

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 62189 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Aug 21 2012

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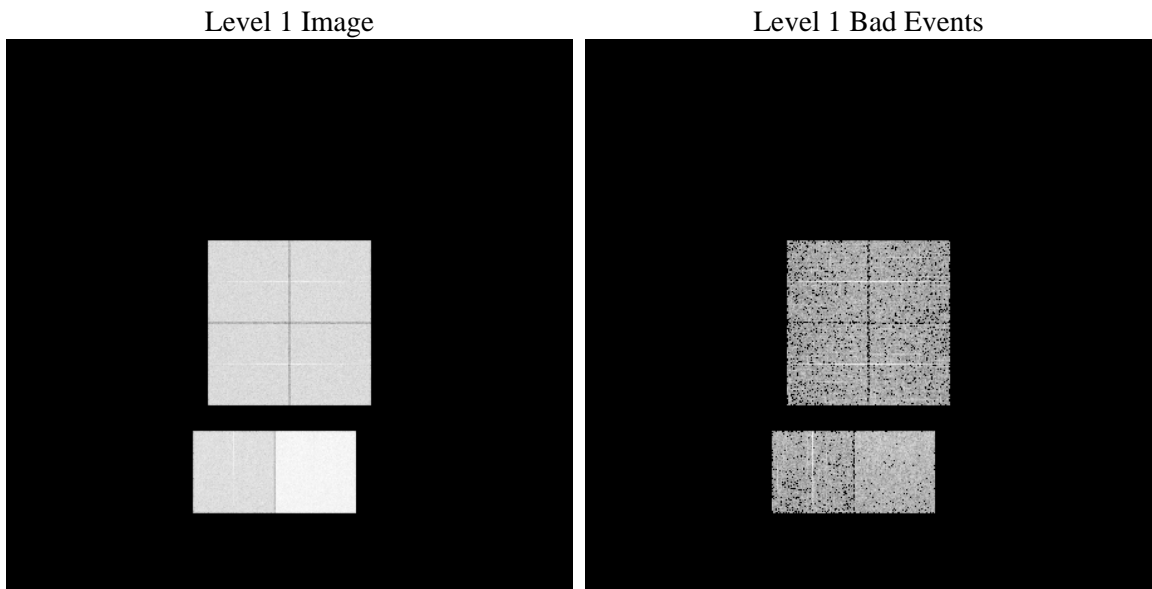
# 1 Front

|          |   |   |
|----------|---|---|
| seq_num  | &#160   | Sequence number                             |
| obs_id   | 62189   | Observation id                              |
| title    | ACIS-012367 diagnostics                         | Proposal title                              |
| observer | CHANDRA engineering request/realtime commanding | Principal investig                          |
| object   | &#160   | Source name                                 |
| dtycycle | 0   | &#160                                       |
| cycle    | P   | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 0.0   | Observer's specified target RA [deg]        |
| dec_targ | 0.0   | Observer's specified target Dec [deg]       |
| ra_nom   | 180.01931078935                                 | Nominal RA [deg]                            |
| dec_nom  | -64.972538300452                                | Nominal Dec [deg]                           |
| roll_nom | 41.031295299363                                 | Nominal Roll [deg]                          |
| revision | 4   | Processing version of data                  |
| ontime   | 3490.7155656666                                 | Sum of GTIs [s]                             |
| livetime | 3446.5140233175                                 | Livetime [s]                                |
| ontime0  | 1374.2947808653                                 | Sum of GTIs [s]                             |
| ontime1  | 1416.3871811554                                 | Sum of GTIs [s]                             |
| ontime2  | 1351.5122962892                                 | Sum of GTIs [s]                             |
| ontime3  | 1370.9585363269                                 | Sum of GTIs [s]                             |
| ontime6  | 1529.7695464939                                 | Sum of GTIs [s]                             |
| ontime7  | 3490.7155656666                                 | Sum of GTIs [s]                             |
| l2events | 921744  | Number of level 2 events                    |

