

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 55457 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Feb 9 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 |

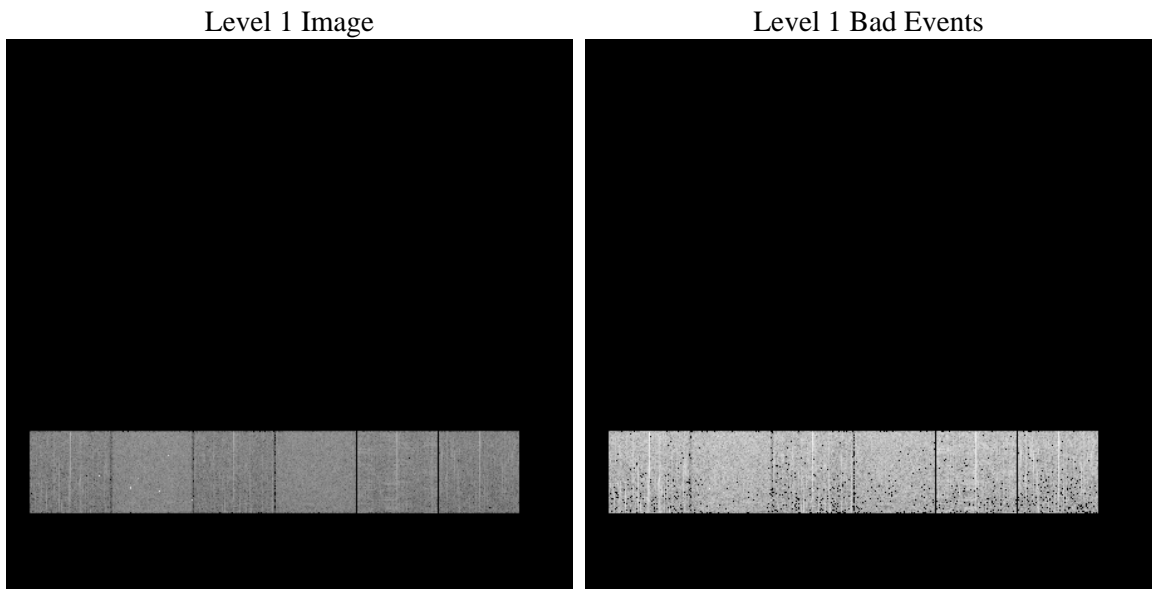
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 55457 | Observation id |
| title | ACIS-456789 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 | 287.97383673021 | Nominal RA [deg] |
| dec_nom | -58.956353370578 | Nominal Dec [deg] |
| roll_nom | 77.040315750839 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 3283.0547062159 | Sum of GTIs [s] |
| livetime | 3241.4826907075 | Livetime [s] |
| ontime4 | 3282.931586206 | Sum of GTIs [s] |
| ontime5 | 3283.0136662126 | Sum of GTIs [s] |
| ontime6 | 3282.9726262093 | Sum of GTIs [s] |
| ontime7 | 3283.0547062159 | Sum of GTIs [s] |
| ontime8 | 3282.8905462027 | Sum of GTIs [s] |
| ontime9 | 3283.0957462192 | Sum of GTIs [s] |
| l2events | 138885 | Number of level 2 events |

