

# V&V Reference Report

## L2 ASCDS Version : 7.6.8

Observation 60591 - L2 Version 001  
Chandra X-Ray Center

L2 Processing Date : Jul 11 2006

## Contents

|          |                               |          |
|----------|-------------------------------|----------|
| <b>1</b> | <b>Front</b>                  | <b>2</b> |
| <b>2</b> | <b>OBI</b>                    | <b>3</b> |
| 2.1      | OBI . . . . .                 | 3        |
| 2.1.1    | Images . . . . .              | 3        |
| 2.1.2    | Bias . . . . .                | 3        |
| 2.1.3    | Parameters . . . . .          | 4        |
| 2.1.4    | Events . . . . .              | 4        |
| 2.2      | Compared Parameters . . . . . | 5        |
| 2.3      | Aspect . . . . .              | 6        |
| 2.4      | Star Slots . . . . .          | 8        |
| 2.5      | FID Slots . . . . .           | 8        |
| <b>A</b> | <b>Summary</b>                | <b>9</b> |
| A.1      | Status . . . . .              | 9        |
| A.2      | Comments . . . . .            | 9        |

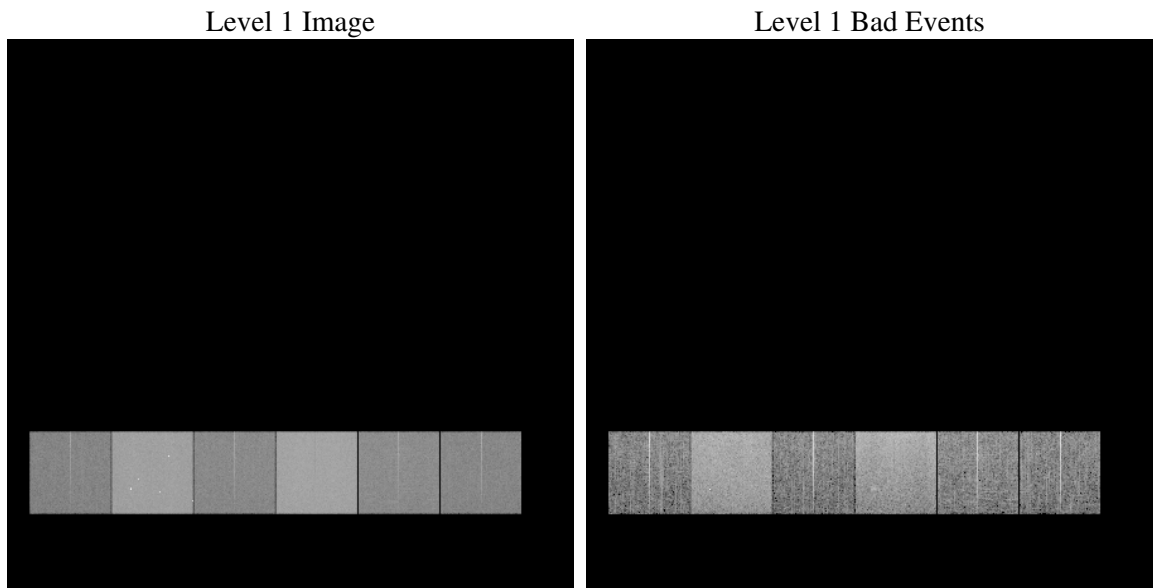
# 1 Front

|          |   |
|----------|---|
| seq_num  | &#160   |
| obs_id   | 60591   |
| 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   | 359.97617761428                                 |
| dec_nom  | 0.015835441268718                               |
| roll_nom | 113.48755013427                                 |
| revision | 2   |
| ontime   | 11823.999955952                                 |
| livetime | 11674.277348952                                 |
| ontime4  | 5161.7806074321                                 |
| ontime5  | 11823.999955952                                 |
| ontime6  | 5647.8912449181                                 |
| ontime7  | 11823.999955952                                 |
| ontime8  | 5886.5260500908                                 |
| ontime9  | 5414.4156246781                                 |
| l2events | 1717016   |

