

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 60261 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Nov 30 2012

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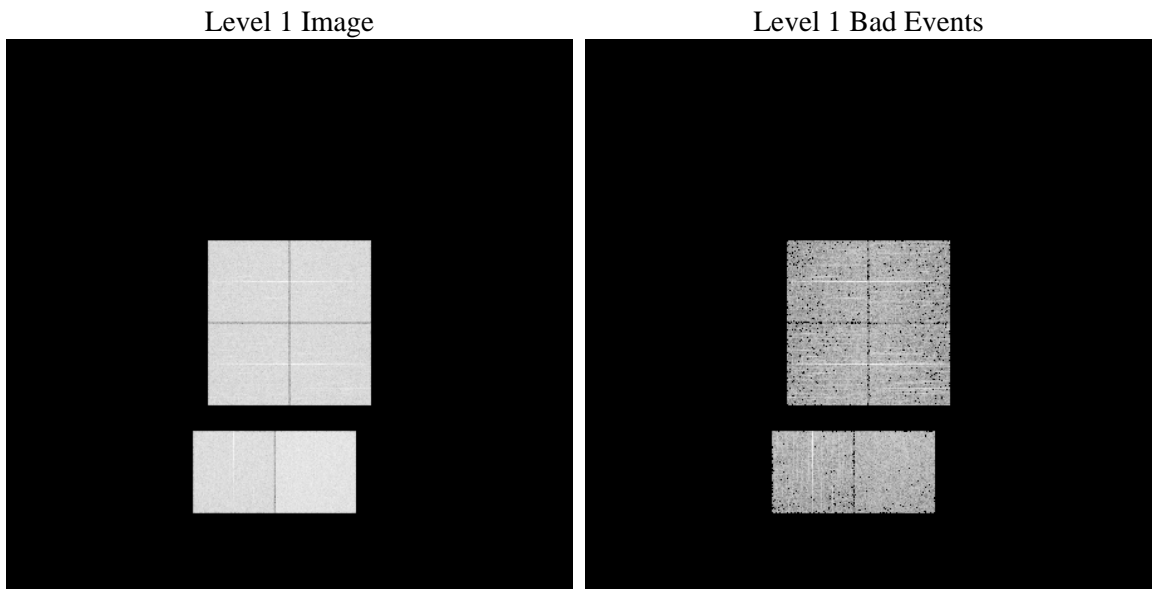
# 1 Front

|          |                                                 |                                             |
|----------|-------------------------------------------------|---------------------------------------------|
| seq_num  | &#160                                           | Sequence number                             |
| obs_id   | 60261                                           | 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   | 186.99843780713                                 | Nominal RA [deg]                            |
| dec_nom  | 1.9714322016445                                 | Nominal Dec [deg]                           |
| roll_nom | 233.96740738805                                 | Nominal Roll [deg]                          |
| revision | 3                                               | Processing version of data                  |
| ontime   | 4607.9999828339                                 | Sum of GTIs [s]                             |
| livetime | 4549.6507124467                                 | Livetime [s]                                |
| ontime0  | 3515.7897488177                                 | Sum of GTIs [s]                             |
| ontime1  | 3509.3078571856                                 | Sum of GTIs [s]                             |
| ontime2  | 3308.3671108484                                 | Sum of GTIs [s]                             |
| ontime3  | 3324.57176283                                   | Sum of GTIs [s]                             |
| ontime6  | 3616.2599082291                                 | Sum of GTIs [s]                             |
| ontime7  | 4607.9999828339                                 | Sum of GTIs [s]                             |
| l2events | 669368                                          | Number of level 2 events                    |

