

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56506 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jun 19 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 |

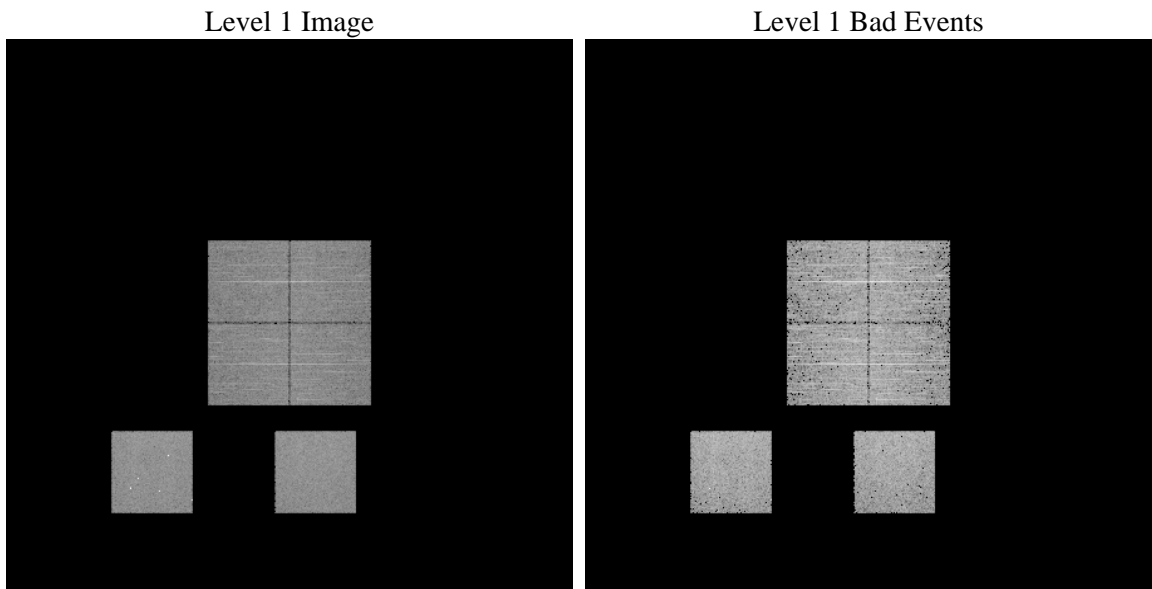
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 56506 | 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 | 139.36436590296 | Nominal RA [deg] |
| dec_nom | 38.509340145965 | Nominal Dec [deg] |
| roll_nom | 131.13648507812 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 3272.700479269 | Sum of GTIs [s] |
| livetime | 3231.2595752169 | Livetime [s] |
| ontime0 | 3272.6594392657 | Sum of GTIs [s] |
| ontime1 | 3272.6183992624 | Sum of GTIs [s] |
| ontime2 | 3272.5773592591 | Sum of GTIs [s] |
| ontime3 | 3272.7415192723 | Sum of GTIs [s] |
| ontime5 | 3272.5363192558 | Sum of GTIs [s] |
| ontime7 | 3272.700479269 | Sum of GTIs [s] |
| l2events | 184250 | Number of level 2 events |

