

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56552 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Jun 19 2012

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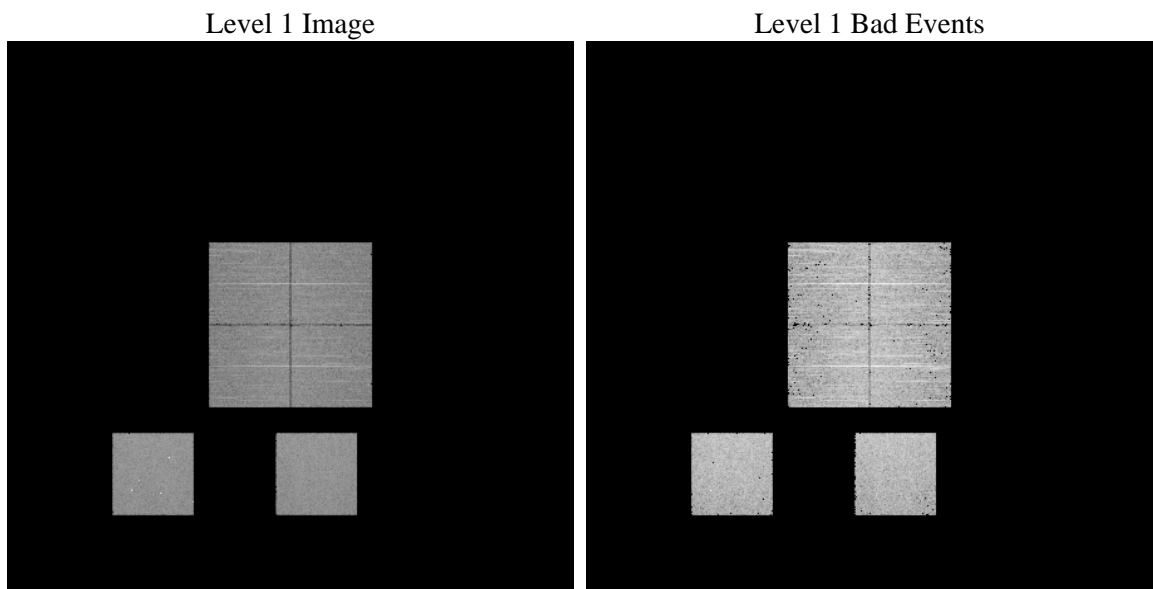
1 Front

seq_num	 	Sequence number
obs_id	56552	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	128.9800592731	Nominal RA [deg]
dec_nom	27.522706879238	Nominal Dec [deg]
roll_nom	94.919505375835	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4159.9999845624	Sum of GTIs [s]
livetime	4107.3235599066	Livetime [s]
ontime0	4159.9999845624	Sum of GTIs [s]
ontime1	4159.9999845624	Sum of GTIs [s]
ontime2	4159.9999845624	Sum of GTIs [s]
ontime3	4159.9999845624	Sum of GTIs [s]
ontime5	4159.9999845624	Sum of GTIs [s]
ontime7	4159.9999845624	Sum of GTIs [s]
l2events	237607	Number of level 2 events

