V&V Reference Report
L2 ASCDS Version : 8.4.3

Observation 55062 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Feb 26 2012

Contents

1 Front

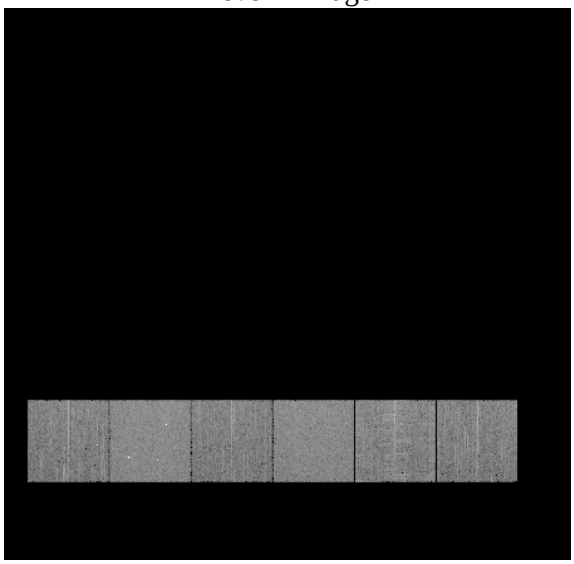
seq_num		Sequence number
obs_id	55062	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object		Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	204.64294990703	Nominal RA [deg]
dec_nom	62.516476492559	Nominal Dec [deg]
roll_nom	22.036626723383	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3286.1913143992	Sum of GTIs [s]
livetime	3244.5795812695	Livetime [s]
ontime4	3286.0681943893	Sum of GTIs [s]
ontime5	3286.1502743959	Sum of GTIs [s]
ontime6	3286.1092343926	Sum of GTIs [s]
ontime7	3286.1913143992	Sum of GTIs [s]
ontime8	3286.027154386	Sum of GTIs [s]
ontime9	3286.2323544025	Sum of GTIs [s]
l2events	127846	Number of level 2 events

