

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 54530 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jun 29 2012

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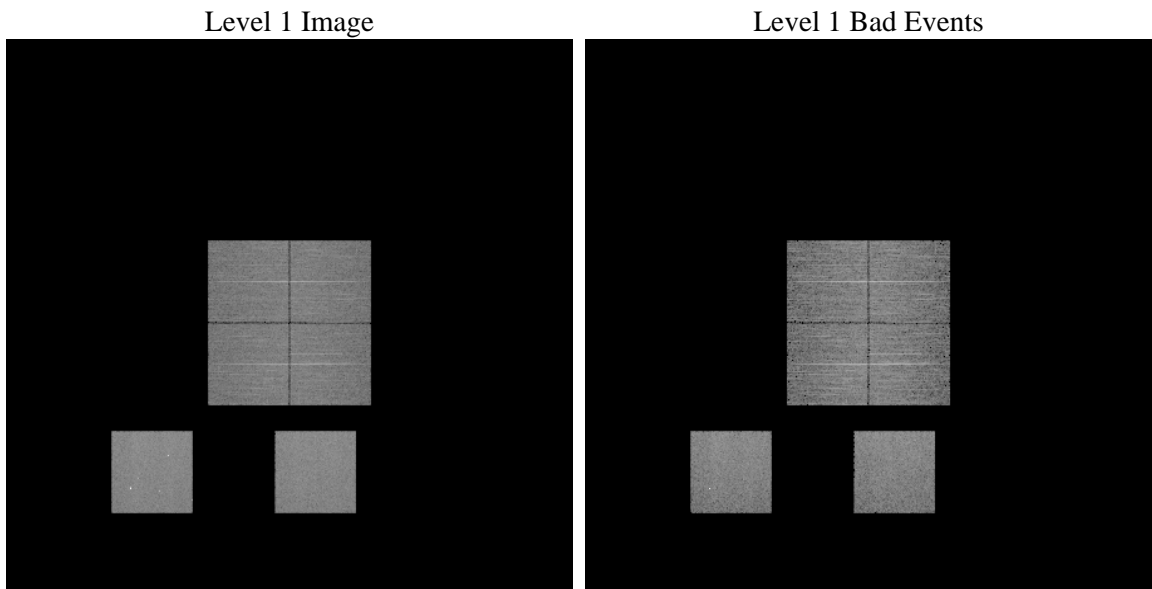
1 Front

seq_num	 	Sequence number
obs_id	54530	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	289.01935052685	Nominal RA [deg]
dec_nom	-48.97421965973	Nominal Dec [deg]
roll_nom	30.949047123674	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8284.2493780255	Sum of GTIs [s]
livetime	8179.3492242249	Livetime [s]
ontime0	8284.2083380222	Sum of GTIs [s]
ontime1	8284.1672980189	Sum of GTIs [s]
ontime2	8284.1262580156	Sum of GTIs [s]
ontime3	8284.2904180288	Sum of GTIs [s]
ontime5	8284.0852180123	Sum of GTIs [s]
ontime7	8284.2493780255	Sum of GTIs [s]
l2events	283284	Number of level 2 events

