

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 62121 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Oct 11 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

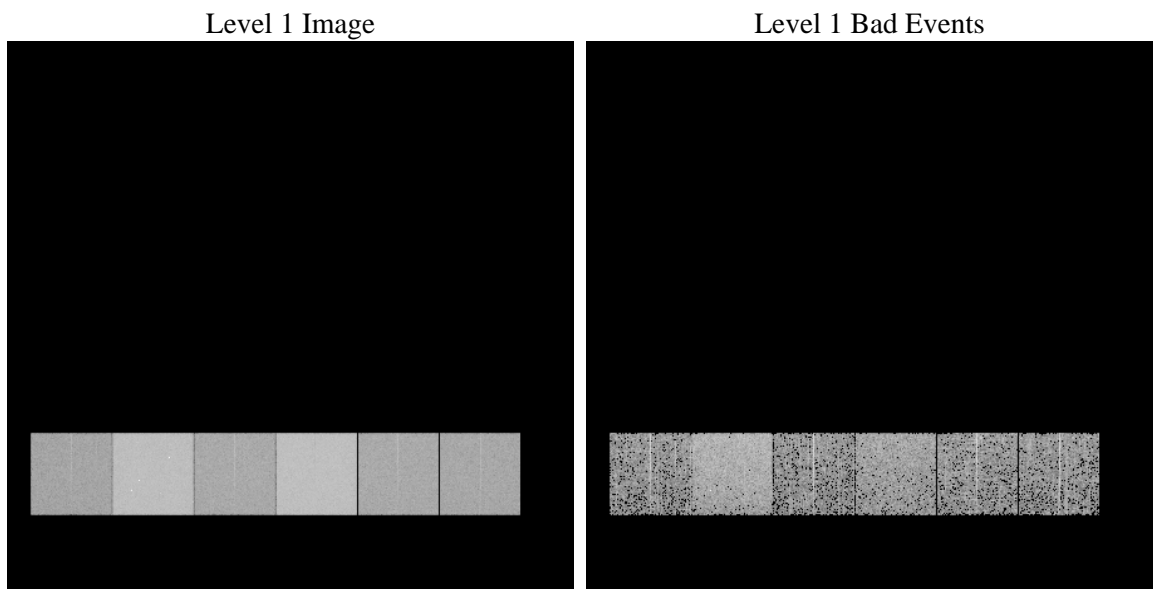
1 Front

seq_num	 	Sequence number
obs_id	62121	Observation id
title	ACIS-456789 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	88.836043326583	Nominal RA [deg]
dec_nom	-60.023204474553	Nominal Dec [deg]
roll_nom	274.31905048017	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2957.5611246377	Sum of GTIs [s]
livetime	2920.1107048481	Livetime [s]
ontime4	1181.6020566374	Sum of GTIs [s]
ontime5	3158.541907683	Sum of GTIs [s]
ontime6	1329.3263840377	Sum of GTIs [s]
ontime7	2957.5611246377	Sum of GTIs [s]
ontime8	1317.7667563558	Sum of GTIs [s]
ontime9	1278.6690166146	Sum of GTIs [s]
l2events	925802	Number of level 2 events

