

# V&V Reference Report

## L2 ASCDS Version : 10.1.1

Observation 53092 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Jan 14 2014

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Star Slots . . . . .	6
2.4	FID Slots . . . . .	6
<b>A</b>	<b>Summary</b>	<b>7</b>
A.1	Status . . . . .	7
A.2	Comments . . . . .	7

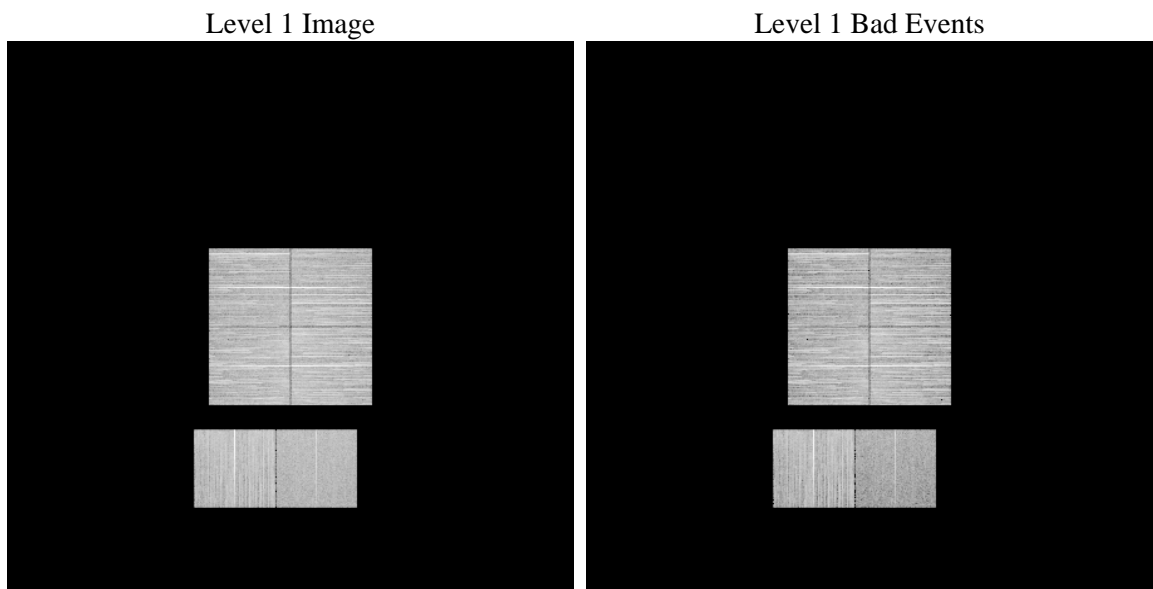
# 1 Front

seq_num	&#160	Sequence number
obs_id	53092	Observation id
title	ACIS-012367 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	126.0614746763	Nominal RA [deg]
dec_nom	36.913831075891	Nominal Dec [deg]
roll_nom	146.15666153456	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8181.9738097787	Sum of GTIs [s]
livetime	8078.3687308061	Livetime [s]
ontime0	8181.9327697754	Sum of GTIs [s]
ontime1	8181.8917297721	Sum of GTIs [s]
ontime2	8181.8506897688	Sum of GTIs [s]
ontime3	8178.7737894058	Sum of GTIs [s]
ontime6	8181.8096497655	Sum of GTIs [s]
ontime7	8181.9738097787	Sum of GTIs [s]
l2events	178431	Number of level 2 events

