

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 61423 - L2 Version _e1
Chandra X-Ray Center

L2 Processing Date : Jan 13 2007

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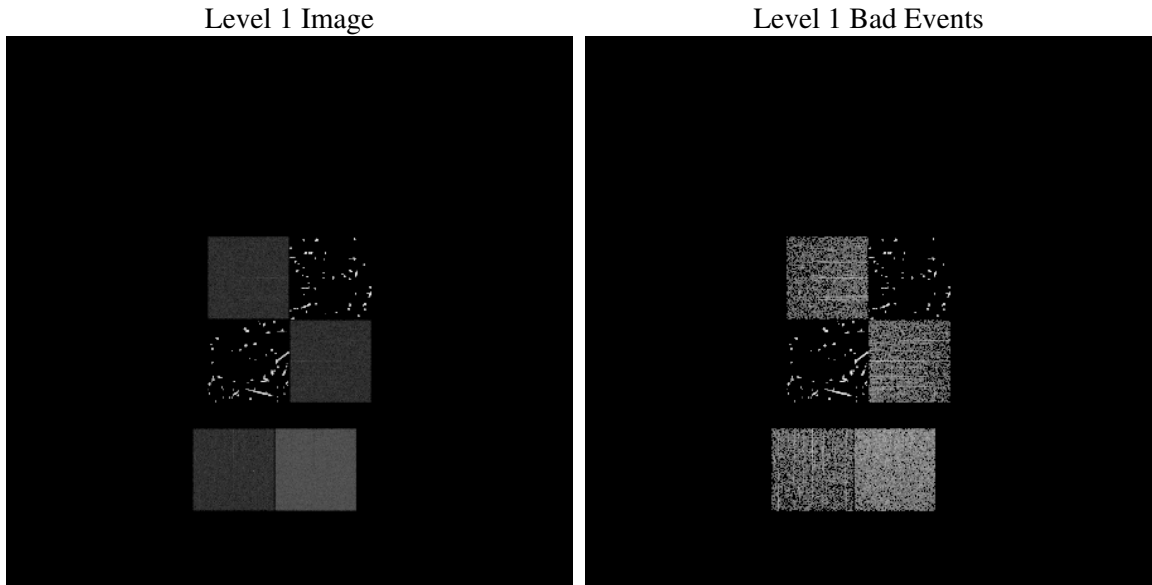
1 Front

seq_num	
obs_id	61423
title	ACIS-012367 diagnostics
observer	CHANDRA engineering request/realtime commanding
object	
dtcycle	0
cycle	P
ra_targ	0.0
dec_targ	0.0
ra_nom	321.04623365523
dec_nom	-60.017018279769
roll_nom	290.87448308273
revision	2
ontime	3250.6366027147
livetime	3217.6237827041
ontime0	1137.3368409872
ontime1	1064.5570809245
ontime2	555.34500050545
ontime3	1112.9674809724
ontime6	1116.9264409691
ontime7	3250.6366027147
l2events	384727

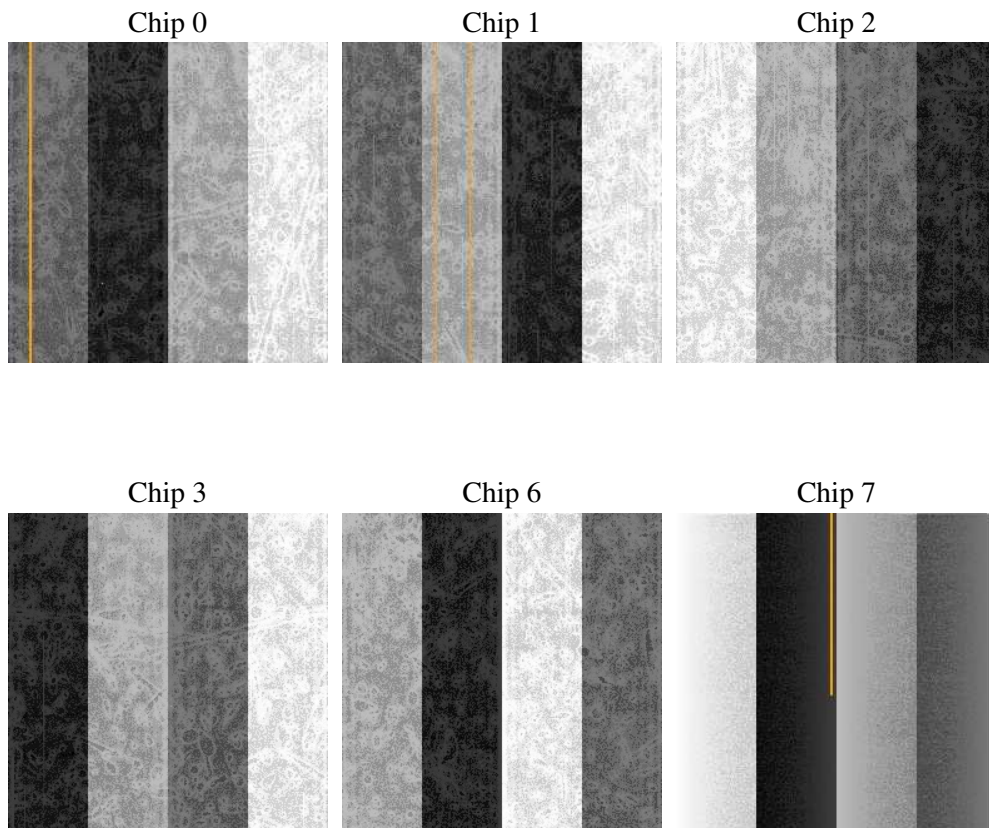
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldbver	3.3.0
date	2007-01-13T17:20:18
revision	2

