

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 51208 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Mar 9 2016

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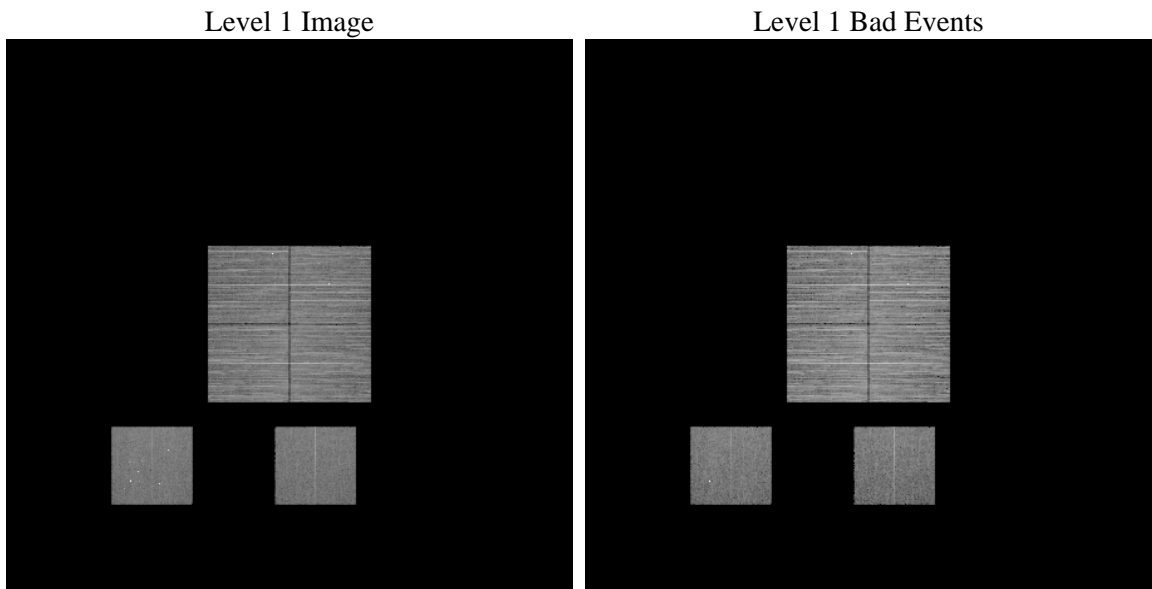
1 Front

seq_num	 	Sequence number
obs_id	51208	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	149.92317955093	Nominal RA [deg]
dec_nom	-52.986361706401	Nominal Dec [deg]
roll_nom	338.94523150356	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5973.5626634359	Sum of GTIs [s]
livetime	5897.9218161439	Livetime [s]
ontime0	5973.521623373	Sum of GTIs [s]
ontime1	5973.4805834293	Sum of GTIs [s]
ontime2	5973.4395433664	Sum of GTIs [s]
ontime3	5973.6037033796	Sum of GTIs [s]
ontime5	5973.3985034227	Sum of GTIs [s]
ontime7	5973.5626634359	Sum of GTIs [s]
l2events	160466	Number of level 2 events