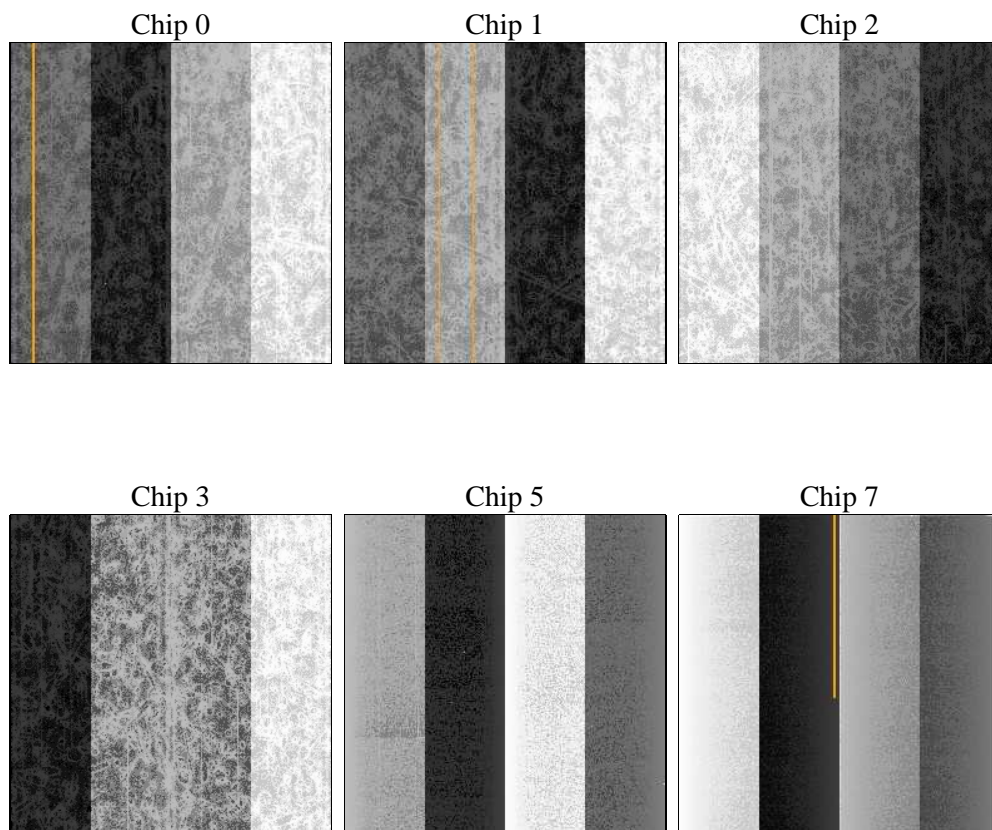
2 OBI

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	4159.9999845624	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	4159.9999845624	Sum of GTIs [s]
date	2012-06-19T13:00:05	Date and time of file creation	ontime1	4159.9999845624	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4159.9999845624	Sum of GTIs [s]
			ontime3	4159.9999845624	Sum of GTIs [s]
			ontime5	4159.9999845624	Sum of GTIs [s]
			ontime7	4159.9999845624	Sum of GTIs [s]
			l1events	473616	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	70336	71381	72399	73532	94678	91290	grade 0 events	18259	18115	18589	19131	9596	9888
rejected events	35831	36577	37850	38366	37184	36307		25%	25%	25%	26%	10%	10%
rejected %	50%	51%	52%	52%	39%	39%	grade 1 events	128	101	174	162	154	80
								0%	0%	0%	0%	0%	0%
							grade 2 events	6298	6515	6037	6208	19718	12133
								8%	9%	8%	8%	20%	13%
							grade 3 events	2387	2383	2384	2316	2615	5077
								3%	3%	3%	3%	2%	5%
							grade 4 events	2235	2294	2424	2447	2543	4973
								3%	3%	3%	3%	2%	5%
							grade 5 events	2208	2230	2040	2258	5121	5960
								3%	3%	2%	3%	5%	6%
							grade 6 events	5326	5497	5115	5064	23022	22912
								7%	7%	7%	6%	24%	25%
							grade 7 events	33495	34246	35636	35946	31909	30267
								47%	47%	49%	48%	33%	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	128.9800592731012	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	27.52270687923793	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	94.91950537583526	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.6828225247311905			
[mm] SIM defocus	0.1037507710433287	0.8505141146731063			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	378794974.304442	378794973.27945			
Observation start date	2010-01-02T04:49:34	2010-01-02T04:49:33			
[s] Observation end time (MET)	378801220.654757	378801219.62976			
Observation end date	2010-01-02T06:33:41	2010-01-02T06:33:39			
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)	2012.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1599999845624

A.2 Comments

Spatial regions of the original bias maps for CCDs 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 CCDs 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 the chip coordinates:
CCD 2: (634,100), (660,100), (660,1024), (634,1024) and
(779,1), (825,1), (825,1024), (779,1024)
CCD 3: (70,602), (94,602), (94,968), (70,968)