

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 59430 - L2 Version 002
Chandra X-Ray Center

L2 Processing Date : Mar 26 2006

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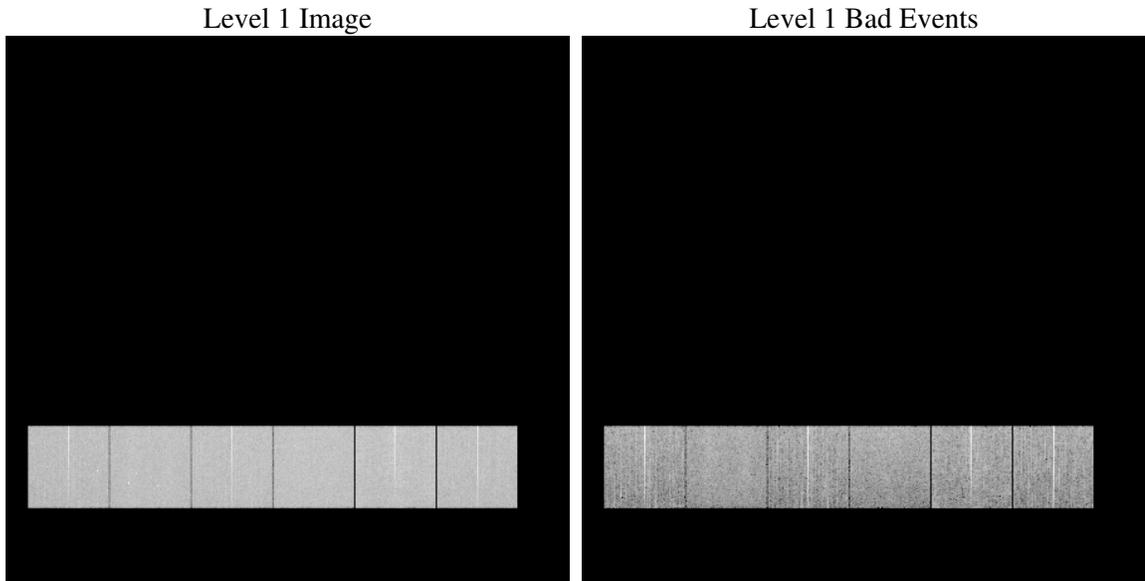
1 Front

seq_num	
obs_id	59430
title	ACIS-456789 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
dtcycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	352.98221399963
dec_nom	29.475952040459
roll_nom	204.28868333248
revision	2
ontime	7705.5999712944
livetime	7608.0270247026
ontime4	7284.2725918889
ontime5	7705.5999712944
ontime6	7699.1180505455
ontime7	7705.5999712944
ontime8	7705.5999712944
ontime9	7566.2379778028
l2events	970563

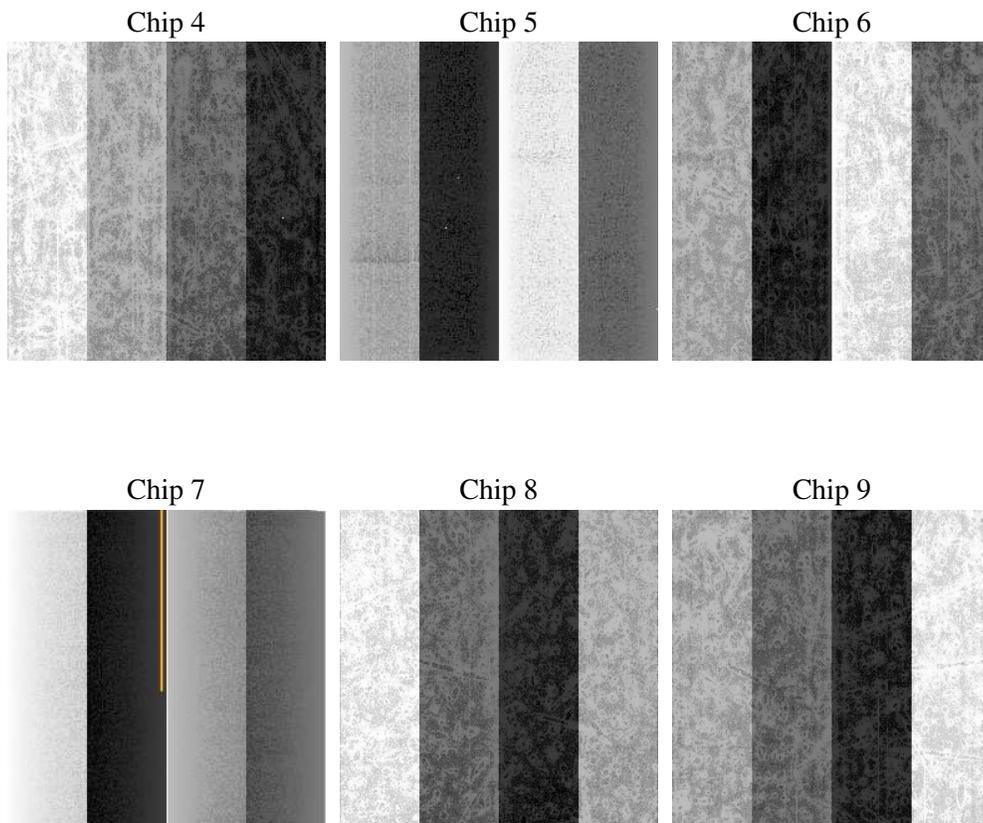
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-03-26T08:41:49
revision	2

