

# V&V Reference Report

## L2 ASCDS Version : 10.4.2.1

Observation 51493 - L2 Version 1  
Chandra X-Ray Center

L2 Processing Date : Nov 20 2015

## 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

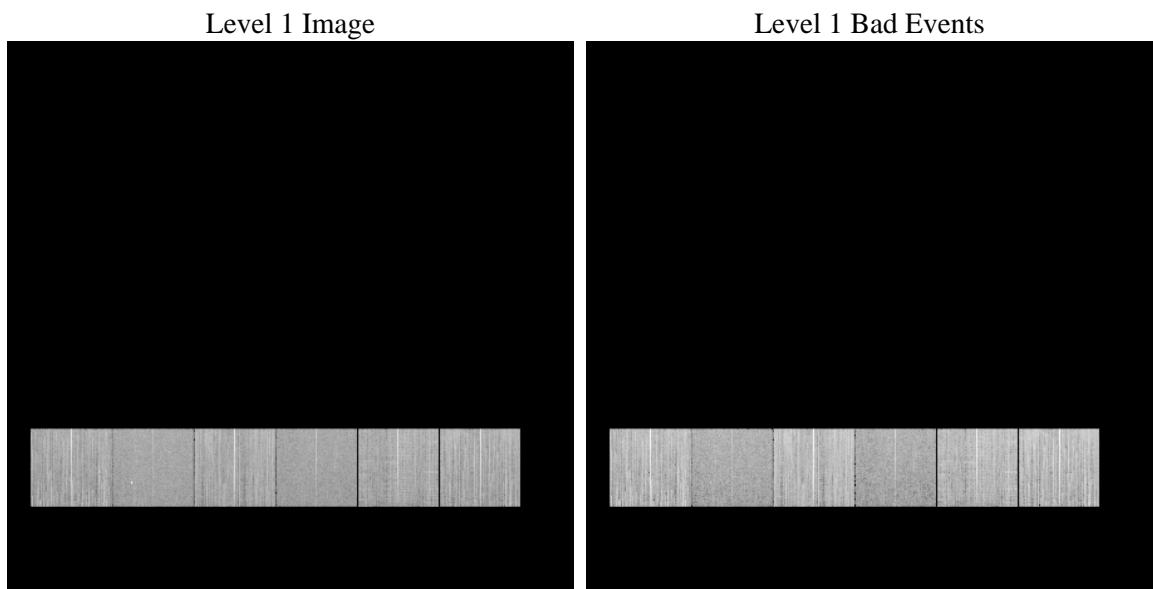
# 1 Front

seq_num	&#160	Sequence number
obs_id	51493	Observation id
title	ACIS-456789 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	95.87013868124	Nominal RA [deg]
dec_nom	54.237310886316	Nominal Dec [deg]
roll_nom	121.79065933514	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8331.5841517448	Sum of GTIs [s]
livetime	8226.0846165378	Livetime [s]
ontime4	8331.4610316753	Sum of GTIs [s]
ontime5	8331.5431116819	Sum of GTIs [s]
ontime6	8331.5020717382	Sum of GTIs [s]
ontime7	8331.5841517448	Sum of GTIs [s]
ontime8	8331.4199917316	Sum of GTIs [s]
ontime9	8331.6251916885	Sum of GTIs [s]
l2events	178567	Number of level 2 events