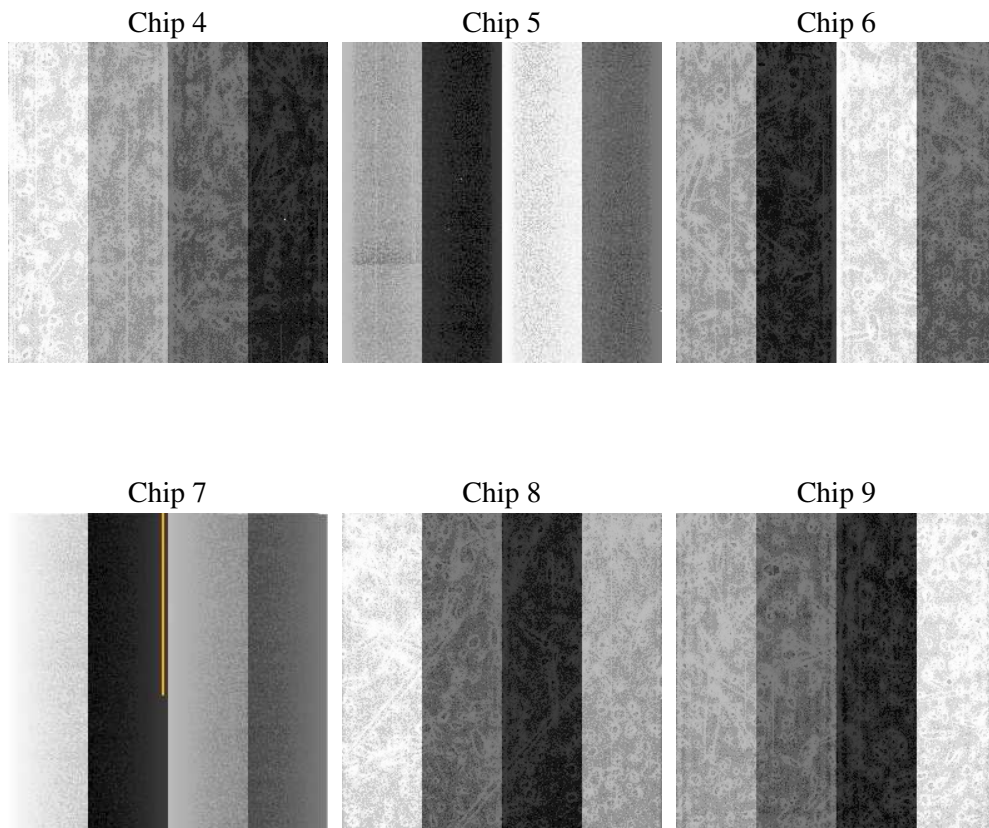
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

|          |                     |
|----------|---------------------|
| obi_num  | 0                   |
| ascdsver | 7.6.8               |
| caldsver | 3.2.2               |
| date     | 2006-07-11T12:00:34 |
| revision | 2                   |

|                |                 |
|----------------|-----------------|
| sched_exp_time | 0.0             |
| ontime         | 11826.425415277 |
| ontime4        | 5162.9656415582 |
| ontime5        | 11826.425415277 |
| ontime6        | 5649.1173190475 |
| ontime7        | 11826.425415277 |
| ontime8        | 5888.9515094161 |
| ontime9        | 5415.7648188174 |
| l1events       | 2143174         |

### 2.1.4 Events

|                 | ccd 4  | ccd 5  | ccd 6  | ccd 7  | ccd 8  | ccd 9  |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events  | 240494 | 513163 | 276584 | 558451 | 295680 | 258802 |
| rejected events | 40360  | 89728  | 40561  | 81972  | 46082  | 41428  |
| rejected %      | 16%    | 17%    | 14%    | 14%    | 15%    | 16%    |

|                | ccd 4  | ccd 5  | ccd 6  | ccd 7  | ccd 8  | ccd 9  |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 115303 | 54121  | 127586 | 86593  | 135911 | 118763 |
|                | 47%    | 10%    | 46%    | 15%    | 45%    | 45%    |
| grade 1 events | 918    | 419    | 657    | 230    | 793    | 711    |
|                | 0%     | 0%     | 0%     | 0%     | 0%     | 0%     |
| grade 2 events | 31576  | 198246 | 40630  | 144221 | 43155  | 36953  |
|                | 13%    | 38%    | 14%    | 25%    | 14%    | 14%    |
| grade 3 events | 13510  | 14305  | 14588  | 34878  | 16150  | 13662  |
|                | 5%     | 2%     | 5%     | 6%     | 5%     | 5%     |
| grade 4 events | 13093  | 14090  | 14483  | 34074  | 15790  | 13794  |
|                | 5%     | 2%     | 5%     | 6%     | 5%     | 5%     |
| grade 5 events | 2450   | 9564   | 2806   | 10233  | 3268   | 2892   |
|                | 1%     | 1%     | 1%     | 1%     | 1%     | 1%     |
| grade 6 events | 26652  | 142673 | 38736  | 176713 | 38592  | 34202  |
|                | 11%    | 27%    | 14%    | 31%    | 13%    | 13%    |
| grade 7 events | 36992  | 79745  | 37098  | 71509  | 42021  | 37825  |
|                | 15%    | 15%    | 13%    | 12%    | 14%    | 14%    |

## 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                   | 359.9761776142806    | Alternating exposures requested | N         | N       |
| Pointing Dec                      | 0                   | 0.01583544126871838  | Primary exposure time           | 0.000000  | 3.2     |
| Pointing Roll                     | 0.0                 | 113.4875501342701    |                                 |           |         |
| 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            | 177044648.106762    | 177044647.08204      |                                 |           |         |
| Observation start date            | 2003-08-12T03:04:08 | 2003-08-12T03:04:07  |                                 |           |         |
| Observation end time              | 177085566.108512    | 177085565.08379      |                                 |           |         |
| Observation end date              | 2003-08-12T14:26:06 | 2003-08-12T14:26:05  |                                 |           |         |
| 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)      | 2006.07.11 |
| V&V Edition                | 1          |
| V&V Disposition and Status | OK         |
| V&V Charge Time            | 11.8239999 |

### A.2 Comments