

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 60581 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Mar 27 2013

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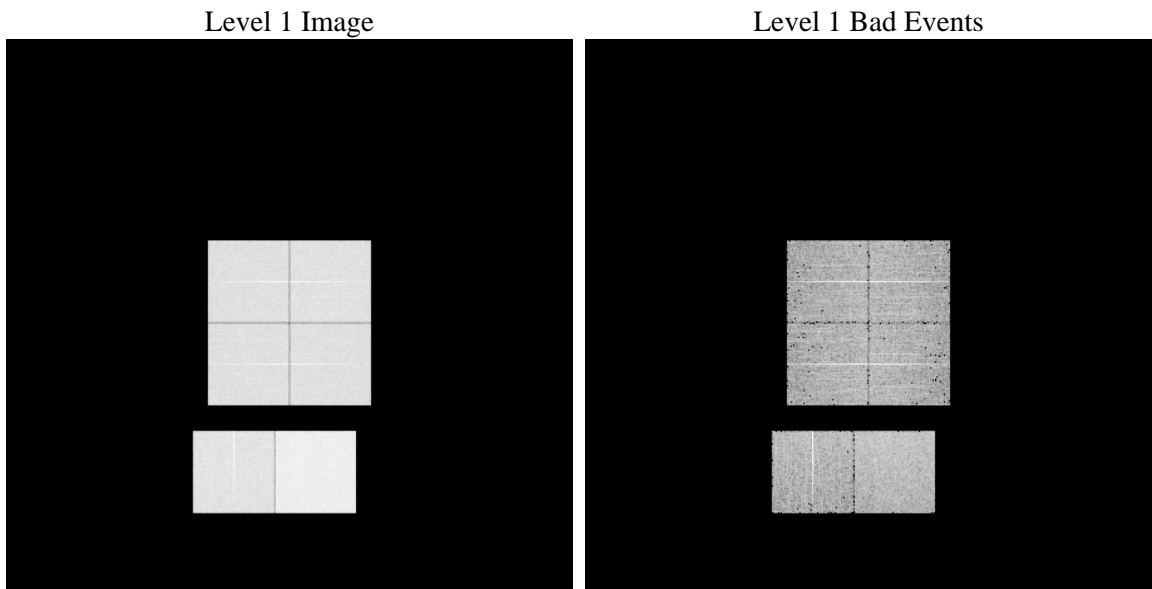
1 Front

seq_num	 	Sequence number
obs_id	60581	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	109.96635523075	Nominal RA [deg]
dec_nom	-33.993638705631	Nominal Dec [deg]
roll_nom	134.28150430123	Nominal Roll [deg]
revision	4	Processing version of data
ontime	8462.926821202	Sum of GTIs [s]
livetime	8355.7641460292	Livetime [s]
ontime0	5361.2843198478	Sum of GTIs [s]
ontime1	5483.8012801111	Sum of GTIs [s]
ontime2	5160.262044102	Sum of GTIs [s]
ontime3	5192.8350696564	Sum of GTIs [s]
ontime6	5636.6427026689	Sum of GTIs [s]
ontime7	8462.926821202	Sum of GTIs [s]
l2events	1259051	Number of level 2 events

