

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 60492 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Nov 7 2012

Contents

1	Front	2
2	OBI	3
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
A	Summary	7
A.1	Status	7
A.2	Comments	7

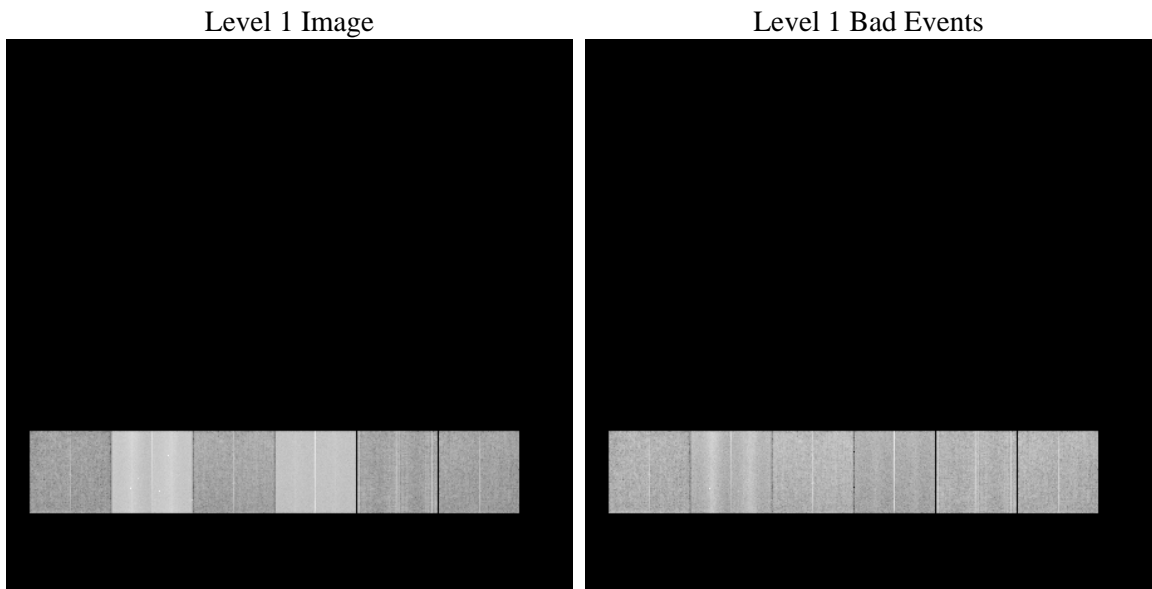
1 Front

seq_num	 	Sequence number
obs_id	60492	Observation id
title	ACIS-456789 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
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	273.46567351061	Nominal RA [deg]
dec_nom	65.890000052067	Nominal Dec [deg]
roll_nom	306.63004355565	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3582.39239645	Sum of GTIs [s]
livetime	3537.0299868685	Livetime [s]
ontime4	559.34118896723	Sum of GTIs [s]
ontime5	3579.151465863	Sum of GTIs [s]
ontime6	688.94174861908	Sum of GTIs [s]
ontime7	3582.39239645	Sum of GTIs [s]
ontime8	705.22902855277	Sum of GTIs [s]
ontime9	653.16718870401	Sum of GTIs [s]
l2events	699933	Number of level 2 events

