

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 57203 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jun 3 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

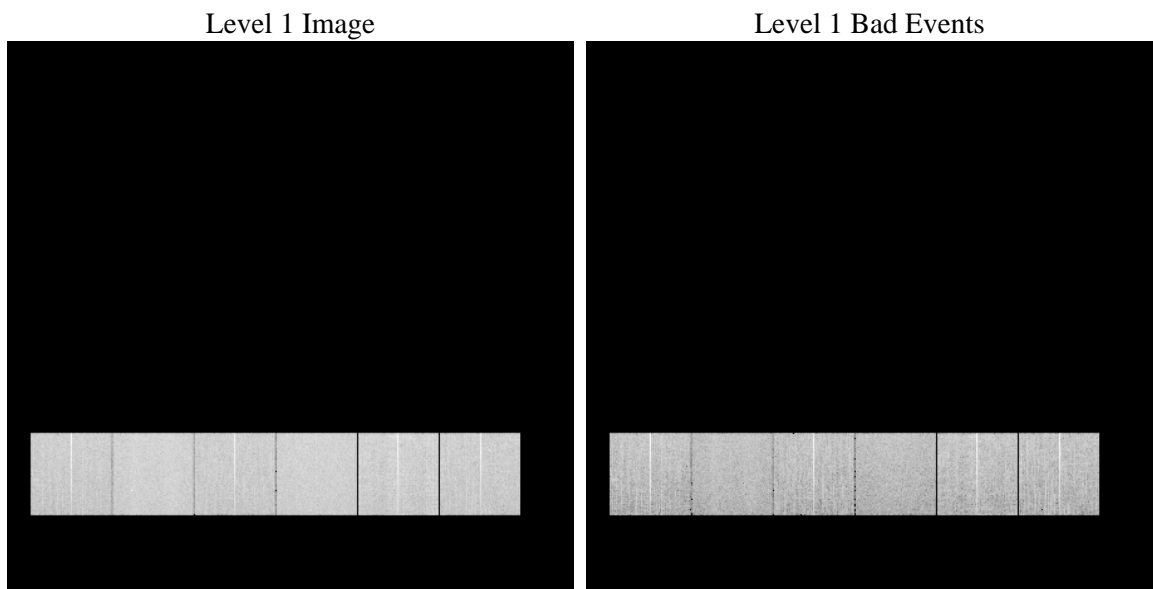
1 Front

seq_num	 	Sequence number
obs_id	57203	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	208.95977247673	Nominal RA [deg]
dec_nom	12.15431552097	Nominal Dec [deg]
roll_nom	128.70841389452	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6850.7338110209	Sum of GTIs [s]
livetime	6763.985694489	Livetime [s]
ontime4	6850.610691011	Sum of GTIs [s]
ontime5	6850.6927710176	Sum of GTIs [s]
ontime6	6850.6517310143	Sum of GTIs [s]
ontime7	6850.7338110209	Sum of GTIs [s]
ontime8	6850.5696510077	Sum of GTIs [s]
ontime9	6850.7748510242	Sum of GTIs [s]
l2events	437837	Number of level 2 events

