

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 60132 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Dec 6 2012

Contents

1	Front	2
2	OBI Primary	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
3	OBI Secondary	6
3.1	OBI	6
3.1.1	Images	6
3.1.2	Bias	6
3.1.3	Parameters	7
3.1.4	Events	7
A	Summary	8
A.1	Status	8
A.2	Comments	8

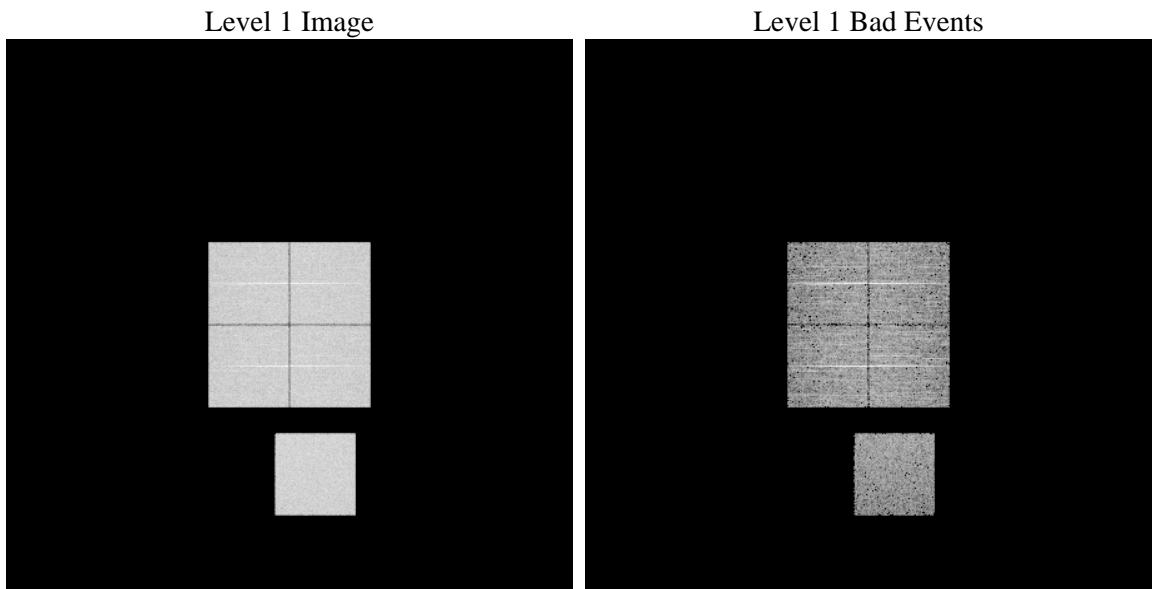
1 Front

seq_num	 	Sequence number
obs_id	60132	Observation id
title	ACIS-01237 diagnostics	Proposal title
observer	CHANDRA engineering request/realtime commanding	Principal investig
object	 	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	0.0	Observer's specified target RA [deg]
dec_targ	0.0	Observer's specified target Dec [deg]
ra_nom	289.03405778187	Nominal RA [deg]
dec_nom	-32.997157414418	Nominal Dec [deg]
roll_nom	332.82030890251	Nominal Roll [deg]
revision	5	Processing version of data
ontime	4138.5576420724	Sum of GTIs [s]
livetime	4090.5925228897	Livetime [s]
ontime0	4092.5241220295	Sum of GTIs [s]
ontime1	4131.4755620658	Sum of GTIs [s]
ontime2	3947.3414818943	Sum of GTIs [s]
ontime3	4021.7033219635	Sum of GTIs [s]
ontime7	4138.5576420724	Sum of GTIs [s]
l2events	581090	Number of level 2 events