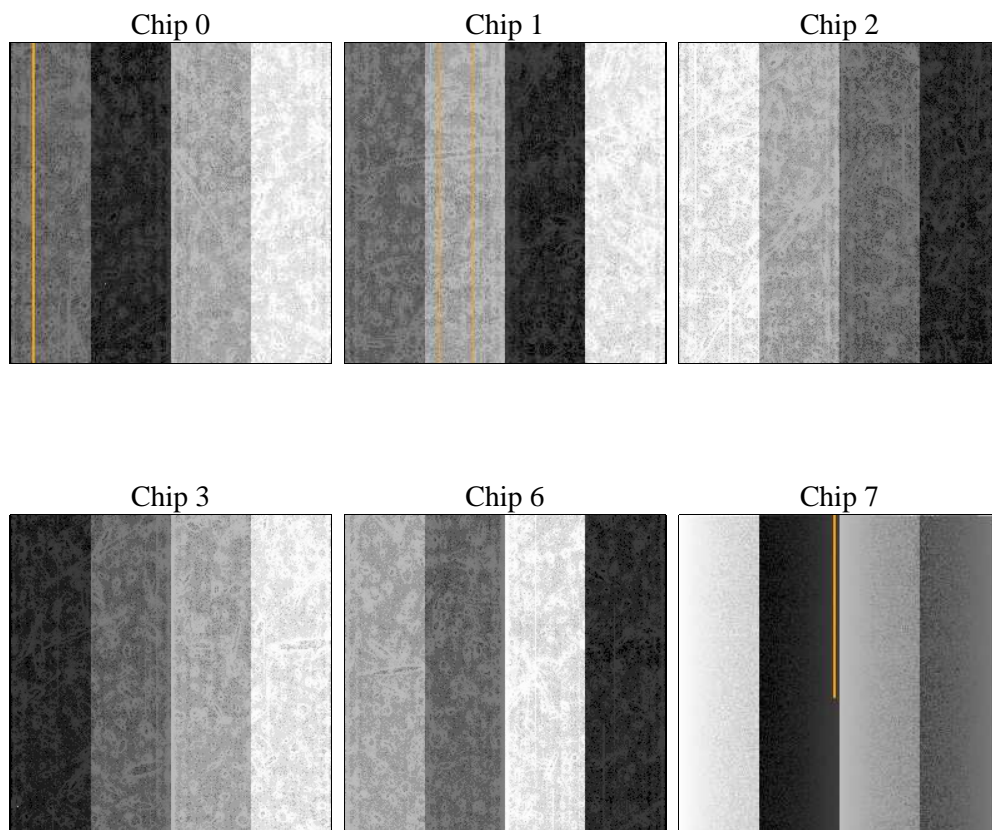
## 2 OBI

### 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	10.1.1	Processing system revision	ontime	8181.9738097787	Sum of GTIs [s]
caldsver	4.6.0	&#160	ontime0	8181.9327697754	Sum of GTIs [s]
date	2014-01-15T04:25:31	Date and time of file creation	ontime1	8181.8917297721	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	8181.8506897688	Sum of GTIs [s]
			ontime3	8178.7737894058	Sum of GTIs [s]
			ontime6	8181.8096497655	Sum of GTIs [s]
			ontime7	8181.9738097787	Sum of GTIs [s]
			l1events	880164	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	142003	149721	153118	166838	150920	117564	grade 0 events	13365	12349	13963	14140	12393	6598
rejected events	114695	122109	125648	139076	122403	67364		9%	8%	9%	8%	8%	5%
rejected %	80%	81%	82%	83%	81%	57%	grade 1 events	60	59	72	83	47	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	6137	7353	5964	5939	7801	12554
								4%	4%	3%	3%	5%	10%
							grade 3 events	1822	1649	1806	1831	1682	3809
								1%	1%	1%	1%	1%	3%
							grade 4 events	1697	1642	1821	1890	1621	3633
								1%	1%	1%	1%	1%	3%
							grade 5 events	2593	2485	2529	2950	2446	6597
								1%	1%	1%	1%	1%	5%
							grade 6 events	4629	5000	4284	4354	5401	24293
								3%	3%	2%	2%	3%	20%
							grade 7 events	111700	119184	122679	135651	119529	60013
								78%	79%	80%	81%	79%	51%

## 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
[deg] Pointing RA	0	126.0614746762956
[deg] Pointing Dec	0	36.91383107589137
[deg] Pointing Roll	0.0	146.1566615345563
SIM focus pos (mm)	-1.4281808131	-1.4281808131
[mm] SIM defocus	0.1051557500557434	0.1051557500557434
SIM translation stage pos (mm)	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	506099294.708726	506099294.708726
Observation start date	2014-01-14T15:08:15	2014-01-14T15:08:14
[s] Observation end time (MET)	506109110.515856	506109110.515856
Observation end date	2014-01-14T17:51:51	2014-01-14T17:51:50
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	OVERRIDE	OVERRIDE
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)	2014.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1819738097787

## A.2 Comments

FP temp ranges from 161.6 K to 158.2 K degrees during this observation. This is equivalent to approximately -111.3 C to -114.7 C degrees. The FP temperature reading of 158.45 K used to determine the temperature-dependent CTI correction is based a time at the end of the observation and is found on the housekeeping file. Much of this observation was taken at higher FP temperatures than what is recorded in the housekeeping file; the CTI correction applied in this processing may be suspect.