V&V Reference Report
L2 ASCDS Version : 8.4.5

Observation 61856 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Oct 11 2012

Contents

1 Front

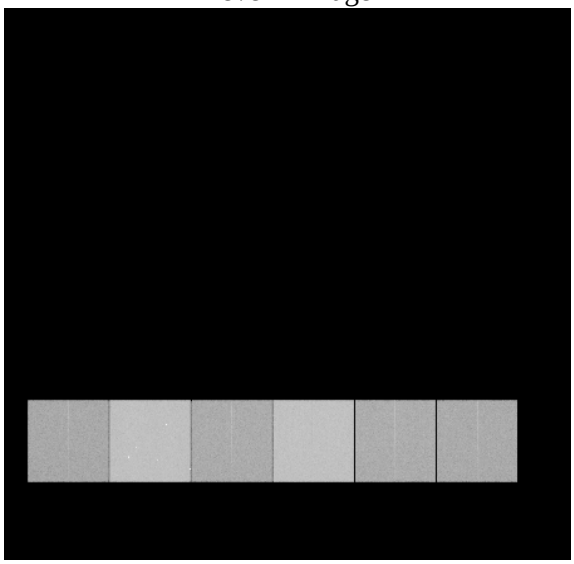
seq_num		Sequence number
obs_id	61856	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object		Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	356.39436001697	Nominal RA [deg]
dec_nom	-59.497991920362	Nominal Dec [deg]
roll_nom	311.46382201719	Nominal Roll [deg]
revision	5	Processing version of data
ontime	4589.28989847	Sum of GTIs [s]
livetime	4531.177546437	Livetime [s]
ontime4	1931.6582098901	Sum of GTIs [s]
ontime5	4916.6260251254	Sum of GTIs [s]
ontime6	2060.5968031436	Sum of GTIs [s]
ontime7	4589.28989847	Sum of GTIs [s]
ontime8	2128.5761840492	Sum of GTIs [s]
ontime9	2048.335320577	Sum of GTIs [s]
l2events	1251038	Number of level 2 events

