

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 51162 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Mar 24 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Star Slots	6
2.4	FID Slots	6
A	Summary	7
A.1	Status	7
A.2	Comments	7

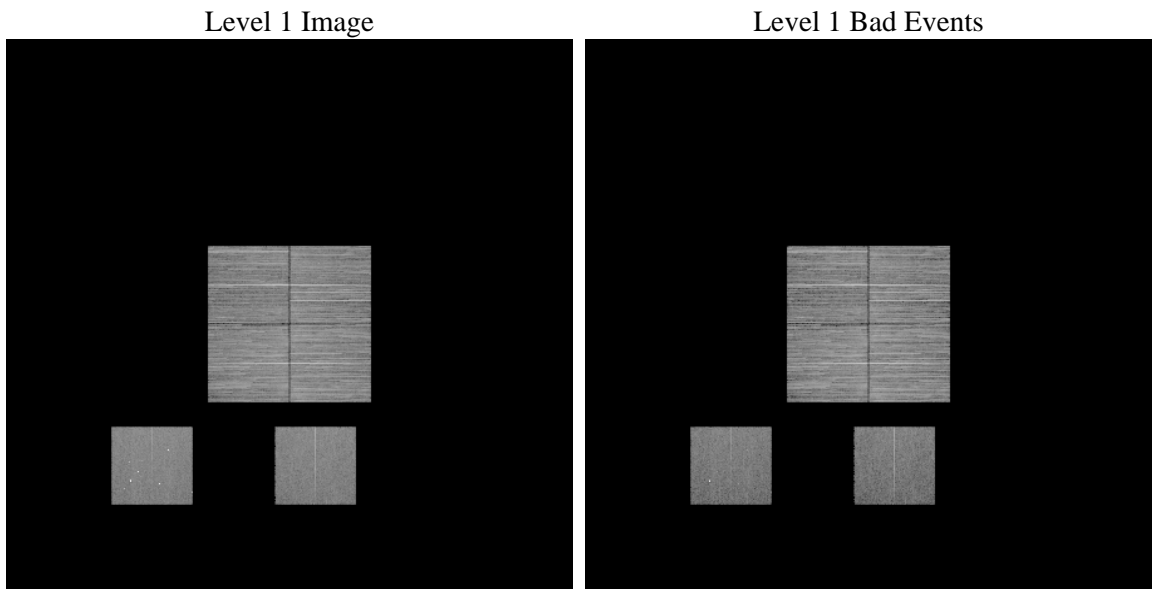
1 Front

seq_num	 	Sequence number
obs_id	51162	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	189.02057465084	Nominal RA [deg]
dec_nom	-24.177980160242	Nominal Dec [deg]
roll_nom	16.803943666535	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8105.2754268646	Sum of GTIs [s]
livetime	8002.6415489987	Livetime [s]
ontime0	8105.2343868017	Sum of GTIs [s]
ontime1	8105.193346858	Sum of GTIs [s]
ontime2	8105.1523067951	Sum of GTIs [s]
ontime3	8105.3164668083	Sum of GTIs [s]
ontime5	8105.1112668514	Sum of GTIs [s]
ontime7	8105.2754268646	Sum of GTIs [s]
l2events	173092	Number of level 2 events

