

V&V Reference Report

L2 ASCDS Version : 10.3

Observation 52342 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Nov 17 2014

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

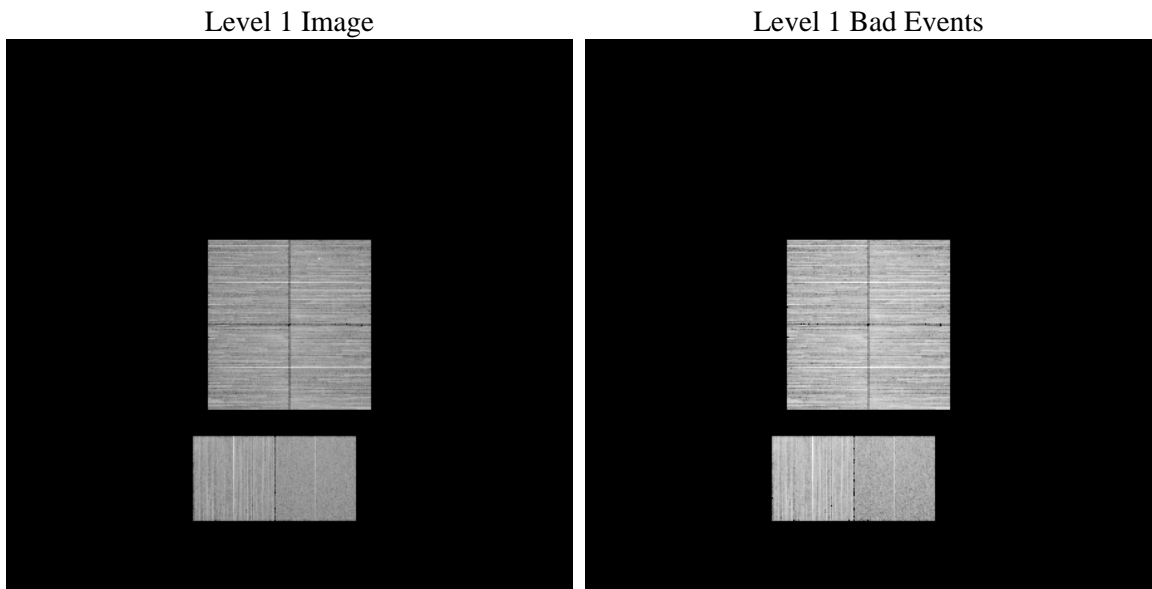
1 Front

seq_num	 	Sequence number
obs_id	52342	Observation id
title	ACIS-012367 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	192.9423445932	Nominal RA [deg]
dec_nom	-59.999426688475	Nominal Dec [deg]
roll_nom	146.17411825664	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8113.942614913	Sum of GTIs [s]
livetime	8011.1989878933	Livetime [s]
ontime0	8113.9015749097	Sum of GTIs [s]
ontime1	8113.8605349064	Sum of GTIs [s]
ontime2	8113.8194949031	Sum of GTIs [s]
ontime3	8113.9836549163	Sum of GTIs [s]
ontime6	8113.7784548998	Sum of GTIs [s]
ontime7	8113.942614913	Sum of GTIs [s]
l2events	160577	Number of level 2 events

