

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 51810 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jul 10 2015

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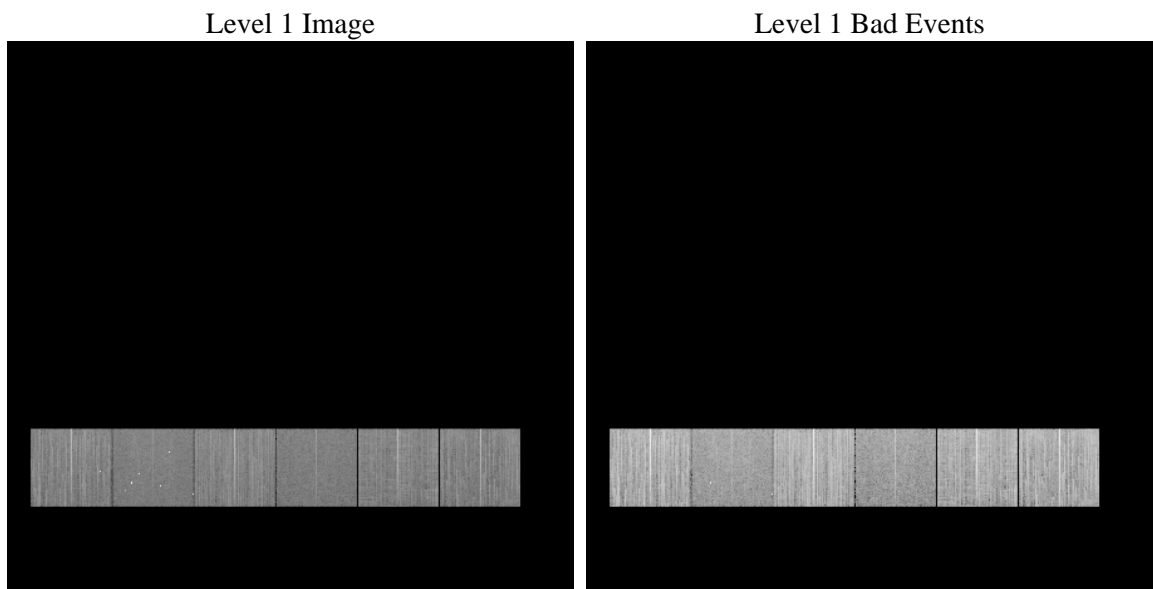
1 Front

seq_num	 	Sequence number
obs_id	51810	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	148.01834900564	Nominal RA [deg]
dec_nom	14.966985176916	Nominal Dec [deg]
roll_nom	251.97978926581	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8243.2001228333	Sum of GTIs [s]
livetime	8138.8197594187	Livetime [s]
ontime4	8243.2001228333	Sum of GTIs [s]
ontime5	8243.2001228333	Sum of GTIs [s]
ontime6	8243.2001228333	Sum of GTIs [s]
ontime7	8243.2001228333	Sum of GTIs [s]
ontime8	8243.2001228333	Sum of GTIs [s]
ontime9	8243.2001228333	Sum of GTIs [s]
l2events	291277	Number of level 2 events