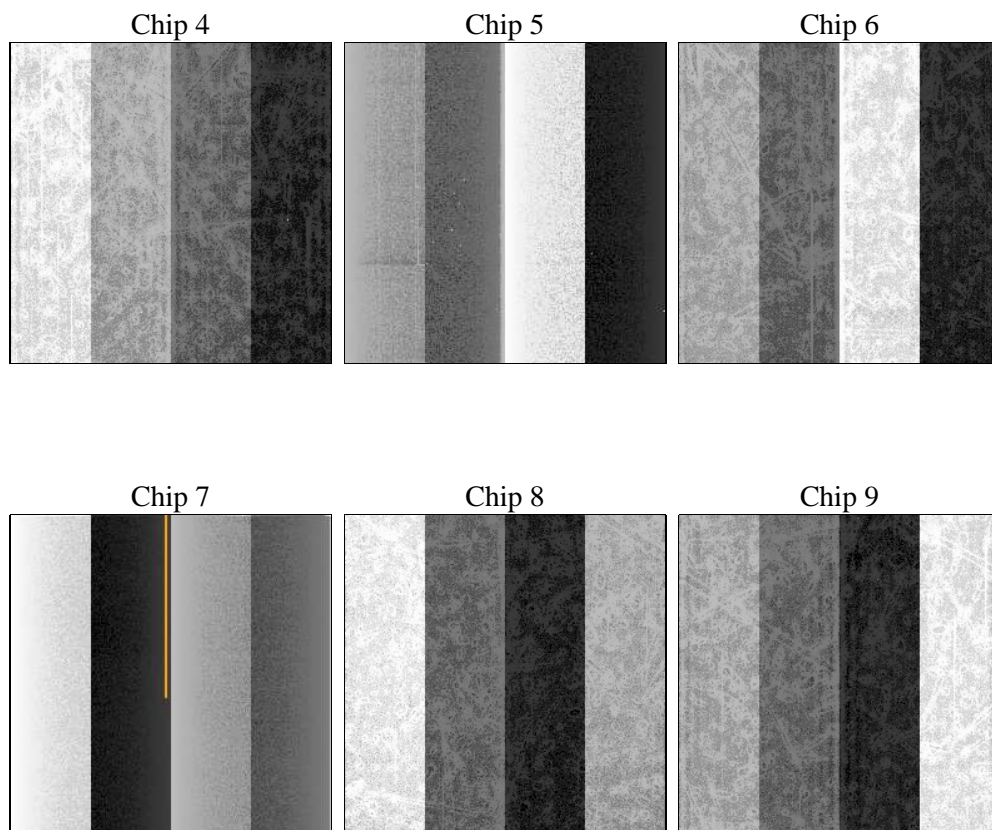
## 2 OBI

### 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	10.4.2.1	Processing system revision	ontime	8331.5841517448	Sum of GTIs [s]
caldsver	4.6.10a	&#160	ontime4	8331.4610316753	Sum of GTIs [s]
date	2015-11-20T19:41:50	Date and time of file creation	ontime5	8331.5431116819	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	8331.5020717382	Sum of GTIs [s]
			ontime7	8331.5841517448	Sum of GTIs [s]
			ontime8	8331.4199917316	Sum of GTIs [s]
			ontime9	8331.6251916885	Sum of GTIs [s]
			l1events	926313	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	159497	134193	169429	123994	165027	174173	grade 0 events	10827	4275	9631	5416	12735	10154
rejected events	138410	79464	147709	75062	134195	152702		6%	3%	5%	4%	7%	5%
rejected %	86%	59%	87%	60%	81%	87%	grade 1 events	110	193	47	96	71	70
								0%	0%	0%	0%	0%	0%
							grade 2 events	4437	20166	5415	12464	7028	4681
								2%	15%	3%	10%	4%	2%
							grade 3 events	1622	1656	1396	3661	2539	1504
								1%	1%	0%	2%	1%	0%
							grade 4 events	1582	1591	1400	3558	2510	1528
								0%	1%	0%	2%	1%	0%
							grade 5 events	3425	6093	3123	7675	4240	3643
								2%	4%	1%	6%	2%	2%
							grade 6 events	2919	27771	4168	24499	6639	3898
								1%	20%	2%	19%	4%	2%
							grade 7 events	134575	72448	144249	66625	129265	148695
								84%	53%	85%	53%	78%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	SECONDARY	SECONDARY	On-chip summing requested	N	N
[deg] Pointing RA	0	95.87013868123971	Subarray requested	NONE	NONE
[deg] Pointing Dec	0	54.23731088631638	Alternating exposures requested	N	N
[deg] Pointing Roll	0.0	121.7906593351376	[s] Primary exposure time	3.2	3.2
[mm] SIM focus pos	-1.429586	-0.7809083437167272			
[mm] SIM defocus	0.1037507710433287	0.7524282956875696			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	564372293.2970721	564372292.2720701			
Observation start date	2015-11-20T02:04:53	2015-11-20T02:04:52			
[s] Observation end time (MET)	564381899.597616	564381898.57262			
Observation end date	2015-11-20T04:45:00	2015-11-20T04:44:58			
Read mode	TIMED	TIMED			

## **2.3 Star Slots**

## **2.4 FID Slots**

## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.11.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.3315841517448

### A.2 Comments