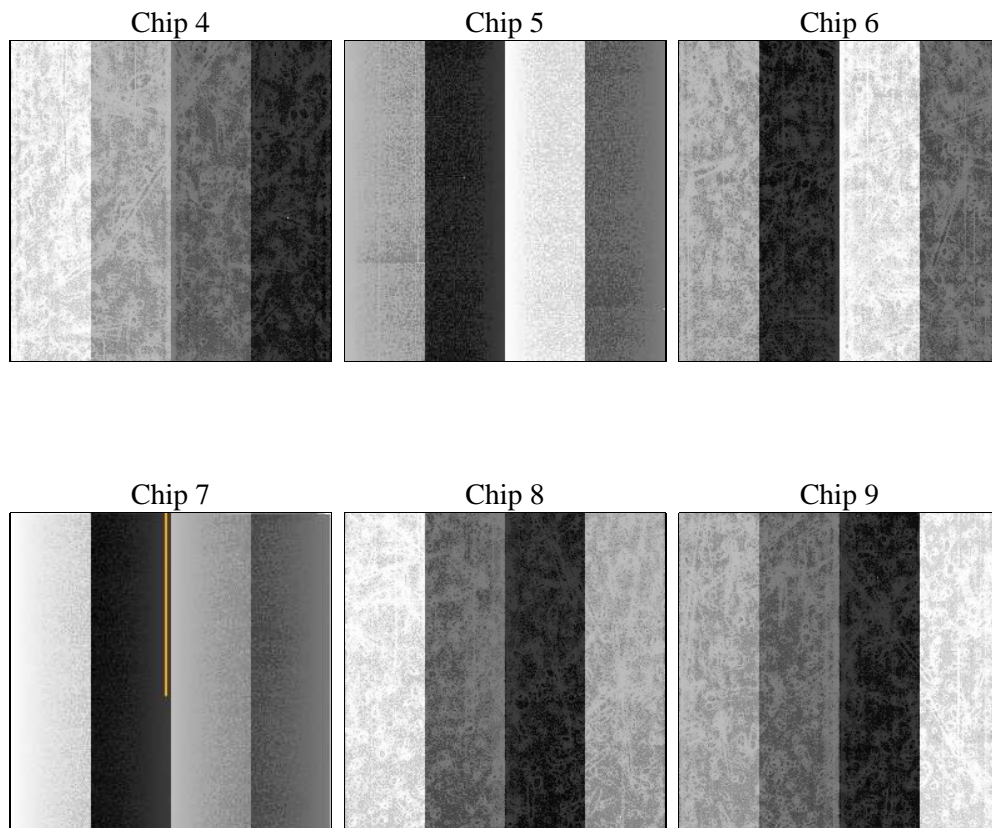
2 OBI

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 | 8.4.3 | Processing system revision | ontime | 3283.0547062159 | Sum of GTIs [s] |
| caldsver | 4.4.7 | | ontime4 | 3282.931586206 | Sum of GTIs [s] |
| date | 2012-02-09T16:11:21 | Date and time of file creation | ontime5 | 3283.0136662126 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 3282.9726262093 | Sum of GTIs [s] |
| | | | ontime7 | 3283.0547062159 | Sum of GTIs [s] |
| | | | ontime8 | 3282.8905462027 | Sum of GTIs [s] |
| | | | ontime9 | 3283.0957462192 | Sum of GTIs [s] |
| | | | l1events | 302280 | Number of level 1 events |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 | | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|-------|-------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| level 1 events | 46138 | 59370 | 44427 | 55531 | 51939 | 44875 | grade 0 events | 11794 | 5680 | 10755 | 5661 | 11976 | 10743 |
| rejected events | 25664 | 24298 | 23538 | 23279 | 26652 | 24599 | | 25% | 9% | 24% | 10% | 23% | 23% |
| rejected % | 55% | 40% | 52% | 41% | 51% | 54% | grade 1 events | 98 | 112 | 60 | 50 | 81 | 62 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3285 | 12006 | 3906 | 7004 | 4872 | 3594 |
| | | | | | | | | 7% | 20% | 8% | 12% | 9% | 8% |
| | | | | | | | grade 3 events | 1346 | 1442 | 1403 | 2934 | 1974 | 1347 |
| | | | | | | | | 2% | 2% | 3% | 5% | 3% | 3% |
| | | | | | | | grade 4 events | 1459 | 1294 | 1340 | 2920 | 1880 | 1391 |
| | | | | | | | | 3% | 2% | 3% | 5% | 3% | 3% |
| | | | | | | | grade 5 events | 1456 | 3174 | 1488 | 3663 | 1978 | 1627 |
| | | | | | | | | 3% | 5% | 3% | 6% | 3% | 3% |
| | | | | | | | grade 6 events | 2590 | 14650 | 3485 | 13733 | 4585 | 3201 |
| | | | | | | | | 5% | 24% | 7% | 24% | 8% | 7% |
| | | | | | | | grade 7 events | 24110 | 21012 | 21990 | 19566 | 24593 | 22910 |
| | | | | | | | | 52% | 35% | 49% | 35% | 47% | 51% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-456789 | ACIS-456789 | 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 | 287.9738367302057 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -58.95635337057847 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 77.04031575083926 | [s] Primary exposure time | 3.2 | 3.2 |
| [mm] SIM focus pos | -1.429586 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 421066778.021477 | 421066776.99647 | | | |
| Observation start date | 2011-05-06T10:59:38 | 2011-05-06T10:59:36 | | | |
| [s] Observation end time (MET) | 421076347.421974 | 421076346.39697 | | | |
| Observation end date | 2011-05-06T13:39:07 | 2011-05-06T13:39:06 | | | |
| 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) | 2012.02.12 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 3.2830547062159 |

A.2 Comments