

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 62502 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Nov 19 2009

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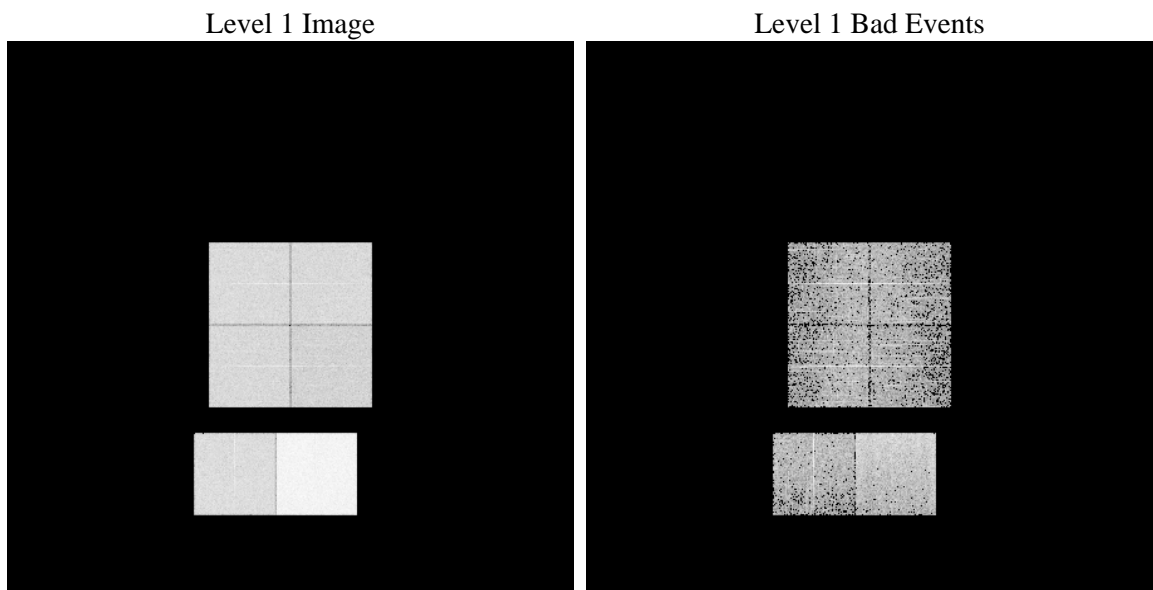
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 62502 | Observation id |
| title | ACIS-012367 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 | 119.97652234292 | Nominal RA |
| dec_nom | -66.571734078433 | Nominal Dec |
| roll_nom | 94.939522054613 | Nominal Roll |
| revision | 3 | Processing version of data |
| ontime | 2511.6248809323 | Sum of GTIs [s] |
| livetime | 2479.821174371 | Livetime [s] |
| ontime0 | 1049.9693274647 | Sum of GTIs [s] |
| ontime1 | 1014.3589273989 | Sum of GTIs [s] |
| ontime2 | 969.02546717227 | Sum of GTIs [s] |
| ontime3 | 800.327166982 | Sum of GTIs [s] |
| ontime6 | 1118.1541978046 | Sum of GTIs [s] |
| ontime7 | 2511.6248809323 | Sum of GTIs [s] |
| l2events | 682746 | Number of level 2 events |

