

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 58056 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : May 10 2012

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

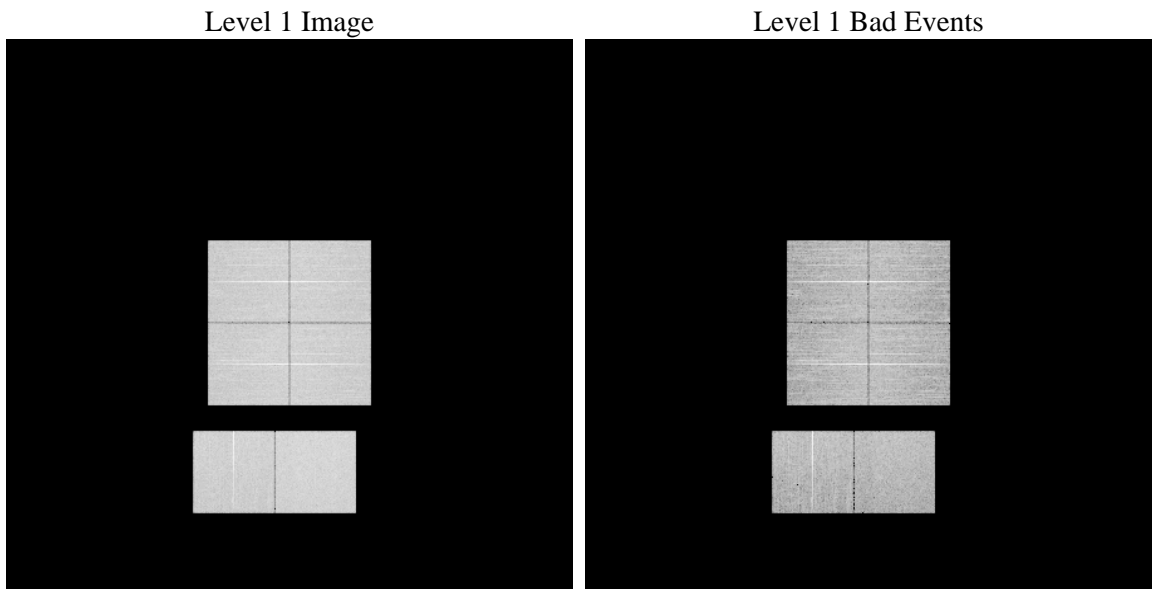
1 Front

seq_num	 	Sequence number
obs_id	58056	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	47.618592446464	Nominal RA [deg]
dec_nom	-24.22320220399	Nominal Dec [deg]
roll_nom	318.56205183811	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7999.9999702573	Sum of GTIs [s]
livetime	7898.6991536122	Livetime [s]
ontime0	7999.9999702573	Sum of GTIs [s]
ontime1	7996.7590000033	Sum of GTIs [s]
ontime2	7999.9999702573	Sum of GTIs [s]
ontime3	7999.9999702573	Sum of GTIs [s]
ontime6	7999.9999702573	Sum of GTIs [s]
ontime7	7999.9999702573	Sum of GTIs [s]
l2events	624336	Number of level 2 events