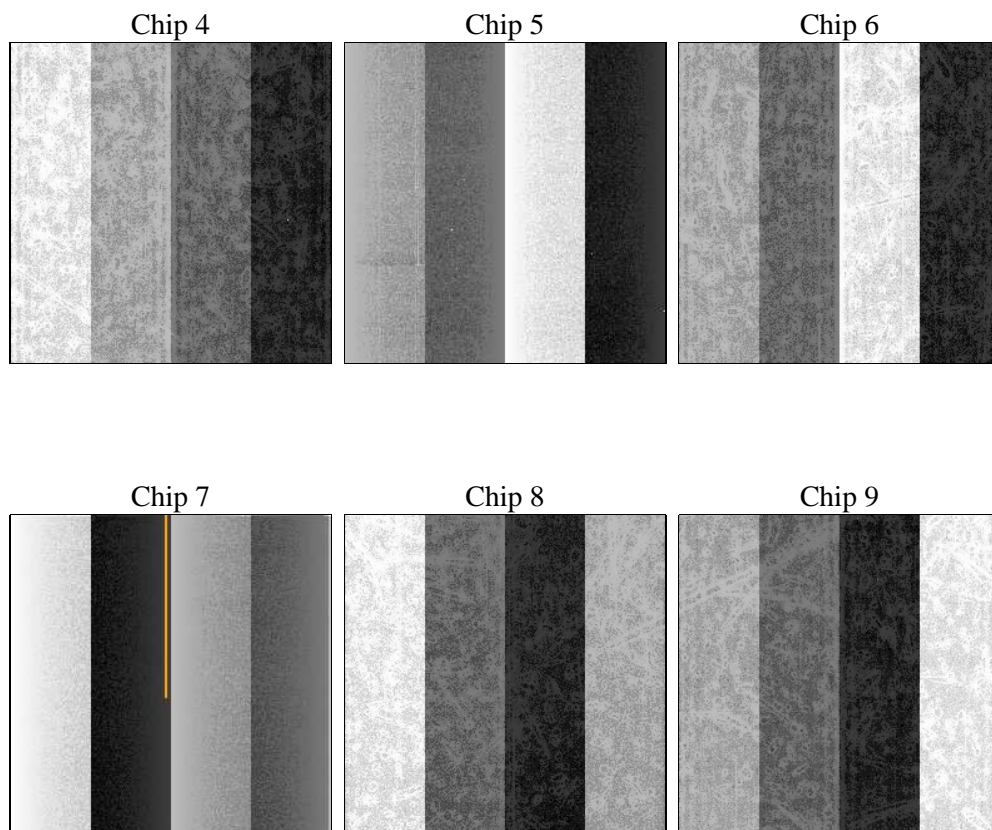
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	8243.2001228333	Sum of GTIs [s]
caldsver	4.6.8	 	ontime4	8243.2001228333	Sum of GTIs [s]
date	2015-07-10T22:29:12	Date and time of file creation	ontime5	8243.2001228333	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8243.2001228333	Sum of GTIs [s]
			ontime7	8243.2001228333	Sum of GTIs [s]
			ontime8	8243.2001228333	Sum of GTIs [s]
			ontime9	8243.2001228333	Sum of GTIs [s]
			l1events	964712	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	175509	146869	177327	129100	168763	167144	grade 0 events	25358	12458	18242	9702	22965	19963
rejected events	127443	72136	131309	66693	114881	122131		14%	8%	10%	7%	13%	11%
rejected %	72%	49%	74%	51%	68%	73%	grade 1 events	176	490	79	78	121	109
								0%	0%	0%	0%	0%	0%
							grade 2 events	9118	28481	12722	16487	11835	10426
								5%	19%	7%	12%	7%	6%
							grade 3 events	2934	2259	2277	4258	3550	2541
								1%	1%	1%	3%	2%	1%
							grade 4 events	2900	2073	2264	4205	3460	2512
								1%	1%	1%	3%	2%	1%
							grade 5 events	2988	5377	2674	6498	3755	3272
								1%	3%	1%	5%	2%	1%
							grade 6 events	7756	29462	10513	27755	12072	9571
								4%	20%	5%	21%	7%	5%
							grade 7 events	124279	66269	128556	60117	111005	118750
								70%	45%	72%	46%	65%	71%

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	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	148.0183490056413	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	14.96698517691642	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	251.9797892658115	[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)	551760779.946287	551760778.92129			
Observation start date	2015-06-27T02:53:00	2015-06-27T02:52:58			
[s] Observation end time (MET)	551770562.546837	551770561.52184			
Observation end date	2015-06-27T05:36:03	2015-06-27T05:36:01			
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)	2015.07.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2432001228333

A.2 Comments

The bias map for CCD_ID = 8 suffered 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 CCD_ID = 8 has been recreated for this processing to remove this anomaly.