

# V&V Reference Report

## L2 ASCDS Version : 10.2.1

Observation 52868 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Apr 6 2014

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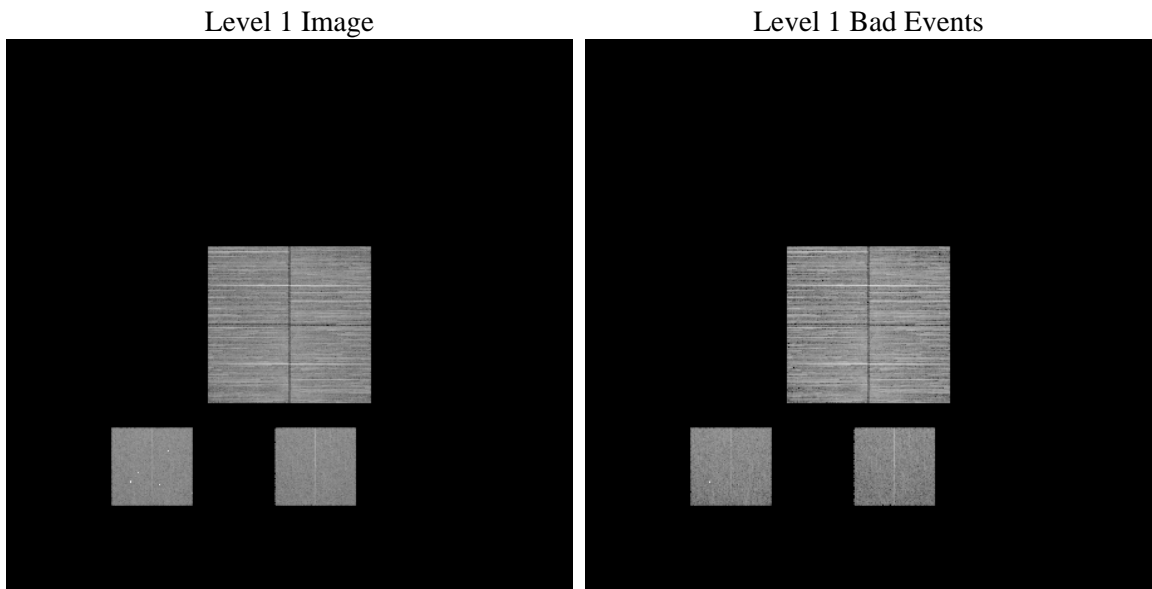
# 1 Front

seq_num	&#160	Sequence number
obs_id	52868	Observation id
title	ACIS-012357 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	&#160	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	174.02964348806	Nominal RA [deg]
dec_nom	-24.009620099018	Nominal Dec [deg]
roll_nom	307.55007119721	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8281.5999692082	Sum of GTIs [s]
livetime	8176.7333638173	Livetime [s]
ontime0	8164.9221723676	Sum of GTIs [s]
ontime1	8184.3684332371	Sum of GTIs [s]
ontime2	8168.1632336378	Sum of GTIs [s]
ontime3	8174.645323813	Sum of GTIs [s]
ontime5	8281.5999692082	Sum of GTIs [s]
ontime7	8281.5999692082	Sum of GTIs [s]
l2events	199068	Number of level 2 events

