

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 55694 - L2 Version 2  
Chandra X-Ray Center

L2 Processing Date : Feb 2 2012

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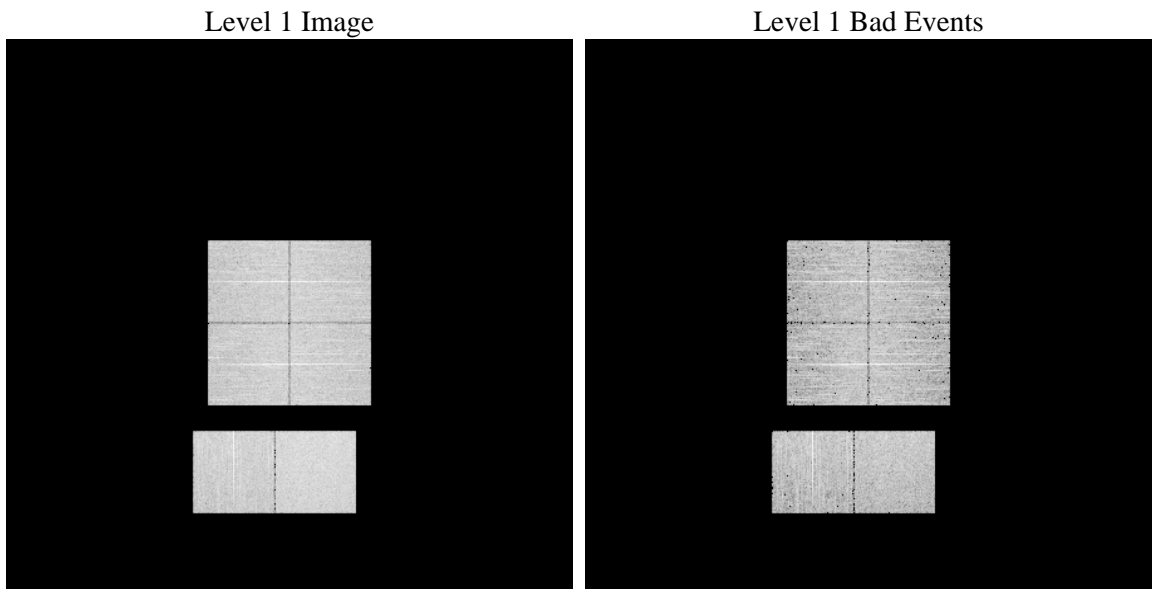
# 1 Front

|          |   |   |
|----------|---|---|
| seq_num  | &#160   | Sequence number                             |
| obs_id   | 55694   | Observation id                              |
| title    | ACIS-012367 diagnostics                         | Proposal title                              |
| observer | CHANDRA engineering request/realtime commanding | Principal investig                          |
| object   | &#160   | Source name                                 |
| dtcycle  | 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   | 315.51036319504                                 | Nominal RA [deg]                            |
| dec_nom  | 14.599477101392                                 | Nominal Dec [deg]                           |
| roll_nom | 154.53074205739                                 | Nominal Roll [deg]                          |
| revision | 2   | Processing version of data                  |
| ontime   | 4985.5999814868                                 | Sum of GTIs [s]                             |
| livetime | 4922.4693125533                                 | Livetime [s]                                |
| ontime0  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| ontime1  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| ontime2  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| ontime3  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| ontime6  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| ontime7  | 4985.5999814868                                 | Sum of GTIs [s]                             |
| l2events | 208688  | Number of level 2 events                    |