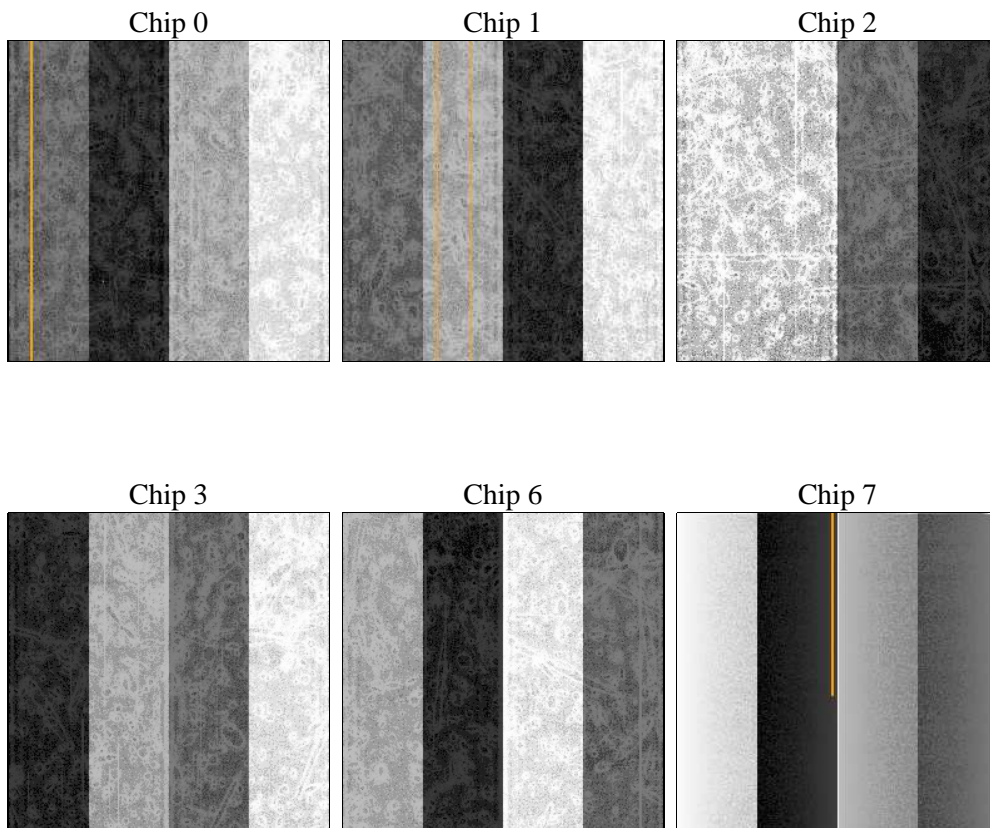
2 OBI

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	8462.926821202	Sum of GTIs [s]
caldbver	4.5.6	 	ontime0	5361.2843198478	Sum of GTIs [s]
date	2013-03-27T17:48:30	Date and time of file creation	ontime1	5483.8012801111	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	5160.262044102	Sum of GTIs [s]
			ontime3	5192.8350696564	Sum of GTIs [s]
			ontime6	5636.6427026689	Sum of GTIs [s]
			ontime7	8462.926821202	Sum of GTIs [s]
			l1events	1539543	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	227918	234962	225637	226831	252141	372054	grade 0 events	108298	109652	108092	108862	117078	79262
rejected events	33168	34952	35147	34572	37636	45664		47%	46%	47%	47%	46%	21%
rejected %	14%	14%	15%	15%	14%	12%	grade 1 events	534	480	626	608	524	218
								0%	0%	0%	0%	0%	0%
							grade 2 events	33551	35966	31271	31934	36998	71854
								14%	15%	13%	14%	14%	19%
							grade 3 events	12560	12390	12357	12564	13063	32214
								5%	5%	5%	5%	5%	8%
							grade 4 events	12328	12512	12222	12737	13028	32067
								5%	5%	5%	5%	5%	8%
							grade 5 events	2218	2444	2133	2216	2575	8378
								0%	1%	0%	0%	1%	2%
							grade 6 events	28121	29490	26651	26295	34479	111111
								12%	12%	11%	11%	13%	29%
							grade 7 events	30308	32028	32285	31615	34396	36950
								13%	13%	14%	13%	13%	9%

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	109.9663552307472
[deg] Pointing Dec	0	-33.99363870563121
[deg] Pointing Roll	0.0	134.2815043012253
[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)	177770784.787804	177770783.7631
Observation start date	2003-08-20T12:46:25	2003-08-20T12:46:23
[s] Observation end time (MET)	177793219.988763	177793218.96406
Observation end date	2003-08-20T19:00:20	2003-08-20T19:00:18
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	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)	2013.03.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.462926821202

A.2 Comments

Spatial regions of the original bias maps for CCD = 0 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 = 0 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 coords:

CCD 0: (229,301), (370,301), (370,533), (229,603)

CCD 2: (237,1), (293,1), (293,22), (237,55)