

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 54166 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Dec 7 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

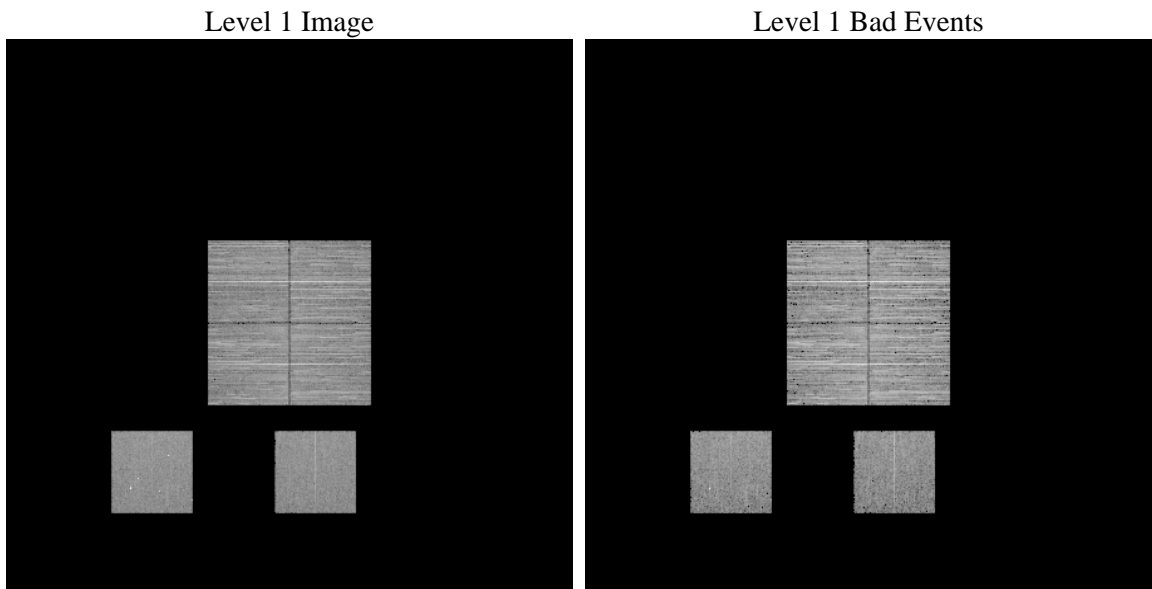
1 Front

seq_num	 	Sequence number
obs_id	54166	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	34.500806914024	Nominal RA [deg]
dec_nom	4.7863572619347	Nominal Dec [deg]
roll_nom	313.65821998077	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5109.388236165	Sum of GTIs [s]
livetime	5044.6900858145	Livetime [s]
ontime0	5109.3471961617	Sum of GTIs [s]
ontime1	5109.3061561584	Sum of GTIs [s]
ontime2	5109.2651161551	Sum of GTIs [s]
ontime3	5109.4292761683	Sum of GTIs [s]
ontime5	5109.2240761518	Sum of GTIs [s]
ontime7	5109.388236165	Sum of GTIs [s]
l2events	161474	Number of level 2 events

