

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56361 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Jun 25 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

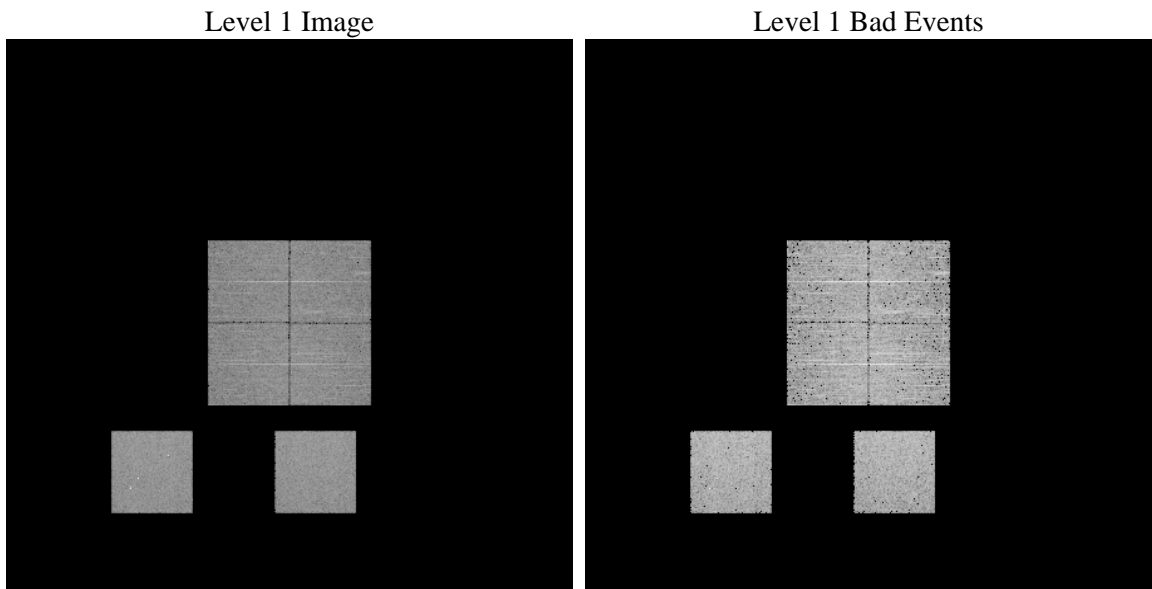
1 Front

seq_num	 	Sequence number
obs_id	56361	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	186.64710795777	Nominal RA [deg]
dec_nom	-23.182113728059	Nominal Dec [deg]
roll_nom	236.98531100501	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3049.5188230276	Sum of GTIs [s]
livetime	3010.9039794906	Livetime [s]
ontime0	3049.4777830243	Sum of GTIs [s]
ontime1	3049.436743021	Sum of GTIs [s]
ontime2	3049.3957030177	Sum of GTIs [s]
ontime3	3049.5598630309	Sum of GTIs [s]
ontime5	3049.3546630144	Sum of GTIs [s]
ontime7	3049.5188230276	Sum of GTIs [s]
l2events	164268	Number of level 2 events

