

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 57266 - L2 Version 2  
Chandra X-Ray Center

L2 Processing Date : May 31 2012

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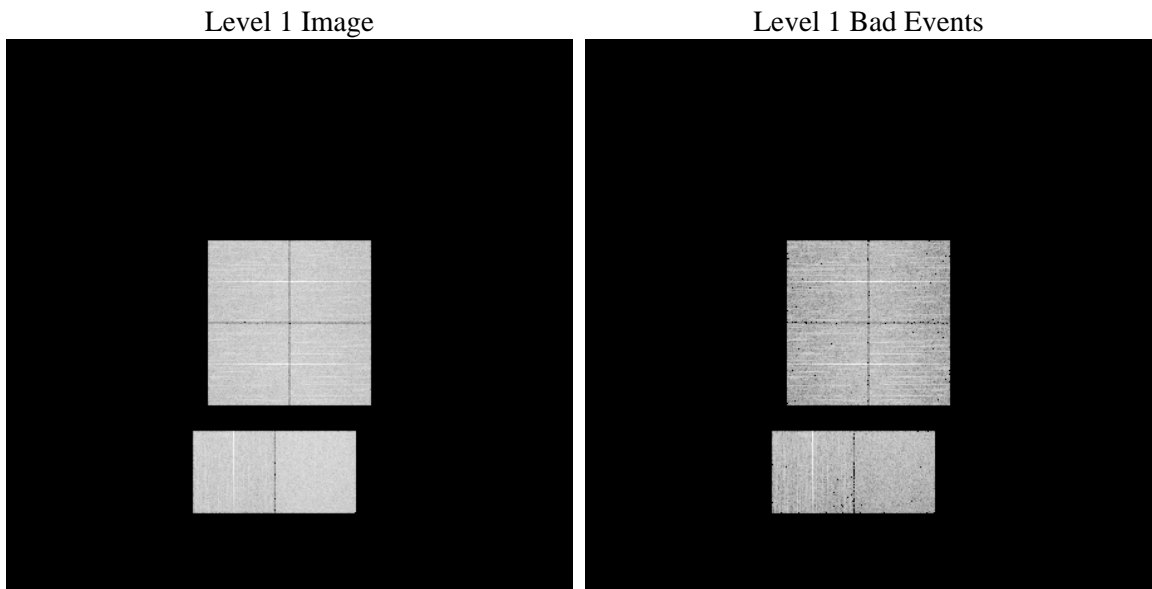
# 1 Front

|          |   |   |
|----------|---|---|
| seq_num  | &#160   | Sequence number                             |
| obs_id   | 57266   | 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   | 160.52493358253                                 | Nominal RA [deg]                            |
| dec_nom  | -15.783968823954                                | Nominal Dec [deg]                           |
| roll_nom | 0.60302696775752                                | Nominal Roll [deg]                          |
| revision | 2   | Processing version of data                  |
| ontime   | 5241.5175632834                                 | Sum of GTIs [s]                             |
| livetime | 5175.1463118342                                 | Livetime [s]                                |
| ontime0  | 5241.4765232801                                 | Sum of GTIs [s]                             |
| ontime1  | 5241.4354832768                                 | Sum of GTIs [s]                             |
| ontime2  | 5241.3944432735                                 | Sum of GTIs [s]                             |
| ontime3  | 5238.3175929785                                 | Sum of GTIs [s]                             |
| ontime6  | 5241.3534032702                                 | Sum of GTIs [s]                             |
| ontime7  | 5241.5175632834                                 | Sum of GTIs [s]                             |
| l2events | 321551  | Number of level 2 events                    |

