

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 58118 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : May 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

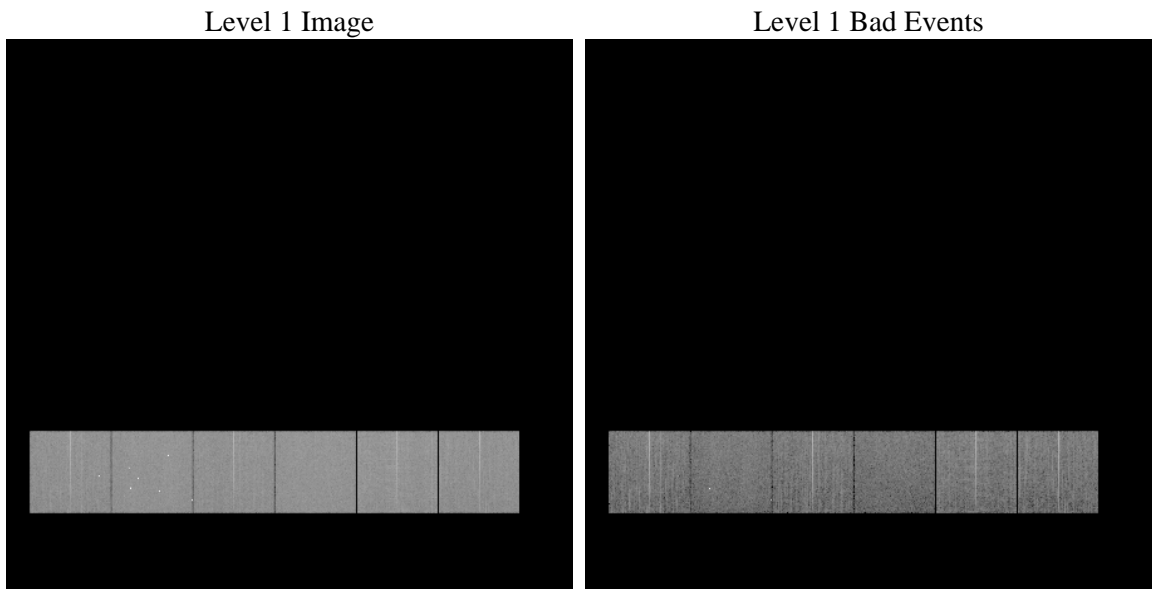
1 Front

seq_num	 	Sequence number
obs_id	58118	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtycle	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	26.014757635438	Nominal RA [deg]
dec_nom	25.974520412082	Nominal Dec [deg]
roll_nom	264.5862223928	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7161.5590030551	Sum of GTIs [s]
livetime	7070.8750307853	Livetime [s]
ontime4	6931.4491710067	Sum of GTIs [s]
ontime5	7161.559032917	Sum of GTIs [s]
ontime6	6954.1359733343	Sum of GTIs [s]
ontime7	7161.5590030551	Sum of GTIs [s]
ontime8	7005.9917578697	Sum of GTIs [s]
ontime9	6967.0999742746	Sum of GTIs [s]
l2events	752370	Number of level 2 events

