

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 54040 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jan 15 2013

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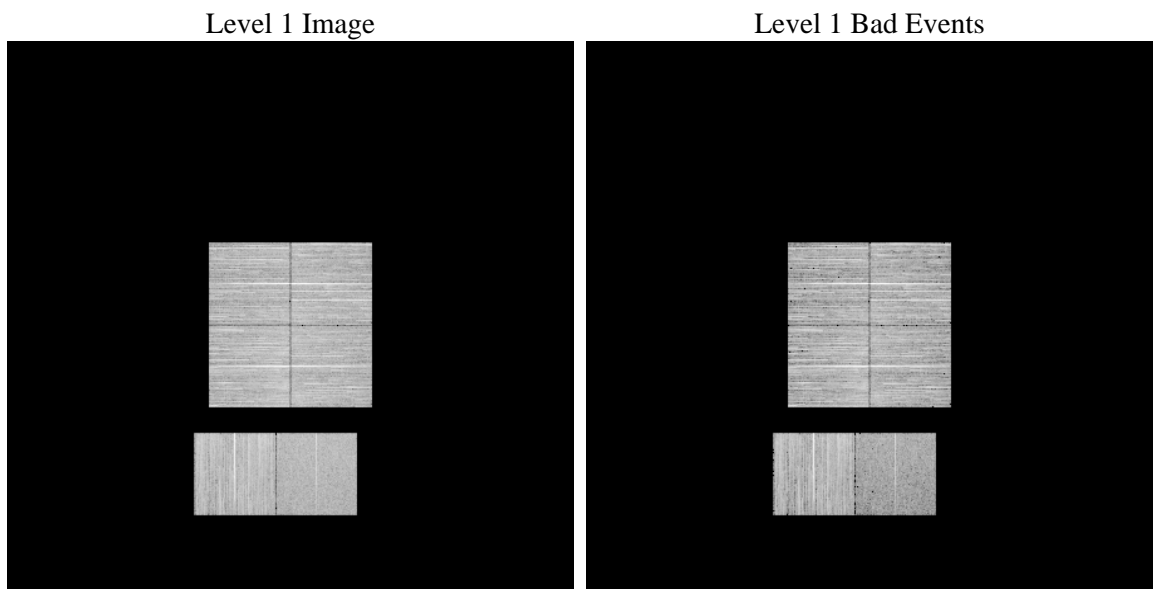
1 Front

seq_num	 	Sequence number
obs_id	54040	Observation id
title	ACIS-012367 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	107.0632851292	Nominal RA [deg]
dec_nom	9.7590178588849	Nominal Dec [deg]
roll_nom	141.74296011739	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6255.9999767542	Sum of GTIs [s]
livetime	6176.7827381376	Livetime [s]
ontime0	6255.9999767542	Sum of GTIs [s]
ontime1	6255.9999767542	Sum of GTIs [s]
ontime2	6255.9999767542	Sum of GTIs [s]
ontime3	6255.9999767542	Sum of GTIs [s]
ontime6	6255.9999767542	Sum of GTIs [s]
ontime7	6255.9999767542	Sum of GTIs [s]
l2events	172390	Number of level 2 events

