

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 51529 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Nov 3 2015

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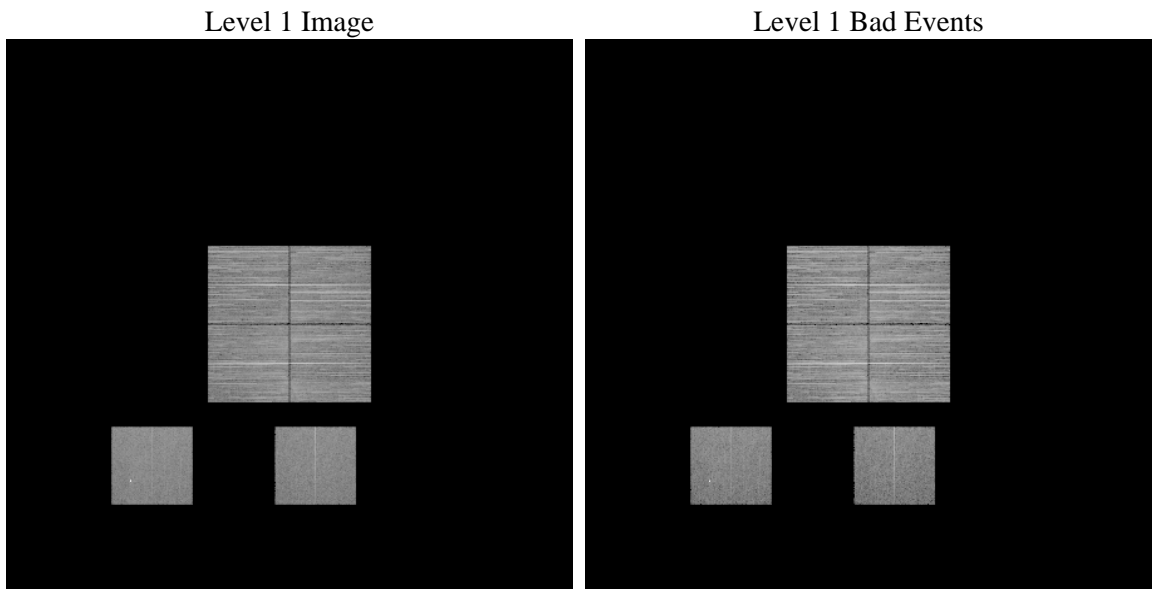
1 Front

seq_num	 	Sequence number
obs_id	51529	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	20.988043709683	Nominal RA [deg]
dec_nom	34.972714129191	Nominal Dec [deg]
roll_nom	217.49298834994	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8110.5963306427	Sum of GTIs [s]
livetime	8007.8950762893	Livetime [s]
ontime0	8110.5552905798	Sum of GTIs [s]
ontime1	8110.5142506361	Sum of GTIs [s]
ontime2	8110.4732105732	Sum of GTIs [s]
ontime3	8110.6373705864	Sum of GTIs [s]
ontime5	8110.4321706295	Sum of GTIs [s]
ontime7	8110.5963306427	Sum of GTIs [s]
l2events	173171	Number of level 2 events