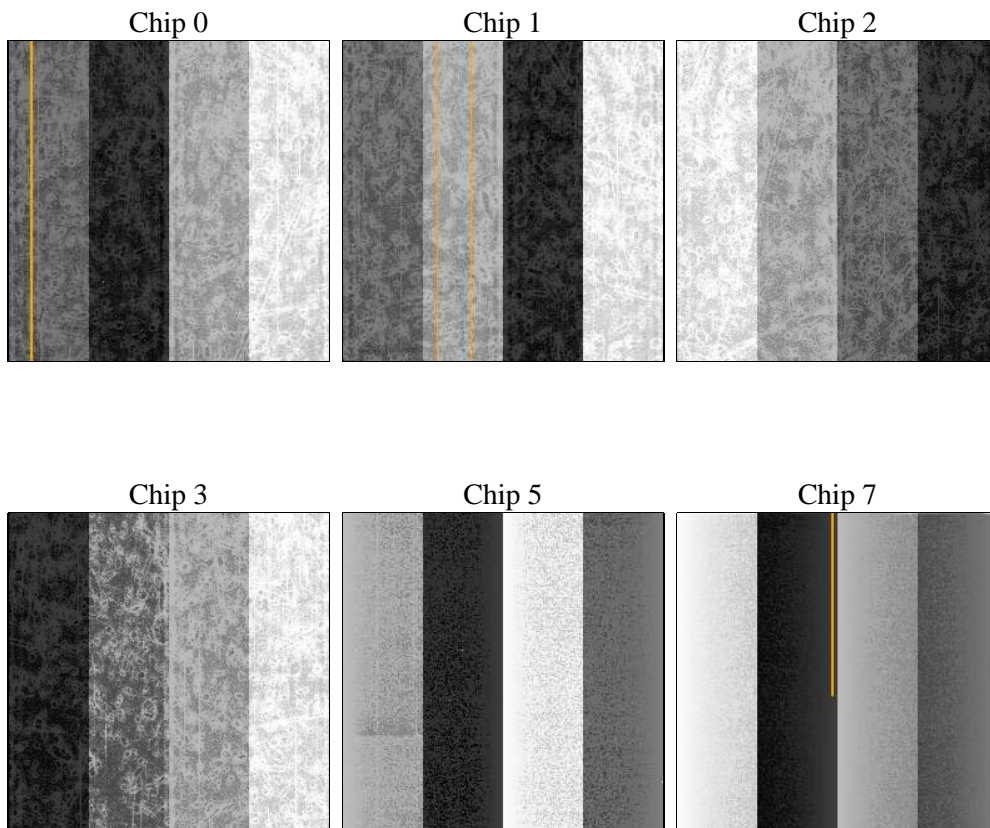
2 OBI

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	8.4.5	Processing system revision	ontime	3049.5188230276	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	3049.4777830243	Sum of GTIs [s]
date	2012-06-25T20:04:48	Date and time of file creation	ontime1	3049.436743021	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	3049.3957030177	Sum of GTIs [s]
			ontime3	3049.5598630309	Sum of GTIs [s]
			ontime5	3049.3546630144	Sum of GTIs [s]
			ontime7	3049.5188230276	Sum of GTIs [s]
			l1events	347542	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	50514	51566	53262	55239	69408	67553	grade 0 events	13603	13652	13976	14243	6764	7303
rejected events	26721	27257	29223	30693	30242	29941		26%	26%	26%	25%	9%	10%
rejected %	52%	52%	54%	55%	43%	44%	grade 1 events	97	77	94	115	113	55
								0%	0%	0%	0%	0%	0%
							grade 2 events	4715	4997	4520	4571	14362	8879
								9%	9%	8%	8%	20%	13%
							grade 3 events	1756	1724	1749	1887	1896	3703
								3%	3%	3%	3%	2%	5%
							grade 4 events	1683	1738	1791	1910	1881	3727
								3%	3%	3%	3%	2%	5%
							grade 5 events	1525	1609	1537	1832	3724	4589
								3%	3%	2%	3%	5%	6%
							grade 6 events	3846	4102	3798	3812	17248	16889
								7%	7%	7%	6%	24%	25%
							grade 7 events	23289	23667	25797	26869	23420	22408
								46%	45%	48%	48%	33%	33%

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	186.6471079577707
[deg] Pointing Dec	0	-23.18211372805888
[deg] Pointing Roll	0.0	236.9853110050128
[mm] SIM focus pos	-0.68282252473119	-0.68282252473119
[mm] SIM defocus	0.8505140384245534	0.8505140384245534
[mm] SIM translation stage pos	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	386335686.486625	386335686.486625
Observation start date	2010-03-30T11:28:06	2010-03-30T11:28:06
[s] Observation end time (MET)	386340235.291217	386340235.291217
Observation end date	2010-03-30T12:43:55	2010-03-30T12:43:55
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)	2012.07.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.0495188230276

A.2 Comments

A spatial region of the original bias map for CCD = 2 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 = 2 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:
(616,1),(647,1),(647,1024),(616,1024)