

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 62080 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Jan 17 2013

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 |

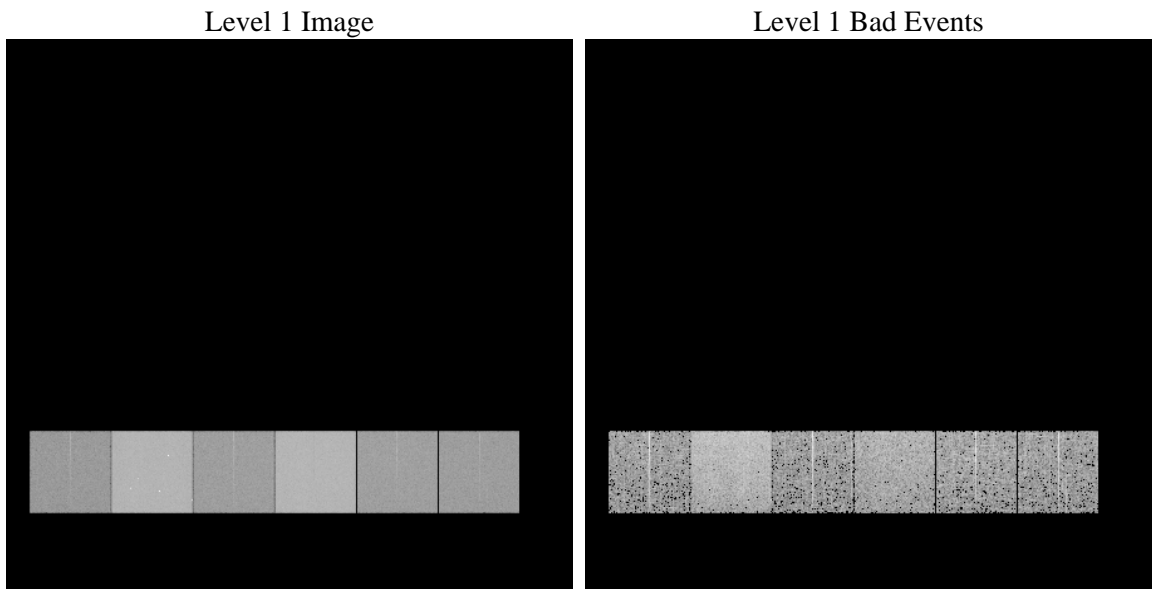
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 62080 | Observation id |
| title | ACIS-456789 diagnostics | Proposal title |
| observer | CHANDRA engineering request/realtime commanding | Principal investig |
| object | | Source name |
| dtycle | 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 | 63.046422862676 | Nominal RA [deg] |
| dec_nom | 52.992971015663 | Nominal Dec [deg] |
| roll_nom | 313.63588285628 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 4156.1770076901 | Sum of GTIs [s] |
| livetime | 4103.5489918694 | Livetime [s] |
| ontime4 | 1620.3606766611 | Sum of GTIs [s] |
| ontime5 | 4473.7919473052 | Sum of GTIs [s] |
| ontime6 | 1798.5768361837 | Sum of GTIs [s] |
| ontime7 | 4156.1770076901 | Sum of GTIs [s] |
| ontime8 | 1876.4438759834 | Sum of GTIs [s] |
| ontime9 | 1782.2484663874 | Sum of GTIs [s] |
| l2events | 1278350 | Number of level 2 events |

