

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 52901 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Mar 25 2014

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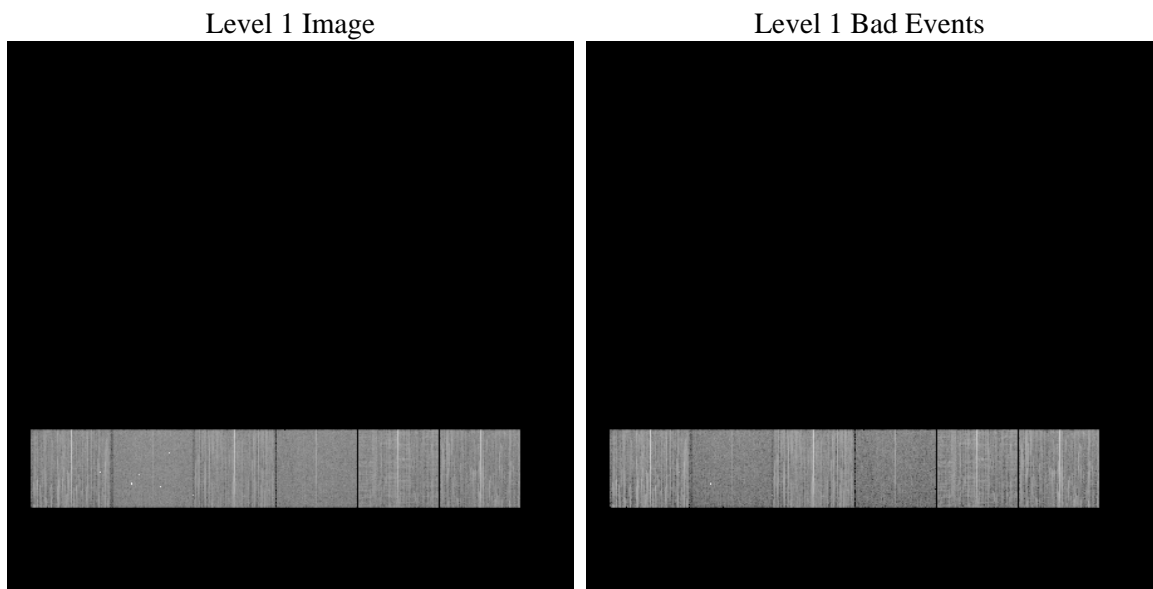
1 Front

seq_num	 	Sequence number
obs_id	52901	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	191.01404311321	Nominal RA [deg]
dec_nom	-3.4028345982878	Nominal Dec [deg]
roll_nom	149.50549359746	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8070.399969995	Sum of GTIs [s]
livetime	7968.2077061635	Livetime [s]
ontime4	8070.399969995	Sum of GTIs [s]
ontime5	8070.399969995	Sum of GTIs [s]
ontime6	8070.399969995	Sum of GTIs [s]
ontime7	8070.399969995	Sum of GTIs [s]
ontime8	8070.399969995	Sum of GTIs [s]
ontime9	8070.399969995	Sum of GTIs [s]
l2events	202002	Number of level 2 events

