V&V Reference Report
L2 ASCDS Version : 7.6.10

Observation 61963 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jun 2 2007

Contents

1 Front

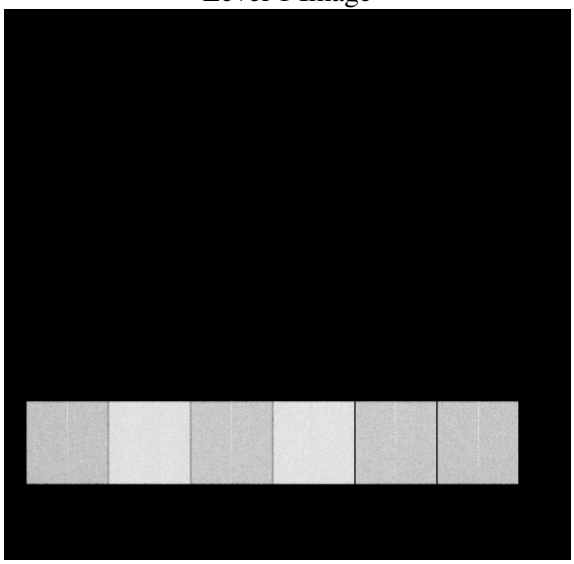
seq_num	
obs_id	61963
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
dtycycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	186.49195090125
dec_nom	-38.298059466776
roll_nom	224.96413967053
revision	3
ontime	4765.2457777709
livetime	4704.9053664462
ontime4	2049.2740474045
ontime5	5139.2417571545
ontime6	2245.0617942065
ontime7	4765.2457777709
ontime8	2228.9387340993
ontime9	2167.1539736688
l2events	1367749

2 OBI

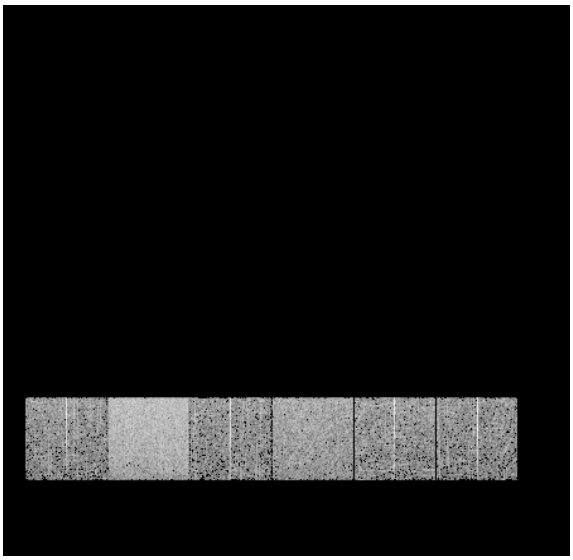
2.1 OBI

2.1.1 Images

Level 1 Image

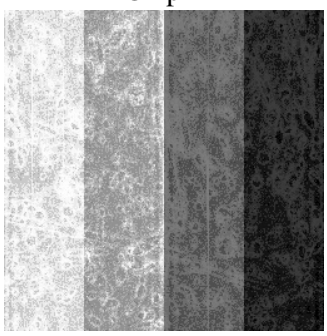


Level 1 Bad Events

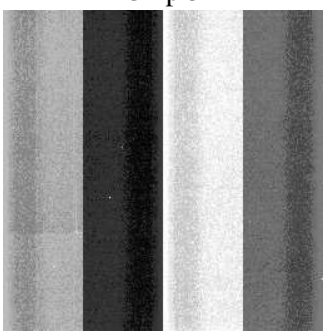


2.1.2 Bias

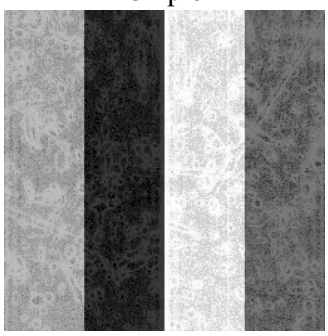
Chip 4



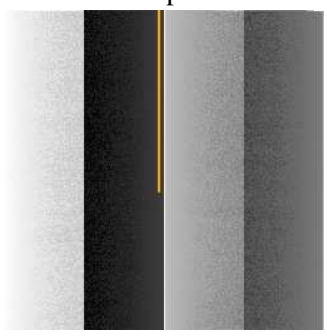
Chip 5



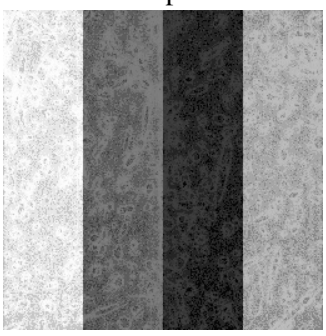
Chip 6



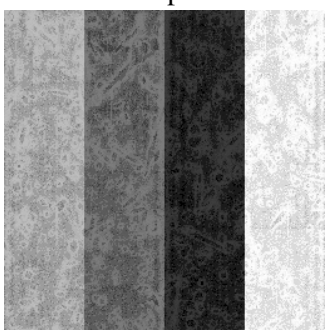
Chip 7



Chip 8



Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldbver	3.4.0
date	2007-06-02T14:51:55
revision	3

sched_exp_time	0.0
ontime	4765.2457777709
ontime4	2049.2740474045
ontime5	5139.2417571545
ontime6	2245.0617942065
ontime7	4765.2457777709
ontime8	2228.9387340993
ontime9	2167.1539736688
l1events	1554939

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	173296	388371	201687	403778	200785	187022
rejected events	17405	37220	17384	22574	18406	16650
rejected %	10%	9%	8%	5%	9%	8%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	88503	83129	101373	98277	100920	93849
	51%	21%	50%	24%	50%	50%
grade 1 events	468	262	467	264	488	453
	0%	0%	0%	0%	0%	0%
grade 2 events	27739	128691	31753	84301	32321	30043
	16%	33%	15%	20%	16%	16%
grade 3 events	9501	22096	11136	38997	11498	10540
	5%	5%	5%	9%	5%	5%
grade 4 events	9369	21880	11146	38568	11354	10374
	5%	5%	5%	9%	5%	5%
grade 5 events	1239	7675	1382	5150	1554	1352
	0%	1%	0%	1%	0%	0%
grade 6 events	20779	95355	28895	121061	26286	25566
	11%	24%	14%	29%	13%	13%
grade 7 events	15698	29283	15535	17160	16364	14845
	9%	7%	7%	4%	8%	7%

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
Pointing RA	0	186.4919509012465
Pointing Dec	0	-38.29805946677587
Pointing Roll	0.0	224.9641396705267
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	82738014.354	82738013.58601201
Observation start date	2000-08-15T14:46:54	2000-08-15T14:46:53
Observation end time	82748524.705	82748523.936405
Observation end date	2000-08-15T17:42:05	2000-08-15T17:42:03
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	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.76524577

A.2 Comments

```
Focal plane temperature is warmer than -118.7 C degrees during the
first 5 ksec of the observation. This temperature is the upper limit of
the verified ACIS calibration for the front-illuminated chips. The
focal plane temperature is warmer than -116.7 degrees C for
approximately the first 0.5 ksec of this observation. This temperature
is the upper limit of the verified ACIS calibration for the
back-illuminated chips. 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.
```