2 OBI

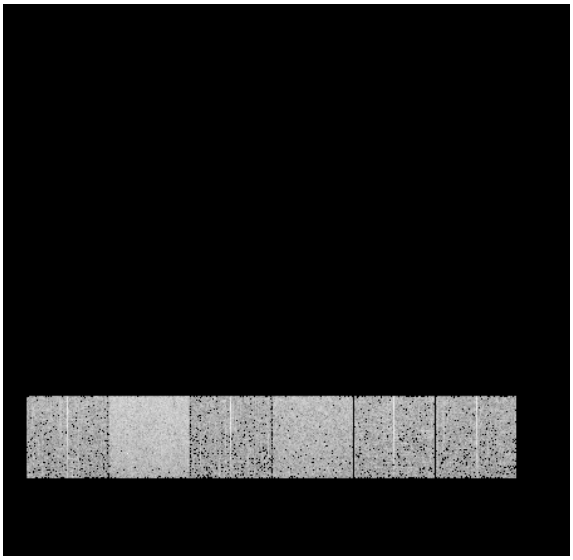
2.1 OBI

2.1.1 Images

Level 1 Image

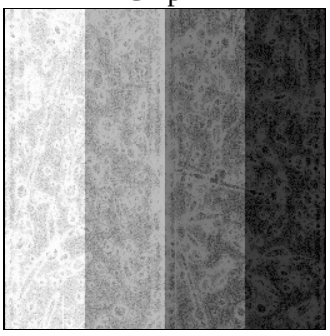


Level 1 Bad Events

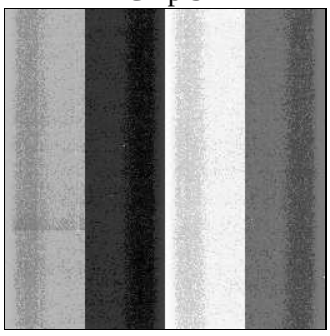


2.1.2 Bias

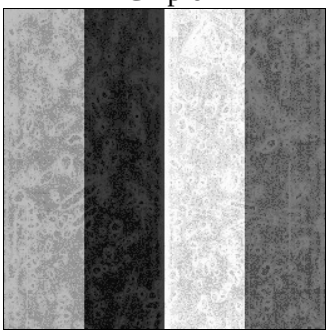
Chip 4



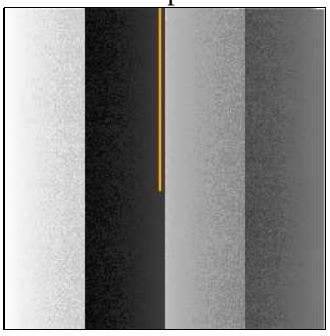
Chip 5



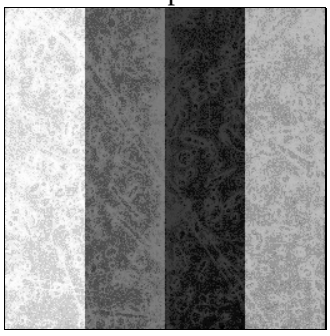
Chip 6



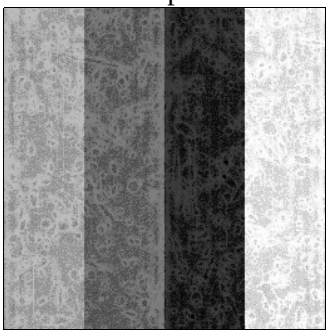
Chip 7



Chip 8



Chip 9



2.1.3 Parameters

obi_num	1	Obi number
ascdsver	8.4.5	Processing system revision
caldbver	4.5.2	
date	2012-10-11T17:54:12	Date and time of file creation
revision	5	Processing version of data

sched_exp_time	0.0	[s] Scheduled observation exposure time
ontime	4589.28989847	Sum of GTIs [s]
ontime4	1931.6582098901	Sum of GTIs [s]
ontime5	4916.6260251254	Sum of GTIs [s]
ontime6	2060.5968031436	Sum of GTIs [s]
ontime7	4589.28989847	Sum of GTIs [s]
ontime8	2128.5761840492	Sum of GTIs [s]
ontime9	2048.335320577	Sum of GTIs [s]
l1events	1431756	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	157669	364439	178209	375198	185327	170914
rejected events	17640	34182	16645	22835	18226	16490
rejected %	11%	9%	9%	6%	9%	9%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	79400	88129	88428	91378	92214	84722
	50%	24%	49%	24%	49%	49%
grade 1 events	461	291	440	241	435	432
	0%	0%	0%	0%	0%	0%
grade 2 events	24933	111296	27961	78148	29443	27123
	15%	30%	15%	20%	15%	15%
grade 3 events	8614	22915	9912	36390	10603	9470
	5%	6%	5%	9%	5%	5%
grade 4 events	8610	22837	9983	35646	10425	9655
	5%	6%	5%	9%	5%	5%
grade 5 events	1210	6942	1381	5113	1508	1313
	0%	1%	0%	1%	0%	0%
grade 6 events	18939	85202	25280	110801	24416	23454
	12%	23%	14%	29%	13%	13%
grade 7 events	15502	26827	14824	17481	16283	14745
	9%	7%	8%	4%	8%	8%

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	356.3943600169741
[deg] Pointing Dec	0	-59.49799192036232
[deg] Pointing Roll	0.0	311.4638220171943
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.8505141146731063
[mm] SIM translation stage pos	-190.132523	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	90459122.34529001	90459121.576905
Observation start date	2000-11-12T23:32:02	2000-11-12T23:32:01
[s] Observation end time (MET)	90503211.696955	90503210.92858499
Observation end date	2000-11-13T11:46:52	2000-11-13T11:46:50
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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)	2012.10.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.58928989847

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: (905,503),(927,503),(927,892),(905,924)