V&V Reference Report
L2 ASCDS Version : 8.4.4

Observation 57618 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : May 20 2012

Contents

1 Front

seq_num	&#160	Sequence number
obs_id	57618	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	359.97027916983	Nominal RA [deg]
dec_nom	15.000333555255	Nominal Dec [deg]
roll_nom	146.40963780249	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8916.0	Sum of GTIs [s]
livetime	8881.171875	Livetime [s]
ontime4	5080.4246082306	Sum of GTIs [s]
ontime5	8916.0	Sum of GTIs [s]
ontime6	5512.342777729	Sum of GTIs [s]
ontime7	8916.0	Sum of GTIs [s]
ontime8	5585.3009378314	Sum of GTIs [s]
ontime9	5464.1893469095	Sum of GTIs [s]
l2events	395100	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
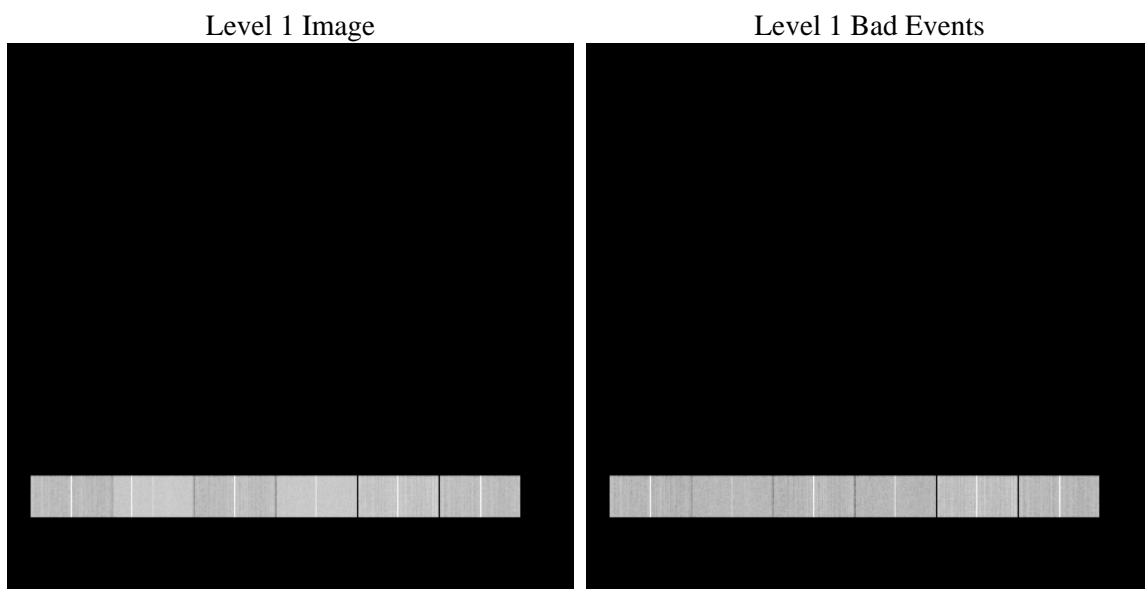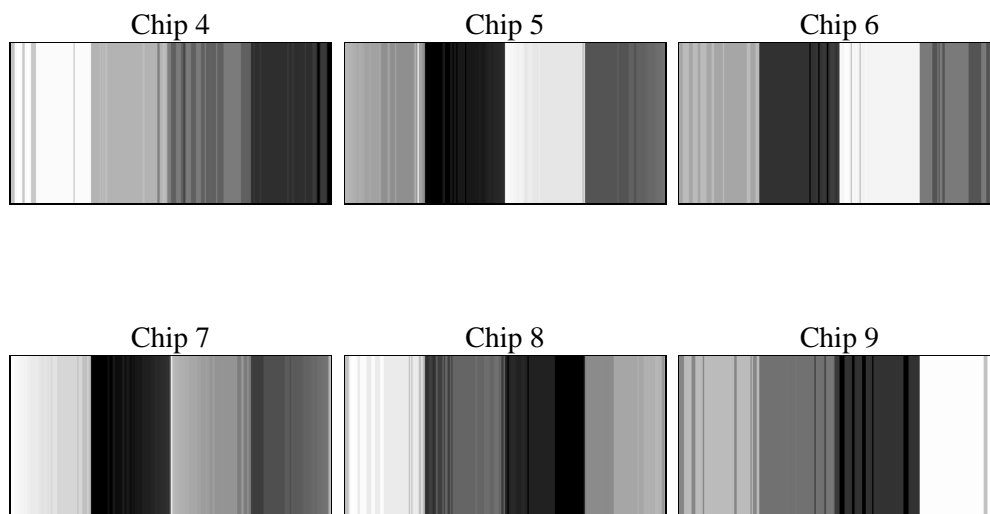
2.1.3 Parameters

