

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 60419 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Apr 1 2013

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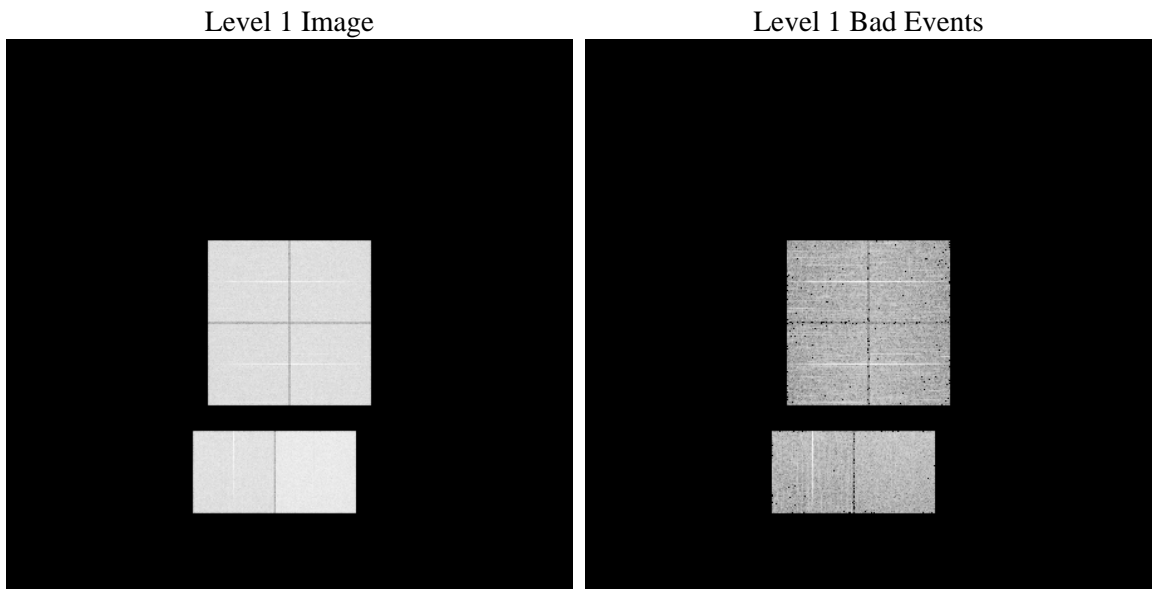
1 Front

seq_num	 	Sequence number
obs_id	60419	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtycycle	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	120.95409170637	Nominal RA [deg]
dec_nom	51.498449833487	Nominal Dec [deg]
roll_nom	150.24057572983	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7804.7999709249	Sum of GTIs [s]
livetime	7705.9708942067	Livetime [s]
ontime0	5412.9542424083	Sum of GTIs [s]
ontime1	5541.7572083771	Sum of GTIs [s]
ontime2	5192.5670449734	Sum of GTIs [s]
ontime3	5457.3685208559	Sum of GTIs [s]
ontime6	5752.5037922561	Sum of GTIs [s]
ontime7	7804.7999709249	Sum of GTIs [s]
l2events	1149291	Number of level 2 events