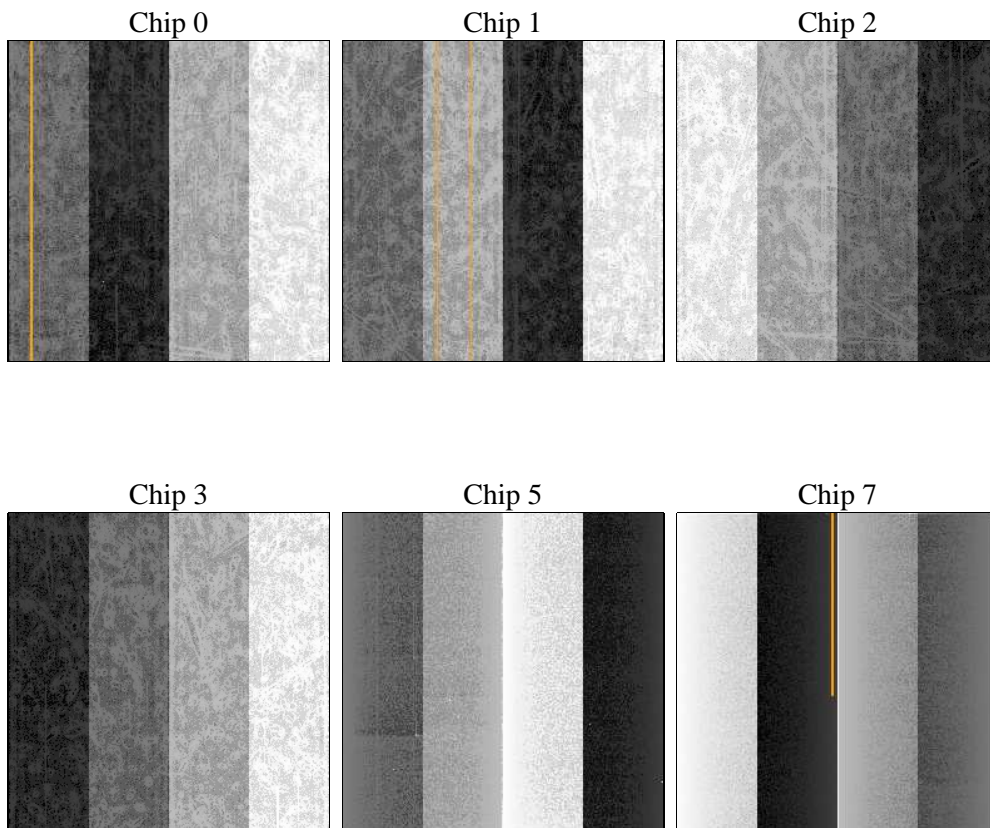
2 OBI

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	10.4.2.1	Processing system revision	ontime	8110.5963306427	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	8110.5552905798	Sum of GTIs [s]
date	2015-11-03T18:12:50	Date and time of file creation	ontime1	8110.5142506361	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8110.4732105732	Sum of GTIs [s]
			ontime3	8110.6373705864	Sum of GTIs [s]
			ontime5	8110.4321706295	Sum of GTIs [s]
			ontime7	8110.5963306427	Sum of GTIs [s]
			l1events	866371	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	152031	157670	153940	152829	129426	120475	grade 0 events	9896	9593	10200	10375	3522	5538
rejected events	131503	136785	133569	132171	76835	72329		6%	6%	6%	6%	2%	4%
rejected %	86%	86%	86%	86%	59%	60%	grade 1 events	73	55	68	69	145	91
								0%	0%	0%	0%	0%	0%
							grade 2 events	4488	4875	4208	4151	19970	12104
								2%	3%	2%	2%	15%	10%
							grade 3 events	1511	1547	1446	1467	1599	3678
								0%	0%	0%	0%	1%	3%
							grade 4 events	1470	1437	1515	1558	1550	3652
								0%	0%	0%	1%	1%	3%
							grade 5 events	3004	2904	2823	3287	6172	7687
								1%	1%	1%	2%	4%	6%
							grade 6 events	3434	3720	3286	3373	26684	23812
								2%	2%	2%	2%	20%	19%
							grade 7 events	128155	133539	130394	128549	69784	63913
								84%	84%	84%	84%	53%	53%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012357	ACIS-012357
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	20.98804370968264
[deg] Pointing Dec	0	34.97271412919059
[deg] Pointing Roll	0.0	217.4929883499366
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.4635187648994
[mm] SIM translation stage offset	0	-0.007540371344731511
[s] Observation start time (MET)	562773258.356529	562773257.33153
Observation start date	2015-11-01T13:54:18	2015-11-01T13:54:17
[s] Observation end time (MET)	562784088.507141	562784087.4821399
Observation end date	2015-11-01T16:54:49	2015-11-01T16:54:47
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	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.11.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1105963306427

A.2 Comments

A spatial region of the original bias map for CCD = 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 map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.