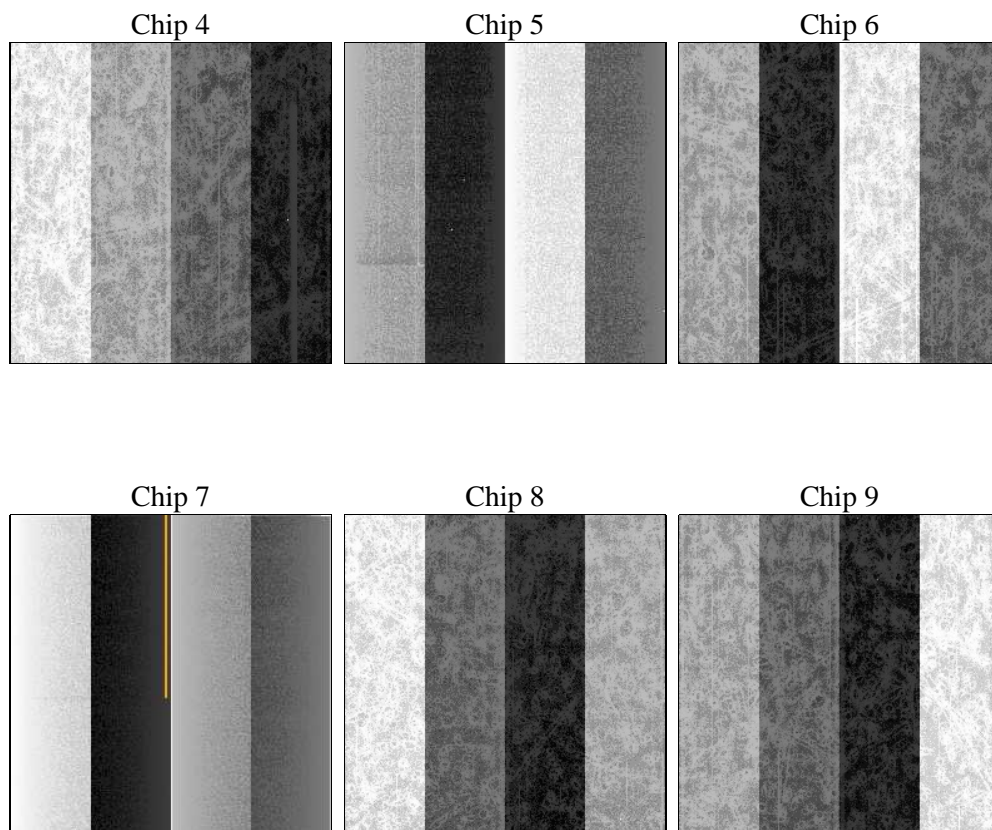
2 OBI

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	6850.7338110209	Sum of GTIs [s]
caldsver	4.4.9	 	ontime4	6850.610691011	Sum of GTIs [s]
date	2012-06-03T10:45:33	Date and time of file creation	ontime5	6850.6927710176	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6850.6517310143	Sum of GTIs [s]
			ontime7	6850.7338110209	Sum of GTIs [s]
			ontime8	6850.5696510077	Sum of GTIs [s]
			ontime9	6850.7748510242	Sum of GTIs [s]
			l1events	891349	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	137430	161709	139051	158807	156094	138258	grade 0 events	37331	11437	35566	17848	40362	36105
rejected events	73155	65072	70483	60937	75408	71824		27%	7%	25%	11%	25%	26%
rejected %	53%	40%	50%	38%	48%	51%	grade 1 events	430	209	211	101	258	291
								0%	0%	0%	0%	0%	0%
							grade 2 events	10024	36875	13165	21891	15196	11589
								7%	22%	9%	13%	9%	8%
							grade 3 events	4575	3857	4399	8920	5920	4503
								3%	2%	3%	5%	3%	3%
							grade 4 events	4537	3751	4284	8719	5861	4397
								3%	2%	3%	5%	3%	3%
							grade 5 events	3596	7558	3530	9366	4831	4134
								2%	4%	2%	5%	3%	2%
							grade 6 events	8514	41796	11906	41502	14288	10609
								6%	25%	8%	26%	9%	7%
							grade 7 events	68423	56226	65990	50460	69378	66630
								49%	34%	47%	31%	44%	48%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	208.9597724767301
[deg] Pointing Dec	0	12.15431552097004
[deg] Pointing Roll	0.0	128.7084138945223
[mm] SIM focus pos	-1.429586	-0.6828225247311905
[mm] SIM defocus	0.1037507710433287	0.8505141146731063
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	354840257.753752	354840256.72877
Observation start date	2009-03-30T22:44:18	2009-03-30T22:44:16
[s] Observation end time (MET)	354852258.454349	354852257.42937
Observation end date	2009-03-31T02:04:18	2009-03-31T02:04:17
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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)	2012.06.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.8507338110209

A.2 Comments

The bias file for chip 4 suffers from anomalously high bias values in an 'exacto-knife'-shaped area of the bias file. Pixels in the event data that have been bias-corrected by one of the 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 chip 4 has not been repaired because this observation was taken at a very focal plane high temperature (about 5 degree higher than normal). Repairing a bias file with data from another bias file that was taken more than one degree different in focal plane temperature is not approved or advised by the Chandra Project.