V&V Reference Report
L2 ASCDS Version : 7.6.10

Observation 61940 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jun 7 2007

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1 Front

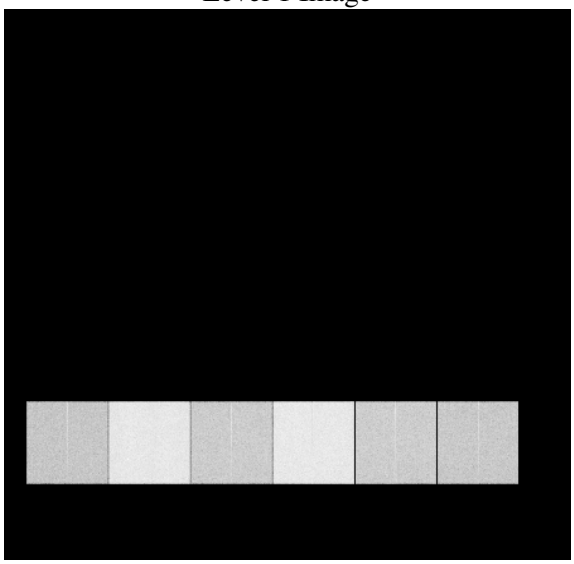
seq_num	
obs_id	61940
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
dtycycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	22.399864365834
dec_nom	26.690105291667
roll_nom	126.86492361929
revision	2
ontime	4850.9389441758
livetime	4789.5134343799
ontime4	2041.1019945145
ontime5	5255.9369473904
ontime6	2199.8717845082
ontime7	4850.9389441758
ontime8	2251.8105941266
ontime9	2092.7124402076
l2events	1340214

2 OBI

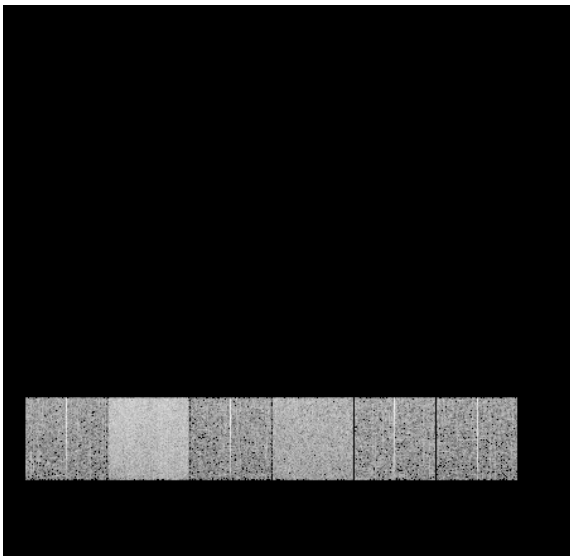
2.1 OBI

2.1.1 Images

Level 1 Image

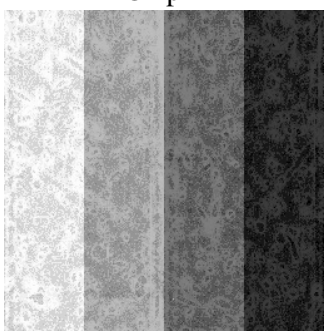


Level 1 Bad Events

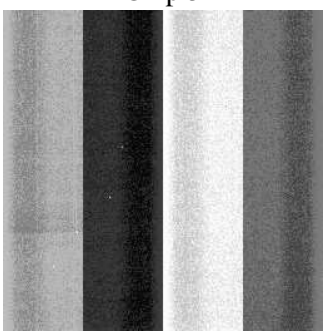


2.1.2 Bias

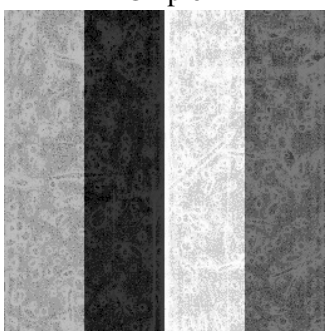
Chip 4



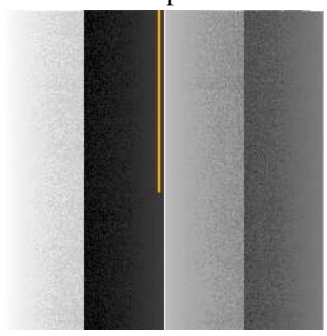
Chip 5



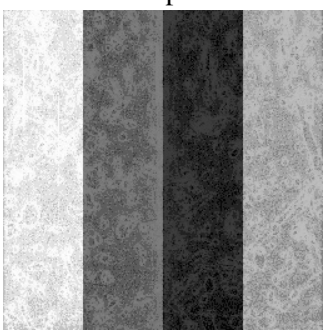
Chip 6



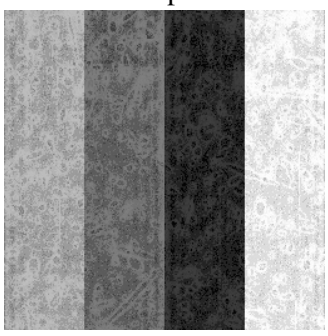
Chip 7



Chip 8



Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldbver	3.4.0
date	2007-06-07T03:34:39
revision	2

sched_exp_time	0.0
ontime	4850.9389441758
ontime4	2041.1019945145
ontime5	5255.9369473904
ontime6	2199.8717845082
ontime7	4850.9389441758
ontime8	2251.8105941266
ontime9	2092.7124402076
l1events	1554641

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	168419	398997	195391	411749	200950	179135
rejected events	20499	46261	20407	30161	22118	19511
rejected %	12%	11%	10%	7%	11%	10%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	79918	79441	94780	98428	99858	87092
	47%	19%	48%	23%	49%	48%
grade 1 events	399	229	374	247	475	440
	0%	0%	0%	0%	0%	0%
grade 2 events	31468	136646	32747	84782	32735	29899
	18%	34%	16%	20%	16%	16%
grade 3 events	8338	21092	10542	39780	10930	9541
	4%	5%	5%	9%	5%	5%
grade 4 events	8448	20567	10499	38874	11108	9608
	5%	5%	5%	9%	5%	5%
grade 5 events	1399	8249	1486	5820	1512	1413
	0%	2%	0%	1%	0%	0%
grade 6 events	21205	99399	28466	124605	26482	24938
	12%	24%	14%	30%	13%	13%
grade 7 events	17244	33374	16497	19213	17850	16204
	10%	8%	8%	4%	8%	9%

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	22.39986436583441
Pointing Dec	0	26.69010529166704
Pointing Roll	0.0	126.8649236192885
SIM focus pos (mm)	-0.684267	-0.7809083437167272
SIM defocus (mm)	0	0.7524282956875696
SIM translation stage pos (mm)	-190.132523	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	84562778.873	84562778.104462
Observation start date	2000-09-05T17:39:39	2000-09-05T17:39:38
Observation end time	84573289.223	84573288.45485599
Observation end date	2000-09-05T20:34:49	2000-09-05T20:34:48
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)	2007.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.85093894

A.2 Comments

```
Focal plane temperature is warmer than -118.7 C degrees during the
entire 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 the entire 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.
```