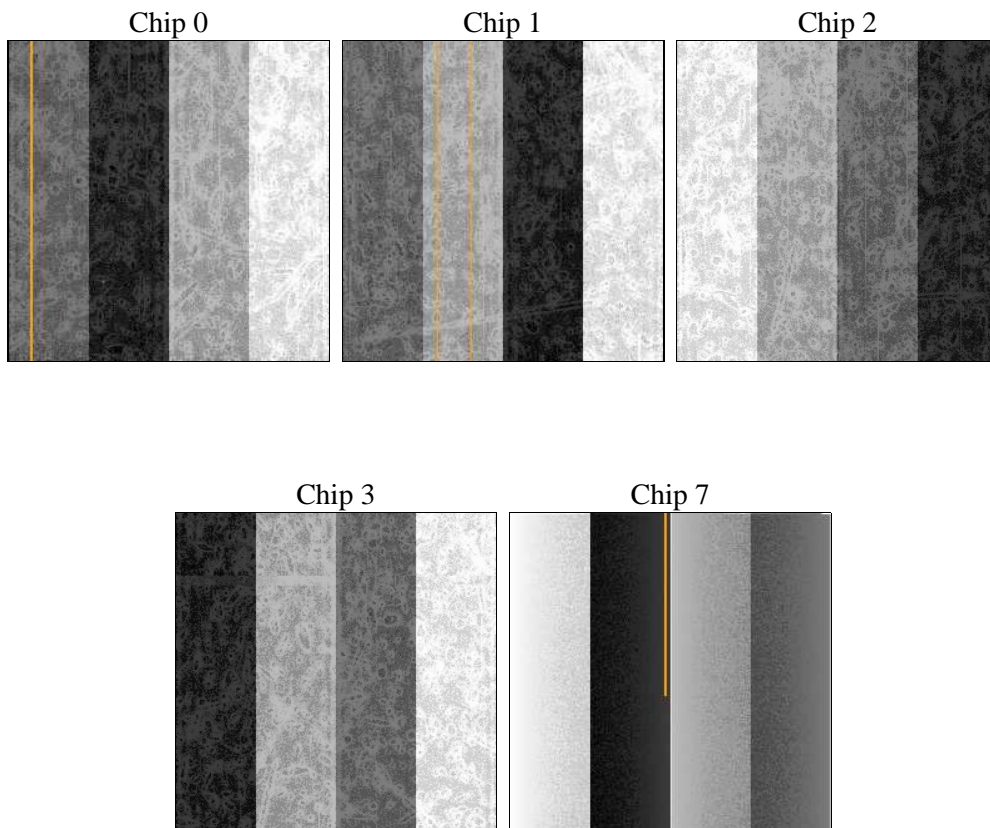
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6360	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	4138.5576420724	Sum of GTIs [s]
caldsver	4.5.4	 	ontime0	4092.5241220295	Sum of GTIs [s]
date	2012-12-06T14:05:38	Date and time of file creation	ontime1	4131.4755620658	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	3947.3414818943	Sum of GTIs [s]
			ontime3	4021.7033219635	Sum of GTIs [s]
			ontime7	4138.5576420724	Sum of GTIs [s]
			l1events	750864	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	146963	149057	146541	150160	158143
rejected events	27151	28030	29760	30588	24030
rejected %	18%	18%	20%	20%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	65847	66271	65270	67296	32567
	44%	44%	44%	44%	20%
grade 1 events	385	344	498	429	96
	0%	0%	0%	0%	0%
grade 2 events	21130	21673	20100	20238	29652
	14%	14%	13%	13%	18%
grade 3 events	7892	7643	7607	7891	13696
	5%	5%	5%	5%	8%
grade 4 events	7781	7567	7646	7892	13374
	5%	5%	5%	5%	8%
grade 5 events	1771	1858	1717	1872	4478
	1%	1%	1%	1%	2%
grade 6 events	17437	18195	16465	16585	45162
	11%	12%	11%	11%	28%
grade 7 events	24720	25506	27238	27957	19118
	16%	17%	18%	18%	12%

