

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 52727 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Jun 6 2014

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 |

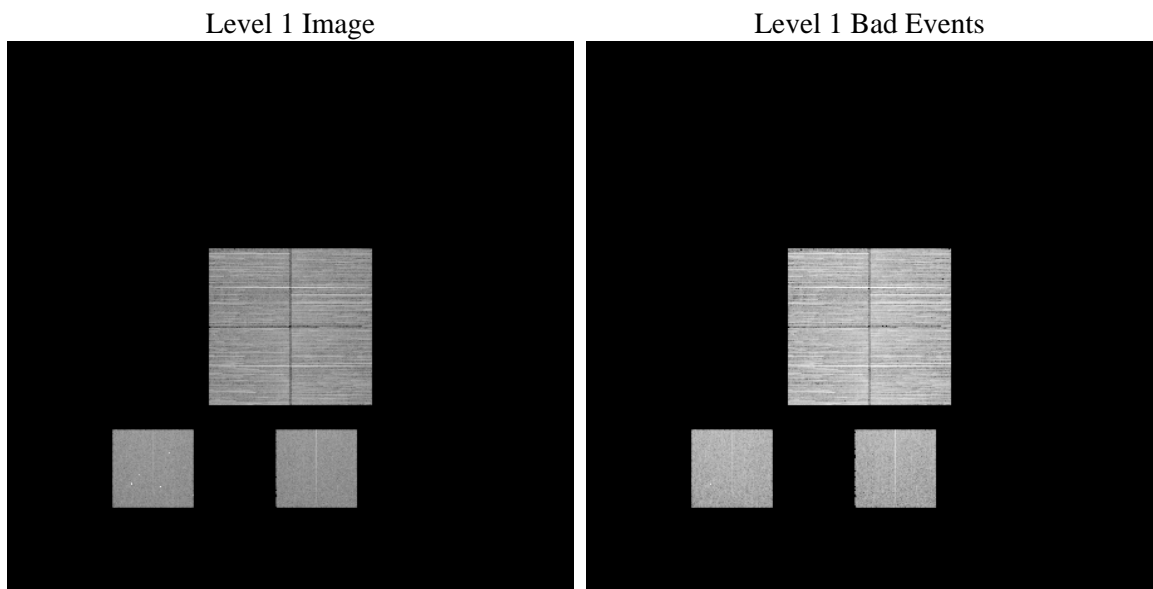
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 52727 | Observation id |
| title | ACIS-012357 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 | 285.32137322643 | Nominal RA [deg] |
| dec_nom | -11.762870469879 | Nominal Dec [deg] |
| roll_nom | 113.46475621209 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8163.1999696493 | Sum of GTIs [s] |
| livetime | 8059.8326163447 | Livetime [s] |
| ontime0 | 8163.1999696493 | Sum of GTIs [s] |
| ontime1 | 8163.1999696493 | Sum of GTIs [s] |
| ontime2 | 8163.1999696493 | Sum of GTIs [s] |
| ontime3 | 8163.1999696493 | Sum of GTIs [s] |
| ontime5 | 8163.1999696493 | Sum of GTIs [s] |
| ontime7 | 8163.1999696493 | Sum of GTIs [s] |
| l2events | 199377 | Number of level 2 events |

