

V&V Reference Report

L2 ASCDS Version : 8.3.3.1

Observation 62230 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Dec 9 2010

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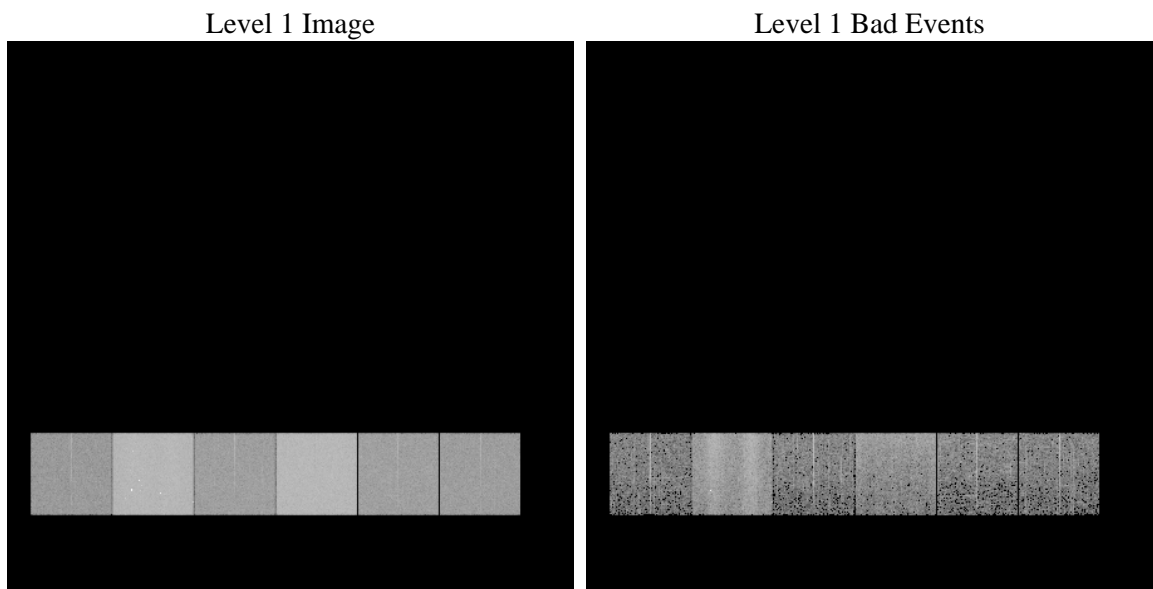
1 Front

seq_num	 	Sequence number
obs_id	62230	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
dec_targ	0.0	Observer's specified target Dec
ra_nom	23.36439756032	Nominal RA
dec_nom	30.536583961017	Nominal Dec
roll_nom	288.4732928338	Nominal Roll
revision	5	Processing version of data
ontime	2926.6503084749	Sum of GTIs [s]
livetime	2889.5913000517	Livetime [s]
ontime4	1092.2291256338	Sum of GTIs [s]
ontime5	3129.6381858364	Sum of GTIs [s]
ontime6	1241.3169060722	Sum of GTIs [s]
ontime7	2926.6503084749	Sum of GTIs [s]
ontime8	1244.5579460785	Sum of GTIs [s]
ontime9	1202.4245656431	Sum of GTIs [s]
l2events	902015	Number of level 2 events

