

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 52537 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Aug 17 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 |

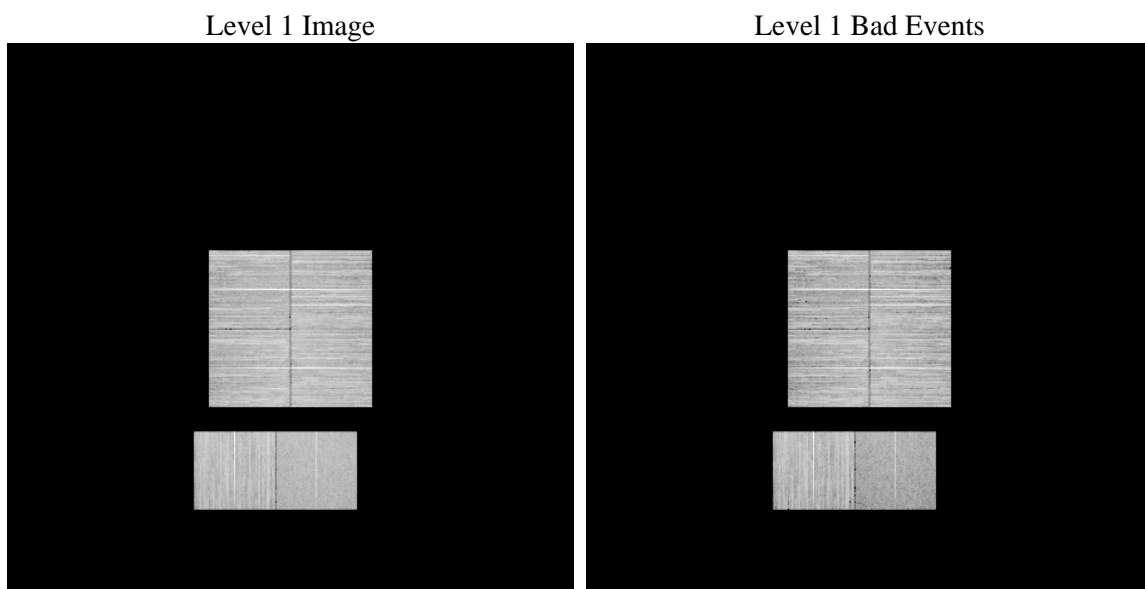
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 52537 | 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 | 130.03597466419 | Nominal RA [deg] |
| dec_nom | -33.146162400123 | Nominal Dec [deg] |
| roll_nom | 153.6926699152 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8021.4551840425 | Sum of GTIs [s] |
| livetime | 7919.8826885617 | Livetime [s] |
| ontime0 | 8021.4141440392 | Sum of GTIs [s] |
| ontime1 | 8021.3731040359 | Sum of GTIs [s] |
| ontime2 | 8021.3320640326 | Sum of GTIs [s] |
| ontime3 | 8021.4962240458 | Sum of GTIs [s] |
| ontime6 | 8021.2910240293 | Sum of GTIs [s] |
| ontime7 | 8021.4551840425 | Sum of GTIs [s] |
| l2events | 164753 | Number of level 2 events |