obi_num	0	Obi number
ascdsver	8.4.4	Processing system revision
caldbver	4.4.9	&#160
date	2012-05-21T00:34:41	Date and time of file creation
revision	2	Processing version of data

sched_exp_time	0.0	[s] Scheduled observation exposure time
ontime	8916.0	Sum of GTIs [s]
ontime4	5080.4246082306	Sum of GTIs [s]
ontime5	8916.0	Sum of GTIs [s]
ontime6	5512.342777729	Sum of GTIs [s]
ontime7	8916.0	Sum of GTIs [s]
ontime8	5585.3009378314	Sum of GTIs [s]
ontime9	5464.1893469095	Sum of GTIs [s]
l1events	1532349	Number of level 1 events

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	206235	311296	218162	293847	282428	220381
rejected events	175784	158043	180382	155656	234897	183302
rejected %	85%	50%	82%	52%	83%	83%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	6134	22375	5766	20460	11857	6383
	2%	7%	2%	6%	4%	2%
grade 1 events	97	168	60	167	121	73
	0%	0%	0%	0%	0%	0%
grade 2 events	32864	62932	36986	41132	39325	35379
	15%	20%	16%	13%	13%	16%
grade 3 events	1706	3363	1594	9404	3265	1643
	0%	1%	0%	3%	1%	0%
grade 4 events	1700	3232	1518	8983	3282	1609
	0%	1%	0%	3%	1%	0%
grade 5 events	2679	9932	2832	12084	3825	2951
	1%	3%	1%	4%	1%	1%
grade 6 events	10333	61442	13220	58291	16217	12623
	5%	19%	6%	19%	5%	5%
grade 7 events	150722	147852	156186	143326	204536	159720
	73%	47%	71%	48%	72%	72%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	359.9702791698347
[deg] Pointing Dec	0	15.00033355525521
[deg] Pointing Roll	0.0	146.409637802486
[mm] SIM focus pos	-1.429586	-1.038866356238299
[mm] SIM defocus	0.1037507710433287	0.4944702831659975
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	337205709.981971	337205708.95697
Observation start date	2008-09-07T20:15:10	2008-09-07T20:15:08
[s] Observation end time (MET)	337215666.83246	337215665.80746
Observation end date	2008-09-07T23:01:07	2008-09-07T23:01:05
Read mode	CONTINUOUS	CONTINUOUS

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	0	0

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Glenn Allen
V&V Date (YYYY-MM-DD)	2012.05.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.916

A.2 Comments

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Glenn,

The bias file for chip 5 has a column with high adu values (about 90 adu

above the surrounding pixels. This column is apparently not marked
bad because it can be seen in the Level 2 data. This is a CTI, so
maybe
this is appropriate behavior. Can you check it?



The column (CCD_ID,CHIPX) = (5,233) is anomalously high in the bias file
acisf337206124N002_2_bias0.fits. The column (CCD_ID,CHIPX) = (5,226) is
also about 10 adu high. These columns are part of the region
(CCD_ID,CHIPX) = (5,232-251) that is marked as bad in the bad-pixel file
acisf57618_000N002_bpix1.fits. As a result, the file
acisf57618_000N002_evt1.fits has STATUS bits 4 and 5 are set to one for
all of the events in this region, including the events on the two
columns with bad bias values. These events are excluded from the file
acisf57618_000N002_evt2.fits.
The bias file could be fixed, if there is an interest in doing so, but I
think that it is not imperative since this observation is a calibration
observation.

Glenn
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