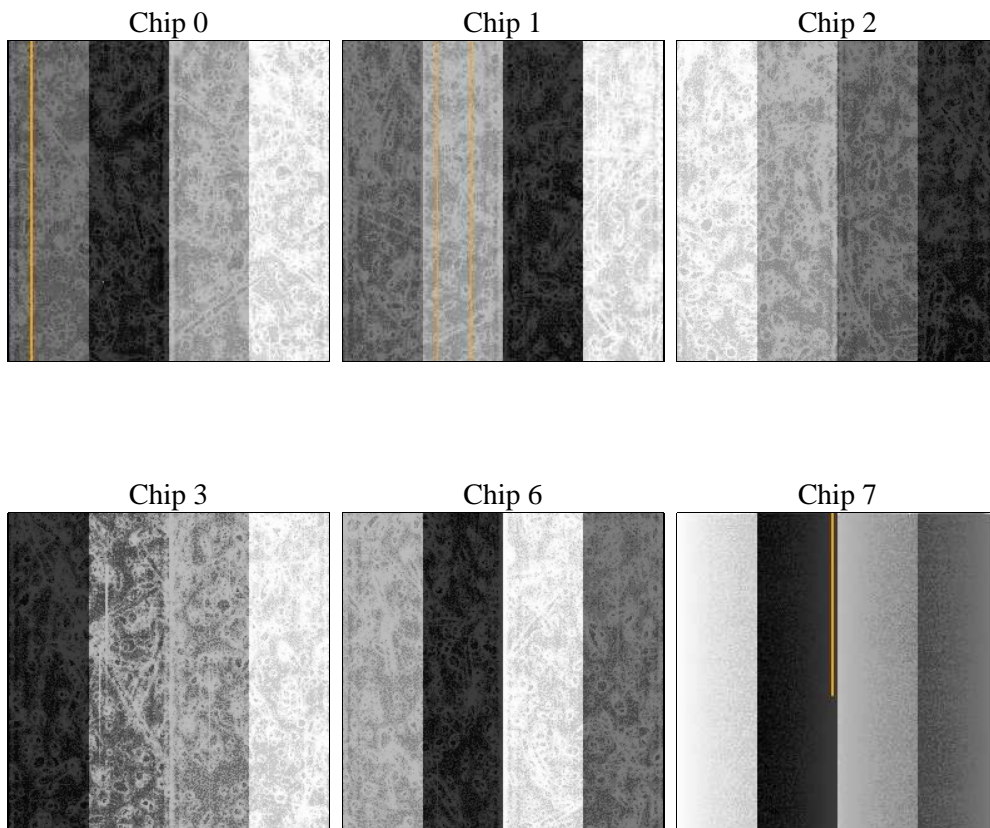
## 2 OBI

### 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             | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5               | Processing system revision     | ontime         | 3490.7155656666 | Sum of GTIs [s]                         |
| caldbver | 4.5.1.1             | &#160                          | ontime0        | 1374.2947808653 | Sum of GTIs [s]                         |
| date     | 2012-08-22T02:07:10 | Date and time of file creation | ontime1        | 1416.3871811554 | Sum of GTIs [s]                         |
| revision | 4                   | Processing version of data     | ontime2        | 1351.5122962892 | Sum of GTIs [s]                         |
|          |                     |                                | ontime3        | 1370.9585363269 | Sum of GTIs [s]                         |
|          |                     |                                | ontime6        | 1529.7695464939 | Sum of GTIs [s]                         |
|          |                     |                                | ontime7        | 3490.7155656666 | Sum of GTIs [s]                         |
|          |                     |                                | l1events       | 1056129         | 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  | 136090 | 140462 | 136067 | 138102 | 158103 | 347305 | grade 0 events | 67258 | 69999 | 67646 | 68727 | 78168 | 83892  |
| rejected events | 14679  | 14622  | 14833  | 15538  | 15476  | 21522  |                | 49%   | 49%   | 49%   | 49%   | 49%   | 24%    |
| rejected %      | 10%    | 10%    | 10%    | 11%    | 9%     | 6%     | grade 1 events | 442   | 466   | 442   | 445   | 480   | 244    |
|                 |        |        |        |        |        |        |                | 0%    | 0%    | 0%    | 0%    | 0%    | 0%     |
|                 |        |        |        |        |        |        | grade 2 events | 21180 | 22092 | 21203 | 21573 | 24574 | 72306  |
|                 |        |        |        |        |        |        |                | 15%   | 15%   | 15%   | 15%   | 15%   | 20%    |
|                 |        |        |        |        |        |        | grade 3 events | 7715  | 7929  | 7550  | 7761  | 8796  | 33721  |
|                 |        |        |        |        |        |        |                | 5%    | 5%    | 5%    | 5%    | 5%    | 9%     |
|                 |        |        |        |        |        |        | grade 4 events | 7704  | 7959  | 7610  | 7802  | 8740  | 33242  |
|                 |        |        |        |        |        |        |                | 5%    | 5%    | 5%    | 5%    | 5%    | 9%     |
|                 |        |        |        |        |        |        | grade 5 events | 1030  | 1078  | 994   | 1068  | 1173  | 4847   |
|                 |        |        |        |        |        |        |                | 0%    | 0%    | 0%    | 0%    | 0%    | 1%     |
|                 |        |        |        |        |        |        | grade 6 events | 17830 | 18144 | 17225 | 16701 | 22349 | 102920 |
|                 |        |        |        |        |        |        |                | 13%   | 12%   | 12%   | 12%   | 14%   | 29%    |
|                 |        |        |        |        |        |        | grade 7 events | 12931 | 12795 | 13397 | 14025 | 13823 | 16133  |
|                 |        |        |        |        |        |        |                | 9%    | 9%    | 9%    | 10%   | 8%    | 4%     |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number    | 7         | 7       |
| 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    |
| [deg] Pointing RA                 | 0                   | 180.0193107893463    | Alternating exposures requested | N         | N       |
| [deg] Pointing Dec                | 0                   | -64.97253830045182   | [s] Primary exposure time       | 0.000000  | 3.2     |
| [deg] Pointing Roll               | 0.0                 | 41.03129529936287    |                                 |           |         |
| [mm] SIM focus pos                | -0.782348           | -1.038866356238299   |                                 |           |         |
| [mm] SIM defocus                  | 0                   | 0.4944702831659975   |                                 |           |         |
| [mm] SIM translation stage pos    | -233.592463         | 250.466033080201     |                                 |           |         |
| [mm] SIM translation stage offset | 0                   | -0.01005468664627074 |                                 |           |         |
| [s] Observation start time (MET)  | 66005528.285        | 66005527.516966      |                                 |           |         |
| Observation start date            | 2000-02-03T22:52:08 | 2000-02-03T22:52:07  |                                 |           |         |
| [s] Observation end time (MET)    | 66014591.336        | 66014590.567296      |                                 |           |         |
| Observation end date              | 2000-02-04T01:23:11 | 2000-02-04T01:23:10  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

**2.3 Star Slots**

**2.4 FID Slots**

# A Summary

## A.1 Status

|                            |                 |
|----------------------------|-----------------|
| V&V Scientist              | Jen Lauer       |
| V&V Date (YYYY-MM-DD)      | 2012.08.23      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 3.4907155656666 |

## A.2 Comments