

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 59918 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date : Apr 8 2006

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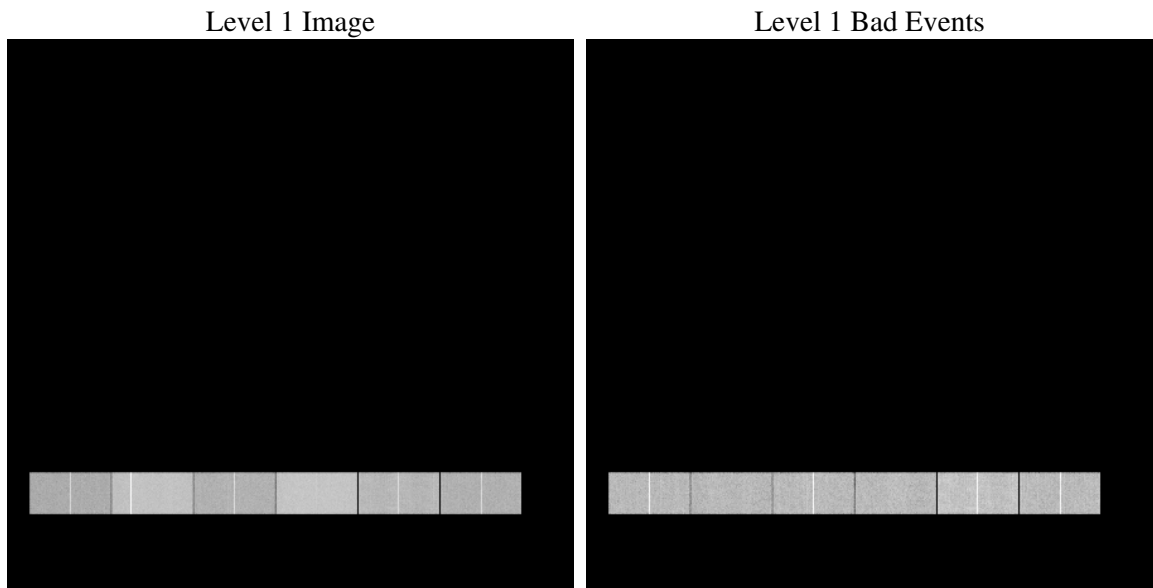
1 Front

seq_num	
obs_id	59918
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
ra_targ	0.0
dec_targ	0.0
ra_nom	77.730401849436
dec_nom	-6.4884029305398
roll_nom	347.6818411919
revision	2
ontime	8384.5
livetime	8351.748046875
ontime4	5228.9074840844
ontime5	8384.5
ontime6	5796.5283640623
ontime7	8384.5
ontime8	5938.0676068962
ontime9	5704.5995229483
l2events	771745

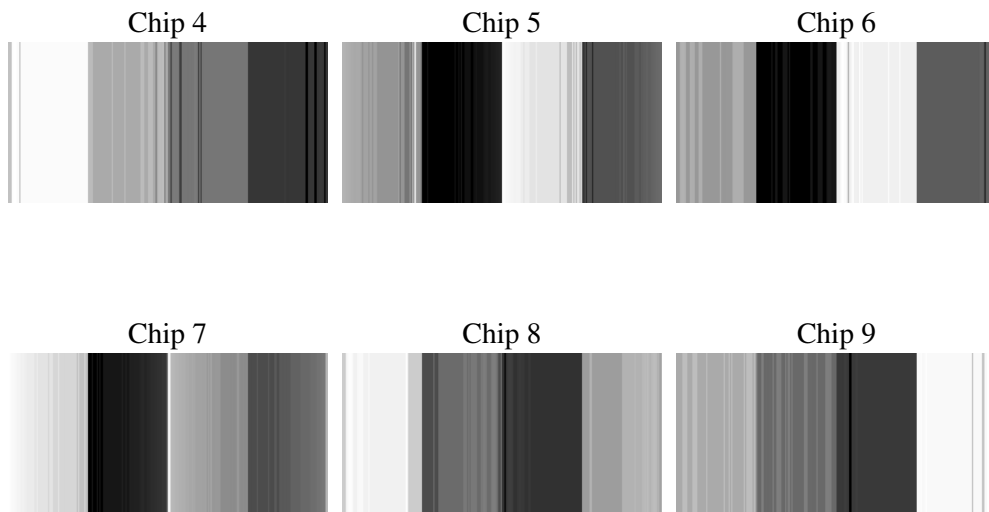
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-04-09T01:42:51
revision	2

sched_exp_time	0.0
ontime	8385.9414773881
ontime4	5229.7458571494
ontime5	8385.9414773881
ontime6	5797.3666776717
ontime7	8385.9414773881
ontime8	5938.905959934
ontime9	5705.4378760457
l1events	1432917

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	171247	316678	198826	321988	231164	193014
rejected events	94206	86351	98180	91685	119940	98315
rejected %	55%	27%	49%	28%	51%	50%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	12601	24553	11631	29227	19836	13360
	7%	7%	5%	9%	8%	6%
grade 1 events	95	71	73	110	142	95
	0%	0%	0%	0%	0%	0%
grade 2 events	78272	113204	93943	83316	93900	87313
	45%	35%	47%	25%	40%	45%
grade 3 events	2126	3265	2087	12452	3780	2147
	1%	1%	1%	3%	1%	1%
grade 4 events	2168	3110	2147	12019	3621	2193
	1%	0%	1%	3%	1%	1%
grade 5 events	2709	6407	2742	8150	3411	2888
	1%	2%	1%	2%	1%	1%
grade 6 events	24375	86322	31848	93419	32774	29477
	14%	27%	16%	29%	14%	15%
grade 7 events	48901	79746	54355	83295	73700	55541
	28%	25%	27%	25%	31%	28%

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	77.73040184943649	Alternating exposures requested	N	N
Pointing Dec	0	-6.488402930539771	Primary exposure time	0	0
Pointing Roll	0.0	347.6818411918999			
SIM focus pos (mm)	-0.684267	-1.428180813131781			
SIM defocus (mm)	0	0.1051558262725154			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	219594652.927073	219594651.90208			
Observation start date	2004-12-16T14:30:53	2004-12-16T14:30:51			
Observation end time	219606649.527613	219606648.50262			
Observation end date	2004-12-16T17:50:50	2004-12-16T17:50:48			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect

2.4 Star Slots

2.5 FID Slots

A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.04.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.3845

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='acisfxxxxx_000N002_evt1.fits' filelist=none
```

```
operation=add
```

```
key=TIMEDEL value=0.00285
```