sched_exp_time	0.0
ontime	3250.6366027147
ontime0	1137.3368409872
ontime1	1064.5570809245
ontime2	555.34500050545
ontime3	1112.9674809724
ontime6	1116.9264409691
ontime7	3250.6366027147
llevents	882604

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	72403	221599	228706	72824	76195	210877
rejected events	7667	3204	5180	8561	8297	15310
rejected %	10%	1%	2%	11%	10%	7%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	35634	219501	226187	36163	37316	50963
	49%	99%	98%	49%	48%	24%
grade 1 events	209	361	433	176	188	140
	0%	0%	0%	0%	0%	0%
grade 2 events	11452	185	263	11221	11699	44080
	15%	0%	0%	15%	15%	20%
grade 3 events	4220	131	154	4078	4262	20091
	5%	0%	0%	5%	5%	9%
grade 4 events	4153	100	97	4100	4139	19811
	5%	0%	0%	5%	5%	9%
grade 5 events	605	203	266	559	605	3355
	0%	0%	0%	0%	0%	1%
grade 6 events	9501	165	177	8928	10735	60883
	13%	0%	0%	12%	14%	28%
grade 7 events	6629	953	1129	7599	7251	11554
	9%	0%	0%	10%	9%	5%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	321.0462336552335	Alternating exposures requested	Y	Y
Pointing Dec	0	-60.01701827976942	Primary exposure time	4	4
Pointing Roll	0.0	290.8744830827318	Secondary exposure time	3.2	3.2
SIM focus pos (mm)	-0.782348	-0.6828225247311905	Duty cycle	1	1
SIM defocus (mm)	0	0.8505141146731063			
SIM translation stage pos (mm)	-233.592463	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	120844777.027419	120844776.25895			
Observation start date	2001-10-30T15:59:37	2001-10-30T15:59:36			
Observation end time	120856421.027882	120856420.25941			
Observation end date	2001-10-30T19:13:41	2001-10-30T19:13:40			
Read mode	TIMED	TIMED			

