

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 61970 - L2 Version 4
Chandra X-Ray Center

L2 Processing Date : Aug 31 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 |

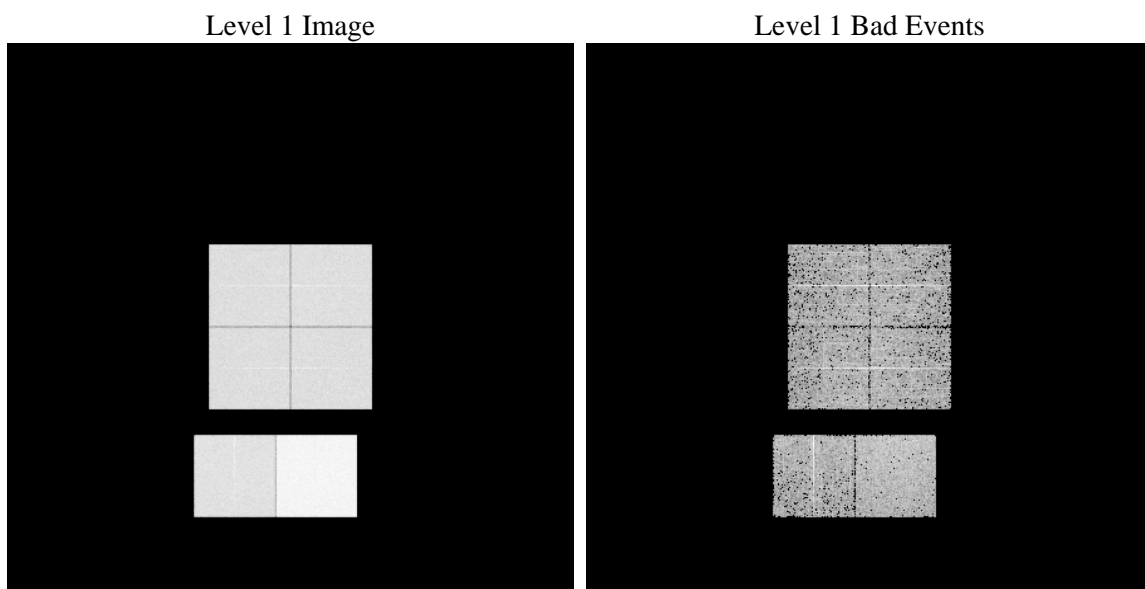
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 61970 | Observation id |
| title | ACIS-012367 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 | 176.83683101478 | Nominal RA [deg] |
| dec_nom | -44.387182536221 | Nominal Dec [deg] |
| roll_nom | 218.46363128614 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 5052.2630228251 | Sum of GTIs [s] |
| livetime | 4988.2882263225 | Livetime [s] |
| ontime0 | 2265.0432519168 | Sum of GTIs [s] |
| ontime1 | 2307.2176822126 | Sum of GTIs [s] |
| ontime2 | 2184.0993221849 | Sum of GTIs [s] |
| ontime3 | 2193.883322075 | Sum of GTIs [s] |
| ontime6 | 2427.2180524915 | Sum of GTIs [s] |
| ontime7 | 5052.2630228251 | Sum of GTIs [s] |
| l2events | 1267706 | Number of level 2 events |