2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01237	ACIS-01237
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	SECONDARY	SECONDARY
[deg] Pointing RA	289.0340283170156	289.034057781867
[deg] Pointing Dec	-32.99714469614063	-32.99715741441779
[deg] Pointing Roll	332.8202928489287	332.8203089025125
[mm] SIM focus pos	-0.68282252473119	-0.68282252473119
[mm] SIM defocus	0.8505140384245534	0.8505140384245534
[mm] SIM translation stage pos	250.4660330802	250.4660330802
[mm] SIM translation stage offset	-0.01005726120527584	-0.01005726120527584
[s] Observation start time (MET)	206295693.482682	206295693.482682
Observation start date	2004-07-15T16:53:00	2004-07-15T16:21:33
[s] Observation end time (MET)	206305211.018084	206305211.018084
Observation end date	2004-07-15T18:39:00	2004-07-15T19:00:11
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	Y	Y
[s] Primary exposure time	3.5	3.5
[s] Secondary exposure time	3.2	3.2
Duty cycle	1	1

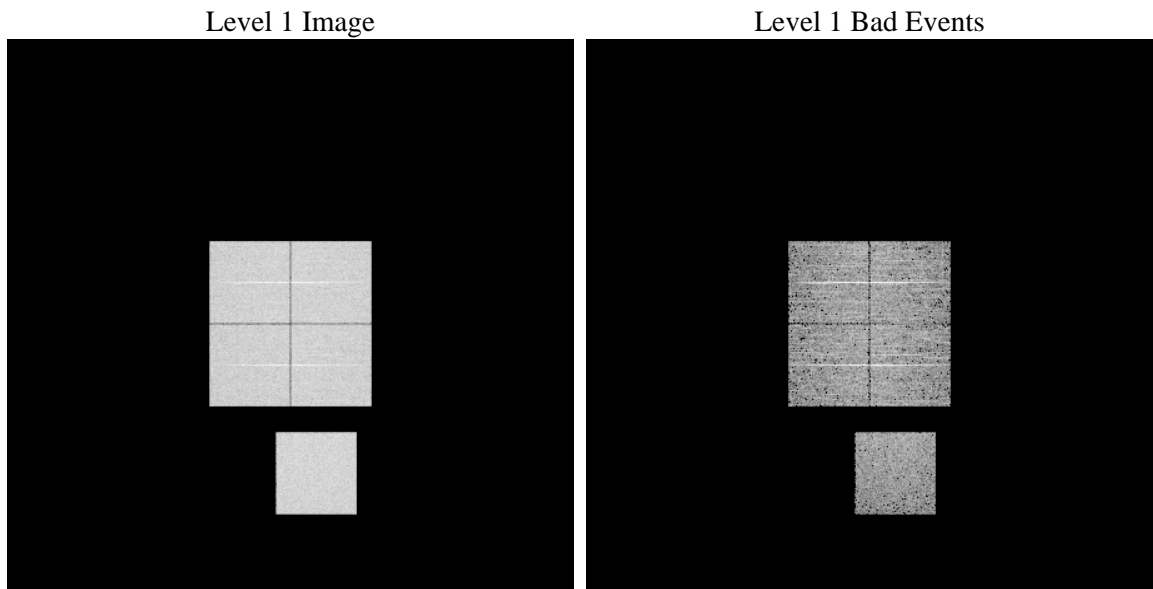
2.3 Star Slots

2.4 FID Slots

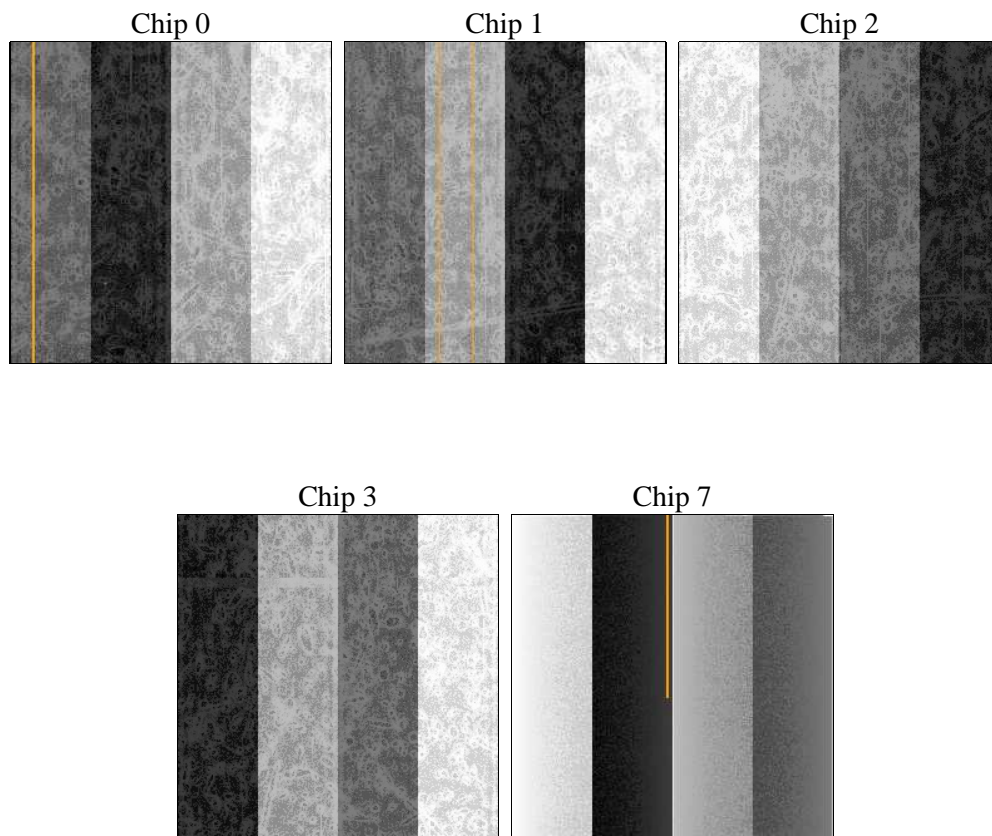
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6360	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	3788.2945587933	Sum of GTIs [s]
caldbver	4.5.4	 	ontime0	3726.8789589703	Sum of GTIs [s]
