

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 51193 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Mar 14 2016

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

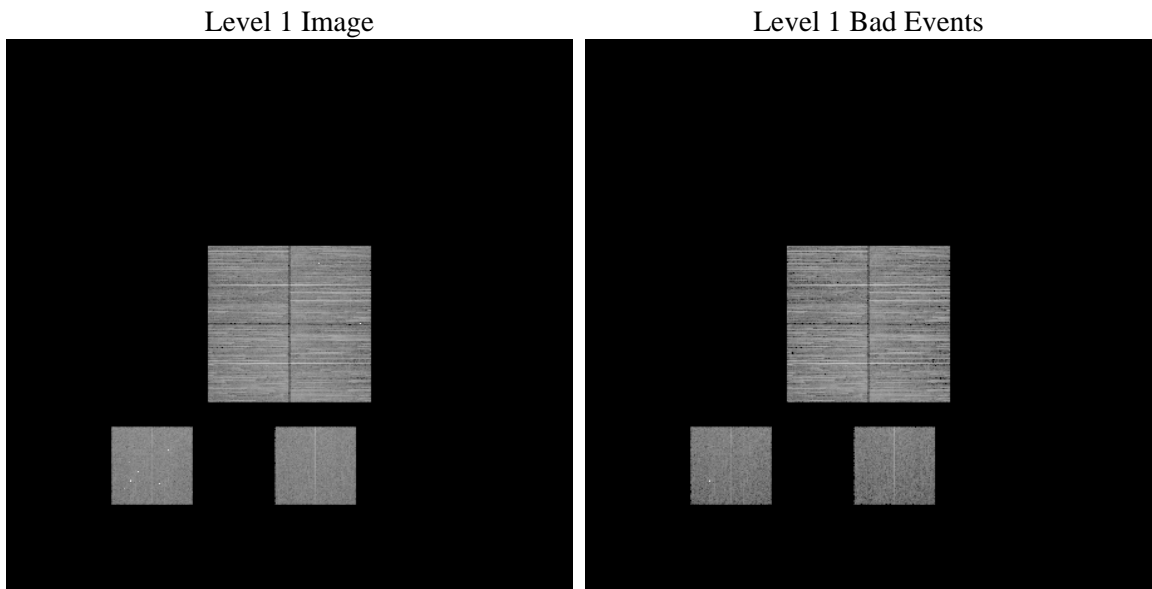
1 Front

seq_num	 	Sequence number
obs_id	51193	Observation id
title	ACIS-012357 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	148.69381907553	Nominal RA [deg]
dec_nom	-1.777328505696	Nominal Dec [deg]
roll_nom	281.09149449731	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5004.8000745773	Sum of GTIs [s]
livetime	4941.4262825042	Livetime [s]
ontime0	5004.8000745773	Sum of GTIs [s]
ontime1	5004.8000745773	Sum of GTIs [s]
ontime2	5004.8000745773	Sum of GTIs [s]
ontime3	5004.8000745773	Sum of GTIs [s]
ontime5	5004.8000745773	Sum of GTIs [s]
ontime7	5004.8000745773	Sum of GTIs [s]
l2events	144617	Number of level 2 events