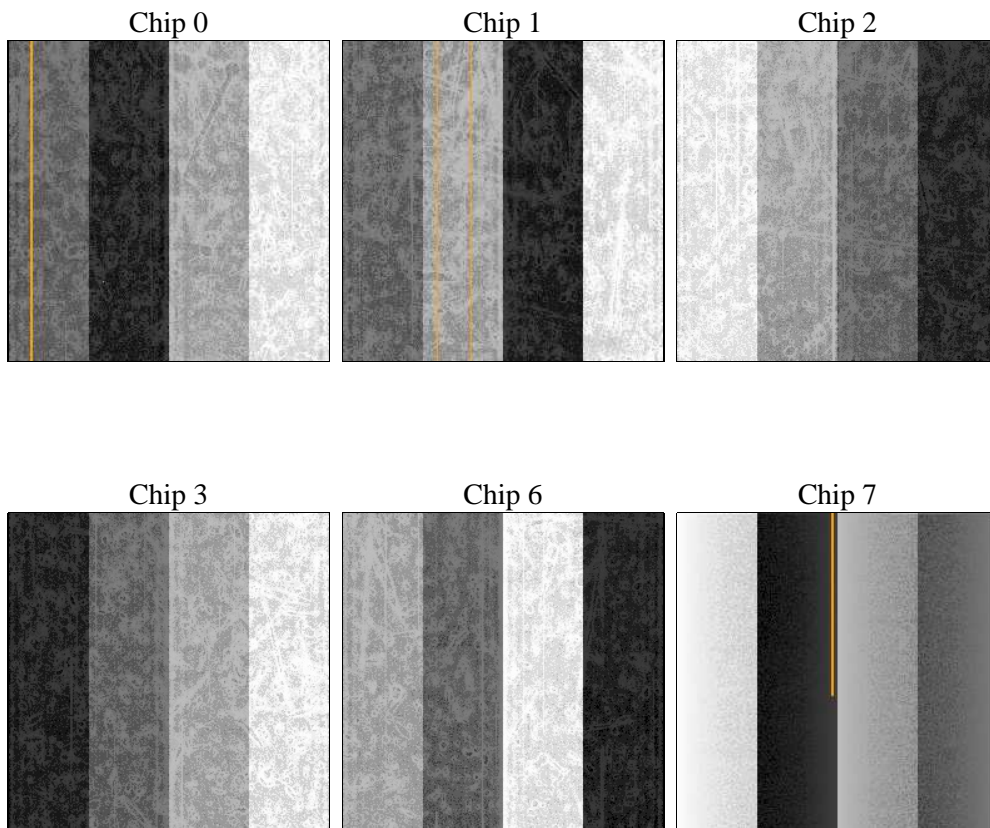
2 OBI

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	10.3	Processing system revision	ontime	8113.942614913	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	8113.9015749097	Sum of GTIs [s]
date	2014-11-17T23:09:45	Date and time of file creation	ontime1	8113.8605349064	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8113.8194949031	Sum of GTIs [s]
			ontime3	8113.9836549163	Sum of GTIs [s]
			ontime6	8113.7784548998	Sum of GTIs [s]
			ontime7	8113.942614913	Sum of GTIs [s]
			l1events	859521	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	133935	155050	146901	155930	150646	117059	grade 0 events	12166	12805	12364	12370	12249	6745
rejected events	109911	129569	123206	131943	125726	67628		9%	8%	8%	7%	8%	5%
rejected %	82%	83%	83%	84%	83%	57%	grade 1 events	64	64	52	57	58	84
								0%	0%	0%	0%	0%	0%
							grade 2 events	5031	5596	4802	4748	5312	12349
								3%	3%	3%	3%	3%	10%
							grade 3 events	1730	1662	1711	1788	1691	4022
								1%	1%	1%	1%	1%	3%
							grade 4 events	1674	1728	1663	1767	1754	3954
								1%	1%	1%	1%	1%	3%
							grade 5 events	2887	2904	2652	3227	3006	7451
								2%	1%	1%	2%	1%	6%
							grade 6 events	3939	4257	3661	3844	4443	23449
								2%	2%	2%	2%	2%	20%
							grade 7 events	106444	126034	119996	128129	122133	59005
								79%	81%	81%	82%	81%	50%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	192.9423445932031
[deg] Pointing Dec	0	-59.99942668847525
[deg] Pointing Roll	0.0	146.1741182566418
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)	531425631.609194	531425631.609194
Observation start date	2014-11-03T18:13:52	2014-11-03T18:13:51
[s] Observation end time (MET)	531435179.394286	531435179.394286
Observation end date	2014-11-03T20:52:59	2014-11-03T20:52:59
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)	2014.11.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.113942614913

A.2 Comments

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(394,1),(417,1),(417,1024),(394,1024)