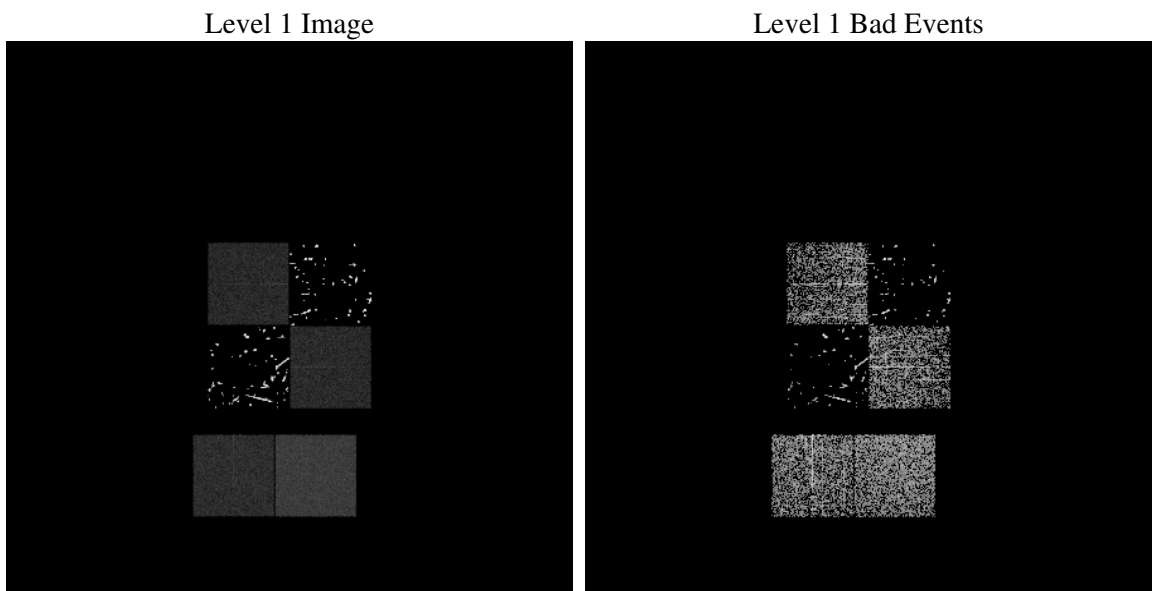
2.3 Star Slots

2.4 FID Slots

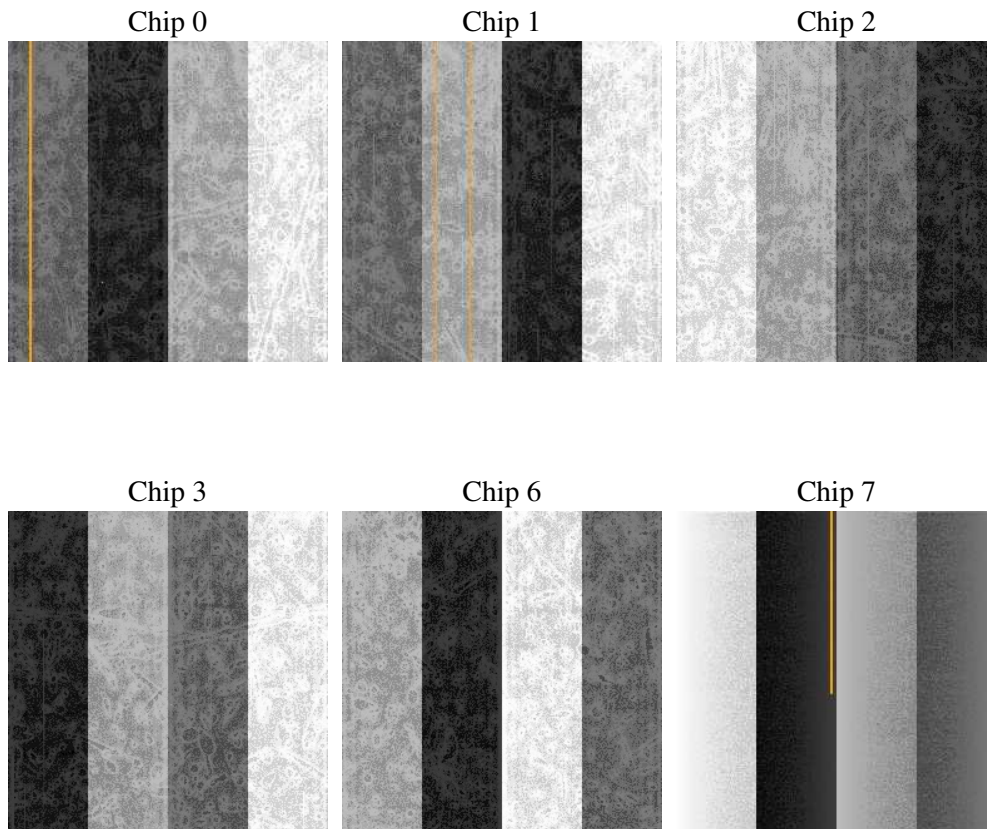
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldbver	3.3.0
date	2007-01-13T17:21:17
revision	2

sched_exp_time	0.0
ontime	1327.1848063618
ontime0	695.34616804123
ontime1	643.44848817587
ontime2	335.50864899158
ontime3	704.94616802037
ontime6	769.68488784134
ontime7	1327.1848063618
llevents	570007

3.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45138	167389	171869	46547	52840	86224
rejected events	4852	1008	1098	5298	6005	6693
rejected %	10%	0%	0%	11%	11%	7%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	22270	165996	170378	23064	25618	20422
	49%	99%	99%	49%	48%	23%
grade 1 events	104	221	249	126	139	45
	0%	0%	0%	0%	0%	0%
grade 2 events	7140	121	132	7099	8264	17849
	15%	0%	0%	15%	15%	20%
grade 3 events	2545	80	85	2642	2920	8217
	5%	0%	0%	5%	5%	9%
grade 4 events	2489	82	75	2725	2765	8175
	5%	0%	0%	5%	5%	9%
grade 5 events	357	148	145	401	466	1346
	0%	0%	0%	0%	0%	1%
grade 6 events	5842	102	101	5719	7476	25086
	12%	0%	0%	12%	14%	29%
grade 7 events	4391	639	704	4771	5192	5084
	9%	0%	0%	10%	9%	5%

A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.01.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.5778214

A.2 Comments

During this observation, an ACIS Threshold-Plane Anomaly occurred. The flight s/w is intended to delay 'start events' until after 'end bias dump'. For some unknown reason, it occasionally fails to do so, and if the overlap lasts for more than a minute or so, one or more FEPs experience a firmware latch-up that renders them useless until they are power cycled. The anomaly occurred for chips I1 and I2. No event data were recorded for these chips; the bright spots on the affected chips are due to known hot pixels.