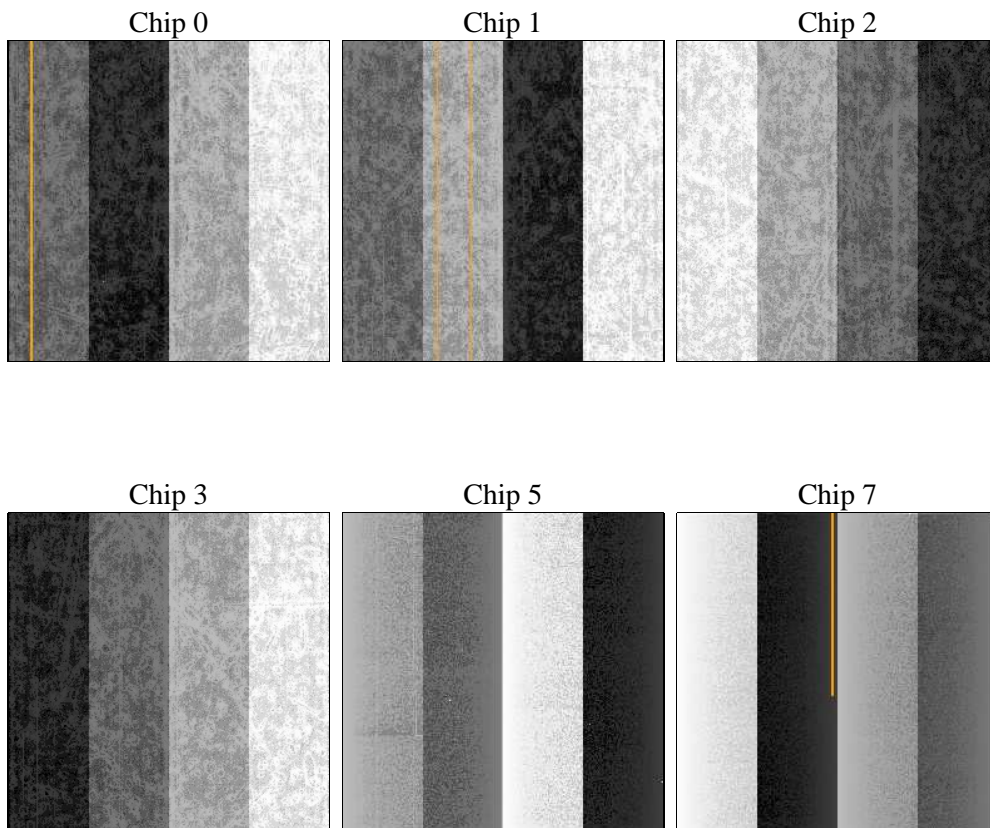
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	5973.5626634359	Sum of GTIs [s]
caldsver	4.7.0	 	ontime0	5973.521623373	Sum of GTIs [s]
date	2016-03-09T08:50:09	Date and time of file creation	ontime1	5973.4805834293	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5973.4395433664	Sum of GTIs [s]
			ontime3	5973.6037033796	Sum of GTIs [s]
			ontime5	5973.3985034227	Sum of GTIs [s]
			ontime7	5973.5626634359	Sum of GTIs [s]
			l1events	745297	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	122887	134787	140996	132623	113350	100654	grade 0 events	9329	8812	9763	9814	8700	4854
rejected events	100399	113312	120456	111608	62879	59432		7%	6%	6%	7%	7%	4%
rejected %	81%	84%	85%	84%	55%	59%	grade 1 events	48	1772	64	72	158	75
								0%	1%	0%	0%	0%	0%
							grade 2 events	6507	5895	4433	4542	17054	10311
								5%	4%	3%	3%	15%	10%
							grade 3 events	1330	1287	1387	1372	1261	2813
								1%	0%	0%	1%	1%	2%
							grade 4 events	1347	1242	1350	1426	1214	2835
								1%	0%	0%	1%	1%	2%
							grade 5 events	2339	2314	2244	2538	4576	5856
								1%	1%	1%	1%	4%	5%
							grade 6 events	3984	4251	3617	3867	22271	20427
								3%	3%	2%	2%	19%	20%
							grade 7 events	98003	109214	118138	108992	58116	53483
								79%	81%	83%	82%	51%	53%

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	149.9231795509325	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-52.98636170640078	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	338.9452315035615	[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)	573738354.264535	573738353.23954			
Observation start date	2016-03-07T11:45:54	2016-03-07T11:45:53			
[s] Observation end time (MET)	573748081.51509	573748080.49009			
Observation end date	2016-03-07T14:28:02	2016-03-07T14:28:00			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.03.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.9735626634359

A.2 Comments

The bias map for CCD_ID = 2 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data that have been bias-corrected by one of the 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_ID = 2 will be recreated to remove this anomaly and the data will be reprocessed.