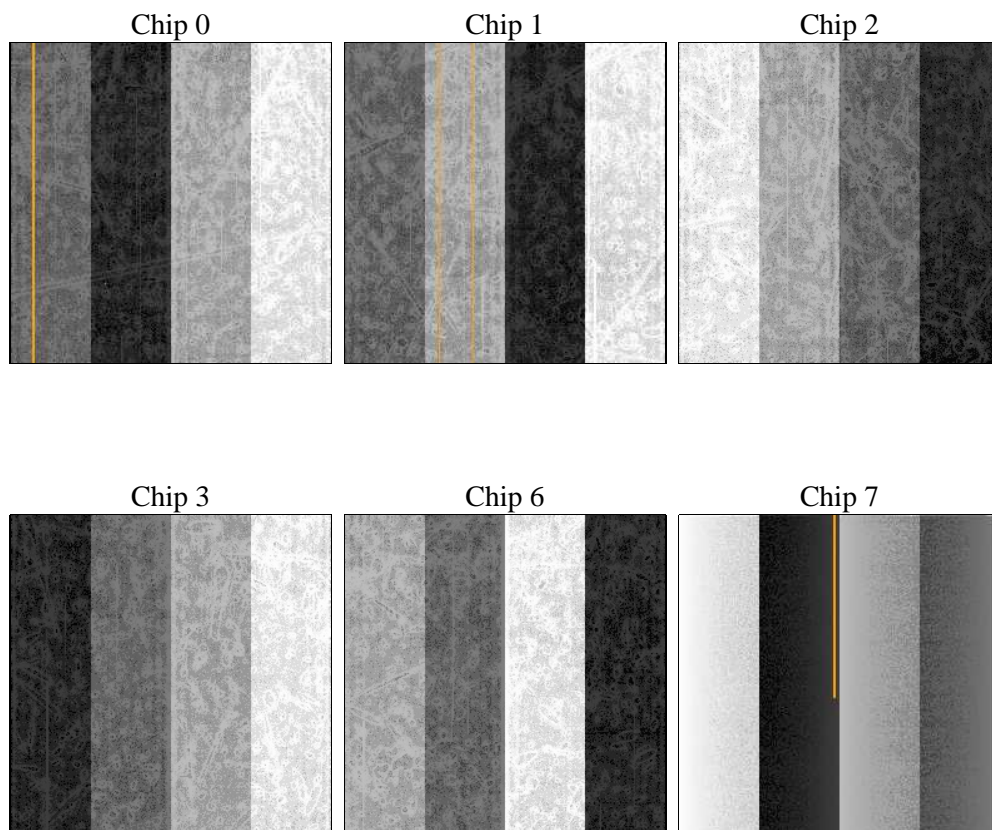
2 OBI

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	8.5.1.1	Processing system revision	ontime	6255.9999767542	Sum of GTIs [s]
caldsver	4.5.5	 	ontime0	6255.9999767542	Sum of GTIs [s]
date	2013-01-15T22:37:02	Date and time of file creation	ontime1	6255.9999767542	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	6255.9999767542	Sum of GTIs [s]
			ontime3	6255.9999767542	Sum of GTIs [s]
			ontime6	6255.9999767542	Sum of GTIs [s]
			ontime7	6255.9999767542	Sum of GTIs [s]
			l1events	745278	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	119660	128285	138115	122022	132922	104274	grade 0 events	13573	13196	14119	14288	13603	7026
rejected events	92994	101734	111248	95073	105389	56412		11%	10%	10%	11%	10%	6%
rejected %	77%	79%	80%	77%	79%	54%	grade 1 events	65	69	86	90	79	71
								0%	0%	0%	0%	0%	0%
							grade 2 events	5523	5747	5294	5210	5954	12049
								4%	4%	3%	4%	4%	11%
							grade 3 events	1852	1796	1788	1916	1678	3788
								1%	1%	1%	1%	1%	3%
							grade 4 events	1815	1718	1910	1804	1766	3794
								1%	1%	1%	1%	1%	3%
							grade 5 events	2431	2395	2290	2566	2419	6025
								2%	1%	1%	2%	1%	5%
							grade 6 events	4180	4366	4007	3991	4816	21656
								3%	3%	2%	3%	3%	20%
							grade 7 events	90221	98998	108621	92157	102607	49865
								75%	77%	78%	75%	77%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	0	107.0632851291957	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	9.759017858884867	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	141.742960117394	[s] Primary exposure time	3.2	3.2
SIM focus pos (mm)	-1.4281808131	-1.4281808131			
[mm] SIM defocus	0.1051557500557434	0.1051557500557434			
SIM translation stage pos (mm)	250.4635187649	250.4635187649			
[mm] SIM translation stage offset	-0.007542945905271381	-0.007542945905271381			
[s] Observation start time (MET)	474106462.017604	474106462.017604			
Observation start date	2013-01-09T08:14:22	2013-01-09T08:14:22			
[s] Observation end time (MET)	474114306.044488	474114306.044488			
Observation end date	2013-01-09T10:25:06	2013-01-09T10:25:06			
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)	2013.01.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.2559999767542

A.2 Comments

Spatial regions of the original bias maps for CCD = 1 and 6 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 maps for CCDs 1 and 6 have 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:

CCD 1: (296,1), (324,1), (324,416), (296,398)

CCD 6: (357,1), (395,1), (395,281), (357,281)