V&V Reference Report
L2 ASCDS Version : 8.1.1

Observation 62338 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Nov 20 2009

Contents

1 Front

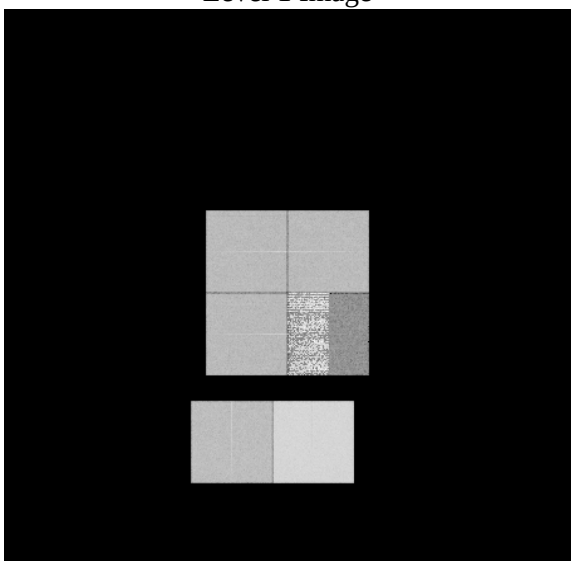
seq_num		Sequence number
obs_id	62338	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object		Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA
dec_targ	0.0	Observer's specified target Dec
ra_nom	101.30083507362	Nominal RA
dec_nom	-16.694526573556	Nominal Dec
roll_nom	72.419048580466	Nominal Roll
revision	4	Processing version of data
ontime	4683.9708172381	Sum of GTIs [s]
livetime	4624.6595584016	Livetime [s]
ontime0	1866.8377170488	Sum of GTIs [s]
ontime1	1873.3198169917	Sum of GTIs [s]
ontime2	1785.8117368221	Sum of GTIs [s]
ontime3	440.77620963752	Sum of GTIs [s]
ontime6	2006.2022976726	Sum of GTIs [s]
ontime7	4683.9708172381	Sum of GTIs [s]
l2events	1145945	Number of level 2 events