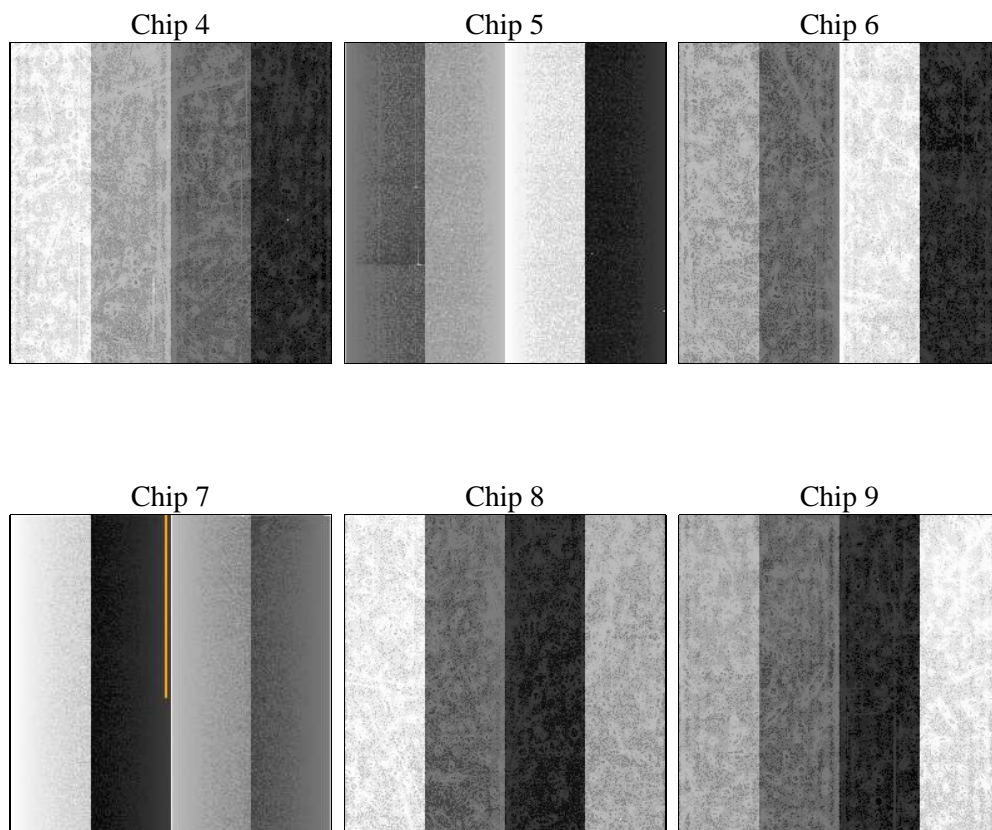
2 OBI

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	10.2.1	Processing system revision	ontime	8070.399969995	Sum of GTIs [s]
caldsver	4.6.0	 	ontime4	8070.399969995	Sum of GTIs [s]
date	2014-03-25T17:57:28	Date and time of file creation	ontime5	8070.399969995	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8070.399969995	Sum of GTIs [s]
			ontime7	8070.399969995	Sum of GTIs [s]
			ontime8	8070.399969995	Sum of GTIs [s]
			ontime9	8070.399969995	Sum of GTIs [s]
			l1events	839411	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	150316	130036	154872	115310	146653	142224	grade 0 events	16390	8780	14057	7252	16451	13890
rejected events	121652	71947	126820	64762	110682	115049		10%	6%	9%	6%	11%	9%
rejected %	80%	55%	81%	56%	75%	80%	grade 1 events	127	162	83	88	94	88
								0%	0%	0%	0%	0%	0%
							grade 2 events	5204	21674	5899	12664	7700	5451
								3%	16%	3%	10%	5%	3%
							grade 3 events	2012	1769	1883	4235	2904	1886
								1%	1%	1%	3%	1%	1%
							grade 4 events	2012	1775	1804	4044	2813	1898
								1%	1%	1%	3%	1%	1%
							grade 5 events	2963	5756	2979	6958	3908	3364
								1%	4%	1%	6%	2%	2%
							grade 6 events	3801	25588	5127	23614	7212	4720
								2%	19%	3%	20%	4%	3%
							grade 7 events	117807	64532	123040	56455	105571	110927
								78%	49%	79%	48%	71%	77%

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	191.0140431132146
[deg] Pointing Dec	0	-3.402834598287845
[deg] Pointing Roll	0.0	149.5054935974558
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)	512041199.535766	512041199.535766
Observation start date	2014-03-24T09:40:00	2014-03-24T09:39:59
[s] Observation end time (MET)	512051017.132517	512051017.132517
Observation end date	2014-03-24T12:23:37	2014-03-24T12:23:37
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	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.03.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.070399969995

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:
(589,408),(627,408),(627,663),(589,675)