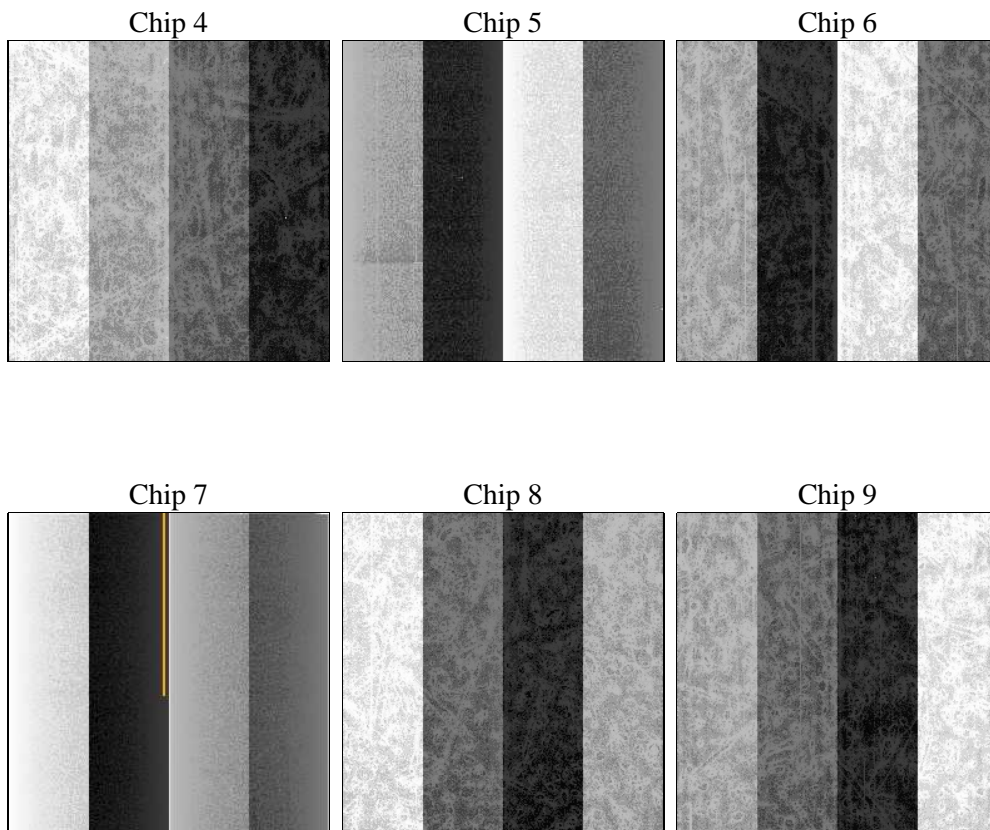
2 OBI

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	8.4.4	Processing system revision	ontime	7161.5590030551	Sum of GTIs [s]
caldbver	4.4.9	 	ontime4	6931.4491710067	Sum of GTIs [s]
date	2012-05-07T12:51:24	Date and time of file creation	ontime5	7161.559032917	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	6954.1359733343	Sum of GTIs [s]
			ontime7	7161.5590030551	Sum of GTIs [s]
			ontime8	7005.9917578697	Sum of GTIs [s]
			ontime9	6967.0999742746	Sum of GTIs [s]
			l1events	1222684	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	194751	214472	195501	208933	215675	193352	grade 0 events	69490	28305	64550	33467	71109	66431
rejected events	72824	65202	69301	56725	74906	68548		35%	13%	33%	16%	32%	34%
rejected %	37%	30%	35%	27%	34%	35%	grade 1 events	733	310	433	146	472	534
								0%	0%	0%	0%	0%	0%
							grade 2 events	18331	54154	22527	32881	25184	20969
								9%	25%	11%	15%	11%	10%
							grade 3 events	8097	7087	7727	13725	9399	7825
								4%	3%	3%	6%	4%	4%
							grade 4 events	8260	6657	7622	13406	9146	7797
								4%	3%	3%	6%	4%	4%
							grade 5 events	3552	8616	3851	8988	4906	4060
								1%	4%	1%	4%	2%	2%
							grade 6 events	17749	53067	23774	58729	25931	21782
								9%	24%	12%	28%	12%	11%
							grade 7 events	68539	56276	65017	47591	69528	63954
								35%	26%	33%	22%	32%	33%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
[deg] Pointing RA	0	26.01475763543783	Alternating exposures requested	N	N
[deg] Pointing Dec	0	25.97452041208168	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	264.5862223927977			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.8505141146731063			
[mm] SIM translation stage pos	-190.132523	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	312072578.29807	312072577.27307			
Observation start date	2007-11-21T22:49:38	2007-11-21T22:49:37			
[s] Observation end time (MET)	312089576.89889	312089575.8739			
Observation end date	2007-11-22T03:32:57	2007-11-22T03:32:55			
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)	2012.05.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.1615590030551

A.2 Comments

A spatial region of the original bias map for CCD = 9 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 = 9 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:
(258,1), (290,1), (290,1024), (258,1024)