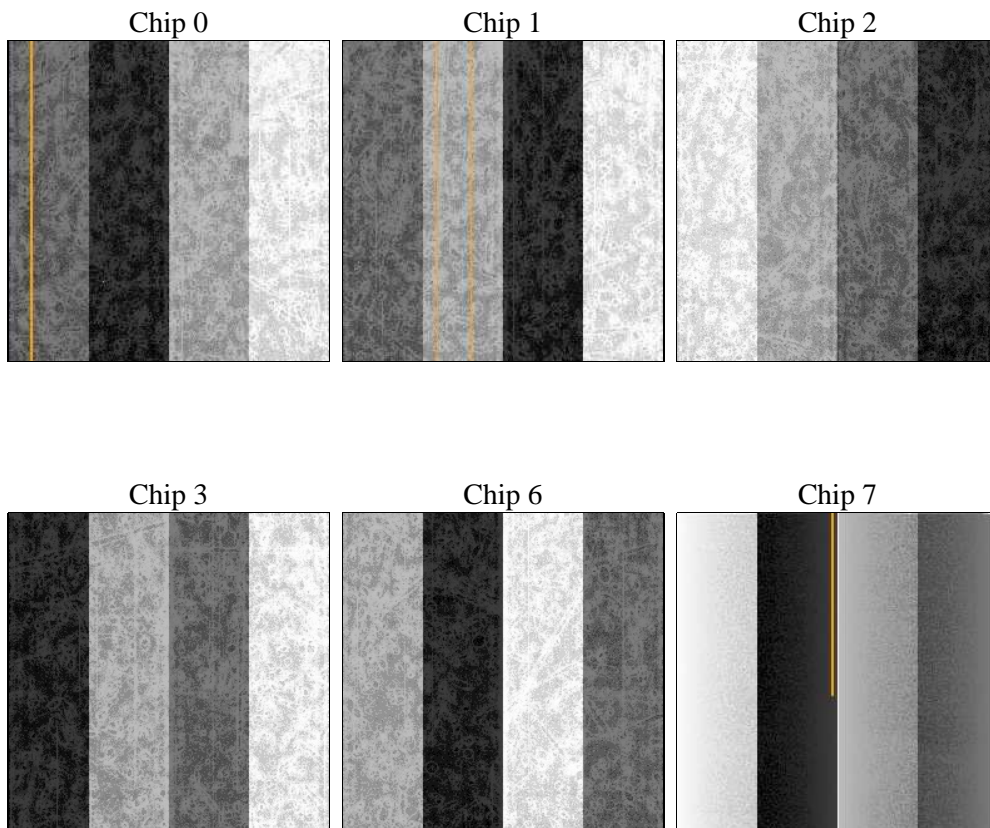
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6120	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	7999.9999702573	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	7999.9999702573	Sum of GTIs [s]
date	2012-05-10T20:07:24	Date and time of file creation	ontime1	7996.7590000033	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	7999.9999702573	Sum of GTIs [s]
			ontime3	7999.9999702573	Sum of GTIs [s]
			ontime6	7999.9999702573	Sum of GTIs [s]
			ontime7	7999.9999702573	Sum of GTIs [s]
			l1events	1111818	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	177008	179014	181500	183492	182829	207975	grade 0 events	57200	56953	59252	59909	58686	28826
rejected events	74377	75338	78224	78996	75771	70577		32%	31%	32%	32%	32%	13%
rejected %	42%	42%	43%	43%	41%	33%	grade 1 events	408	360	437	486	334	136
								0%	0%	0%	0%	0%	0%
							grade 2 events	19040	19834	17967	18606	19554	31207
								10%	11%	9%	10%	10%	15%
							grade 3 events	7118	7118	7217	7323	6985	13340
								4%	3%	3%	3%	3%	6%
							grade 4 events	6934	7016	7167	7227	7152	13146
								3%	3%	3%	3%	3%	6%
							grade 5 events	3826	4033	3710	4327	4083	10824
								2%	2%	2%	2%	2%	5%
							grade 6 events	15774	16157	15107	15066	18418	55613
								8%	9%	8%	8%	10%	26%
							grade 7 events	66708	67543	70643	70548	67617	54883
								37%	37%	38%	38%	36%	26%

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	47.6185924562788	47.61859244646386
[deg] Pointing Dec	-24.22320223922167	-24.22320220399015
[deg] Pointing Roll	318.5620518380097	318.5620518381064
[mm] SIM focus pos	-0.78090834371673	-0.78090834371673
[mm] SIM defocus	0.7524282194390134	0.7524282194390134
[mm] SIM translation stage pos	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	314859803.532819	314859803.532819
Observation start date	2007-12-24T05:32:00	2007-12-24T05:03:23
[s] Observation end time (MET)	314873675.25764	314873675.25764
Observation end date	2007-12-24T07:14:00	2007-12-24T08:54:35
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)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.9999999702573

A.2 Comments

A spatial region of the original bias map for CCD = 1 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 = 1 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:
(95,1),(154,1),(154,168),(95,227)