

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 60048 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Dec 8 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 |

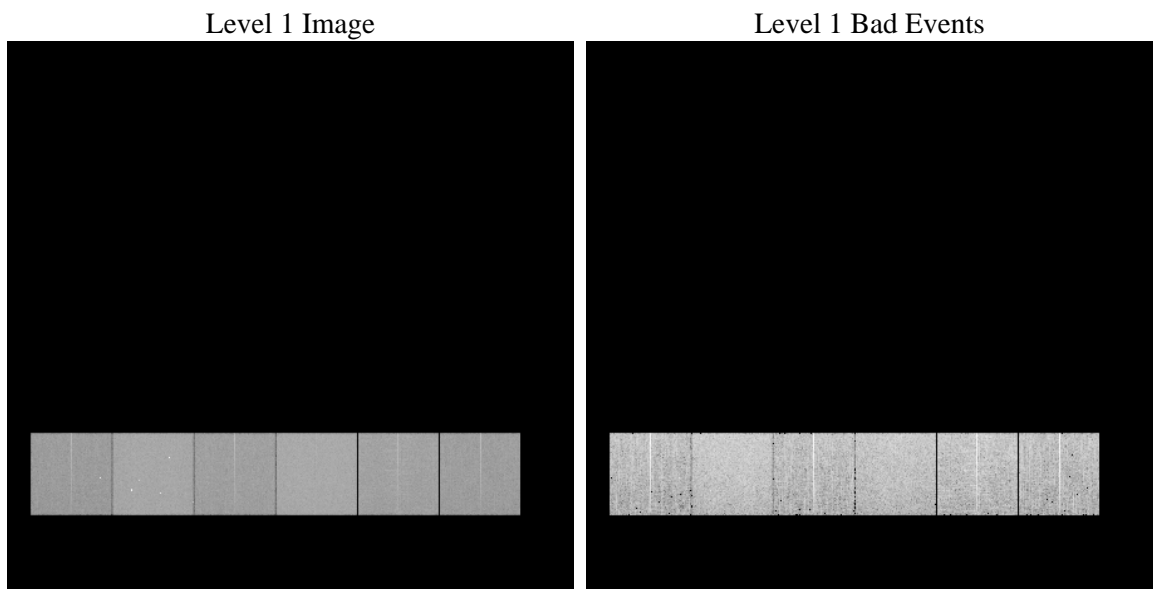
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 60048 | 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 | 114.99731338601 | Nominal RA [deg] |
| dec_nom | 39.028765302452 | Nominal Dec [deg] |
| roll_nom | 69.870798563493 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 7798.3999709487 | Sum of GTIs [s] |
| livetime | 7699.6519348838 | Livetime [s] |
| ontime4 | 5247.7387634814 | Sum of GTIs [s] |
| ontime5 | 7798.3999709487 | Sum of GTIs [s] |
| ontime6 | 5769.5569460988 | Sum of GTIs [s] |
| ontime7 | 7798.3999709487 | Sum of GTIs [s] |
| ontime8 | 5989.8790039122 | Sum of GTIs [s] |
| ontime9 | 5503.7982229292 | Sum of GTIs [s] |
| l2events | 1061537 | Number of level 2 events |