2 OBI

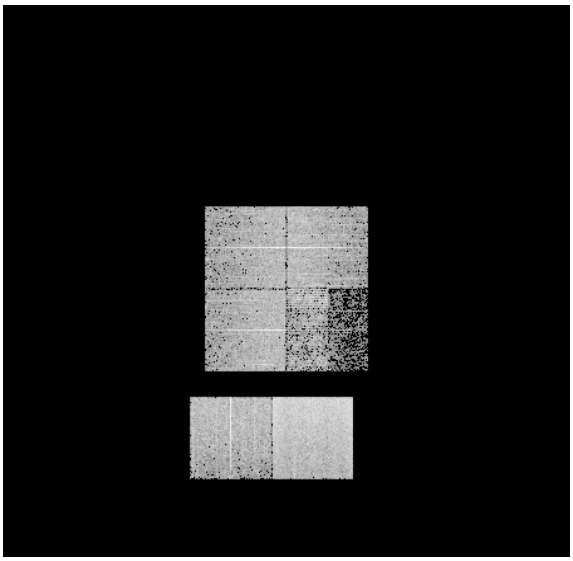
2.1 OBI

2.1.1 Images

Level 1 Image

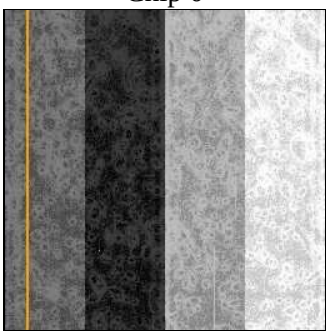


Level 1 Bad Events

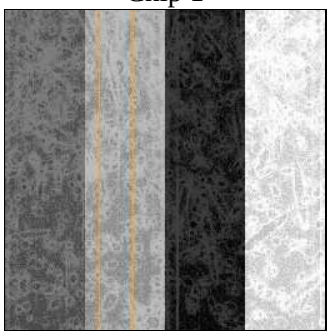


2.1.2 Bias

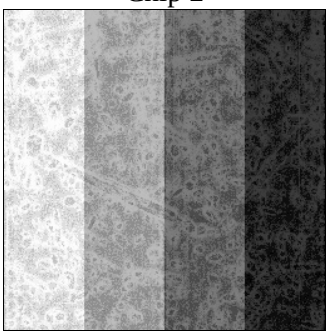
Chip 0



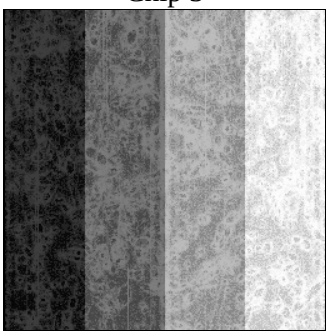
Chip 1



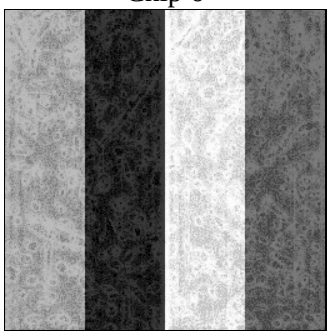
Chip 2



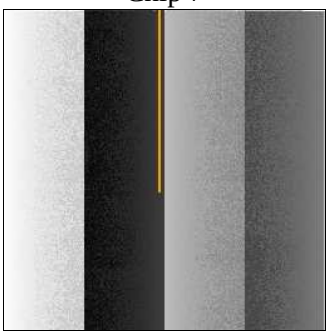
Chip 3



Chip 6



Chip 7



2.1.3 Parameters

obi_num	0	Obi number
ascdsver	8.1.1	ASCDS version number
caldbver	4.1.4	
date	2009-11-20T20:20:38	Date and time of file creation
revision	3	Processing version of data

sched_exp_time	0.0	Scheduled observation exposure time
ontime	4683.9708172381	Sum of GTIs [s]
ontime0	1866.8377170488	Sum of GTIs [s]
ontime1	1873.3198169917	Sum of GTIs [s]
ontime2	1785.8117368221	Sum of GTIs [s]
ontime3	440.77620963752	Sum of GTIs [s]
ontime6	2006.2022976726	Sum of GTIs [s]
ontime7	4683.9708172381	Sum of GTIs [s]
l1events	1490706	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	192671	195100	186832	203603	214432	498068
rejected events	25089	26597	27180	14291	30047	47833
rejected %	13%	13%	14%	7%	14%	9%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	63694	63922	51498	165329	52133	81720
	33%	32%	27%	81%	24%	16%
grade 1 events	268	289	224	1249	211	196
	0%	0%	0%	0%	0%	0%
grade 2 events	61004	61568	68786	14174	85079	126818
	31%	31%	36%	6%	39%	25%
grade 3 events	6911	6884	5469	1727	5382	38691
	3%	3%	2%	0%	2%	7%
grade 4 events	6664	6822	5293	1670	5393	35108
	3%	3%	2%	0%	2%	7%
grade 5 events	1681	1585	1489	1583	1738	6885
	0%	0%	0%	0%	0%	1%
grade 6 events	29309	29307	28606	6412	36398	168209
	15%	15%	15%	3%	16%	33%
grade 7 events	23140	24723	25467	11459	28098	40441
	12%	12%	13%	5%	13%	8%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
Pointing RA	0	101.3008350736216
Pointing Dec	0	-16.69452657355561
Pointing Roll	0.0	72.41904858046632
SIM focus pos (mm)	-0.782348	-1.508139491973113
SIM defocus (mm)	0	0.02519714743118384
SIM translation stage pos (mm)	-233.592463	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	57329524.121	57329523.352739
Observation start date	1999-10-26T12:52:04	1999-10-26T12:52:03
Observation end time	57378603.173	57378602.404509
Observation end date	1999-10-27T02:30:03	1999-10-27T02:30:02
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	6	6
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
Primary exposure time	0.000000	3.2

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.6839708172381

A.2 Comments

```
The front-end processor designated FEP0 suffered from a rare
problem.
As a result, the top half of the bias-map for CCD_ID I3 (the CCD
associated with FEP0) was corrupted for part of the observation
and
many invalid events were telemetered for this region. The standard
pipeline processing tools identify the problem and remove the
spurious
events from the Level 2 event file during the interval in
question.
===
The focal plane temperature is approximately -110 C during this
observation. This reprocessing of the data applies no CTI correction
because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature,
because it was early in the mission, and ACIS had not yet been lowered
to the standard -119.7 C. Both front and back illuminated chips are
affected. However a T_GAIN correction has been applied to the BI chips
(ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer
temperatures than it is at -119.7 C. Users whose science objectives
depend on the most accurate spectral response (ie: fitting line-rich
spectra) may notice an effect. Users whose science objectives do not
depend on the most accurate spectral response should not notice an
effect.
```