V&V Reference Report
L2 ASCDS Version : 8.1.2

Observation 62220 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Dec 2 2009

Contents

1 Front

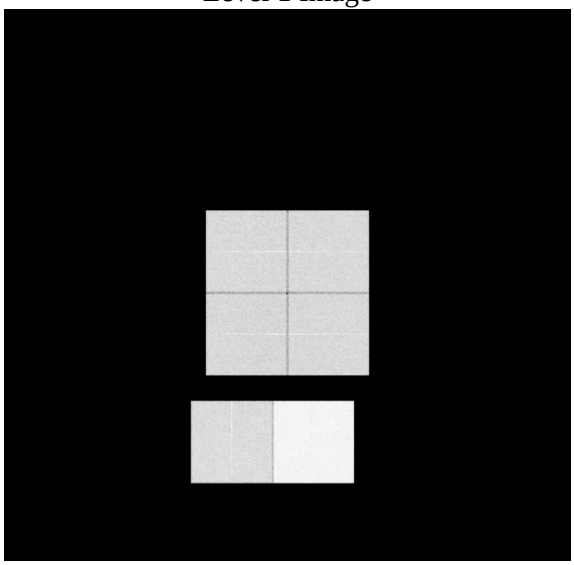
seq_num		Sequence number
obs_id	62220	Observation id
title	ACIS-012367 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object		Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA
dec_targ	0.0	Observer's specified target Dec
ra_nom	213.29496614581	Nominal RA
dec_nom	-65.322867321689	Nominal Dec
roll_nom	86.065036092193	Nominal Roll
revision	3	Processing version of data
ontime	3613.9478462785	Sum of GTIs [s]
livetime	3568.1858625908	Livetime [s]
ontime0	1429.297136575	Sum of GTIs [s]
ontime1	1429.4276149496	Sum of GTIs [s]
ontime2	1348.2711563408	Sum of GTIs [s]
ontime3	1377.6941547096	Sum of GTIs [s]
ontime6	1529.8177751452	Sum of GTIs [s]
ontime7	3613.9478462785	Sum of GTIs [s]
l2events	915002	Number of level 2 events