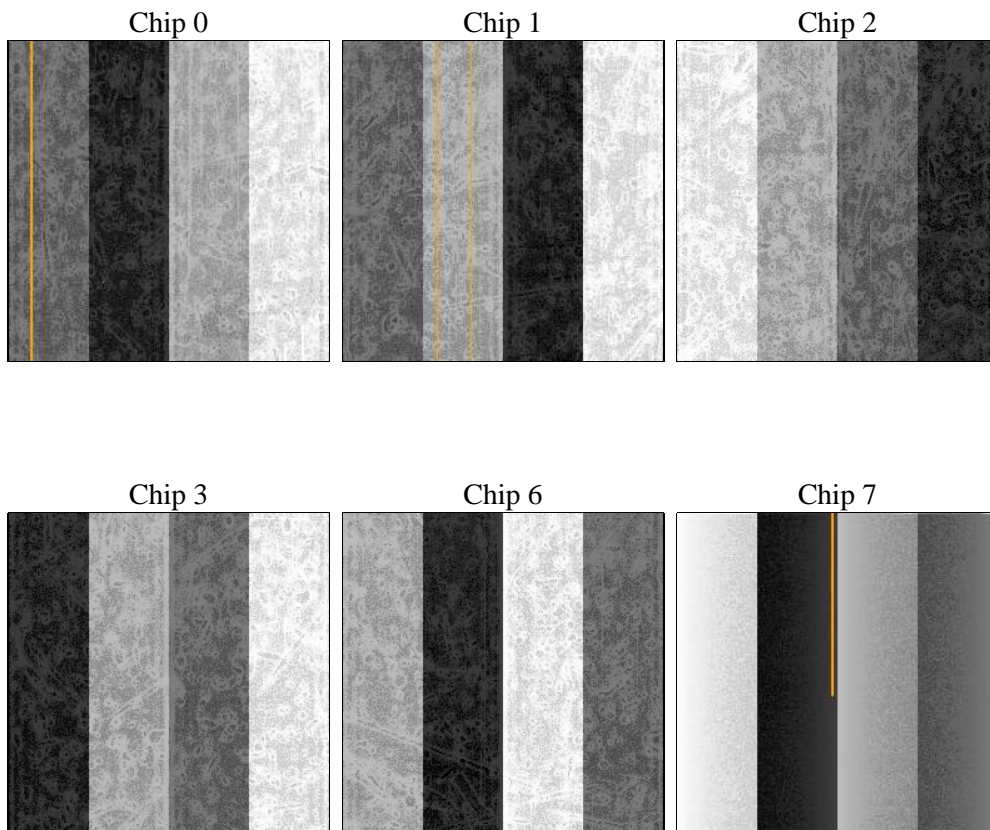
2 OBI

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	7804.7999709249	Sum of GTIs [s]
caldbver	4.5.6	 	ontime0	5412.9542424083	Sum of GTIs [s]
date	2013-04-01T15:10:17	Date and time of file creation	ontime1	5541.7572083771	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	5192.5670449734	Sum of GTIs [s]
			ontime3	5457.3685208559	Sum of GTIs [s]
			ontime6	5752.5037922561	Sum of GTIs [s]
			ontime7	7804.7999709249	Sum of GTIs [s]
			l1events	1418923	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	213583	217538	209342	220175	238342	319943	grade 0 events	100158	101662	98846	105019	109819	68840
rejected events	33146	33032	34843	34549	37351	41460		46%	46%	47%	47%	46%	21%
rejected %	15%	15%	16%	15%	15%	12%	grade 1 events	542	470	549	575	502	206
								0%	0%	0%	0%	0%	0%
							grade 2 events	31351	32864	28789	31295	34531	61668
								14%	15%	13%	14%	14%	19%
							grade 3 events	11556	11635	11440	11762	12452	27692
								5%	5%	5%	5%	5%	8%
							grade 4 events	11585	11586	11410	12123	12532	27610
								5%	5%	5%	5%	5%	8%
							grade 5 events	2337	2238	2056	2336	2693	7571
								1%	1%	0%	1%	1%	2%
							grade 6 events	25888	26759	24117	25427	31657	92774
								12%	12%	11%	11%	13%	28%
							grade 7 events	30166	30324	32135	31638	34156	33582
								14%	13%	15%	14%	14%	10%

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	120.9540917063667	Alternating exposures requested	N	N
[deg] Pointing Dec	0	51.4984498334872	[s] Primary exposure time	0.000000	3.2
[deg] Pointing Roll	0.0	150.2405757298339			
[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)	189613282.698693	189613281.67398			
Observation start date	2004-01-04T14:21:23	2004-01-04T14:21:21			
[s] Observation end time (MET)	189653311.000434	189653309.97572			
Observation end date	2004-01-05T01:28:31	2004-01-05T01:28:29			
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)	2013.04.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.8047999709249

A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(584,1), (612,1), (612,131), (584,103)