2 OBI

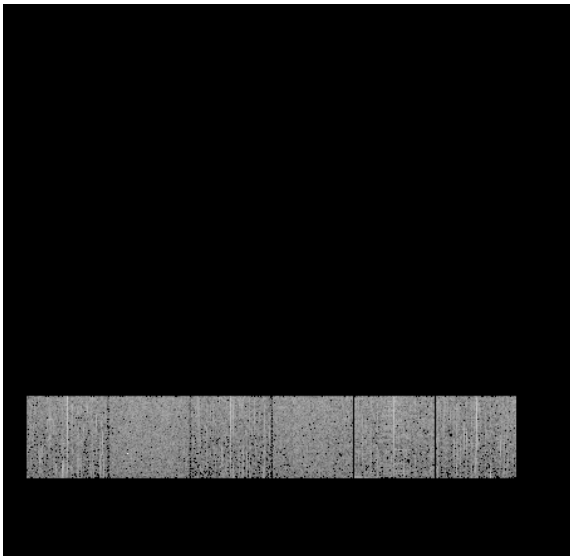
2.1 OBI

2.1.1 Images

Level 1 Image

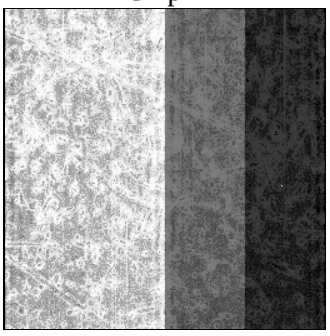


Level 1 Bad Events

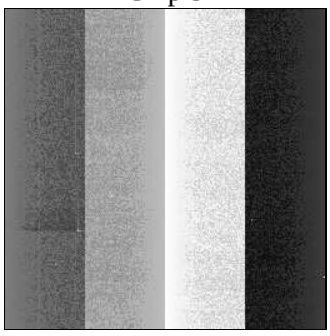


2.1.2 Bias

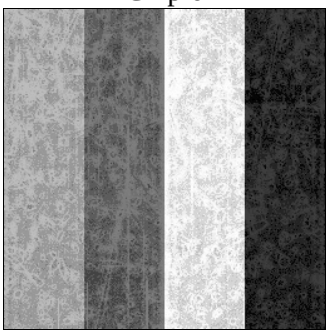
Chip 4



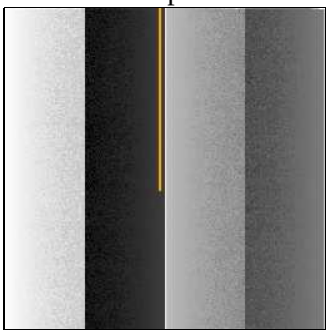
Chip 5



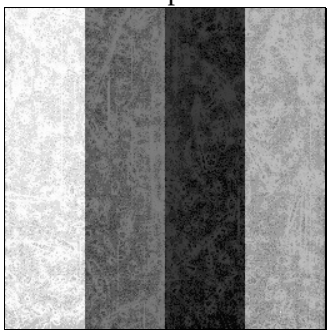
Chip 6



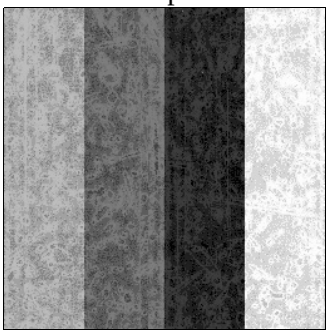
Chip 7



Chip 8



Chip 9



2.1.3 Parameters

obi_num	0	Obi number
ascdsver	8.4.3	Processing system revision
caldbver	4.4.8	
date	2012-02-26T22:29:30	Date and time of file creation
revision	3	Processing version of data

sched_exp_time	0.0	[s] Scheduled observation exposure time
ontime	3286.1913143992	Sum of GTIs [s]
ontime4	3286.0681943893	Sum of GTIs [s]
ontime5	3286.1502743959	Sum of GTIs [s]
ontime6	3286.1092343926	Sum of GTIs [s]
ontime7	3286.1913143992	Sum of GTIs [s]
ontime8	3286.027154386	Sum of GTIs [s]
ontime9	3286.2323544025	Sum of GTIs [s]
l1events	284964	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	42641	57307	41019	52786	48619	42592
rejected events	23912	24333	22252	22970	25288	24052
rejected %	56%	42%	54%	43%	52%	56%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	10656	5147	9584	5063	10944	9649
	24%	8%	23%	9%	22%	22%
grade 1 events	98	73	56	31	48	63
	0%	0%	0%	0%	0%	0%
grade 2 events	2991	11620	3391	6503	4489	3359
	7%	20%	8%	12%	9%	7%
grade 3 events	1300	1300	1229	2648	1794	1248
	3%	2%	2%	5%	3%	2%
grade 4 events	1323	1231	1266	2793	1689	1244
	3%	2%	3%	5%	3%	2%
grade 5 events	1388	3131	1486	3609	1960	1618
	3%	5%	3%	6%	4%	3%
grade 6 events	2459	13676	3297	12809	4415	3040
	5%	23%	8%	24%	9%	7%
grade 7 events	22426	21129	20710	19330	23280	22371
	52%	36%	50%	36%	47%	52%

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	204.6429499070292
[deg] Pointing Dec	0	62.51647649255857
[deg] Pointing Roll	0.0	22.0366267233829
[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)	437517517.846882	437517516.82188
Observation start date	2011-11-12T20:38:38	2011-11-12T20:38:36
[s] Observation end time (MET)	437530069.997543	437530068.97254
Observation end date	2011-11-13T00:07:50	2011-11-13T00:07:48
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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)	2012.02.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.2861913143992

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: (437,1),(460,1),(460,1024),(437,1024)