

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 52831 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Apr 21 2014

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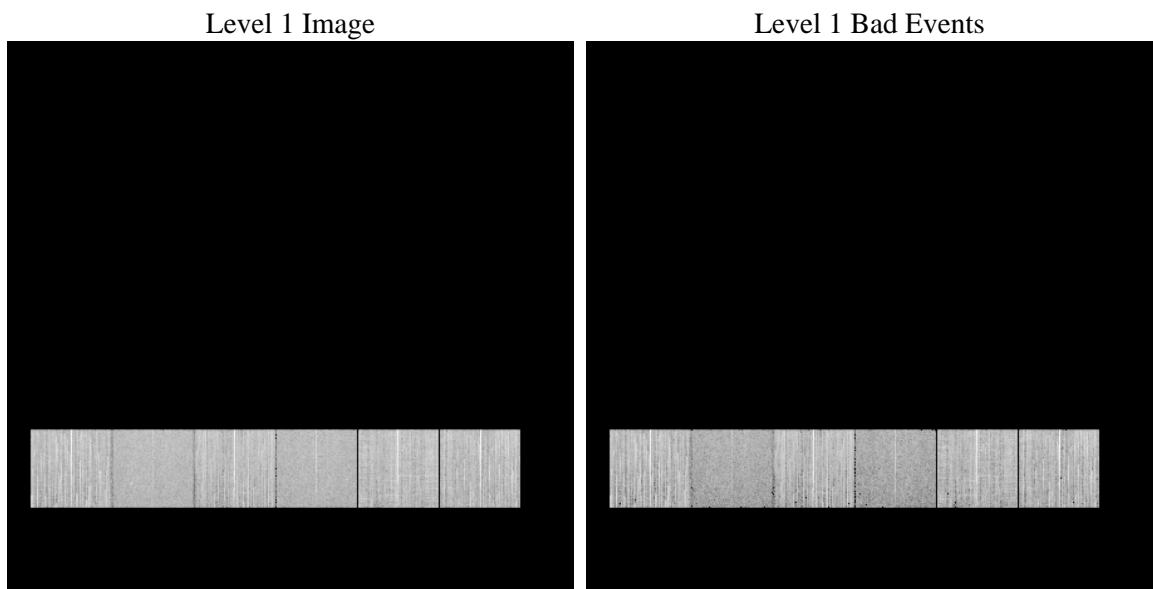
1 Front

seq_num	 	Sequence number
obs_id	52831	Observation id
title	ACIS-456789 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	22.048741523934	Nominal RA [deg]
dec_nom	62.017249292695	Nominal Dec [deg]
roll_nom	3.7989470108277	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6946.8496438265	Sum of GTIs [s]
livetime	6858.8844507457	Livetime [s]
ontime4	6946.7265238166	Sum of GTIs [s]
ontime5	6946.8086038232	Sum of GTIs [s]
ontime6	6946.7675638199	Sum of GTIs [s]
ontime7	6946.8496438265	Sum of GTIs [s]
ontime8	6946.6854838133	Sum of GTIs [s]
ontime9	6946.8906838298	Sum of GTIs [s]
l2events	178201	Number of level 2 events

