

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 59198 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Mar 22 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

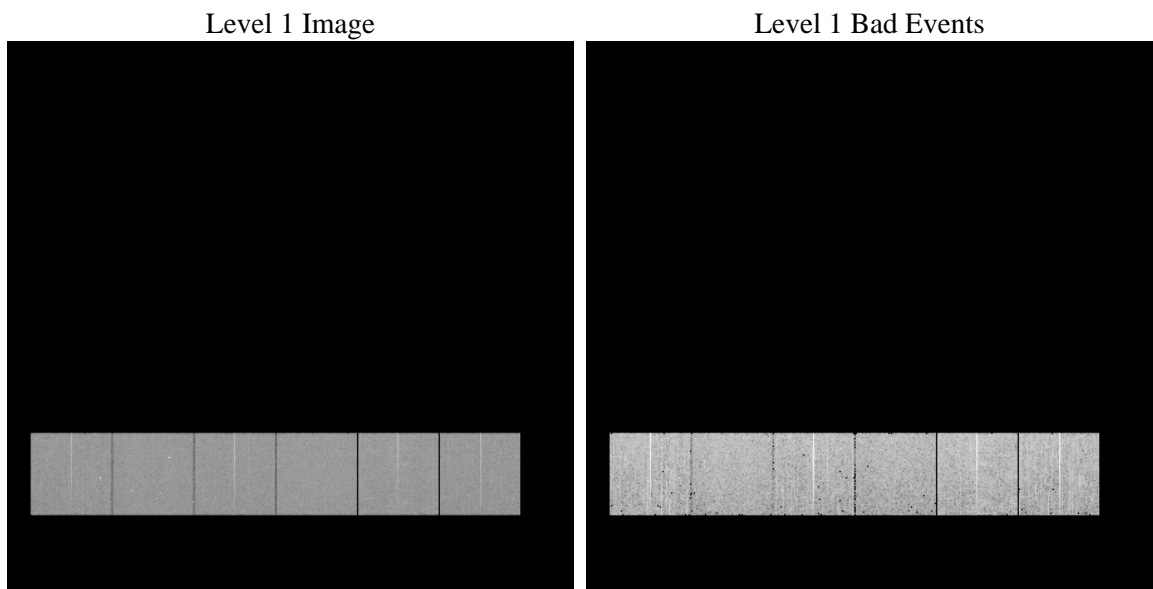
1 Front

seq_num	 	Sequence number
obs_id	59198	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	89.169534157718	Nominal RA [deg]
dec_nom	15.235076339284	Nominal Dec [deg]
roll_nom	299.8835720842	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5208.3186226785	Sum of GTIs [s]
livetime	5142.3677562052	Livetime [s]
ontime4	5208.1955026686	Sum of GTIs [s]
ontime5	5208.2775826752	Sum of GTIs [s]
ontime6	5208.2365426719	Sum of GTIs [s]
ontime7	5208.3186226785	Sum of GTIs [s]
ontime8	5208.1544626951	Sum of GTIs [s]
ontime9	5208.3596626818	Sum of GTIs [s]
l2events	637762	Number of level 2 events

