

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 60686 - L2 Version 001  
Chandra X-Ray Center

L2 Processing Date : Aug 8 2006

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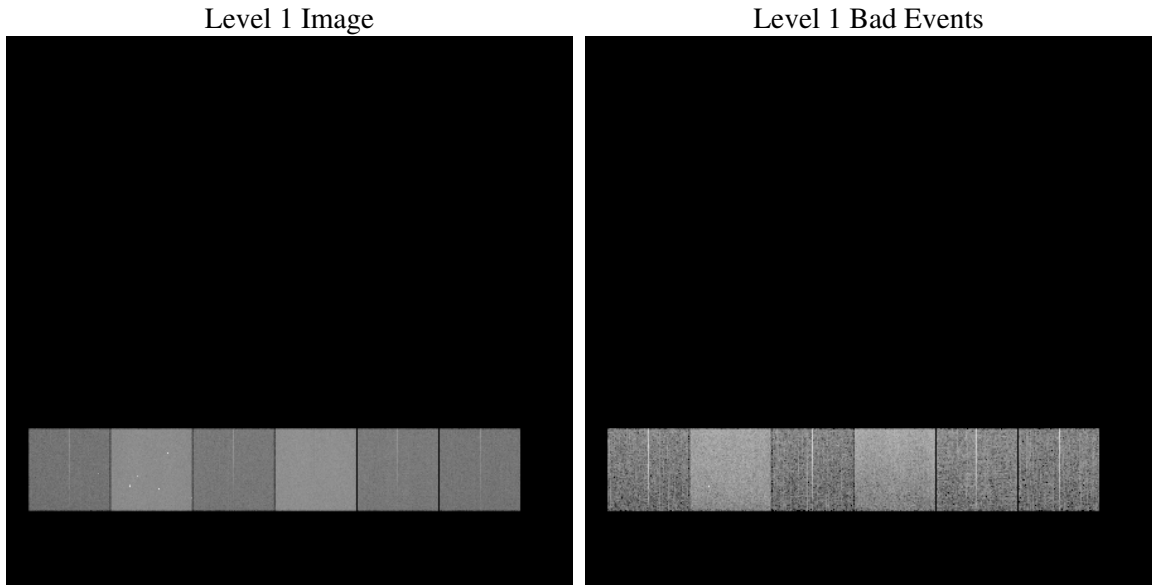
# 1 Front

|          |   |
|----------|---|
| seq_num  | &#160   |
| obs_id   | 60686   |
| title    | ACIS-456789 diagnostics                         |
| observer | CHANDRA engineering request/realtime commanding |
| object   | &#160   |
| dtcycle  | 0   |
| cycle    | P   |
| ra_targ  | 0.0   |
| dec_targ | 0.0   |
| ra_nom   | 299.96551896893                                 |
| dec_nom  | 33.999593432673                                 |
| roll_nom | 147.94300258114                                 |
| revision | 2   |
| ontime   | 11638.399956644                                 |
| livetime | 11491.027528589                                 |
| ontime4  | 5568.7442912459                                 |
| ontime5  | 11638.399956644                                 |
| ontime6  | 6015.3013337255                                 |
| ontime7  | 11638.399956644                                 |
| ontime8  | 6229.2072044313                                 |
| ontime9  | 5769.5226394832                                 |
| l2events | 1703869   |

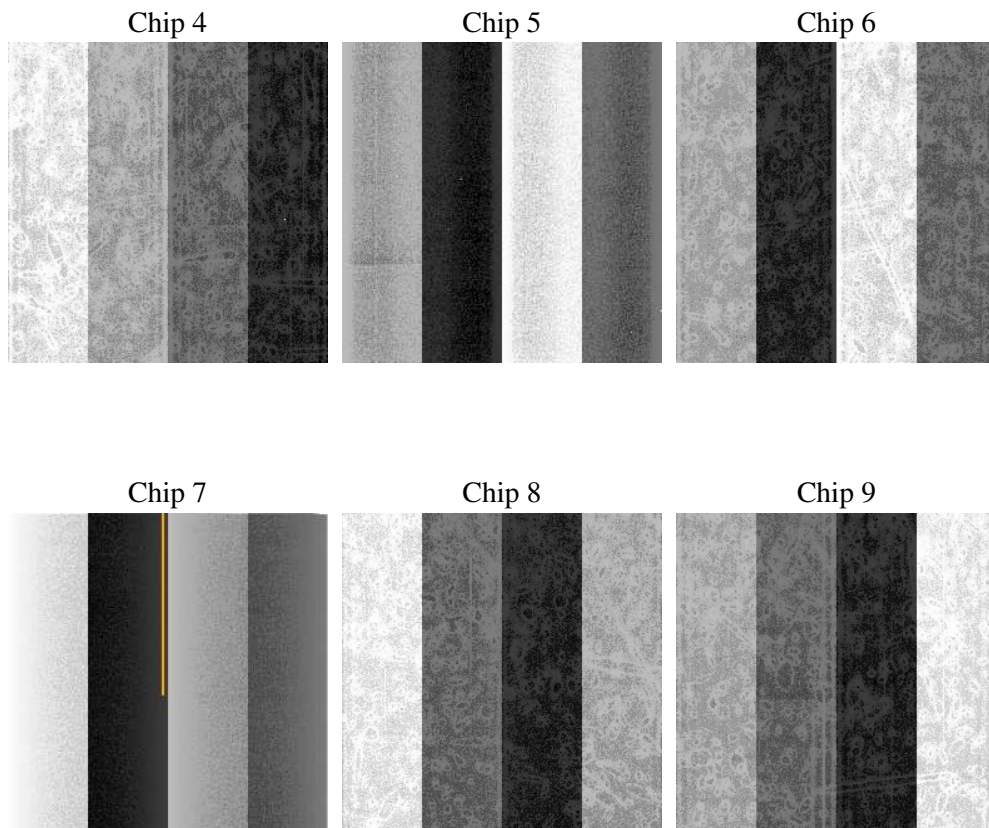
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8.1             |
| caldbver | 3.2.2               |
| date     | 2006-08-09T01:16:29 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 0.0             |
| ontime         | 11641.688834637 |
| ontime4        | 5571.3319112062 |
| ontime5        | 11641.688834637 |
| ontime6        | 6018.5902117193 |
| ontime7        | 11641.688834637 |
| ontime8        | 6232.4960824251 |
| ontime9        | 5772.2744194567 |
| l1events       | 2106866         |