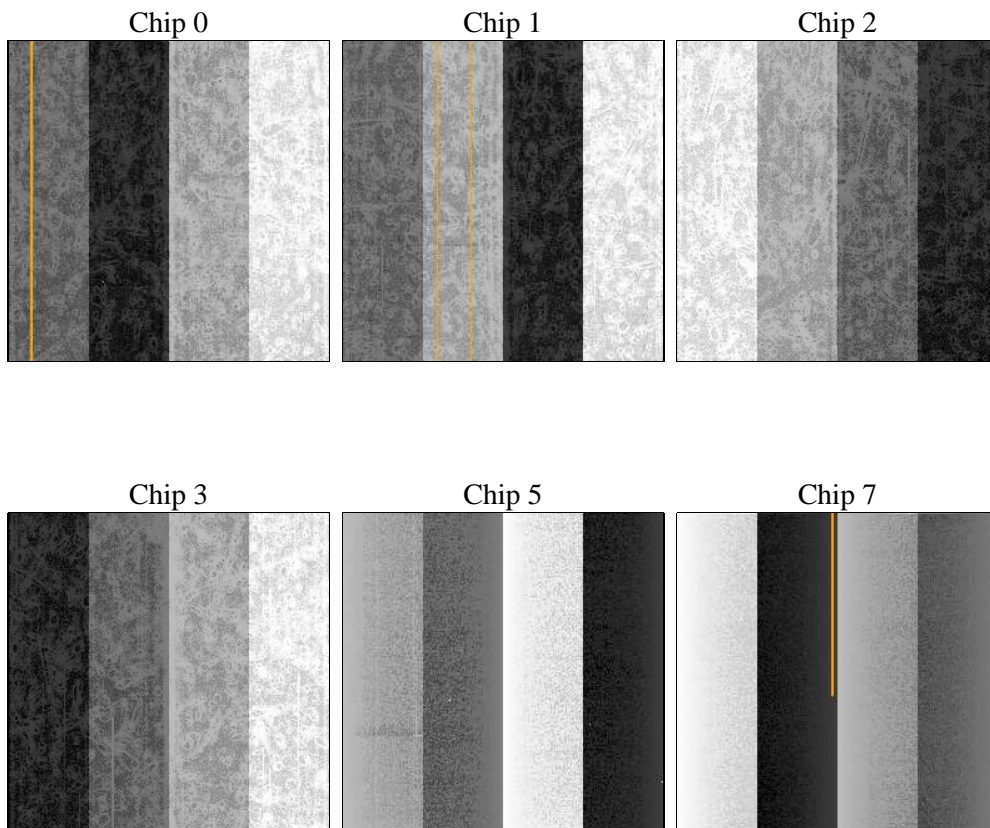
2 OBI

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	8105.2754268646	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	8105.2343868017	Sum of GTIs [s]
date	2016-03-24T13:57:01	Date and time of file creation	ontime1	8105.193346858	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8105.1523067951	Sum of GTIs [s]
			ontime3	8105.3164668083	Sum of GTIs [s]
			ontime5	8105.1112668514	Sum of GTIs [s]
			ontime7	8105.2754268646	Sum of GTIs [s]
			l1events	990617	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	158752	174060	182876	191682	150899	132348	grade 0 events	8959	8781	9545	9811	10622	5168
rejected events	139365	153889	163562	171645	88383	82916		5%	5%	5%	5%	7%	3%
rejected %	87%	88%	89%	89%	58%	62%	grade 1 events	67	54	72	71	218	92
								0%	0%	0%	0%	0%	0%
							grade 2 events	4558	5300	4181	4462	20924	12486
								2%	3%	2%	2%	13%	9%
							grade 3 events	1443	1344	1397	1440	1601	3597
								0%	0%	0%	0%	1%	2%
							grade 4 events	1363	1308	1377	1437	1481	3441
								0%	0%	0%	0%	0%	2%
							grade 5 events	3131	3070	2917	3784	6563	8076
								1%	1%	1%	1%	4%	6%
							grade 6 events	3457	3869	3224	3312	29230	25707
								2%	2%	1%	1%	19%	19%
							grade 7 events	135774	150334	160163	167365	80260	73781
								85%	86%	87%	87%	53%	55%

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	189.020574650845
[deg] Pointing Dec	0	-24.17798016024173
[deg] Pointing Roll	0.0	16.80394366653467
SIM focus pos (mm)	-0.78090834371673	-0.78090834371673
[mm] SIM defocus	0.7524282194390134	0.7524282194390134
SIM translation stage pos (mm)	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	575068726.440465	575068726.440465
Observation start date	2016-03-22T21:18:46	2016-03-22T21:18:46
[s] Observation end time (MET)	575078276.415241	575078276.415241
Observation end date	2016-03-22T23:57:56	2016-03-22T23:57:56
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	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.03.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1052754268646

A.2 Comments

A spatial region of the original bias map for CCD = 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 map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.