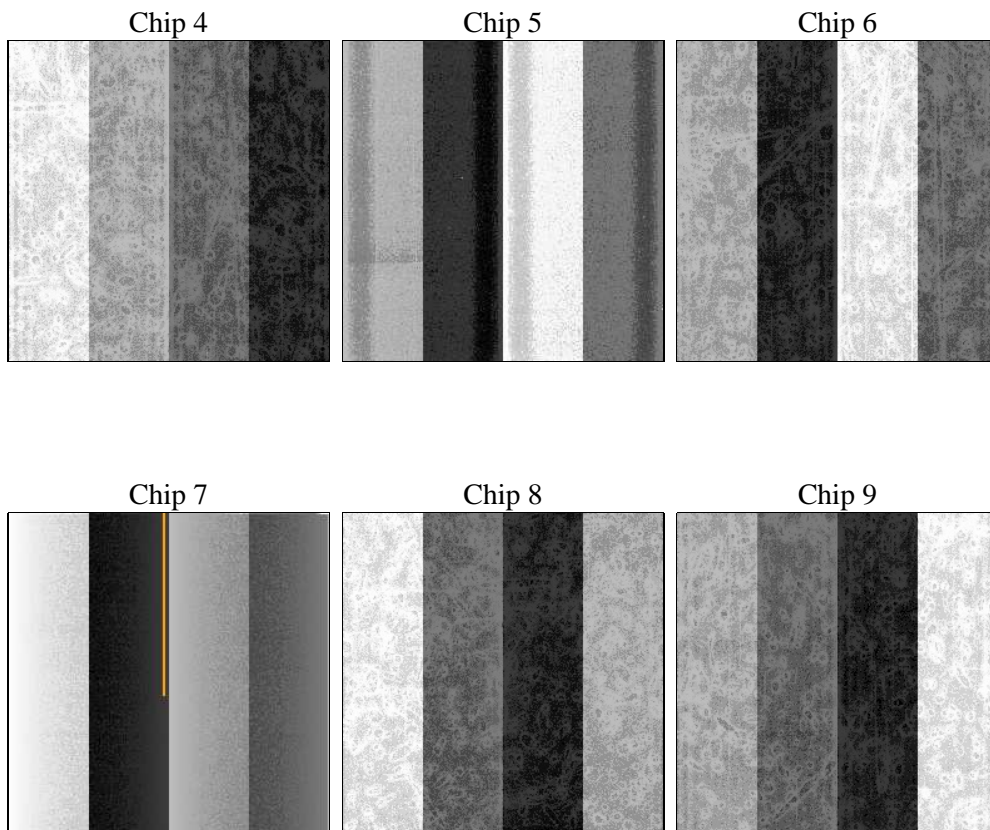
2 OBI

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 | 8.5.1.1 | Processing system revision | ontime | 4156.1770076901 | Sum of GTIs [s] |
| caldbver | 4.5.5 | | ontime4 | 1620.3606766611 | Sum of GTIs [s] |
| date | 2013-01-17T20:38:45 | Date and time of file creation | ontime5 | 4473.7919473052 | Sum of GTIs [s] |
| revision | 5 | Processing version of data | ontime6 | 1798.5768361837 | Sum of GTIs [s] |
| | | | ontime7 | 4156.1770076901 | Sum of GTIs [s] |
| | | | ontime8 | 1876.4438759834 | Sum of GTIs [s] |
| | | | ontime9 | 1782.2484663874 | Sum of GTIs [s] |
| | | | l1events | 1463135 | 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 | 150649 | 383329 | 178140 | 393221 | 187056 | 170740 | grade 0 events | 75611 | 95509 | 87887 | 95978 | 92227 | 84021 |
| rejected events | 16981 | 34574 | 17069 | 23927 | 19566 | 17311 | | 50% | 24% | 49% | 24% | 49% | 49% |
| rejected % | 11% | 9% | 9% | 6% | 10% | 10% | grade 1 events | 518 | 335 | 535 | 263 | 516 | 532 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 23395 | 116004 | 27850 | 82159 | 29563 | 26871 |
| | | | | | | | | 15% | 30% | 15% | 20% | 15% | 15% |
| | | | | | | | grade 3 events | 8203 | 24793 | 9790 | 38129 | 10696 | 9517 |
| | | | | | | | | 5% | 6% | 5% | 9% | 5% | 5% |
| | | | | | | | grade 4 events | 8130 | 24380 | 9965 | 37667 | 10436 | 9518 |
| | | | | | | | | 5% | 6% | 5% | 9% | 5% | 5% |
| | | | | | | | grade 5 events | 1239 | 7228 | 1312 | 5254 | 1523 | 1385 |
| | | | | | | | | 0% | 1% | 0% | 1% | 0% | 0% |
| | | | | | | | grade 6 events | 18329 | 88320 | 25579 | 115656 | 24568 | 23502 |
| | | | | | | | | 12% | 23% | 14% | 29% | 13% | 13% |
| | | | | | | | grade 7 events | 15224 | 26760 | 15222 | 18115 | 17527 | 15394 |
| | | | | | | | | 10% | 6% | 8% | 4% | 9% | 9% |

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 | On-chip summing requested | N | N |
| Observation mode | SECONDARY | SECONDARY | Subarray requested | NONE | NONE |
| [deg] Pointing RA | 0 | 63.04642286267617 | Alternating exposures requested | N | N |
| [deg] Pointing Dec | 0 | 52.99297101566311 | [s] Primary exposure time | 3.2 | 3.2 |
| [deg] Pointing Roll | 0.0 | 313.6358828562758 | | | |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0 | 0.8505141146731063 | | | |
| [mm] SIM translation stage pos | -190.132523 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 72637996.081715 | 72637995.31324799 | | | |
| Observation start date | 2000-04-20T17:13:16 | 2000-04-20T17:13:15 | | | |
| [s] Observation end time (MET) | 72682056.73333099 | 72682055.964864 | | | |
| Observation end date | 2000-04-21T05:27:37 | 2000-04-21T05:27:35 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2013.01.25 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.1561770076901 |

A.2 Comments