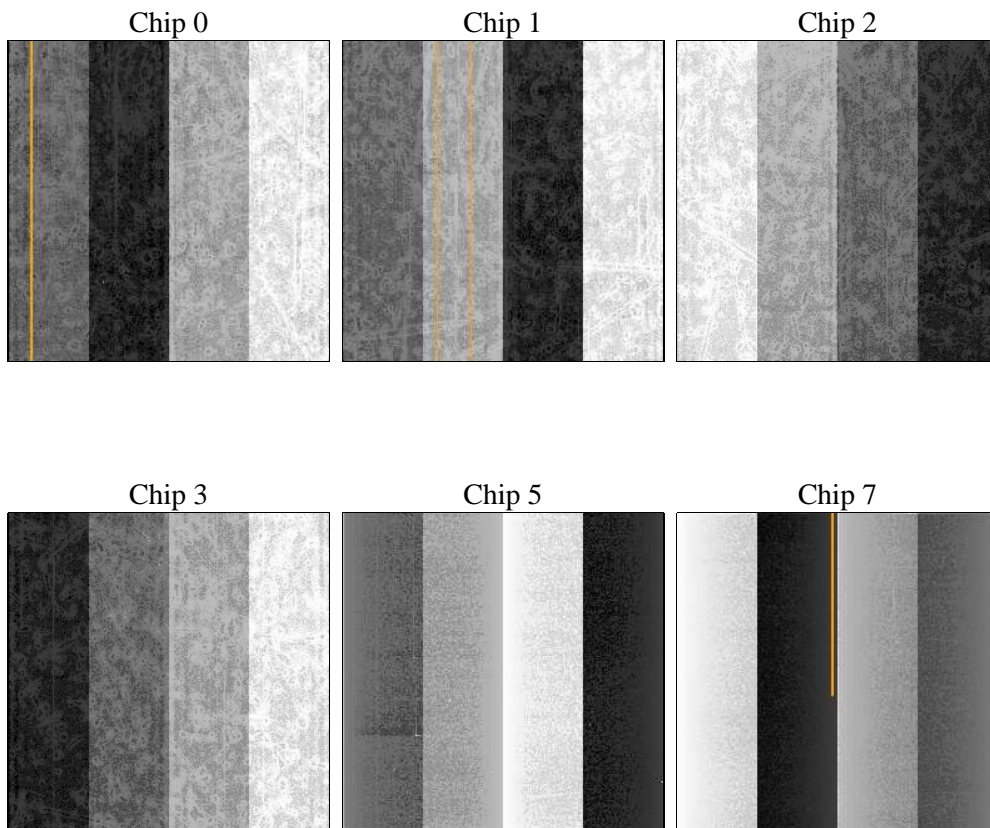
2 OBI

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	8.5	Processing system revision	ontime	5109.388236165	Sum of GTIs [s]
caldbver	4.5.4	 	ontime0	5109.3471961617	Sum of GTIs [s]
date	2012-12-07T04:43:25	Date and time of file creation	ontime1	5109.3061561584	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5109.2651161551	Sum of GTIs [s]
			ontime3	5109.4292761683	Sum of GTIs [s]
			ontime5	5109.2240761518	Sum of GTIs [s]
			ontime7	5109.388236165	Sum of GTIs [s]
			l1events	565442	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	96566	100770	99196	99326	87741	81843	grade 0 events	11489	11284	11729	11998	5585	6046
rejected events	74295	78234	76788	76636	45556	42617		11%	11%	11%	12%	6%	7%
rejected %	76%	77%	77%	77%	51%	52%	grade 1 events	57	61	73	71	125	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	4362	4730	4333	4235	15590	9666
								4%	4%	4%	4%	17%	11%
							grade 3 events	1565	1485	1536	1527	1552	3367
								1%	1%	1%	1%	1%	4%
							grade 4 events	1408	1420	1501	1574	1475	3256
								1%	1%	1%	1%	1%	3%
							grade 5 events	1727	1810	1741	2152	3955	4963
								1%	1%	1%	2%	4%	6%
							grade 6 events	3458	3633	3325	3368	18010	16918
								3%	3%	3%	3%	20%	20%
							grade 7 events	72500	76347	74958	74401	41449	37560
								75%	75%	75%	74%	47%	45%

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	34.50080691402354	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	4.786357261934679	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	313.6582199807675	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	469281091.807853	469281090.78285			
Observation start date	2012-11-14T11:51:32	2012-11-14T11:51:30			
[s] Observation end time (MET)	469289060.158281	469289059.13328			
Observation end date	2012-11-14T14:04:20	2012-11-14T14:04:19			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.109388236165

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 the chip coords:
(898,481),(924,481),(924,847),(898,837)