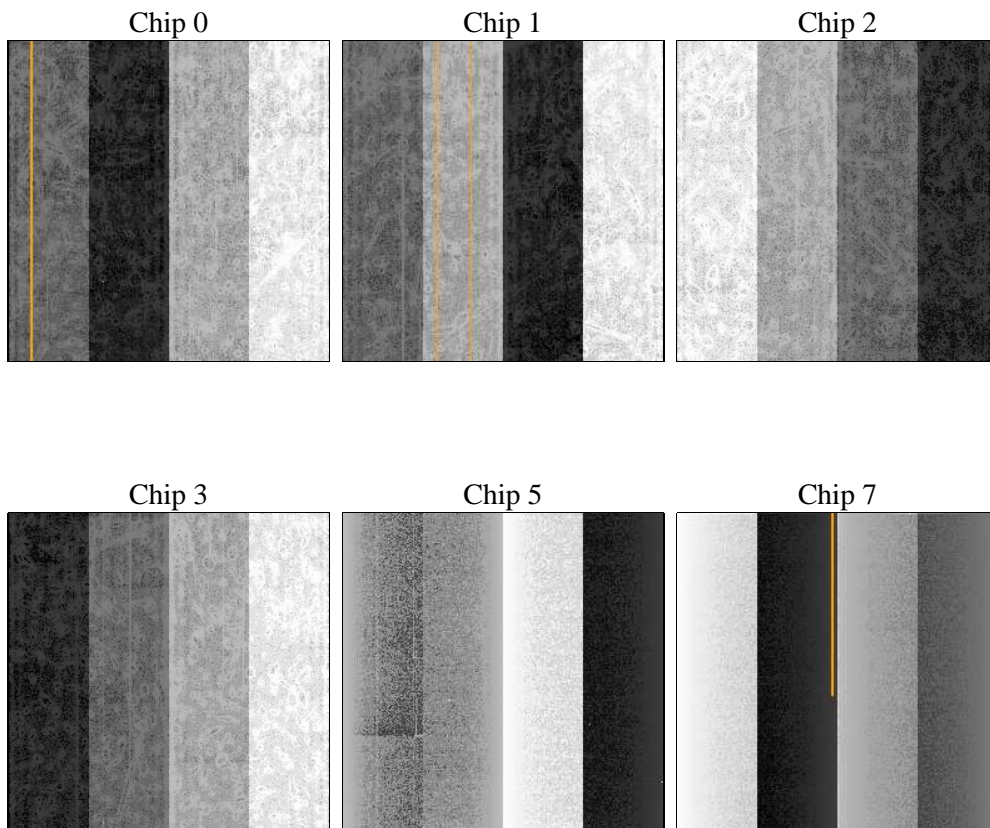
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	10.2.1	Processing system revision	ontime	8281.5999692082	Sum of GTIs [s]
caldsver	4.6.1	&#160	ontime0	8164.9221723676	Sum of GTIs [s]
date	2014-04-06T23:08:55	Date and time of file creation	ontime1	8184.3684332371	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	8168.1632336378	Sum of GTIs [s]
			ontime3	8174.645323813	Sum of GTIs [s]
			ontime5	8281.5999692082	Sum of GTIs [s]
			ontime7	8281.5999692082	Sum of GTIs [s]
			l1events	803494	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 5	ccd 7
level 1 events	131241	143988	141297	144081	127549	115338	grade 0 events	13564	13380	14288	14105	8832	7430
rejected events	104981	117100	114473	117506	70125	64734		10%	9%	10%	9%	6%	6%
rejected %	79%	81%	81%	81%	54%	56%	grade 1 events	79	70	70	87	108	96
								0%	0%	0%	0%	0%	0%
							grade 2 events	5308	5940	5233	5004	21020	12484
								4%	4%	3%	3%	16%	10%
							grade 3 events	1852	1797	1885	1960	1951	4264
								1%	1%	1%	1%	1%	3%
							grade 4 events	1885	1840	1935	1895	1877	4130
								1%	1%	1%	1%	1%	3%
							grade 5 events	2694	2639	2593	2996	5972	7111
								2%	1%	1%	2%	4%	6%
							grade 6 events	4226	4515	4082	4227	25089	23389
								3%	3%	2%	2%	19%	20%
							grade 7 events	101633	113807	111211	113807	62700	56434
								77%	79%	78%	78%	49%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012357	ACIS-012357
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	0	174.0296434880614
[deg] Pointing Dec	0	-24.00962009901768
[deg] Pointing Roll	0.0	307.5500711972136
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	513181891.34868	513181890.32368
Observation start date	2014-04-06T14:31:31	2014-04-06T14:31:30
[s] Observation end time (MET)	513191891.249232	513191890.22423
Observation end date	2014-04-06T17:18:11	2014-04-06T17:18:10
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	3.2	3.2

## **2.3 Star Slots**

## **2.4 FID Slots**

# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.04.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.2815999692082

## A.2 Comments

There is a period of time (2-3 ks) when the ACIS threshold THR\_PIX drops to about 1/3 of the mean value for this obsid. This time period is not included in the GTI time intervals for the BI chips.