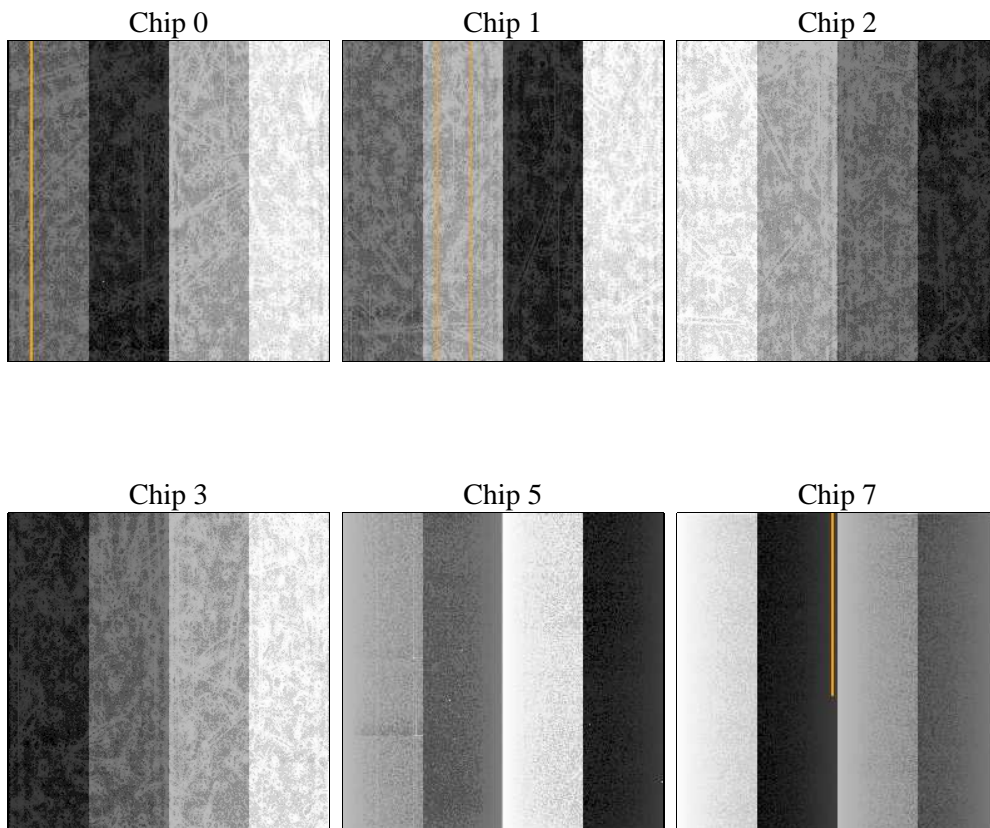
2 OBI

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	10.4.3.1	Processing system revision	ontime	5004.8000745773	Sum of GTIs [s]
caldsver	4.7.0	 	ontime0	5004.8000745773	Sum of GTIs [s]
date	2016-03-14T16:58:45	Date and time of file creation	ontime1	5004.8000745773	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5004.8000745773	Sum of GTIs [s]
			ontime3	5004.8000745773	Sum of GTIs [s]
			ontime5	5004.8000745773	Sum of GTIs [s]
			ontime7	5004.8000745773	Sum of GTIs [s]
			l1events	651218	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	104068	117789	126006	118778	97473	87104	grade 0 events	8633	8756	8715	8987	7219	4661
rejected events	84903	96062	107327	99416	53818	50329		8%	7%	6%	7%	7%	5%
rejected %	81%	81%	85%	83%	55%	57%	grade 1 events	47	48	57	61	157	56
								0%	0%	0%	0%	0%	0%
							grade 2 events	4403	6609	3903	4176	15074	9653
								4%	5%	3%	3%	15%	11%
							grade 3 events	1199	1207	1290	1250	1141	2524
								1%	1%	1%	1%	1%	2%
							grade 4 events	1205	1119	1249	1307	1042	2527
								1%	0%	0%	1%	1%	2%
							grade 5 events	1879	1959	1873	2201	3934	4900
								1%	1%	1%	1%	4%	5%
							grade 6 events	3733	4047	3531	3642	19205	17410
								3%	3%	2%	3%	19%	19%
							grade 7 events	82969	94044	105388	97154	49701	45373
								79%	79%	83%	81%	50%	52%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012357	ACIS-012357	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
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	0	148.6938190755322	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-1.777328505695961	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	281.0914944973061	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	574197638.340691	574197637.31569			
Observation start date	2016-03-12T19:20:38	2016-03-12T19:20:37			
[s] Observation end time (MET)	574205221.291122	574205220.26612			
Observation end date	2016-03-12T21:27:01	2016-03-12T21:27:00			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.03.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0048000745773

A.2 Comments

A spatial region of the original bias map for CCD = 2 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 = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.