2 OBI

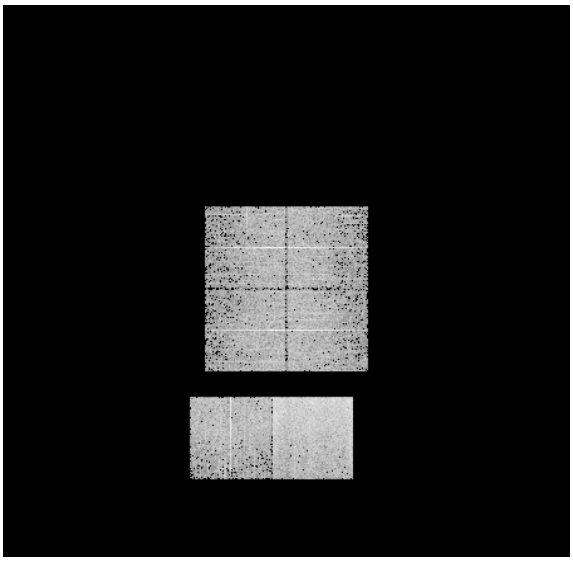
2.1 OBI

2.1.1 Images

Level 1 Image

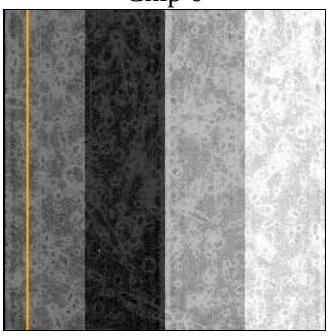


Level 1 Bad Events

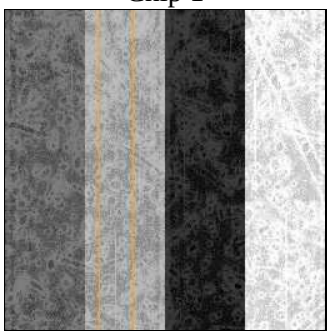


2.1.2 Bias

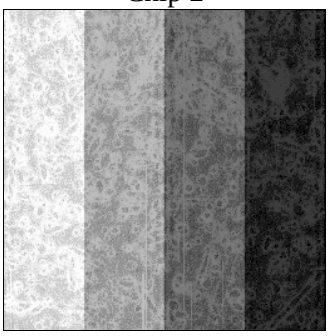
Chip 0



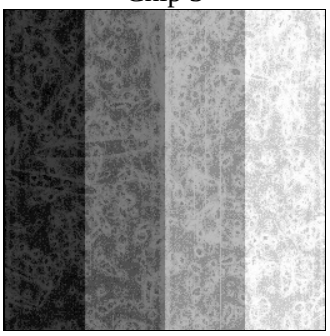
Chip 1



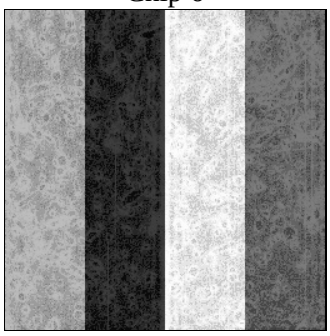
Chip 2



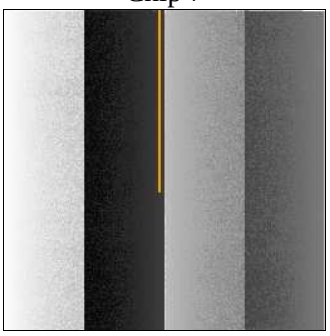
Chip 3



Chip 6



Chip 7



2.1.3 Parameters

obi_num	0	Obi number
ascdsver	8.1.2	ASCDS version number
caldbver	4.1.4	
date	2009-12-02T21:06:29	Date and time of file creation
revision	3	Processing version of data

sched_exp_time	0.0	Scheduled observation exposure time
ontime	3613.9478462785	Sum of GTIs [s]
ontime0	1429.297136575	Sum of GTIs [s]
ontime1	1429.4276149496	Sum of GTIs [s]
ontime2	1348.2711563408	Sum of GTIs [s]
ontime3	1377.6941547096	Sum of GTIs [s]
ontime6	1529.8177751452	Sum of GTIs [s]
ontime7	3613.9478462785	Sum of GTIs [s]
l1events	1059568	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	138085	139205	131905	136331	154247	359795
rejected events	18772	18930	19148	20165	22338	35767
rejected %	13%	13%	14%	14%	14%	9%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	43193	43540	35044	37433	36719	58398
	31%	31%	26%	27%	23%	16%
grade 1 events	180	179	143	184	122	138
	0%	0%	0%	0%	0%	0%
grade 2 events	45490	46332	50095	50687	62031	91652
	32%	33%	37%	37%	40%	25%
grade 3 events	4681	4706	3613	3800	3733	27544
	3%	3%	2%	2%	2%	7%
grade 4 events	4707	4694	3660	3889	3873	25042
	3%	3%	2%	2%	2%	6%
grade 5 events	1122	1109	1152	1187	1247	4923
	0%	0%	0%	0%	0%	1%
grade 6 events	21242	21283	20345	20626	25819	121700
	15%	15%	15%	15%	16%	33%
grade 7 events	17470	17362	17853	18525	20703	30398
	12%	12%	13%	13%	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	213.2949661458145
Pointing Dec	0	-65.32286732168932
Pointing Roll	0.0	86.06503609219257
SIM focus pos (mm)	-0.782348	-0.6828225247311905
SIM defocus (mm)	0	0.8505141146731063
SIM translation stage pos (mm)	-233.592463	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	64468848.23	64468847.461089
Observation start date	2000-01-17T04:00:48	2000-01-17T04:00:47
Observation end time	64476148.28	64476147.511354
Observation end date	2000-01-17T06:02:28	2000-01-17T06:02:27
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	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.6139478462785

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 also 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.
```