

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56381 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jun 23 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 |

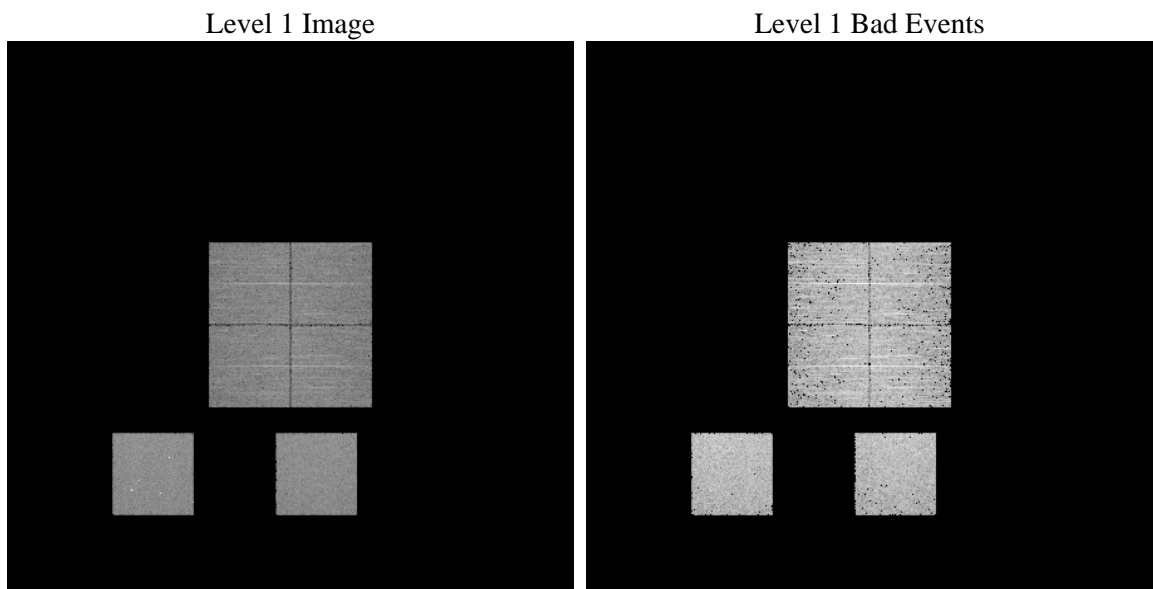
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 56381 | 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 | 187.97018707391 | Nominal RA [deg] |
| dec_nom | 22.991566823075 | Nominal Dec [deg] |
| roll_nom | 164.3083791539 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 3278.5229045749 | Sum of GTIs [s] |
| livetime | 3237.0082734677 | Livetime [s] |
| ontime0 | 3278.4818645716 | Sum of GTIs [s] |
| ontime1 | 3278.4408245683 | Sum of GTIs [s] |
| ontime2 | 3278.399784565 | Sum of GTIs [s] |
| ontime3 | 3278.5639445782 | Sum of GTIs [s] |
| ontime5 | 3278.3587445617 | Sum of GTIs [s] |
| ontime7 | 3278.5229045749 | Sum of GTIs [s] |
| l2events | 174856 | Number of level 2 events |

