

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 60729 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Oct 28 2012

Contents

| | | |
|----------|-------------------------------|----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 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 | Star Slots | 6 |
| 2.4 | FID Slots | 6 |
| A | Summary | 7 |
| A.1 | Status | 7 |
| A.2 | Comments | 7 |

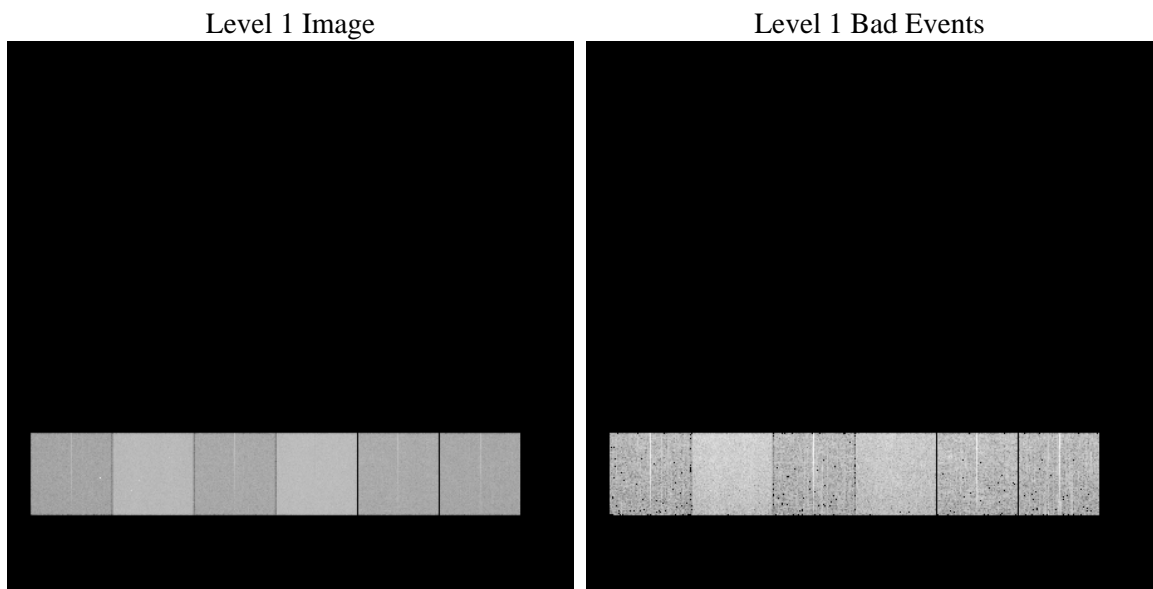
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 60729 | Observation id |
| title | ACIS-456789 diagnostics | Proposal title |
| observer | CHANDRA engineering request/realtime commanding | Principal investig |
| object | | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? 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 | 155.50968659003 | Nominal RA [deg] |
| dec_nom | -31.727366615377 | Nominal Dec [deg] |
| roll_nom | 253.89881573631 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 8386.970398128 | Sum of GTIs [s] |
| livetime | 8280.7695289197 | Livetime [s] |
| ontime4 | 3843.8627195954 | Sum of GTIs [s] |
| ontime5 | 8386.9293581247 | Sum of GTIs [s] |
| ontime6 | 4232.7839825749 | Sum of GTIs [s] |
| ontime7 | 8386.970398128 | Sum of GTIs [s] |
| ontime8 | 4342.0727009475 | Sum of GTIs [s] |
| ontime9 | 4073.9740982056 | Sum of GTIs [s] |
| l2events | 1244540 | Number of level 2 events |

