

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 51441 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Dec 9 2015

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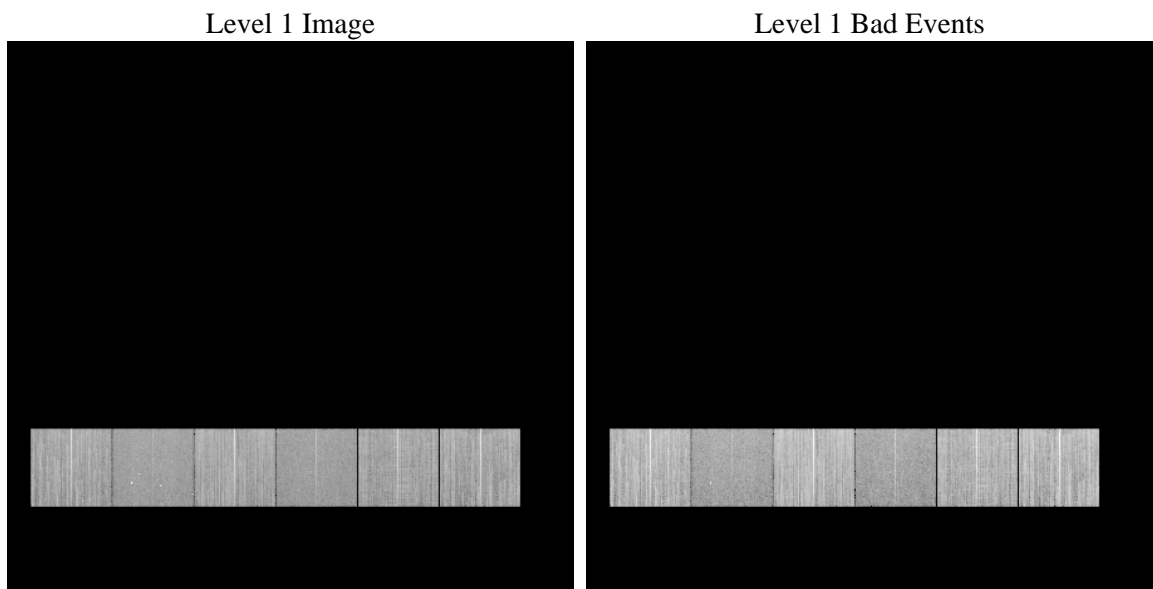
1 Front

seq_num	 	Sequence number
obs_id	51441	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	331.57959497503	Nominal RA [deg]
dec_nom	-23.43703157552	Nominal Dec [deg]
roll_nom	282.61640309235	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8320.0001239777	Sum of GTIs [s]
livetime	8214.6472727052	Livetime [s]
ontime4	8320.0001239777	Sum of GTIs [s]
ontime5	8320.0001239777	Sum of GTIs [s]
ontime6	8320.0001239777	Sum of GTIs [s]
ontime7	8320.0001239777	Sum of GTIs [s]
ontime8	8320.0001239777	Sum of GTIs [s]
ontime9	8320.0001239777	Sum of GTIs [s]
l2events	185990	Number of level 2 events