sched_exp_time	0.0
ontime	7726.5652552247
ontime4	7305.2378758192
ontime5	7726.5652552247
ontime6	7720.0833344758
ontime7	7726.5652552247
ontime8	7726.5652552247
ontime9	7587.2032617331
l1events	1383043

2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	213846	226020	233723	238968	245559	224927
rejected events	58469	58768	57358	56292	61174	57689
rejected %	27%	26%	24%	23%	24%	25%

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	91382	15737	95264	28649	100042	92629
	42%	6%	40%	11%	40%	41%
grade 1 events	700	98	425	93	490	558
	0%	0%	0%	0%	0%	0%
grade 2 events	23582	77565	31352	56840	32358	28197
	11%	34%	13%	23%	13%	12%
grade 3 events	10360	4941	10740	12092	12121	10626
	4%	2%	4%	5%	4%	4%
grade 4 events	10410	4576	10842	12033	12055	10758
	4%	2%	4%	5%	4%	4%
grade 5 events	3183	5381	3487	6073	4125	3695
	1%	2%	1%	2%	1%	1%
grade 6 events	20097	64931	28667	73616	28305	25526
	9%	28%	12%	30%	11%	11%
grade 7 events	54132	52791	52946	49572	56063	52938
	25%	23%	22%	20%	22%	23%

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	352.982213999631	Alternating exposures requested	N	N
Pointing Dec	0	29.47595204045937	Primary exposure time	3.2	3.2
Pointing Roll	0.0	204.2886833324841			
SIM focus pos (mm)	-0.684267	-1.038866356238299			
SIM defocus (mm)	0	0.4944702831659975			
SIM translation stage pos (mm)	-190.132523	250.4635187648994			
SIM translation stage offset (mm)	0	-0.007540371344731511			
Observation start time	244269048.550316	244269047.52531			
Observation start date	2005-09-28T04:30:49	2005-09-28T04:30:47			
Observation end time	244281203.000875	244281201.97587			
Observation end date	2005-09-28T07:53:23	2005-09-28T07:53:21			
Read mode	TIMED	TIMED			

2.3 Aspect

2.4 Star Slots

2.5 FID Slots

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.03.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.70559997

A.2 Comments

As a consequence of the DEA-A shutdown anomaly on Sep 15th (DOY258), the the reported value of the ACIS FP temperature was ~1.3 degrees warmer than the actual temperature. GOs should subtract 1.3 degrees from the reported temperature to determine the true temperature. In addition the FP temperature was not regulating during this period. The FP temperature fluctuated between -121.3 C and -118.8 C during this time. For analysis of line-dominated spectra from the FI CCDs, GOs might notice a systematic gain shift by up to 0.5%, either towards higher/lower energies depending on if the FP temperature was colder/warmer than -119.7 C. Analysis of line-dominated spectra on S3 are mostly unaffected (where mostly unaffected means that the changes are smaller than the current uncertainties in the calibration). Analysis of continuum-dominated spectra on both the FI and BI CCDs are mostly unaffected. Imaging analysis on both the FI and BI CCDs are mostly unaffected.