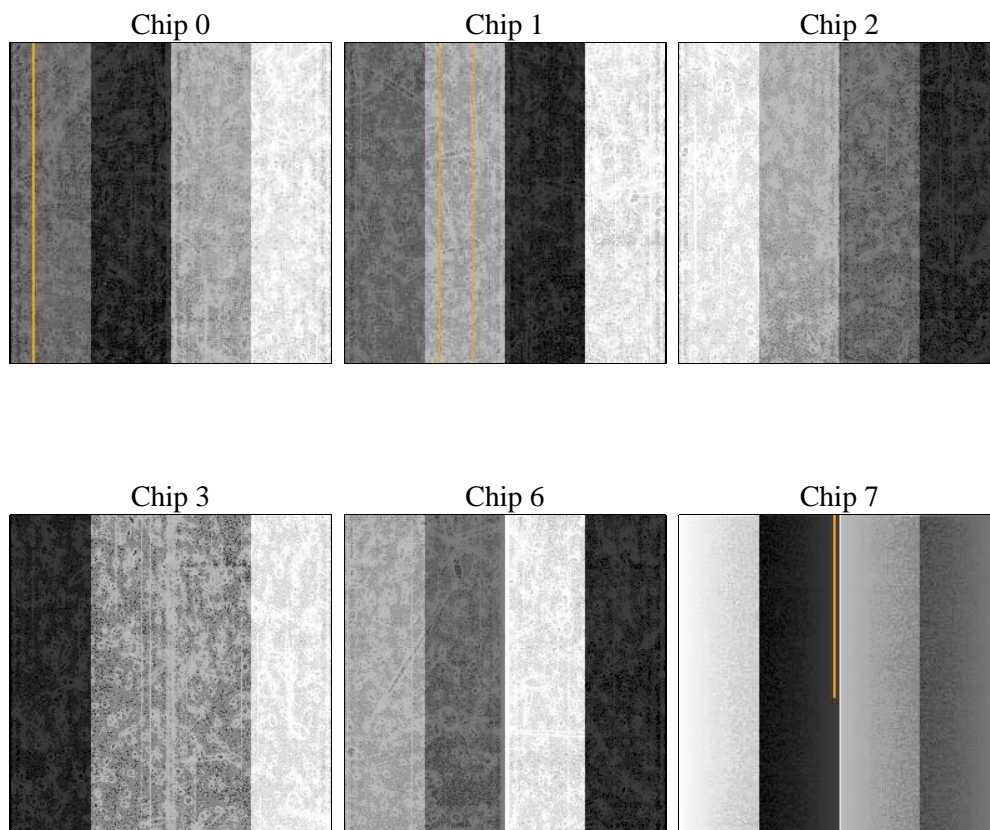
2 OBI

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 | 10.2.4 | Processing system revision | ontime | 8021.4551840425 | Sum of GTIs [s] |
| caldsver | 4.6.2 | | ontime0 | 8021.4141440392 | Sum of GTIs [s] |
| date | 2014-08-17T13:42:55 | Date and time of file creation | ontime1 | 8021.3731040359 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 8021.3320640326 | Sum of GTIs [s] |
| | | | ontime3 | 8021.4962240458 | Sum of GTIs [s] |
| | | | ontime6 | 8021.2910240293 | Sum of GTIs [s] |
| | | | ontime7 | 8021.4551840425 | Sum of GTIs [s] |
| | | | l1events | 867036 | 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 | 138421 | 152445 | 149723 | 157125 | 148439 | 120883 | grade 0 events | 12529 | 11952 | 12712 | 12937 | 12624 | 6921 |
| rejected events | 113479 | 127836 | 125220 | 132310 | 122696 | 70549 | | 9% | 7% | 8% | 8% | 8% | 5% |
| rejected % | 81% | 83% | 83% | 84% | 82% | 58% | grade 1 events | 65 | 59 | 72 | 73 | 57 | 113 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 5296 | 5267 | 4945 | 4856 | 5329 | 12705 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 10% |
| | | | | | | | grade 3 events | 1800 | 1716 | 1775 | 1807 | 1765 | 4310 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 1747 | 1833 | 1845 | 1817 | 1776 | 4211 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 2903 | 2957 | 2673 | 3113 | 3093 | 7741 |
| | | | | | | | | 2% | 1% | 1% | 1% | 2% | 6% |
| | | | | | | | grade 6 events | 4128 | 4357 | 3783 | 3977 | 4786 | 23995 |
| | | | | | | | | 2% | 2% | 2% | 2% | 3% | 19% |
| | | | | | | | grade 7 events | 109953 | 124304 | 121918 | 128545 | 119009 | 60887 |
| | | | | | | | | 79% | 81% | 81% | 81% | 80% | 50% |

2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|----------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-012367 | ACIS-012367 |
| Grating | NONE | NONE |
| Data mode | FAINT | FAINT |
| Observation mode | SECONDARY | SECONDARY |
| [deg] Pointing RA | 0 | 130.0359746641917 |
| [deg] Pointing Dec | 0 | -33.14616240012328 |
| [deg] Pointing Roll | 0.0 | 153.692669915195 |
| 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) | 524610652.230665 | 524610652.230665 |
| Observation start date | 2014-08-16T21:10:52 | 2014-08-16T21:10:52 |
| [s] Observation end time (MET) | 524621073.272113 | 524621073.272113 |
| Observation end date | 2014-08-17T00:04:33 | 2014-08-17T00:04:33 |
| 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 | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2014.08.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.0214551840425 |

A.2 Comments