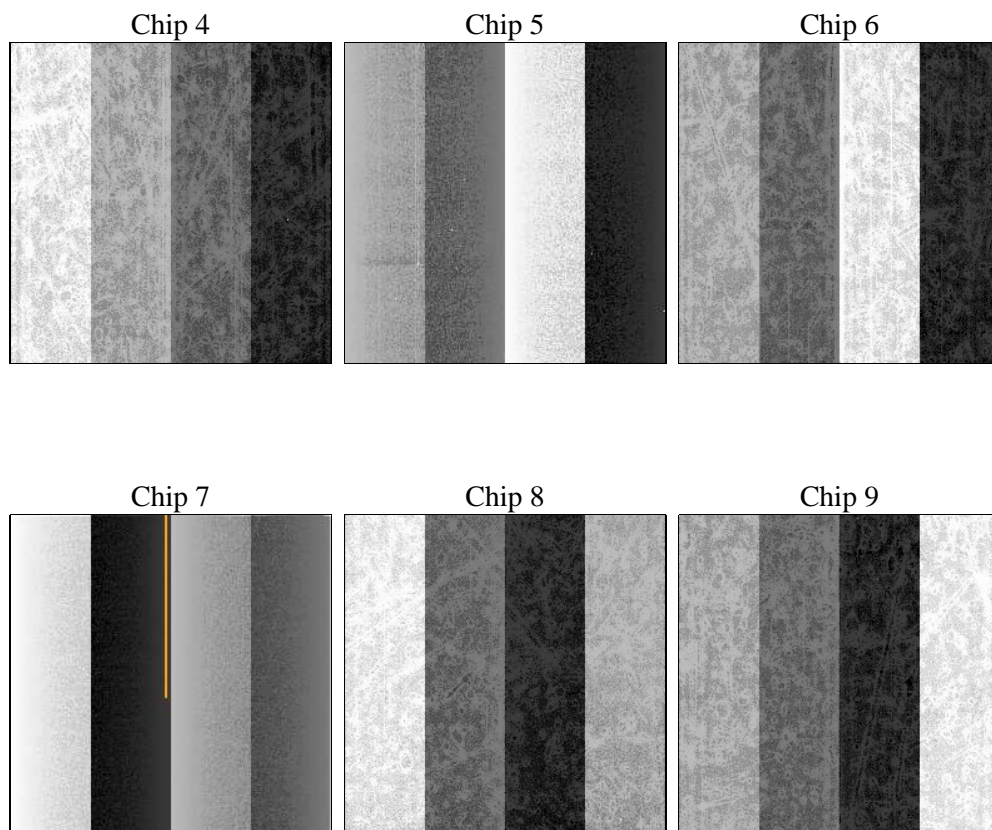
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	8320.0001239777	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime4	8320.0001239777	Sum of GTIs [s]
date	2015-12-09T22:04:12	Date and time of file creation	ontime5	8320.0001239777	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8320.0001239777	Sum of GTIs [s]
			ontime7	8320.0001239777	Sum of GTIs [s]
			ontime8	8320.0001239777	Sum of GTIs [s]
			ontime9	8320.0001239777	Sum of GTIs [s]
			l1events	987892	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	176349	140873	189477	128339	167877	184977	grade 0 events	11456	5217	9225	5560	13299	10311
rejected events	153838	83283	166588	78243	135607	162339		6%	3%	4%	4%	7%	5%
rejected %	87%	59%	87%	60%	80%	87%	grade 1 events	98	277	59	91	78	52
								0%	0%	0%	0%	0%	0%
							grade 2 events	4765	20664	6656	12905	7474	5333
								2%	14%	3%	10%	4%	2%
							grade 3 events	1677	1603	1329	3460	2630	1547
								0%	1%	0%	2%	1%	0%
							grade 4 events	1690	1544	1271	3404	2496	1493
								0%	1%	0%	2%	1%	0%
							grade 5 events	3473	6183	3118	7732	4245	3563
								1%	4%	1%	6%	2%	1%
							grade 6 events	3280	29399	4738	25535	6900	4307
								1%	20%	2%	19%	4%	2%
							grade 7 events	149910	75986	163081	69652	130755	158371
								85%	53%	86%	54%	77%	85%

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	331.5795949750283
[deg] Pointing Dec	0	-23.43703157551982
[deg] Pointing Roll	0.0	282.61640309235
SIM focus pos (mm)	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
SIM translation stage pos (mm)	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	565742499.024691	565742499.024691
Observation start date	2015-12-05T22:41:39	2015-12-05T22:41:39
[s] Observation end time (MET)	565751835.10778	565751835.10778
Observation end date	2015-12-06T01:17:15	2015-12-06T01:17:15
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
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	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.3200001239777

A.2 Comments

A spatial region of the original bias map for CCD = 4 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 = 4 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.