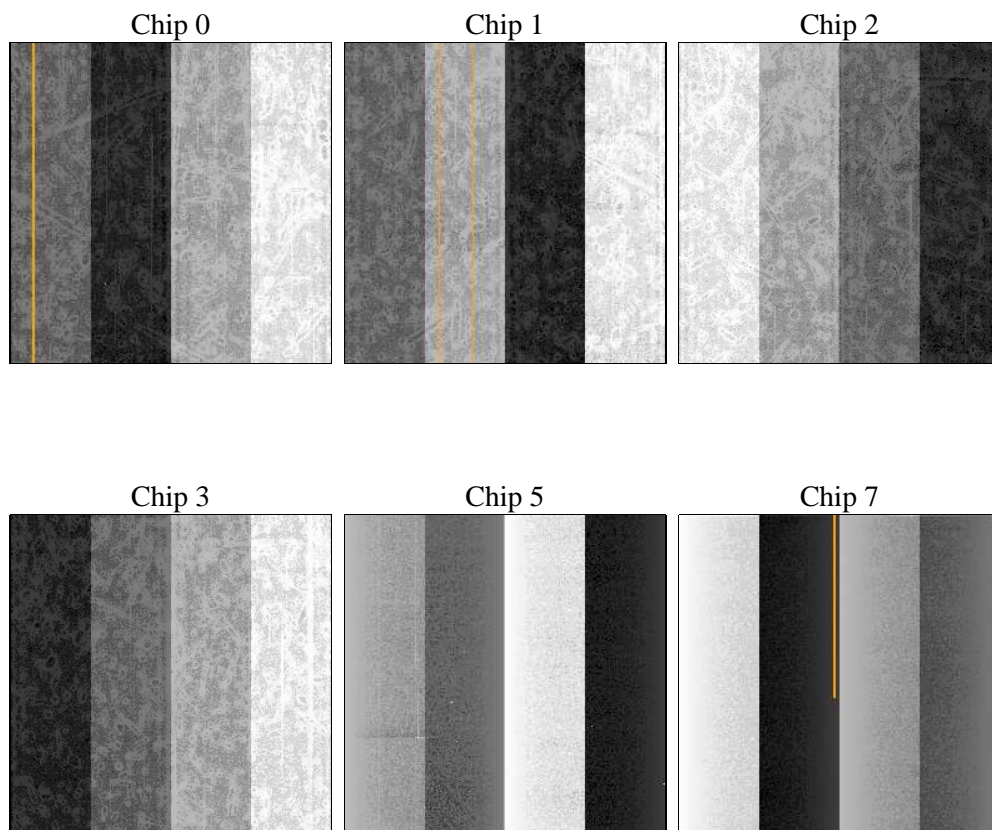
2 OBI

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 | 10.2.2 | Processing system revision | ontime | 8163.1999696493 | Sum of GTIs [s] |
| caldsver | 4.6.1 | | ontime0 | 8163.1999696493 | Sum of GTIs [s] |
| date | 2014-06-06T16:36:41 | Date and time of file creation | ontime1 | 8163.1999696493 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 8163.1999696493 | Sum of GTIs [s] |
| | | | ontime3 | 8163.1999696493 | Sum of GTIs [s] |
| | | | ontime5 | 8163.1999696493 | Sum of GTIs [s] |
| | | | ontime7 | 8163.1999696493 | Sum of GTIs [s] |
| | | | l1events | 838365 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|-------|-------|
| level 1 events | 134912 | 150976 | 152252 | 152575 | 127728 | 119922 | grade 0 events | 13182 | 12598 | 13460 | 13606 | 7210 | 7023 |
| rejected events | 108960 | 124884 | 126167 | 126341 | 71002 | 68428 | | 9% | 8% | 8% | 8% | 5% | 5% |
| rejected % | 80% | 82% | 82% | 82% | 55% | 57% | grade 1 events | 64 | 47 | 67 | 72 | 198 | 86 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 5405 | 5834 | 5275 | 5161 | 20570 | 13021 |
| | | | | | | | | 4% | 3% | 3% | 3% | 16% | 10% |
| | | | | | | | grade 3 events | 1803 | 1760 | 1781 | 1870 | 1852 | 4128 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 1767 | 1842 | 1835 | 1804 | 1817 | 4036 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 2857 | 2887 | 2676 | 3114 | 5721 | 7497 |
| | | | | | | | | 2% | 1% | 1% | 2% | 4% | 6% |
| | | | | | | | grade 6 events | 4169 | 4437 | 4129 | 4204 | 26129 | 24023 |
| | | | | | | | | 3% | 2% | 2% | 2% | 20% | 20% |
| | | | | | | | grade 7 events | 105665 | 121571 | 123029 | 122744 | 64231 | 60108 |
| | | | | | | | | 78% | 80% | 80% | 80% | 50% | 50% |

2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|----------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-012357 | ACIS-012357 |
| Grating | NONE | NONE |
| Data mode | FAINT | FAINT |
| Observation mode | SECONDARY | SECONDARY |
| [deg] Pointing RA | 0 | 285.3213732264253 |
| [deg] Pointing Dec | 0 | -11.76287046987949 |
| [deg] Pointing Roll | 0.0 | 113.4647562120851 |
| SIM focus pos (mm) | -1.4281808131 | -1.4281808131 |
| [mm] SIM defocus | 0.1051557500557434 | 0.1051557500557434 |
| SIM translation stage pos (mm) | 250.4660330802 | 250.4660330802 |
| [mm] SIM translation stage offset | -0.01005726120527584 | -0.01005726120527584 |
| [s] Observation start time (MET) | 518403176.036946 | 518403176.036946 |
| Observation start date | 2014-06-06T00:52:56 | 2014-06-06T00:52:56 |
| [s] Observation end time (MET) | 518412724.110545 | 518412724.110545 |
| Observation end date | 2014-06-06T03:32:04 | 2014-06-06T03:32:04 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|----------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | OVERRIDE | OVERRIDE |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 3.2 | 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) | 2014.06.06 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.1631999696493 |

A.2 Comments