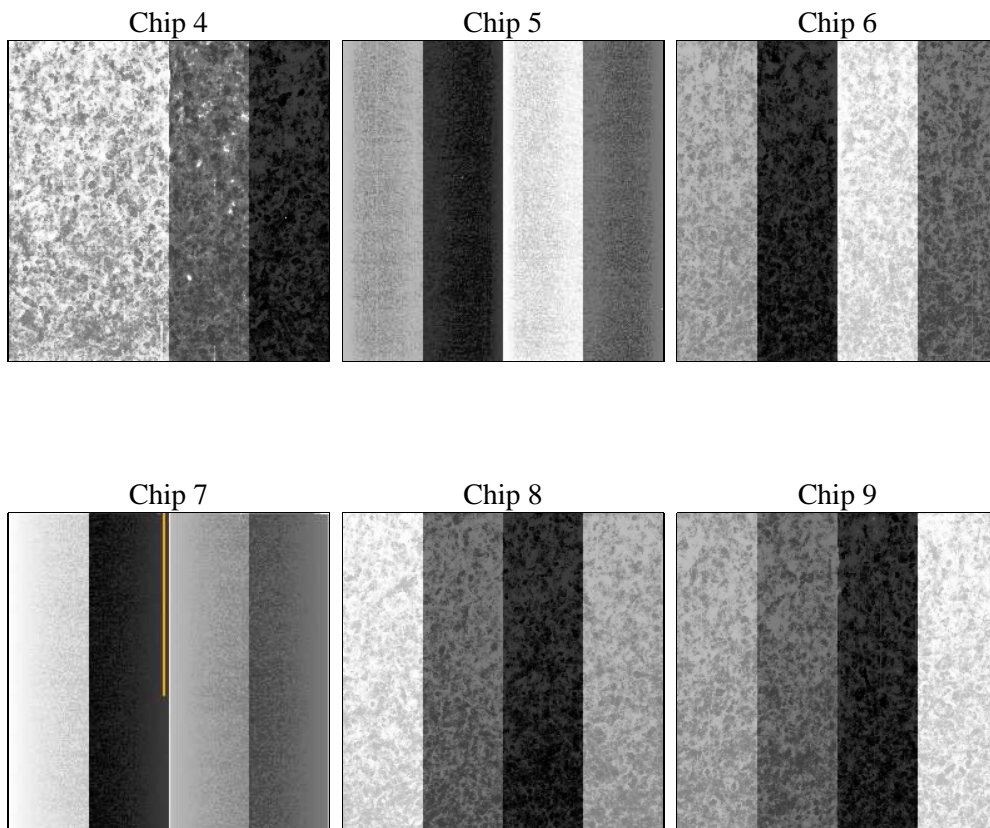
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	0.0	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3582.39239645	Sum of GTIs [s]
caldsver	4.5.2	 	ontime4	559.34118896723	Sum of GTIs [s]
date	2012-11-07T17:16:36	Date and time of file creation	ontime5	3579.151465863	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	688.94174861908	Sum of GTIs [s]
			ontime7	3582.39239645	Sum of GTIs [s]
			ontime8	705.22902855277	Sum of GTIs [s]
			ontime9	653.16718870401	Sum of GTIs [s]
			l1events	1506858	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	117112	525146	150579	432100	155438	126483	grade 0 events	2770	53169	4555	55268	9243	3980
rejected events	111129	155767	141162	102147	129438	118337		2%	10%	3%	12%	5%	3%
rejected %	94%	29%	93%	23%	83%	93%	grade 1 events	666	4102	589	1794	1108	546
								0%	0%	0%	0%	0%	0%
							grade 2 events	1056	153112	1725	89265	5274	1394
								0%	29%	1%	20%	3%	1%
							grade 3 events	582	25149	712	28795	3082	641
								0%	4%	0%	6%	1%	0%
							grade 4 events	539	24493	787	28349	2914	652
								0%	4%	0%	6%	1%	0%
							grade 5 events	760	25146	779	15287	2092	699
								0%	4%	0%	3%	1%	0%
							grade 6 events	1036	113456	1638	128276	5487	1479
								0%	21%	1%	29%	3%	1%
							grade 7 events	109703	126519	139794	85066	126238	117092
								93%	24%	92%	19%	81%	92%

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	On-chip summing requested	N	N
Observation mode	SECONDARY	SECONDARY	Subarray requested	NONE	NONE
[deg] Pointing RA	0	273.4656735106115	Alternating exposures requested	N	N
[deg] Pointing Dec	0	65.89000005206665	[s] Primary exposure time	0.000000	3.2
[deg] Pointing Roll	0.0	306.6300435556527			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.8505141146731063			
[mm] SIM translation stage pos	-190.132523	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	184171032.662496	184171031.63782			
Observation start date	2003-11-02T14:37:13	2003-11-02T14:37:11			
[s] Observation end time (MET)	184192342.413413	184192341.38875			
Observation end date	2003-11-02T20:32:22	2003-11-02T20:32:21			
Read mode	TIMED	TIMED			

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

V&V Scientist	Glenn Allen
V&V Date (YYYY-MM-DD)	2013.02.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.58239239645

A.2 Comments

Noisy bias, wondering if the following comment applies?:

An unusually large number of cosmic ray hits in the bias files produce elevated bias values for all pixel values in a column read after the pixel with the cosmic ray hit. Care should be taken in interpreting the final event data in the vicinity of these bias cosmic ray streaks.

This observation was performed during one of the biggest solar storms Chandra has seen. The relatively high charged-particle background during the observation adversely affected the bias map and pulse-height data.

Although, I'm marking the V&V state as 'OK,' the data may be of limited utility.

Glenn