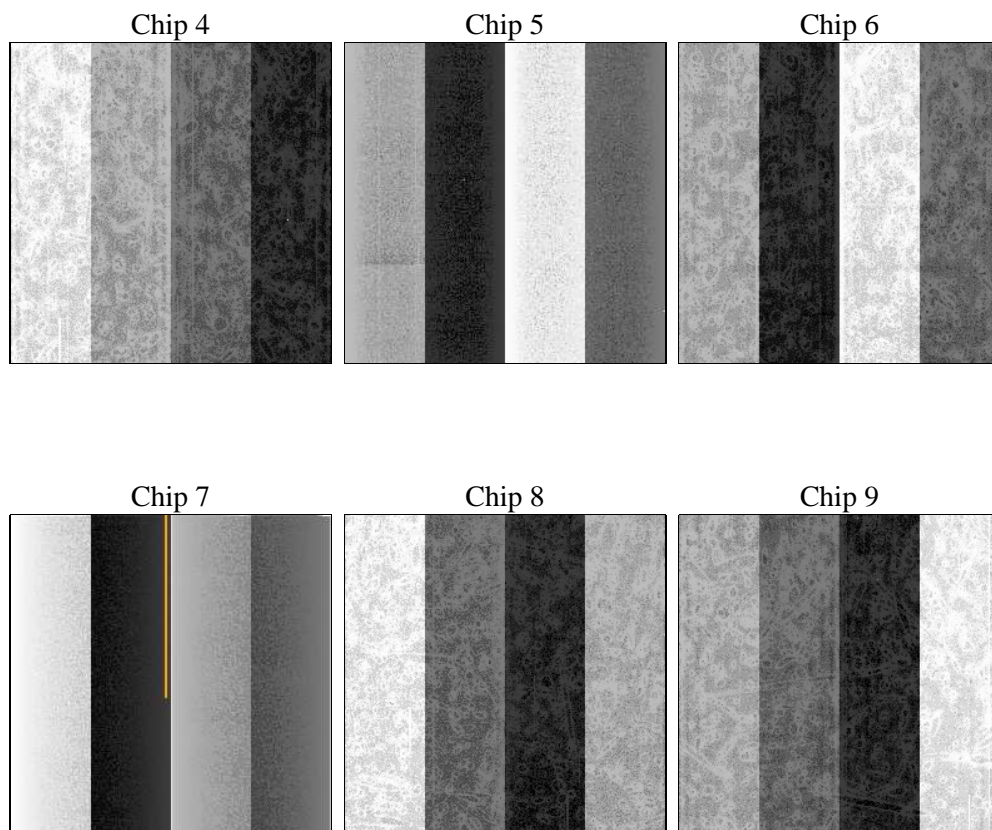
2 OBI

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	8.4.3	Processing system revision	ontime	5208.3186226785	Sum of GTIs [s]
caldsver	4.4.8	 	ontime4	5208.1955026686	Sum of GTIs [s]
date	2012-03-22T12:46:03	Date and time of file creation	ontime5	5208.2775826752	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	5208.2365426719	Sum of GTIs [s]
			ontime7	5208.3186226785	Sum of GTIs [s]
			ontime8	5208.1544626951	Sum of GTIs [s]
			ontime9	5208.3596626818	Sum of GTIs [s]
			l1events	938681	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	151852	154278	154700	161646	164344	151861	grade 0 events	61946	24290	60945	29595	63135	59499
rejected events	46303	39269	42933	35920	46868	44089		40%	15%	39%	18%	38%	39%
rejected %	30%	25%	27%	22%	28%	29%	grade 1 events	502	108	309	100	348	409
								0%	0%	0%	0%	0%	0%
							grade 2 events	16861	41614	19615	27797	21153	18723
								11%	26%	12%	17%	12%	12%
							grade 3 events	7264	6408	7005	12712	8034	7116
								4%	4%	4%	7%	4%	4%
							grade 4 events	7171	6521	7217	12748	7970	7101
								4%	4%	4%	7%	4%	4%
							grade 5 events	2375	5788	2533	6040	3131	2760
								1%	3%	1%	3%	1%	1%
							grade 6 events	13626	37489	18298	44365	18592	16598
								8%	24%	11%	27%	11%	10%
							grade 7 events	42107	32060	38778	28289	41981	39655
								27%	20%	25%	17%	25%	26%

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	OVERRIDE	OVERRIDE
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	89.16961020139469	89.16953415771823	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.23529060292321	15.23507633928381	Alternating exposures requested	N	N
[deg] Pointing Roll	299.8833430969991	299.8835720841971	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.5263399358	-1.5263399358			
[mm] SIM defocus	0.006996627355743357	0.006996627355743357			
[mm] SIM translation stage pos	250.4635187649	250.4635187649			
[mm] SIM translation stage offset	-0.007542945905271381	-0.007542945905271381			
[s] Observation start time (MET)	252670129.338141	252670129.338141			
Observation start date	2006-01-03T10:42:00	2006-01-03T10:08:49			
[s] Observation end time (MET)	252677117.268615	252677117.268615			
Observation end date	2006-01-03T10:42:00	2006-01-03T12:05:17			
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)	2012.03.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.2083186226785

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:
(941,1),(974,1),(974,87),(941,54)