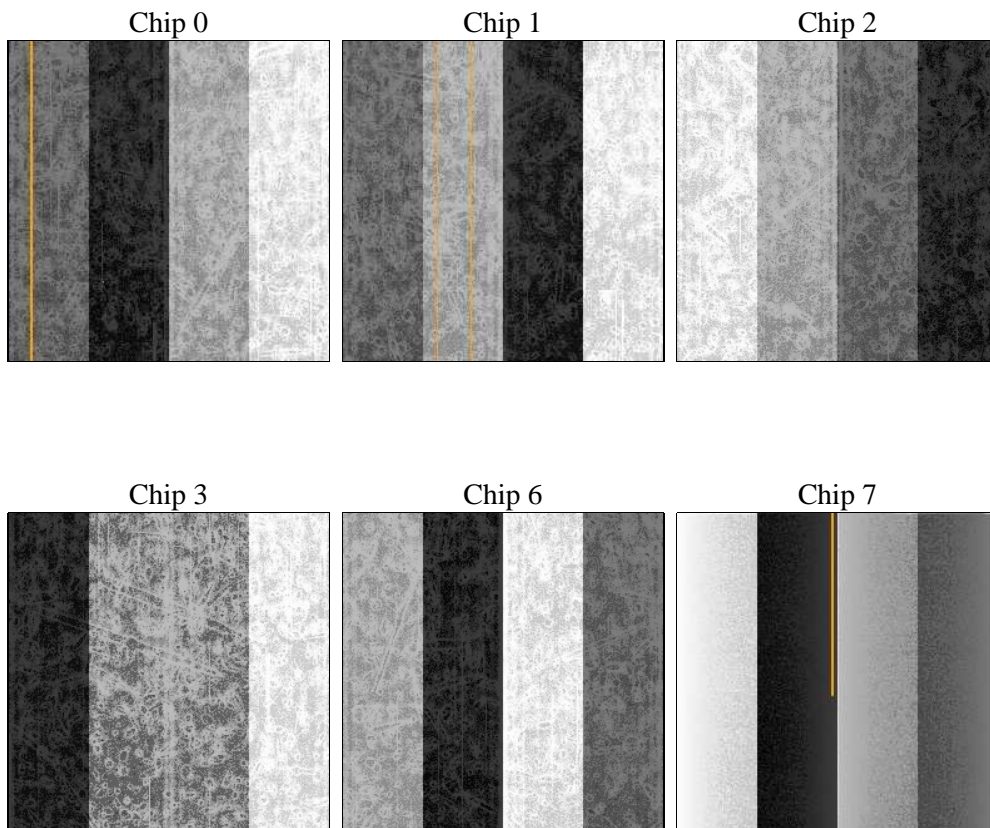
## 2 OBI

### 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 | 8.4.3               | Processing system revision     | ontime         | 4985.5999814868 | Sum of GTIs [s]                         |
| caldsver | 4.4.7               | &#160                          | ontime0        | 4985.5999814868 | Sum of GTIs [s]                         |
| date     | 2012-02-03T00:46:10 | Date and time of file creation | ontime1        | 4985.5999814868 | Sum of GTIs [s]                         |
| revision | 2                   | Processing version of data     | ontime2        | 4985.5999814868 | Sum of GTIs [s]                         |
|          |                     |                                | ontime3        | 4985.5999814868 | Sum of GTIs [s]                         |
|          |                     |                                | ontime6        | 4985.5999814868 | Sum of GTIs [s]                         |
|          |                     |                                | ontime7        | 4985.5999814868 | Sum of GTIs [s]                         |
|          |                     |                                | l1events       | 467172          | 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  | 71785 | 72454 | 74481 | 74650 | 77578 | 96224 | grade 0 events | 18693 | 18195 | 18666 | 18937 | 18651 | 9748  |
| rejected events | 38367 | 39005 | 41509 | 41194 | 43060 | 43011 |                | 26%   | 25%   | 25%   | 25%   | 24%   | 10%   |
| rejected %      | 53%   | 53%   | 55%   | 55%   | 55%   | 44%   | grade 1 events | 115   | 108   | 145   | 154   | 104   | 75    |
|                 |       |       |       |       |       |       |                | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    |
|                 |       |       |       |       |       |       | grade 2 events | 6485  | 6812  | 6187  | 6082  | 6748  | 12126 |
|                 |       |       |       |       |       |       |                | 9%    | 9%    | 8%    | 8%    | 8%    | 12%   |
|                 |       |       |       |       |       |       | grade 3 events | 2435  | 2343  | 2401  | 2437  | 2401  | 5149  |
|                 |       |       |       |       |       |       |                | 3%    | 3%    | 3%    | 3%    | 3%    | 5%    |
|                 |       |       |       |       |       |       | grade 4 events | 2386  | 2390  | 2456  | 2541  | 2444  | 5021  |
|                 |       |       |       |       |       |       |                | 3%    | 3%    | 3%    | 3%    | 3%    | 5%    |
|                 |       |       |       |       |       |       | grade 5 events | 2380  | 2456  | 2175  | 2641  | 2594  | 6395  |
|                 |       |       |       |       |       |       |                | 3%    | 3%    | 2%    | 3%    | 3%    | 6%    |
|                 |       |       |       |       |       |       | grade 6 events | 5269  | 5563  | 5068  | 5264  | 6230  | 24105 |
|                 |       |       |       |       |       |       |                | 7%    | 7%    | 6%    | 7%    | 8%    | 25%   |
|                 |       |       |       |       |       |       | grade 7 events | 34022 | 34587 | 37383 | 36594 | 38406 | 33605 |
|                 |       |       |       |       |       |       |                | 47%   | 47%   | 50%   | 49%   | 49%   | 34%   |

## 2.2 Compared Parameters

| Parameter                         | Planned              | Actual               |
|-----------------------------------|----------------------|----------------------|
| Instrument                        | ACIS                 | ACIS                 |
| Detector                          | ACIS-012367          | ACIS-012367          |
| Grating                           | NONE                 | NONE                 |
| Data mode                         | FAINT                | FAINT                |
| Observation mode                  | SECONDARY            | SECONDARY            |
| [deg] Pointing RA                 | 0                    | 315.5103631950449    |
| [deg] Pointing Dec                | 0                    | 14.59947710139203    |
| [deg] Pointing Roll               | 0.0                  | 154.5307420573897    |
| [mm] SIM focus pos                | -1.4281808131        | -1.4281808131        |
| [mm] SIM defocus                  | 0.1051557500557434   | 0.1051557500557434   |
| [mm] SIM translation stage pos    | 250.4660330802       | 250.4660330802       |
| [mm] SIM translation stage offset | -0.01005726120527584 | -0.01005726120527584 |
| [s] Observation start time (MET)  | 412383055.471488     | 412383055.471488     |
| Observation start date            | 2011-01-25T22:50:55  | 2011-01-25T22:50:55  |
| [s] Observation end time (MET)    | 412389561.033254     | 412389561.033254     |
| Observation end date              | 2011-01-26T00:39:21  | 2011-01-26T00:39:21  |
| Read mode                         | TIMED                | TIMED                |

| Parameter                             | Planned   | Actual   |
|---------------------------------------|-----------|----------|
| Obspar format version number          | 7         | 7        |
| Obspar file type                      | PREDICTED | ACTUAL   |
| Obspar update status                  | OVERRIDE  | OVERRIDE |
| Number of optional ACIS chips dropped | 0         | 0        |
| On-chip summing requested             | N         | N        |
| Subarray requested                    | NONE      | NONE     |
| Alternating exposures requested       | N         | N        |
| [s] Primary exposure time             | 3.2       | 3.2      |

## 2.3 Star Slots

## 2.4 FID Slots

## A Summary

### A.1 Status

|                            |                 |
|----------------------------|-----------------|
| V&V Scientist              | Joy Nichols     |
| V&V Date (YYYY-MM-DD)      | 2012.02.03      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 4.9855999814868 |

### A.2 Comments