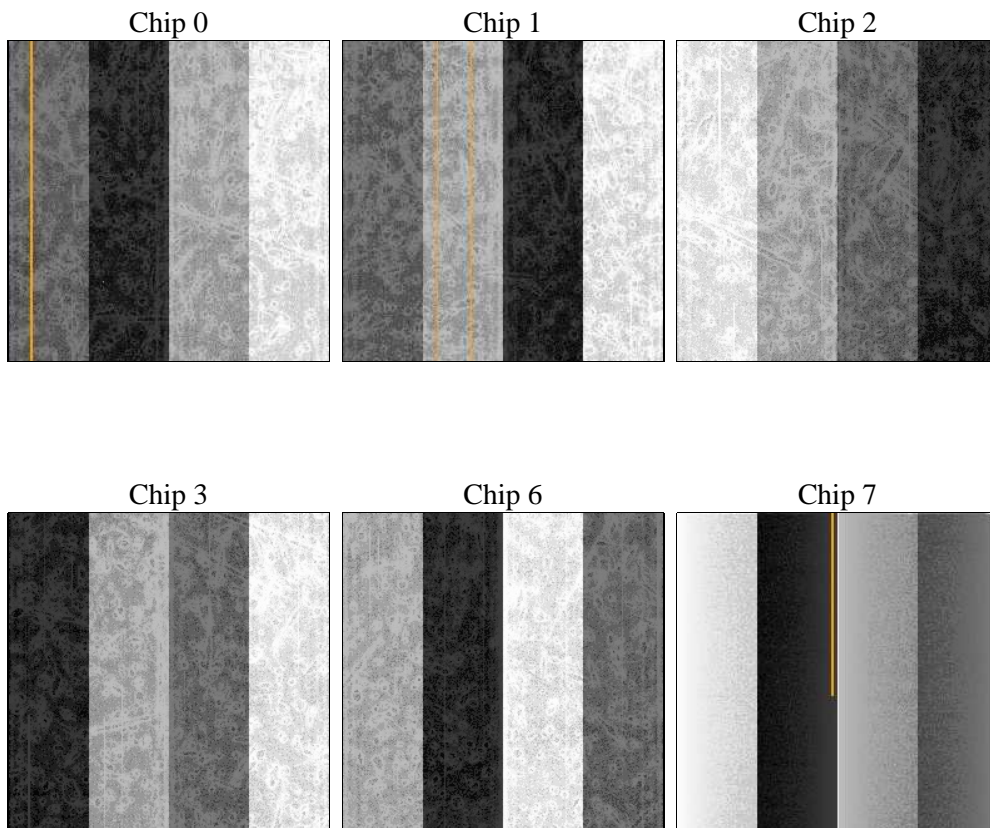
## 2 OBI

### 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         | 4607.9999828339 | Sum of GTIs [s]                         |
| caldbver | 4.5.2               | &#160                          | ontime0        | 3515.7897488177 | Sum of GTIs [s]                         |
| date     | 2012-11-30T17:54:21 | Date and time of file creation | ontime1        | 3509.3078571856 | Sum of GTIs [s]                         |
| revision | 3                   | Processing version of data     | ontime2        | 3308.3671108484 | Sum of GTIs [s]                         |
|          |                     |                                | ontime3        | 3324.57176283   | Sum of GTIs [s]                         |
|          |                     |                                | ontime6        | 3616.2599082291 | Sum of GTIs [s]                         |
|          |                     |                                | ontime7        | 4607.9999828339 | Sum of GTIs [s]                         |
|          |                     |                                | l1events       | 848451          | 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  | 131241 | 132516 | 128823 | 130001 | 143947 | 181923 | grade 0 events | 60176 | 60120 | 58298 | 58780 | 64454 | 38036 |
| rejected events | 22305  | 22956  | 24399  | 25263  | 25200  | 25932  |                | 45%   | 45%   | 45%   | 45%   | 44%   | 20%   |
| rejected %      | 16%    | 17%    | 18%    | 19%    | 17%    | 14%    | grade 1 events | 314   | 287   | 357   | 399   | 320   | 106   |
|                 |        |        |        |        |        |        |                | 0%    | 0%    | 0%    | 0%    | 0%    | 0%    |
|                 |        |        |        |        |        |        | grade 2 events | 19098 | 19474 | 17728 | 17906 | 20502 | 34256 |
|                 |        |        |        |        |        |        |                | 14%   | 14%   | 13%   | 13%   | 14%   | 18%   |
|                 |        |        |        |        |        |        | grade 3 events | 7012  | 7017  | 6884  | 6850  | 7396  | 15954 |
|                 |        |        |        |        |        |        |                | 5%    | 5%    | 5%    | 5%    | 5%    | 8%    |
|                 |        |        |        |        |        |        | grade 4 events | 6969  | 6947  | 6815  | 6802  | 7356  | 15767 |
|                 |        |        |        |        |        |        |                | 5%    | 5%    | 5%    | 5%    | 5%    | 8%    |
|                 |        |        |        |        |        |        | grade 5 events | 1475  | 1557  | 1389  | 1609  | 1648  | 4880  |
|                 |        |        |        |        |        |        |                | 1%    | 1%    | 1%    | 1%    | 1%    | 2%    |
|                 |        |        |        |        |        |        | grade 6 events | 15770 | 16093 | 14802 | 14505 | 19136 | 52089 |
|                 |        |        |        |        |        |        |                | 12%   | 12%   | 11%   | 11%   | 13%   | 28%   |
|                 |        |        |        |        |        |        | grade 7 events | 20427 | 21021 | 22550 | 23150 | 23135 | 20835 |
|                 |        |        |        |        |        |        |                | 15%   | 15%   | 17%   | 17%   | 16%   | 11%   |

## 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                   | 186.9984378071346    |
| [deg] Pointing Dec                | 0                   | 1.971432201644462    |
| [deg] Pointing Roll               | 0.0                 | 233.9674073880522    |
| [mm] SIM focus pos                | -0.782348           | -0.6828225247311905  |
| [mm] SIM defocus                  | 0                   | 0.8505141146731063   |
| [mm] SIM translation stage pos    | -233.592463         | 250.466033080201     |
| [mm] SIM translation stage offset | 0                   | -0.01005468664627074 |
| [s] Observation start time (MET)  | 199439771.57952     | 199439770.55452      |
| Observation start date            | 2004-04-27T07:56:12 | 2004-04-27T07:56:10  |
| [s] Observation end time (MET)    | 199456116.230241    | 199456115.20524      |
| Observation end date              | 2004-04-27T12:28:36 | 2004-04-27T12:28:35  |
| Read mode                         | TIMED               | TIMED                |

| Parameter                       | Planned   | Actual  |
|---------------------------------|-----------|---------|
| Obspar format version number    | 7         | 7       |
| Obspar file type                | PREDICTED | ACTUAL  |
| Obspar update status            | NONE      | UPDATED |
| On-chip summing requested       | N         | N       |
| Subarray requested              | NONE      | NONE    |
| Alternating exposures requested | N         | N       |
| [s] Primary exposure time       | 0.000000  | 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)      | 2012.12.14      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 4.6079999828339 |

### **A.2 Comments**