### 2.1.4 Events

|                 | ccd 4  | ccd 5  | ccd 6  | ccd 7  | ccd 8  | ccd 9  |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events  | 245564 | 491216 | 281753 | 528035 | 297803 | 262495 |
| rejected events | 37750  | 81584  | 38302  | 72802  | 43991  | 38666  |
| rejected %      | 15%    | 16%    | 13%    | 13%    | 14%    | 14%    |

|                | ccd 4  | ccd 5  | ccd 6  | ccd 7  | ccd 8  | ccd 9  |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 121283 | 55775  | 132735 | 84354  | 139919 | 123968 |
|                | 49%    | 11%    | 47%    | 15%    | 46%    | 47%    |
| grade 1 events | 741    | 440    | 589    | 208    | 682    | 643    |
|                | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 33359  | 191267 | 42164  | 136575 | 44131  | 38743  |
|                | 13%    | 38%    | 14%    | 25%    | 14%    | 14%    |
| grade 3 events | 13714  | 14213  | 15142  | 34243  | 16391  | 14230  |
|                | 5%     | 2%     | 5%     | 6%     | 5%     | 5%     |
| grade 4 events | 13607  | 13780  | 14982  | 33660  | 16240  | 14154  |
|                | 5%     | 2%     | 5%     | 6%     | 5%     | 5%     |
| grade 5 events | 2523   | 8831   | 2722   | 9461   | 3361   | 2783   |
|                | 1%     | 1%     | 0%     | 1%     | 1%     | 1%     |
| grade 6 events | 25956  | 134720 | 38557  | 166548 | 37264  | 32871  |
|                | 10%    | 27%    | 13%    | 31%    | 12%    | 12%    |
| grade 7 events | 34381  | 72190  | 34862  | 62986  | 39815  | 35103  |
|                | 14%    | 14%    | 12%    | 11%    | 13%    | 13%    |

## 2.2 Compared Parameters

| Parameter                         | Planned             | Actual               | Parameter                       | Planned   | Actual  |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument                        | ACIS                | ACIS                 | Obspar format version number    | 6         | 6       |
| Detector                          | ACIS-456789         | ACIS-456789          | 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                   | 299.965518968928     | Alternating exposures requested | N         | N       |
| Pointing Dec                      | 0                   | 33.99959343267295    | Primary exposure time           | 0.000000  | 3.2     |
| Pointing Roll                     | 0.0                 | 147.9430025811432    |                                 |           |         |
| SIM focus pos (mm)                | -0.684267           | -0.6828225247311905  |                                 |           |         |
| SIM defocus (mm)                  | 0                   | 0.8505141146731063   |                                 |           |         |
| SIM translation stage pos (mm)    | -190.132523         | 250.466033080201     |                                 |           |         |
| SIM translation stage offset (mm) | 0                   | -0.01005468664627074 |                                 |           |         |
| Observation start time            | 172475085.16207     | 172475084.13735      |                                 |           |         |
| Observation start date            | 2003-06-20T05:44:45 | 2003-06-20T05:44:44  |                                 |           |         |
| Observation end time              | 172509724.013542    | 172509722.98882      |                                 |           |         |
| Observation end date              | 2003-06-20T15:22:04 | 2003-06-20T15:22:02  |                                 |           |         |
| Read mode                         | TIMED               | TIMED                |                                 |           |         |

## 2.3 Aspect



**2.4 Star Slots**

**2.5 FID Slots**

# A Summary

## A.1 Status

|                            |            |
|----------------------------|------------|
| V&V Scientist              | Jen Lauer  |
| V&V Date (YYYY-MM-DD)      | 2006.08.09 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 11.6383999 |

## A.2 Comments