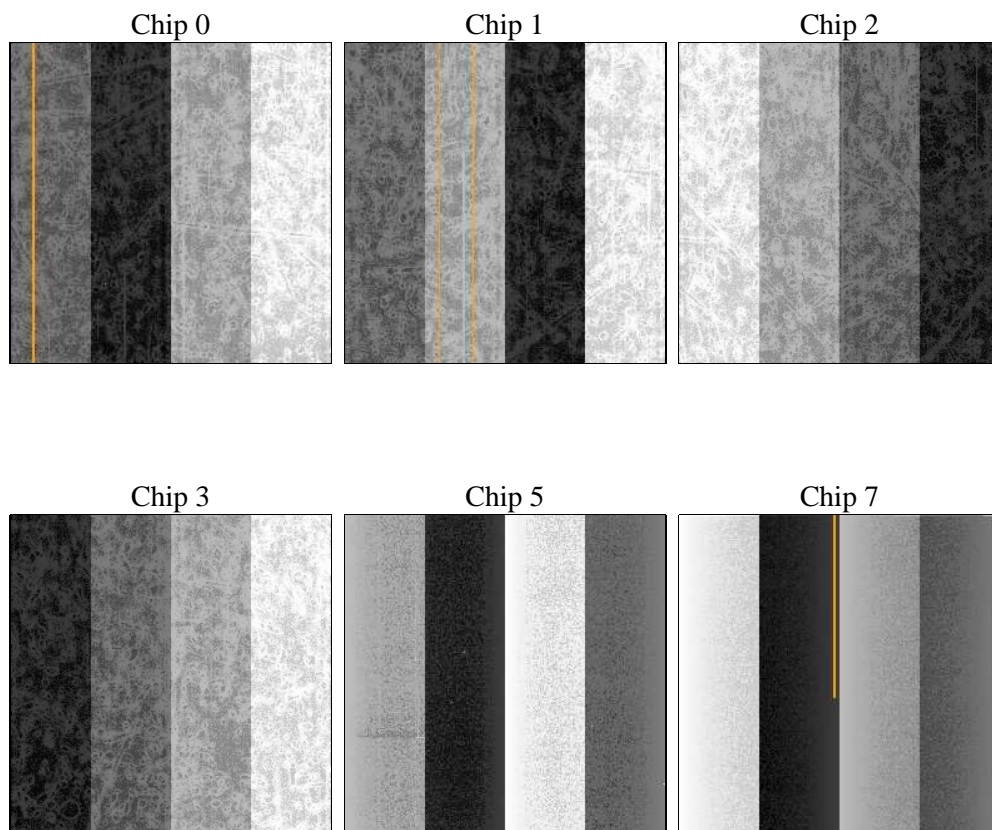
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 0.0 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 3278.5229045749 | Sum of GTIs [s] |
| caldsver | 4.4.10 | | ontime0 | 3278.4818645716 | Sum of GTIs [s] |
| date | 2012-06-23T05:59:49 | Date and time of file creation | ontime1 | 3278.4408245683 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 3278.399784565 | Sum of GTIs [s] |
| | | | ontime3 | 3278.5639445782 | Sum of GTIs [s] |
| | | | ontime5 | 3278.3587445617 | Sum of GTIs [s] |
| | | | ontime7 | 3278.5229045749 | Sum of GTIs [s] |
| | | | l1events | 349632 | 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 | 52656 | 51407 | 52484 | 54665 | 71160 | 67260 | grade 0 events | 13630 | 13245 | 13949 | 14003 | 7291 | 7177 |
| rejected events | 26837 | 25780 | 26748 | 28812 | 28159 | 27166 | | 25% | 25% | 26% | 25% | 10% | 10% |
| rejected % | 50% | 50% | 50% | 52% | 39% | 40% | grade 1 events | 95 | 76 | 116 | 99 | 158 | 58 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4704 | 4935 | 4479 | 4540 | 14982 | 8771 |
| | | | | | | | | 8% | 9% | 8% | 8% | 21% | 13% |
| | | | | | | | grade 3 events | 1735 | 1749 | 1751 | 1741 | 1859 | 3580 |
| | | | | | | | | 3% | 3% | 3% | 3% | 2% | 5% |
| | | | | | | | grade 4 events | 1752 | 1771 | 1794 | 1810 | 1707 | 3601 |
| | | | | | | | | 3% | 3% | 3% | 3% | 2% | 5% |
| | | | | | | | grade 5 events | 1623 | 1645 | 1495 | 1813 | 3655 | 4374 |
| | | | | | | | | 3% | 3% | 2% | 3% | 5% | 6% |
| | | | | | | | grade 6 events | 3998 | 3927 | 3763 | 3759 | 17162 | 16965 |
| | | | | | | | | 7% | 7% | 7% | 6% | 24% | 25% |
| | | | | | | | grade 7 events | 25119 | 24059 | 25137 | 26900 | 24346 | 22734 |
| | | | | | | | | 47% | 46% | 47% | 49% | 34% | 33% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012357 | ACIS-012357 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | SECONDARY | SECONDARY | On-chip summing requested | N | N |
| [deg] Pointing RA | 0 | 187.9701870739113 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | 22.99156682307497 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 164.3083791538976 | [s] Primary exposure time | 3.2 | 3.2 |
| [mm] SIM focus pos | -1.429586 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.8505141146731063 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 385650414.501795 | 385650413.47681 | | | |
| Observation start date | 2010-03-22T13:06:55 | 2010-03-22T13:06:53 | | | |
| [s] Observation end time (MET) | 385656363.602097 | 385656362.57712 | | | |
| Observation end date | 2010-03-22T14:46:04 | 2010-03-22T14:46:02 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2012.06.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.2785229045749 |

A.2 Comments