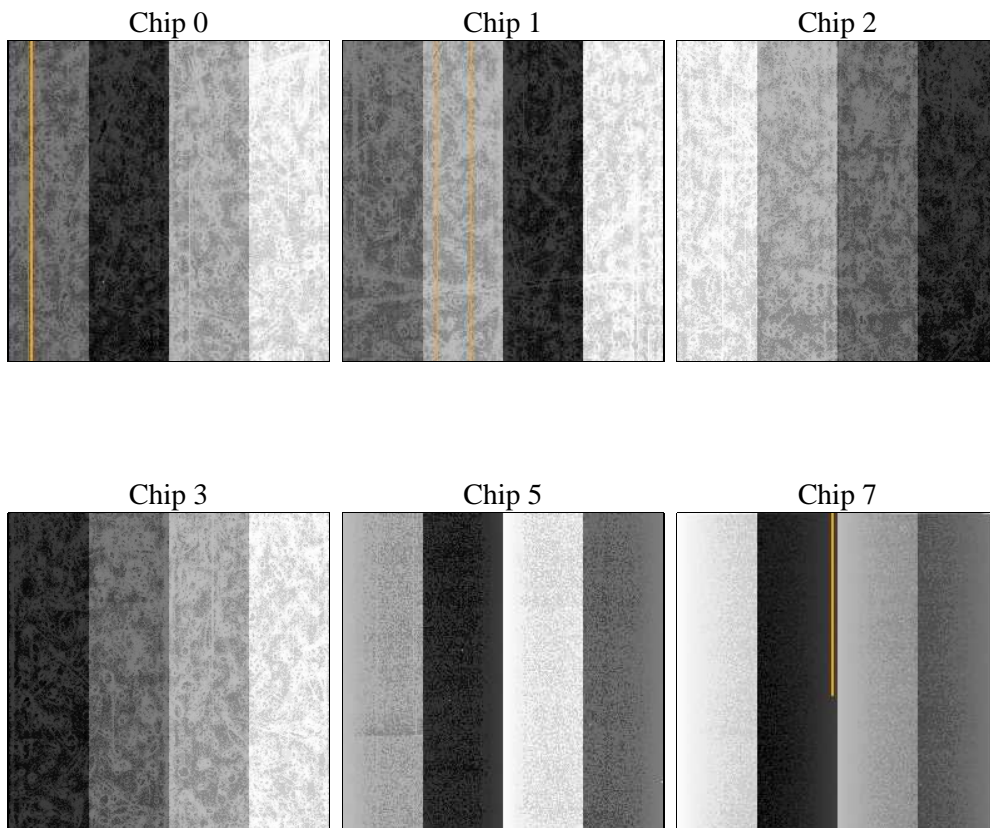
2 OBI

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 | 3272.700479269 | Sum of GTIs [s] |
| caldsver | 4.4.10 | | ontime0 | 3272.6594392657 | Sum of GTIs [s] |
| date | 2012-06-20T01:30:56 | Date and time of file creation | ontime1 | 3272.6183992624 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime2 | 3272.5773592591 | Sum of GTIs [s] |
| | | | ontime3 | 3272.7415192723 | Sum of GTIs [s] |
| | | | ontime5 | 3272.5363192558 | Sum of GTIs [s] |
| | | | ontime7 | 3272.700479269 | Sum of GTIs [s] |
| | | | l1events | 377440 | 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 | 55015 | 57321 | 57652 | 58581 | 76602 | 72269 | grade 0 events | 14117 | 14043 | 14398 | 14450 | 8201 | 7624 |
| rejected events | 28452 | 30058 | 31176 | 31554 | 30360 | 29383 | | 25% | 24% | 24% | 24% | 10% | 10% |
| rejected % | 51% | 52% | 54% | 53% | 39% | 40% | grade 1 events | 106 | 109 | 129 | 118 | 324 | 55 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4862 | 5149 | 4554 | 4837 | 15702 | 9580 |
| | | | | | | | | 8% | 8% | 7% | 8% | 20% | 13% |
| | | | | | | | grade 3 events | 1808 | 1841 | 1821 | 1901 | 1972 | 3866 |
| | | | | | | | | 3% | 3% | 3% | 3% | 2% | 5% |
| | | | | | | | grade 4 events | 1730 | 1888 | 1798 | 1867 | 1890 | 3795 |
| | | | | | | | | 3% | 3% | 3% | 3% | 2% | 5% |
| | | | | | | | grade 5 events | 1618 | 1707 | 1603 | 1906 | 4011 | 4691 |
| | | | | | | | | 2% | 2% | 2% | 3% | 5% | 6% |
| | | | | | | | grade 6 events | 4046 | 4342 | 3905 | 3972 | 18477 | 18021 |
| | | | | | | | | 7% | 7% | 6% | 6% | 24% | 24% |
| | | | | | | | grade 7 events | 26728 | 28242 | 29444 | 29530 | 26025 | 24637 |
| | | | | | | | | 48% | 49% | 51% | 50% | 33% | 34% |

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 | 139.364365902964 |
| [deg] Pointing Dec | 0 | 38.50934014596467 |
| [deg] Pointing Roll | 0.0 | 131.1364850781221 |
| [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) | 380166883.57381 | 380166882.54883 |
| Observation start date | 2010-01-18T01:54:44 | 2010-01-18T01:54:42 |
| [s] Observation end time (MET) | 380187252.37484 | 380187251.34986 |
| Observation end date | 2010-01-18T07:34:12 | 2010-01-18T07:34:11 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| 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) | 2012.06.25 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.272700479269 |

A.2 Comments