

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 59909 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date : Apr 7 2006

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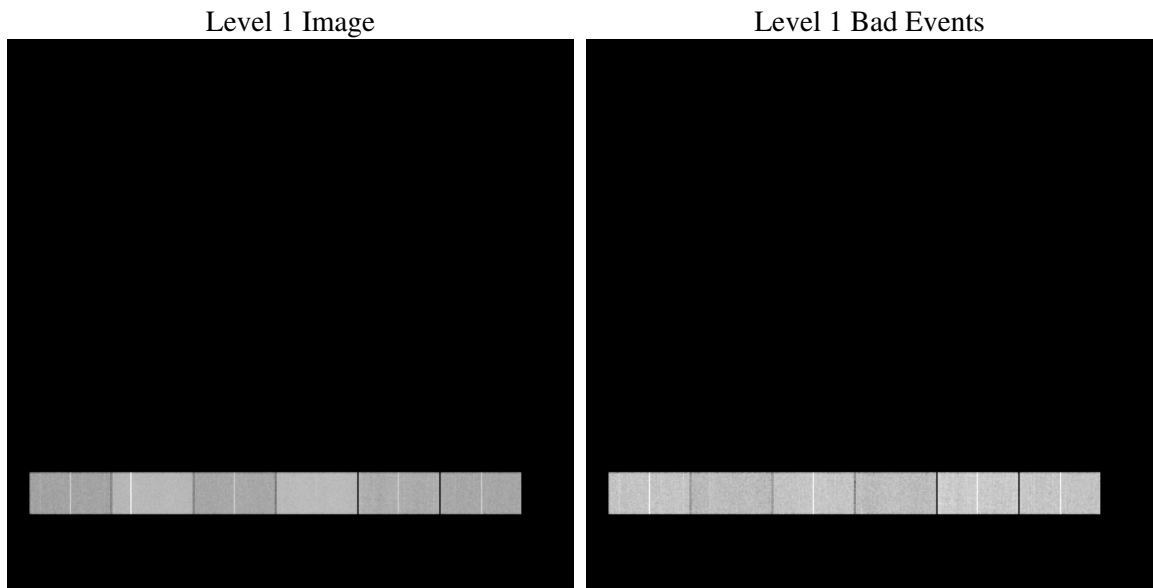
1 Front

seq_num	
obs_id	59909
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
ra_targ	0.0
dec_targ	0.0
ra_nom	99.466124979246
dec_nom	33.005031259627
roll_nom	137.33995340425
revision	2
ontime	8336.25
livetime	8303.6865234375
ontime4	4602.222907573
ontime5	8336.25
ontime6	5111.4758681059
ontime7	8336.25
ontime8	5271.9858552516
ontime9	5173.4691293538
l2events	698131

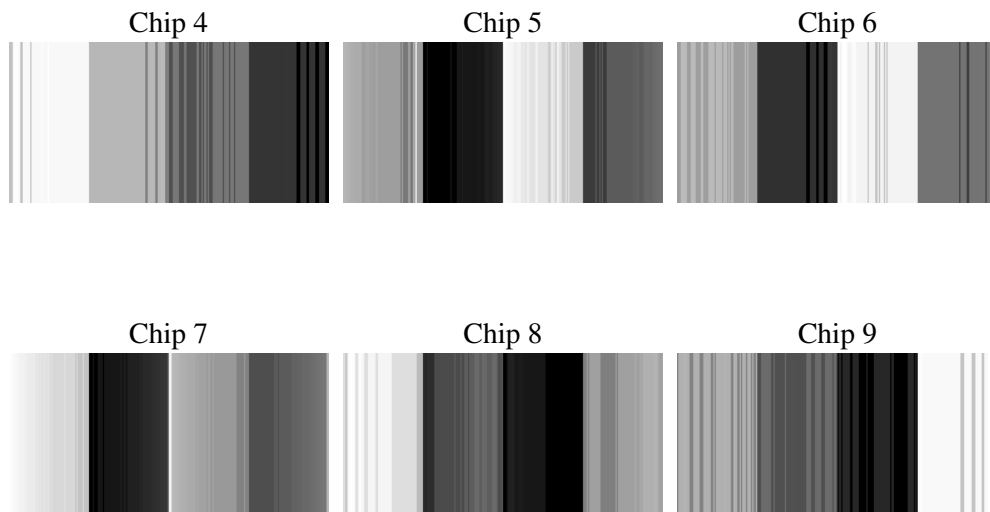
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-07T19:33:52
revision	2

sched_exp_time	0.0
ontime	8387.3951077163
ontime4	4628.56197384
ontime5	8387.3951276243
ontime6	5140.7333742678
ontime7	8387.3951077163
ontime8	5305.6208817363
ontime9	5200.5604655445
l1events	1443842

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	177375	324752	196398	321234	228540	195543
rejected events	116227	88396	118742	92607	138950	118471
rejected %	65%	27%	60%	28%	60%	60%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	11255	30274	10329	29352	17820	12219
	6%	9%	5%	9%	7%	6%
grade 1 events	111	93	69	138	111	83
	0%	0%	0%	0%	0%	0%
grade 2 events	69423	114708	82743	83217	84468	79993
	39%	35%	42%	25%	36%	40%
grade 3 events	1904	3546	1838	12449	3210	2037
	1%	1%	0%	3%	1%	1%
grade 4 events	2024	3307	1744	11996	3247	2121
	1%	1%	0%	3%	1%	1%
grade 5 events	2338	6752	2396	8234	3002	2529
	1%	2%	1%	2%	1%	1%
grade 6 events	21413	86081	28404	93144	29559	26678
	12%	26%	14%	28%	12%	13%
grade 7 events	68907	79991	68875	82704	87123	69883
	38%	24%	35%	25%	38%	35%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	CC33_FAINT	CC33_FAINT	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
Pointing RA	0	99.46612497924595	Alternating exposures requested	N	N
Pointing Dec	0	33.00503125962705	Primary exposure time	0	0
Pointing Roll	0.0	137.3399534042518			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	220042657.897257	220042656.87226			
Observation start date	2004-12-21T18:57:38	2004-12-21T18:57:36			
Observation end time	220064635.948247	220064634.92325			
Observation end date	2004-12-22T01:03:56	2004-12-22T01:03:54			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect

2.4 Star Slots

2.5 FID Slots

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.33625

A.2 Comments

The fits keyword value of TIMEDEL in the Level 1 and Level 2 event file headers are incorrect in this version of the processing.

The

value in the event files should be 0.00285 s. This value is appropriate

since the TIMES between events can be separated by only 0.00285 s.

The value of the keyword TIMEDEL in the exr0 and stat1 files is 1.4592 s, which is the correct value for these files. The data in the event files are correct. The correct value of TIMEDEL=0.00285 was used

to calculate the arrival time of each event, but the TIMEDEL value was changed in a subsequent step of the code to the incorrect value of 1.4592 s,

which was then recorded in the header. There is the potential for the event

times to become corrupted if the user reproceses the data. To fix this problem,

the user should update the value of TIMEDEL in the header of their event-data

file. They can do this using, e.g., dmhedit:

```
dmhedit infile='acisf06709_000N001_evt1.fits' filelist=none
operation=add
key=TIMEDEL value=0.00285
```