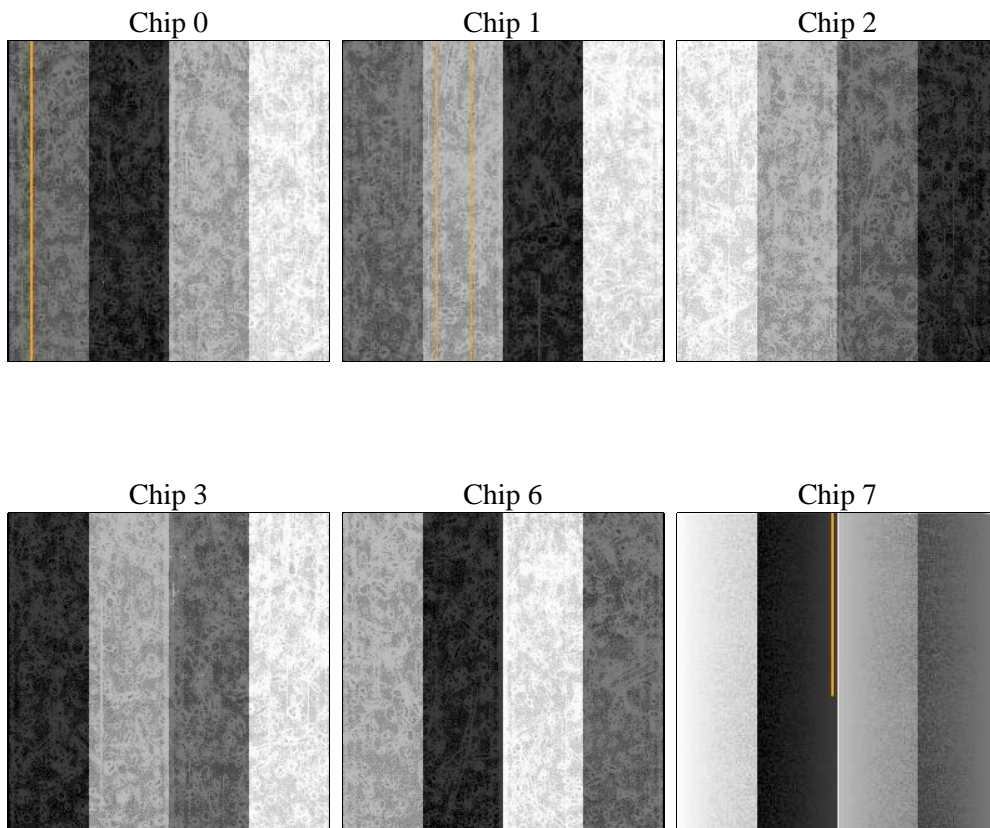
## 2 OBI

### 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 | 8.4.4               | Processing system revision     | ontime         | 5241.5175632834 | Sum of GTIs [s]                         |
| caldsver | 4.4.9               | &#160                          | ontime0        | 5241.4765232801 | Sum of GTIs [s]                         |
| date     | 2012-05-31T17:12:01 | Date and time of file creation | ontime1        | 5241.4354832768 | Sum of GTIs [s]                         |
| revision | 2                   | Processing version of data     | ontime2        | 5241.3944432735 | Sum of GTIs [s]                         |
|          |                     |                                | ontime3        | 5238.3175929785 | Sum of GTIs [s]                         |
|          |                     |                                | ontime6        | 5241.3534032702 | Sum of GTIs [s]                         |
|          |                     |                                | ontime7        | 5241.5175632834 | Sum of GTIs [s]                         |
|          |                     |                                | l1events       | 616732          | 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  | 96351 | 95174 | 100147 | 102317 | 102674 | 120069 | grade 0 events | 27907 | 27494 | 28560 | 28552 | 28490 | 14467 |
| rejected events | 44430 | 42904 | 47691  | 49981  | 48233  | 43707  |                | 28%   | 28%   | 28%   | 27%   | 27%   | 12%   |
| rejected %      | 46%   | 45%   | 47%    | 48%    | 46%    | 36%    | grade 1 events | 222   | 164   | 238   | 211   | 192   | 111   |
|                 |       |       |        |        |        |        |                | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    |
|                 |       |       |        |        |        |        | grade 2 events | 9441  | 9791  | 9137  | 9208  | 9664  | 16381 |
|                 |       |       |        |        |        |        |                | 9%    | 10%   | 9%    | 8%    | 9%    | 13%   |
|                 |       |       |        |        |        |        | grade 3 events | 3447  | 3489  | 3618  | 3603  | 3577  | 7072  |
|                 |       |       |        |        |        |        |                | 3%    | 3%    | 3%    | 3%    | 3%    | 5%    |
|                 |       |       |        |        |        |        | grade 4 events | 3354  | 3436  | 3543  | 3507  | 3485  | 7069  |
|                 |       |       |        |        |        |        |                | 3%    | 3%    | 3%    | 3%    | 3%    | 5%    |
|                 |       |       |        |        |        |        | grade 5 events | 2553  | 2706  | 2518  | 2839  | 2724  | 7268  |
|                 |       |       |        |        |        |        |                | 2%    | 2%    | 2%    | 2%    | 2%    | 6%    |
|                 |       |       |        |        |        |        | grade 6 events | 7805  | 8088  | 7633  | 7499  | 9264  | 31409 |
|                 |       |       |        |        |        |        |                | 8%    | 8%    | 7%    | 7%    | 9%    | 26%   |
|                 |       |       |        |        |        |        | grade 7 events | 41622 | 40006 | 44900 | 46898 | 45278 | 36292 |
|                 |       |       |        |        |        |        |                | 43%   | 42%   | 44%   | 45%   | 44%   | 30%   |

## 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                   | 160.5249335825344    |
| [deg] Pointing Dec                | 0                   | -15.78396882395431   |
| [deg] Pointing Roll               | 0.0                 | 0.6030269677575185   |
| [mm] SIM focus pos                | -1.429586           | -0.6828225247311905  |
| [mm] SIM defocus                  | 0.1037507710433287  | 0.8505141146731063   |
| [mm] SIM translation stage pos    | 250.455976          | 250.466033080201     |
| [mm] SIM translation stage offset | 0                   | -0.01005468664627074 |
| [s] Observation start time (MET)  | 352101410.46772     | 352101409.44271      |
| Observation start date            | 2009-02-27T05:56:50 | 2009-02-27T05:56:49  |
| [s] Observation end time (MET)    | 352111082.3682      | 352111081.34319      |
| Observation end date              | 2009-02-27T08:38:02 | 2009-02-27T08:38:01  |
| Read mode                         | TIMED               | TIMED                |

| Parameter                             | Planned   | Actual  |
|---------------------------------------|-----------|---------|
| Obspar format version number          | 7         | 7       |
| Obspar file type                      | PREDICTED | ACTUAL  |
| Obspar update status                  | NONE      | UPDATED |
| 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              | Jen Lauer       |
| V&V Date (YYYY-MM-DD)      | 2012.06.06      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 5.2415175632834 |

### **A.2 Comments**