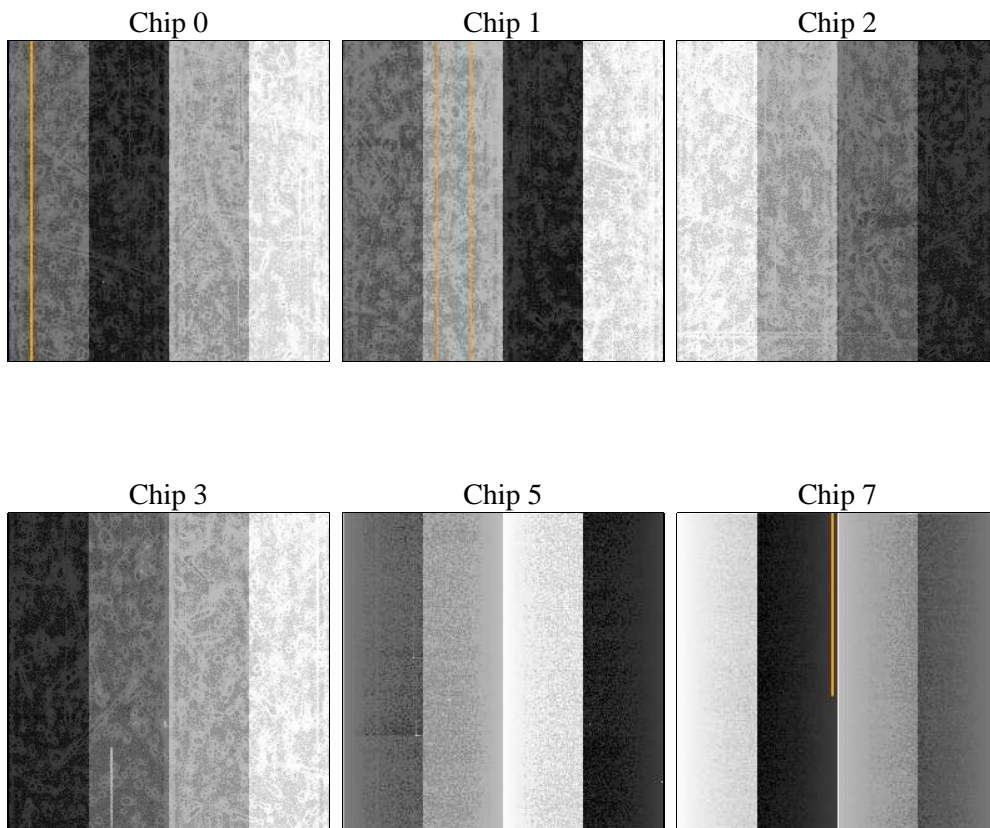
2 OBI

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	8.4.5	Processing system revision	ontime	8284.2493780255	Sum of GTIs [s]
caldsver	4.5.0	 	ontime0	8284.2083380222	Sum of GTIs [s]
date	2012-06-29T21:04:59	Date and time of file creation	ontime1	8284.1672980189	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	8284.1262580156	Sum of GTIs [s]
			ontime3	8284.2904180288	Sum of GTIs [s]
			ontime5	8284.0852180123	Sum of GTIs [s]
			ontime7	8284.2493780255	Sum of GTIs [s]
			l1events	606600	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	86246	87935	89098	88992	130391	123938	grade 0 events	20604	20388	21188	21143	8842	10909
rejected events	46781	48209	49183	49258	57748	56057		23%	23%	23%	23%	6%	8%
rejected %	54%	54%	55%	55%	44%	45%	grade 1 events	100	119	162	150	130	109
								0%	0%	0%	0%	0%	0%
							grade 2 events	7479	7678	7253	7085	26037	14691
								8%	8%	8%	7%	19%	11%
							grade 3 events	2657	2623	2795	2796	2792	5896
								3%	2%	3%	3%	2%	4%
							grade 4 events	2591	2613	2747	2801	2889	5866
								3%	2%	3%	3%	2%	4%
							grade 5 events	3214	3289	3053	3501	7331	8727
								3%	3%	3%	3%	5%	7%
							grade 6 events	6150	6438	5950	5925	32117	30546
								7%	7%	6%	6%	24%	24%
							grade 7 events	43451	44787	45950	45591	50253	47194
								50%	50%	51%	51%	38%	38%

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	289.0193505268535	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	-48.97421965972954	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	30.94904712367441	[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)	456938178.496989	456938177.47199			
Observation start date	2012-06-24T15:16:18	2012-06-24T15:16:17			
[s] Observation end time (MET)	456955939.697936	456955938.67294			
Observation end date	2012-06-24T20:12:20	2012-06-24T20:12:18			
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)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2842493780255

A.2 Comments

Spatial regions of the original bias maps for CCDs 1 and 3 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 3 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_ID = 1: (461,653),(560,653),(560,907),(461,883)

CCD_ID = 3: (769,503),(808,503),(808,707),(769,707)