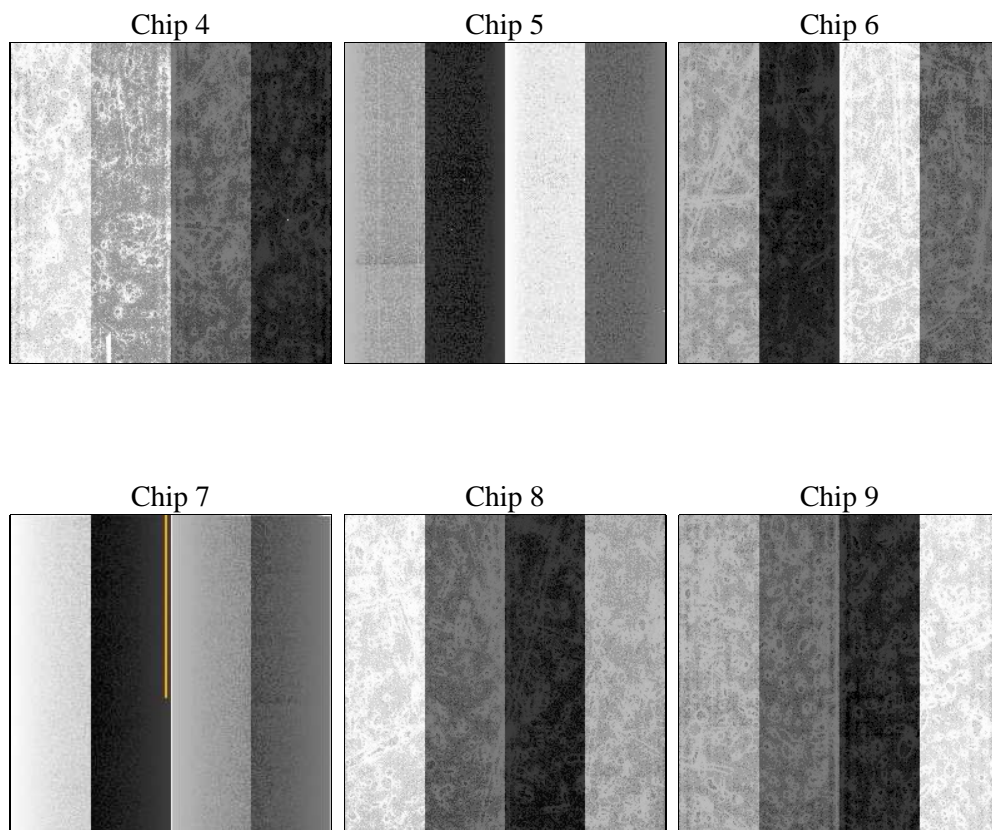
2 OBI

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 | 8386.970398128 | Sum of GTIs [s] |
| caldbver | 4.5.2 | | ontime4 | 3843.8627195954 | Sum of GTIs [s] |
| date | 2012-10-28T13:12:19 | Date and time of file creation | ontime5 | 8386.9293581247 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 4232.7839825749 | Sum of GTIs [s] |
| | | | ontime7 | 8386.970398128 | Sum of GTIs [s] |
| | | | ontime8 | 4342.0727009475 | Sum of GTIs [s] |
| | | | ontime9 | 4073.9740982056 | Sum of GTIs [s] |
| | | | l1events | 1538983 | Number of level 1 events |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 | | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|-------|--------|-------|--------|-------|-------|
| level 1 events | 174853 | 361717 | 203028 | 392874 | 215094 | 191417 | grade 0 events | 86271 | 67920 | 94618 | 85611 | 99500 | 89245 |
| rejected events | 28990 | 58635 | 30804 | 48281 | 35556 | 31577 | | 49% | 18% | 46% | 21% | 46% | 46% |
| rejected % | 16% | 16% | 15% | 12% | 16% | 16% | grade 1 events | 584 | 234 | 450 | 217 | 506 | 470 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 22890 | 112854 | 30178 | 76330 | 31659 | 27548 |
| | | | | | | | | 13% | 31% | 14% | 19% | 14% | 14% |
| | | | | | | | grade 3 events | 9632 | 18306 | 10836 | 35260 | 11823 | 10223 |
| | | | | | | | | 5% | 5% | 5% | 8% | 5% | 5% |
| | | | | | | | grade 4 events | 9769 | 18272 | 10447 | 34659 | 11784 | 10397 |
| | | | | | | | | 5% | 5% | 5% | 8% | 5% | 5% |
| | | | | | | | grade 5 events | 1794 | 9482 | 2012 | 8439 | 2410 | 2097 |
| | | | | | | | | 1% | 2% | 0% | 2% | 1% | 1% |
| | | | | | | | grade 6 events | 18548 | 88479 | 27608 | 115891 | 26560 | 23833 |
| | | | | | | | | 10% | 24% | 13% | 29% | 12% | 12% |
| | | | | | | | grade 7 events | 25365 | 46170 | 26879 | 36467 | 30852 | 27604 |
| | | | | | | | | 14% | 12% | 13% | 9% | 14% | 14% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| 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 |
| [deg] Pointing RA | 0 | 155.509686590026 | Alternating exposures requested | N | N |
| [deg] Pointing Dec | 0 | -31.72736661537702 | [s] Primary exposure time | 0.000000 | 3.2 |
| [deg] Pointing Roll | 0.0 | 253.8988157363094 | | | |
| [mm] SIM focus pos | -0.684267 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.7524282956875696 | | | |
| [mm] SIM translation stage pos | -190.132523 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 170233793.416935 | 170233792.39221 | | | |
| Observation start date | 2003-05-25T07:09:53 | 2003-05-25T07:09:52 | | | |
| [s] Observation end time (MET) | 170257159.317927 | 170257158.2932 | | | |
| Observation end date | 2003-05-25T13:39:19 | 2003-05-25T13:39:18 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2012.12.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.386970398128 |

A.2 Comments