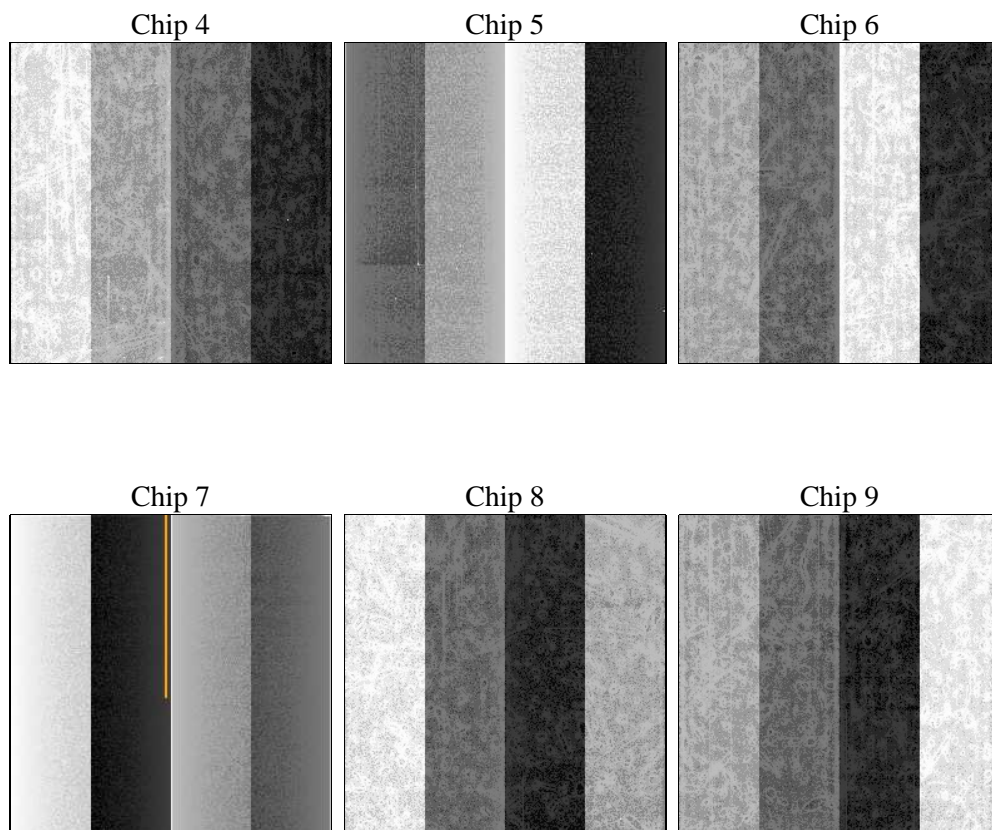
2 OBI

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	10.2.1	Processing system revision	ontime	6946.8496438265	Sum of GTIs [s]
caldsver	4.6.1	 	ontime4	6946.7265238166	Sum of GTIs [s]
date	2014-04-21T15:29:01	Date and time of file creation	ontime5	6946.8086038232	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6946.7675638199	Sum of GTIs [s]
			ontime7	6946.8496438265	Sum of GTIs [s]
			ontime8	6946.6854838133	Sum of GTIs [s]
			ontime9	6946.8906838298	Sum of GTIs [s]
			l1events	733805	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	133746	106416	128699	100516	133328	131100	grade 0 events	12700	3926	11589	5955	14186	12031
rejected events	109849	59807	104107	56078	101227	106874		9%	3%	9%	5%	10%	9%
rejected %	82%	56%	80%	55%	75%	81%	grade 1 events	103	100	54	100	66	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	4626	17718	5524	11049	6876	4961
								3%	16%	4%	10%	5%	3%
							grade 3 events	1605	1433	1583	3518	2497	1661
								1%	1%	1%	3%	1%	1%
							grade 4 events	1670	1482	1582	3449	2311	1663
								1%	1%	1%	3%	1%	1%
							grade 5 events	2546	4636	2469	5963	3353	2842
								1%	4%	1%	5%	2%	2%
							grade 6 events	3433	22377	4476	20782	6462	4058
								2%	21%	3%	20%	4%	3%
							grade 7 events	107063	54744	101422	49700	97577	103814
								80%	51%	78%	49%	73%	79%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	22.04874152393395
[deg] Pointing Dec	0	62.01724929269521
[deg] Pointing Roll	0.0	3.798947010827713
SIM focus pos (mm)	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
SIM translation stage pos (mm)	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	514096443.549126	514096443.549126
Observation start date	2014-04-17T04:34:04	2014-04-17T04:34:03
[s] Observation end time (MET)	514107004.315719	514107004.315719
Observation end date	2014-04-17T07:30:04	2014-04-17T07:30:04
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
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)	2014.04.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.9468496438265

A.2 Comments

A spatial region of the original bias map for CCD = 6 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 = 6 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:
(984,1),(1022,1),(1022,1024),(984,1024)