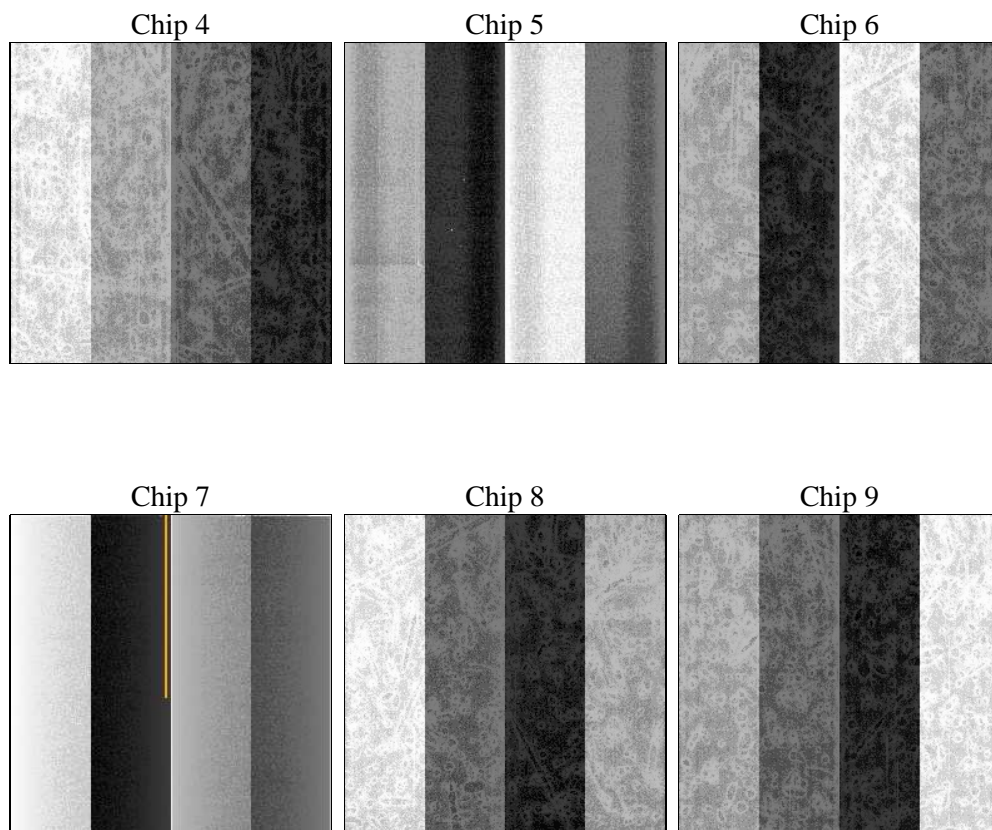
2 OBI

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	Scheduled observation exposure time
ascdsver	8.3.3.1	ASCDS version number	ontime	2926.6503084749	Sum of GTIs [s]
caldsver	4.4.0	 	ontime4	1092.2291256338	Sum of GTIs [s]
date	2010-12-09T23:54:02	Date and time of file creation	ontime5	3129.6381858364	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	1241.3169060722	Sum of GTIs [s]
			ontime7	2926.6503084749	Sum of GTIs [s]
			ontime8	1244.5579460785	Sum of GTIs [s]
			ontime9	1202.4245656431	Sum of GTIs [s]
			l1events	1063207	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	104303	289573	126090	295182	129595	118464	grade 0 events	19683	26213	29010	47601	38405	30552
rejected events	17147	47933	18616	29031	18719	17349		18%	9%	23%	16%	29%	25%
rejected %	16%	16%	14%	9%	14%	14%	grade 1 events	93	149	113	110	154	102
								0%	0%	0%	0%	0%	0%
							grade 2 events	47377	93758	51182	74858	44454	45284
								45%	32%	40%	25%	34%	38%
							grade 3 events	2079	12699	2975	22739	4092	3145
								1%	4%	2%	7%	3%	2%
							grade 4 events	2047	10770	2948	20442	3991	3223
								1%	3%	2%	6%	3%	2%
							grade 5 events	884	4974	1064	4097	1169	1062
								0%	1%	0%	1%	0%	0%
							grade 6 events	15970	98200	21359	100511	19934	18911
								15%	33%	16%	34%	15%	15%
							grade 7 events	16170	42810	17439	24824	17396	16185
								15%	14%	13%	8%	13%	13%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	0	23.36439756032036	Alternating exposures requested	N	N
Pointing Dec	0	30.53658396101658	Primary exposure time	0.000000	3.2
Pointing Roll	0.0	288.4732928338011			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-190.132523	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	64002569.563	64002568.794151			
Observation start date	2000-01-11T18:29:30	2000-01-11T18:29:28			
Observation end time	64009869.613	64009868.844416			
Observation end date	2000-01-11T20:31:10	2000-01-11T20:31:08			
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)	2010.12.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.9266503084749

A.2 Comments

A spatial region of the original bias map for CCD = 4 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 4 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation.

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The focal plane temperature is approximately -110C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present. The ACIS CTI correction has not been calibrated at this temperature because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front- and back-illuminated chips are affected. However, a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.