date	2012-12-06T14:05:30	Date and time of file creation	ontime1	3775.4535188377	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	3545.2986394465	Sum of GTIs [s]
			ontime3	3658.6939991415	Sum of GTIs [s]
			ontime7	3788.2945587933	Sum of GTIs [s]
			l1events	688742	Number of level 1 events

3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	136639	138065	131728	136620	145690
rejected events	26558	26726	26120	27709	22865
rejected %	19%	19%	19%	20%	15%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	60860	61053	59562	61001	30086
	44%	44%	45%	44%	20%
grade 1 events	362	346	374	387	91
	0%	0%	0%	0%	0%
grade 2 events	19433	19905	17901	18951	27186
	14%	14%	13%	13%	18%
grade 3 events	7025	7138	6846	7174	12388
	5%	5%	5%	5%	8%
grade 4 events	7106	7101	6778	7158	12171
	5%	5%	5%	5%	8%
grade 5 events	1641	1669	1612	1719	4122
	1%	1%	1%	1%	2%
grade 6 events	16069	16510	14896	15025	41419
	11%	11%	11%	10%	28%
grade 7 events	24143	24343	23759	25205	18227
	17%	17%	18%	18%	12%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.01.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.9268522008657

A.2 Comments

The CCD bias map for CCD 3 was incomplete because of data gaps in telemetry. The bias map was reconstructed using scaled data from a comparable bias map for another observation to fill the missing data. The pixels affected by the anomaly are bounded by the chip coords: (1,795),(1024,795),(1024,824),(1,824)