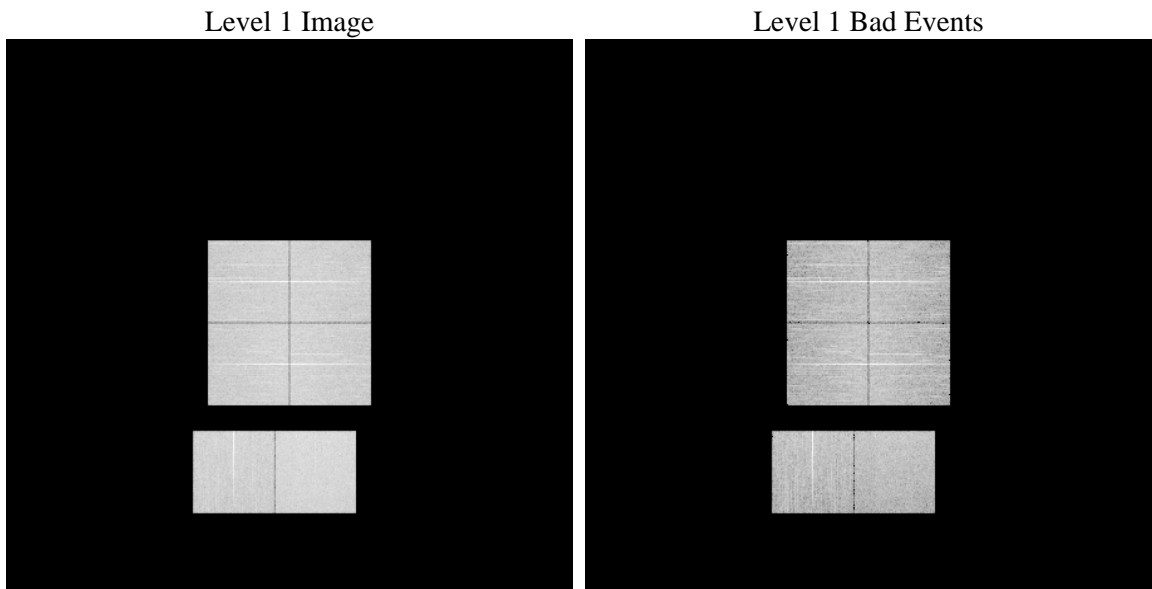
1 Front

seq_num	 	Sequence number
obs_id	57349	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	119.03099828899	Nominal RA [deg]
dec_nom	-3.9962755330081	Nominal Dec [deg]
roll_nom	338.1599058636	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8271.999969244	Sum of GTIs [s]
livetime	8167.254924833	Livetime [s]
ontime0	8268.7590283155	Sum of GTIs [s]
ontime1	8271.999969244	Sum of GTIs [s]
ontime2	8268.7589689493	Sum of GTIs [s]
ontime3	8271.999969244	Sum of GTIs [s]
ontime6	8271.999969244	Sum of GTIs [s]
ontime7	8271.999969244	Sum of GTIs [s]
l2events	528581	Number of level 2 events