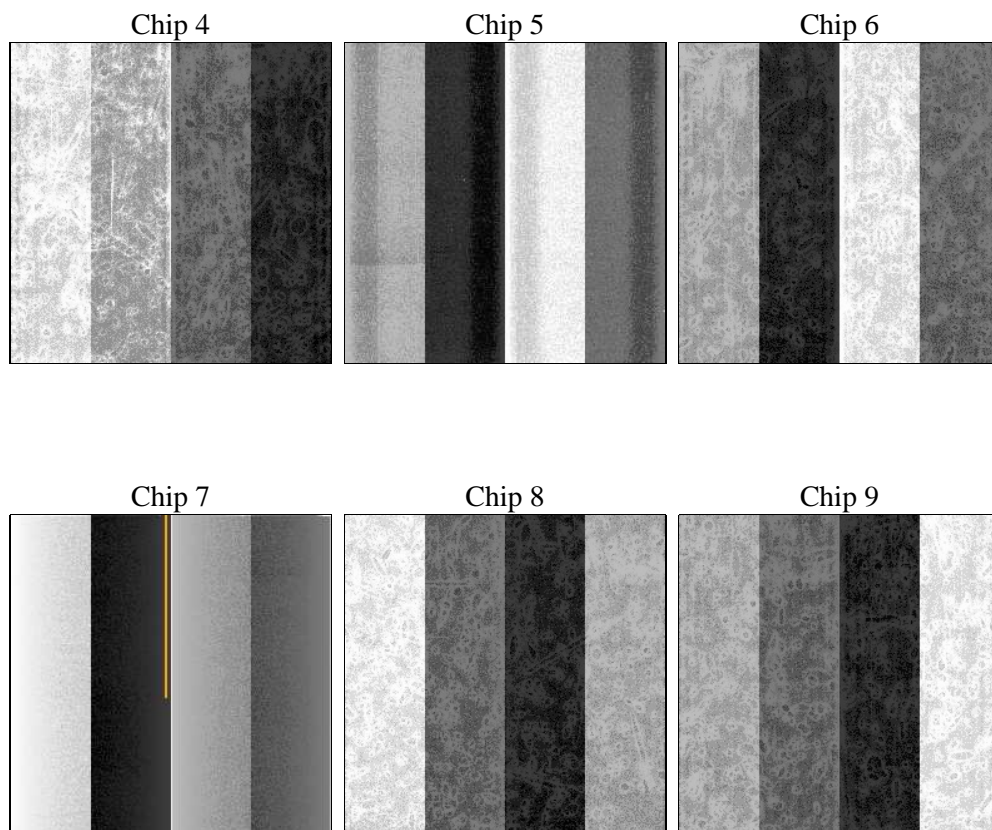
2 OBI

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	8.4.5	Processing system revision	ontime	2957.5611246377	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	1181.6020566374	Sum of GTIs [s]
date	2012-10-11T13:47:06	Date and time of file creation	ontime5	3158.541907683	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	1329.3263840377	Sum of GTIs [s]
			ontime7	2957.5611246377	Sum of GTIs [s]
			ontime8	1317.7667563558	Sum of GTIs [s]
			ontime9	1278.6690166146	Sum of GTIs [s]
			l1events	1065684	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	113230	274761	134587	283788	134495	124823	grade 0 events	56846	64295	66221	69066	66564	61398
rejected events	13695	27224	13380	17701	14484	13717		50%	23%	49%	24%	49%	49%
rejected %	12%	9%	9%	6%	10%	10%	grade 1 events	404	170	406	192	367	357
								0%	0%	0%	0%	0%	0%
							grade 2 events	17470	86080	21024	59436	21080	19469
								15%	31%	15%	20%	15%	15%
							grade 3 events	6069	16797	7517	27280	7627	6889
								5%	6%	5%	9%	5%	5%
							grade 4 events	6100	16531	7535	27049	7656	7031
								5%	6%	5%	9%	5%	5%
							grade 5 events	868	5354	1004	3709	1132	933
								0%	1%	0%	1%	0%	0%
							grade 6 events	13598	65113	19186	84680	17679	16871
								12%	23%	14%	29%	13%	13%
							grade 7 events	11875	20421	11694	12376	12390	11875
								10%	7%	8%	4%	9%	9%

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	88.83604332658339	Alternating exposures requested	N	N
[deg] Pointing Dec	0	-60.02320447455337	[s] Primary exposure time	3.2	3.2
[deg] Pointing Roll	0.0	274.3190504801746			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.8505141146731063			
[mm] SIM translation stage pos	-190.132523	250.4635187648994			
[mm] SIM translation stage offset	0	-0.007540371344731511			
[s] Observation start time (MET)	69484310.81625199	69484310.04778901			
Observation start date	2000-03-15T05:11:51	2000-03-15T05:11:50			
[s] Observation end time (MET)	69491610.866519	69491610.098056			
Observation end date	2000-03-15T07:13:31	2000-03-15T07:13:30			
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)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.9575611246377

A.2 Comments

A spatial region of the original bias map for CCD = 6 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 = 6 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:
(77,1),(145,1),(145,1024),(77,1024)