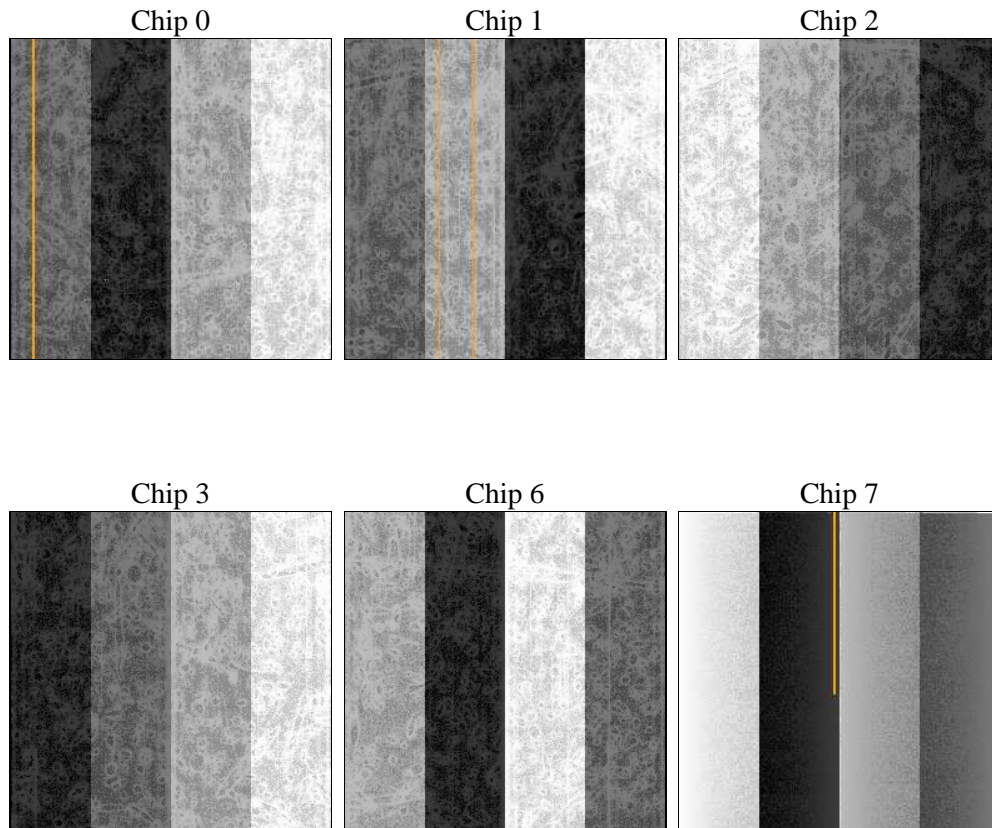
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | |
|----------|---------------------|--------------------------------|----------------|-------------------------------------|
| obi_num | 0 | Obi number | | |
| ascdsver | 8.1.1 | ASCDS version number | sched_exp_time | 0.0 |
| caldsver | 4.1.4 | | | Scheduled observation exposure time |
| date | 2009-11-20T00:21:33 | Date and time of file creation | ontime | 2511.6248809323 |
| revision | 3 | Processing version of data | ontime0 | 1049.9693274647 |
| | | | ontime1 | 1014.3589273989 |
| | | | ontime2 | 969.02546717227 |
| | | | ontime3 | 800.327166982 |
| | | | ontime6 | 1118.1541978046 |
| | | | ontime7 | 2511.6248809323 |
| | | | l1events | 792924 |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Sum of GTIs [s] |
| | | | | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|-------|--------|--------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 109356 | 105971 | 102795 | 85987 | 119672 | 269143 | grade 0 events | 36171 | 34894 | 28389 | 25099 | 28930 | 42774 |
| rejected events | 14669 | 14223 | 15361 | 12398 | 16881 | 27933 | | 33% | 32% | 27% | 29% | 24% | 15% |
| rejected % | 13% | 13% | 14% | 14% | 14% | 10% | grade 1 events | 147 | 160 | 107 | 123 | 108 | 118 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 34622 | 33694 | 37690 | 30857 | 47920 | 68476 |
| | | | | | | | | 31% | 31% | 36% | 35% | 40% | 25% |
| | | | | | | | grade 3 events | 3860 | 3696 | 3039 | 2467 | 2940 | 20450 |
| | | | | | | | | 3% | 3% | 2% | 2% | 2% | 7% |
| | | | | | | | grade 4 events | 3853 | 3818 | 2898 | 2476 | 2993 | 18671 |
| | | | | | | | | 3% | 3% | 2% | 2% | 2% | 6% |
| | | | | | | | grade 5 events | 950 | 877 | 868 | 718 | 935 | 3842 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 1% |
| | | | | | | | grade 6 events | 16472 | 16223 | 15724 | 12690 | 20587 | 91801 |
| | | | | | | | | 15% | 15% | 15% | 14% | 17% | 34% |
| | | | | | | | grade 7 events | 13281 | 12609 | 14080 | 11557 | 15259 | 23011 |
| | | | | | | | | 12% | 11% | 13% | 13% | 12% | 8% |

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 | 119.9765223429194 | Alternating exposures requested | N | N |
| Pointing Dec | 0 | -66.57173407843273 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 0.0 | 94.93952205461346 | | | |
| SIM focus pos (mm) | -0.782348 | -0.7809083437167272 | | | |
| SIM defocus (mm) | 0 | 0.7524282956875696 | | | |
| SIM translation stage pos (mm) | -233.592463 | 250.466033080201 | | | |
| SIM translation stage offset (mm) | 0 | -0.01005468664627074 | | | |
| Observation start time | 56477273.49 | 56477272.722022 | | | |
| Observation start date | 1999-10-16T16:07:53 | 1999-10-16T16:07:52 | | | |
| Observation end time | 56483663.341 | 56483662.572252 | | | |
| Observation end date | 1999-10-16T17:54:23 | 1999-10-16T17:54:22 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2010.08.16 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 2.5116248809323 |

A.2 Comments

The front-end processor designated FEP0 suffered from a rare problem. As a result, the top half of the bias-map for a CCD_ID (the CCD associated with FEP0) was corrupted for part of the observation and many invalid events were telemetered for this region. The standard pipeline processing tools identify the problem and remove the spurious events from the Level 2 event file during the interval in question. The FEP0 anomaly could not be verified in the bias files for this observation, but it was on the original list of obsids that have the FEP0 anomaly.
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