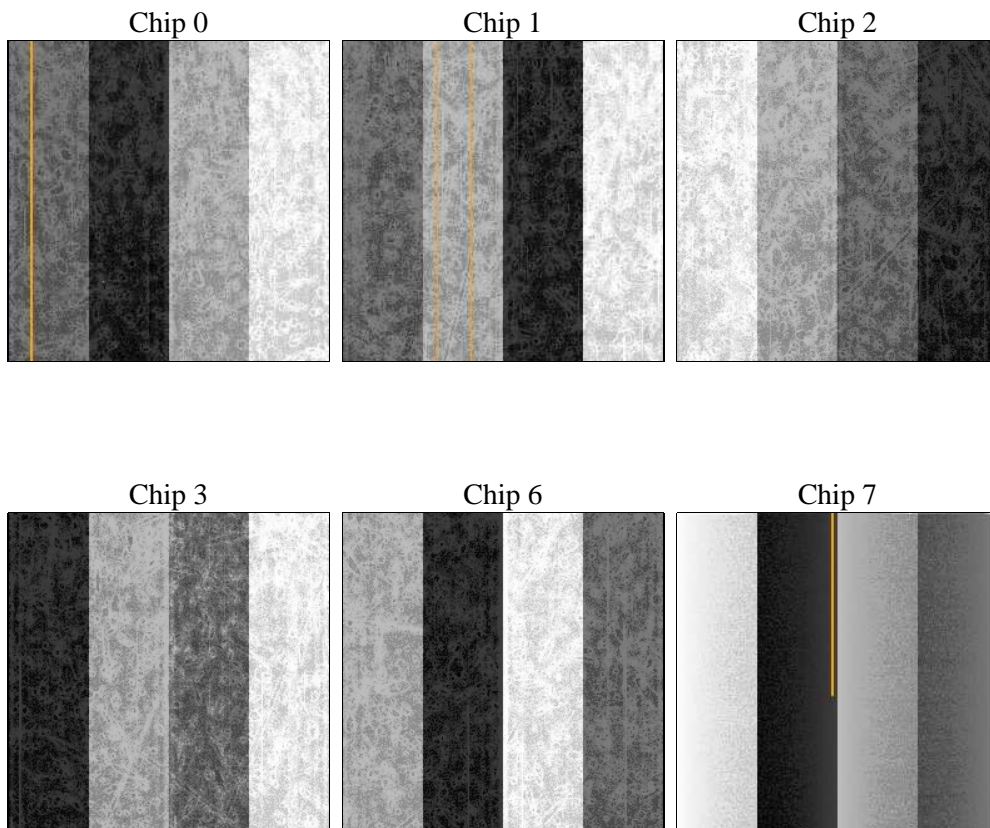
2 OBI

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	8271.999969244	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	8268.7590283155	Sum of GTIs [s]
date	2012-05-30T18:18:38	Date and time of file creation	ontime1	8271.999969244	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8268.7589689493	Sum of GTIs [s]
			ontime3	8271.999969244	Sum of GTIs [s]
			ontime6	8271.999969244	Sum of GTIs [s]
			ontime7	8271.999969244	Sum of GTIs [s]
			l1events	1005772	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	158907	159177	162609	163816	164885	196378	grade 0 events	45744	45058	46864	47359	46638	24102
rejected events	73330	73254	76736	77047	75844	71280		28%	28%	28%	28%	28%	12%
rejected %	46%	46%	47%	47%	45%	36%	grade 1 events	354	287	367	391	322	195
								0%	0%	0%	0%	0%	0%
							grade 2 events	15302	15939	14874	15150	15875	27444
								9%	10%	9%	9%	9%	13%
							grade 3 events	5760	5732	5807	5841	5755	11703
								3%	3%	3%	3%	3%	5%
							grade 4 events	5718	5679	5788	5953	5824	11644
								3%	3%	3%	3%	3%	5%
							grade 5 events	4267	4286	3889	4633	4442	11790
								2%	2%	2%	2%	2%	6%
							grade 6 events	13053	13515	12540	12492	14949	50244
								8%	8%	7%	7%	9%	25%
							grade 7 events	68709	68681	72480	71997	71080	59256
								43%	43%	44%	43%	43%	30%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	119.0309982889867
[deg] Pointing Dec	0	-3.996275533008089
[deg] Pointing Roll	0.0	338.1599058635959
[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)	349314482.47949	349314481.4545
Observation start date	2009-01-25T23:48:02	2009-01-25T23:48:01
[s] Observation end time (MET)	349324566.429989	349324565.405
Observation end date	2009-01-26T02:36:06	2009-01-26T02:36:05
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	3.2	3.2

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.271999969244

A.2 Comments

Spatial regions of the original bias maps for CCD = 1, 2, and 3 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, 2, and 3 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 coords:

CCD 1: (7,377), (60,377), (60,943), (7,996)

CCD 2: (170,381), (213,381), (213,1024), (170,1024)

CCD 3: (895,1), (921,1), (921,1024), (895,1024)