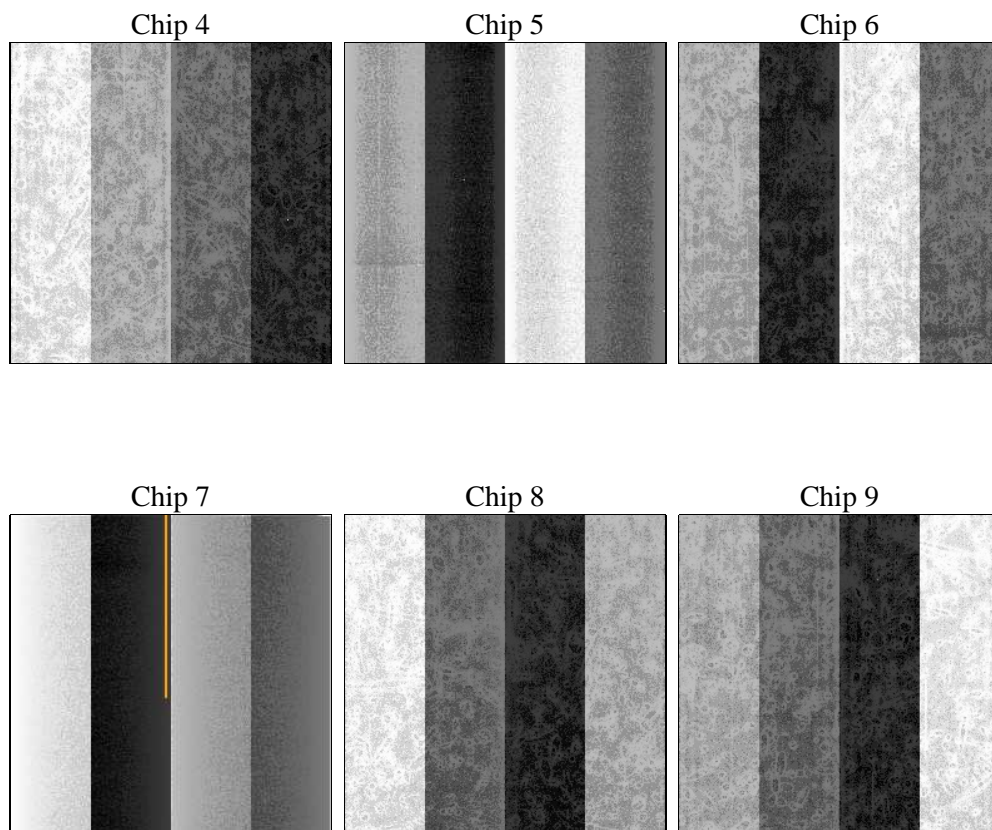
2 OBI

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 | Processing system revision | ontime | 7798.3999709487 | Sum of GTIs [s] |
| caldsver | 4.5.4 | | ontime4 | 5247.7387634814 | Sum of GTIs [s] |
| date | 2012-12-09T01:14:40 | Date and time of file creation | ontime5 | 7798.3999709487 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 5769.5569460988 | Sum of GTIs [s] |
| | | | ontime7 | 7798.3999709487 | Sum of GTIs [s] |
| | | | ontime8 | 5989.8790039122 | Sum of GTIs [s] |
| | | | ontime9 | 5503.7982229292 | Sum of GTIs [s] |
| | | | l1events | 1413258 | 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 | 188159 | 280433 | 214657 | 295064 | 234786 | 200159 | grade 0 events | 84776 | 53407 | 92881 | 59290 | 99921 | 85673 |
| rejected events | 42415 | 54876 | 43799 | 49412 | 50707 | 43663 | | 45% | 19% | 43% | 20% | 42% | 42% |
| rejected % | 22% | 19% | 20% | 16% | 21% | 21% | grade 1 events | 648 | 242 | 496 | 198 | 517 | 572 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 23057 | 78409 | 29421 | 54327 | 32242 | 27123 |
| | | | | | | | | 12% | 27% | 13% | 18% | 13% | 13% |
| | | | | | | | grade 3 events | 9747 | 13917 | 10760 | 24448 | 11982 | 9953 |
| | | | | | | | | 5% | 4% | 5% | 8% | 5% | 4% |
| | | | | | | | grade 4 events | 9616 | 13985 | 10759 | 24610 | 12008 | 10027 |
| | | | | | | | | 5% | 4% | 5% | 8% | 5% | 5% |
| | | | | | | | grade 5 events | 2575 | 9005 | 2906 | 8773 | 3671 | 2933 |
| | | | | | | | | 1% | 3% | 1% | 2% | 1% | 1% |
| | | | | | | | grade 6 events | 18617 | 65913 | 27120 | 83079 | 28008 | 23817 |
| | | | | | | | | 9% | 23% | 12% | 28% | 11% | 11% |
| | | | | | | | grade 7 events | 39123 | 45555 | 40314 | 40339 | 46437 | 40061 |
| | | | | | | | | 20% | 16% | 18% | 13% | 19% | 20% |

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 | 114.9973133860132 | Alternating exposures requested | N | N |
| [deg] Pointing Dec | 0 | 39.02876530245228 | [s] Primary exposure time | 3.2 | 3.2 |
| [deg] Pointing Roll | 0.0 | 69.87079856349278 | | | |
| [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) | 211316402.006119 | 211316400.98113 | | | |
| Observation start date | 2004-09-11T19:00:02 | 2004-09-11T19:00:00 | | | |
| [s] Observation end time (MET) | 211336278.807006 | 211336277.78201 | | | |
| Observation end date | 2004-09-12T00:31:19 | 2004-09-12T00:31:17 | | | |
| 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) | 2012.12.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.7983999709487 |

A.2 Comments