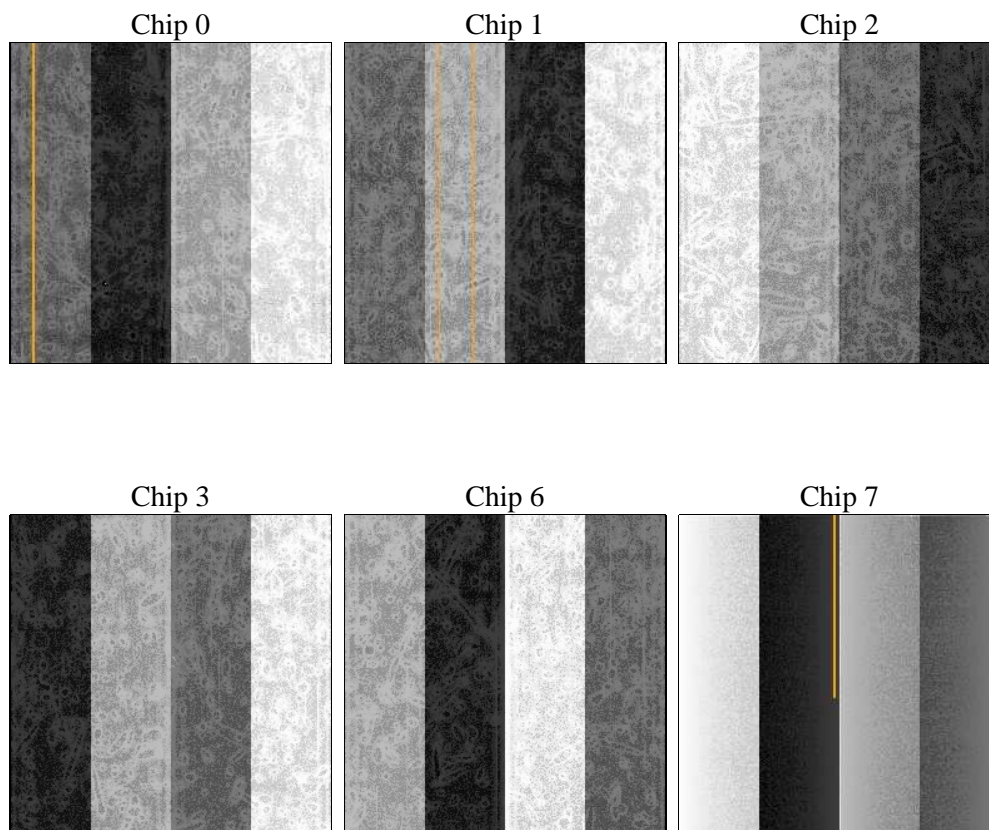
2 OBI

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 | 5052.2630228251 | Sum of GTIs [s] |
| caldbver | 4.5.1.1 | | ontime0 | 2265.0432519168 | Sum of GTIs [s] |
| date | 2012-08-31T19:41:51 | Date and time of file creation | ontime1 | 2307.2176822126 | Sum of GTIs [s] |
| revision | 4 | Processing version of data | ontime2 | 2184.0993221849 | Sum of GTIs [s] |
| | | | ontime3 | 2193.883322075 | Sum of GTIs [s] |
| | | | ontime6 | 2427.2180524915 | Sum of GTIs [s] |
| | | | ontime7 | 5052.2630228251 | Sum of GTIs [s] |
| | | | l1events | 1433124 | 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 | 194867 | 200499 | 192152 | 192739 | 220074 | 432793 | grade 0 events | 98432 | 101280 | 97806 | 97741 | 110021 | 106778 |
| rejected events | 16959 | 17232 | 17324 | 17894 | 18291 | 23823 | | 50% | 50% | 50% | 50% | 49% | 24% |
| rejected % | 8% | 8% | 9% | 9% | 8% | 5% | grade 1 events | 493 | 488 | 478 | 517 | 533 | 259 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 31224 | 32114 | 30290 | 30585 | 34948 | 90890 |
| | | | | | | | | 16% | 16% | 15% | 15% | 15% | 21% |
| | | | | | | | grade 3 events | 11250 | 11607 | 11087 | 11094 | 12382 | 42143 |
| | | | | | | | | 5% | 5% | 5% | 5% | 5% | 9% |
| | | | | | | | grade 4 events | 11168 | 11862 | 11012 | 11407 | 12576 | 41789 |
| | | | | | | | | 5% | 5% | 5% | 5% | 5% | 9% |
| | | | | | | | grade 5 events | 1374 | 1339 | 1296 | 1342 | 1577 | 5557 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 1% |
| | | | | | | | grade 6 events | 25834 | 26404 | 24633 | 24270 | 31856 | 127370 |
| | | | | | | | | 13% | 13% | 12% | 12% | 14% | 29% |
| | | | | | | | grade 7 events | 15092 | 15405 | 15550 | 15783 | 16181 | 18007 |
| | | | | | | | | 7% | 7% | 8% | 8% | 7% | 4% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | 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 | 176.8368310147809 | Alternating exposures requested | N | N |
| [deg] Pointing Dec | 0 | -44.38718253622073 | [s] Primary exposure time | 3.2 | 3.2 |
| [deg] Pointing Roll | 0.0 | 218.4636312861355 | | | |
| [mm] SIM focus pos | -0.782348 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | -233.592463 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 82233511.385591 | 82233510.617137 | | | |
| Observation start date | 2000-08-09T18:38:31 | 2000-08-09T18:38:30 | | | |
| [s] Observation end time (MET) | 82282180.43740299 | 82282179.66895001 | | | |
| Observation end date | 2000-08-10T08:09:40 | 2000-08-10T08:09:39 | | | |
| 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) | 2012.09.07 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.0522630228251 |

A.2 Comments