

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 61592 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Sep 17 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 |

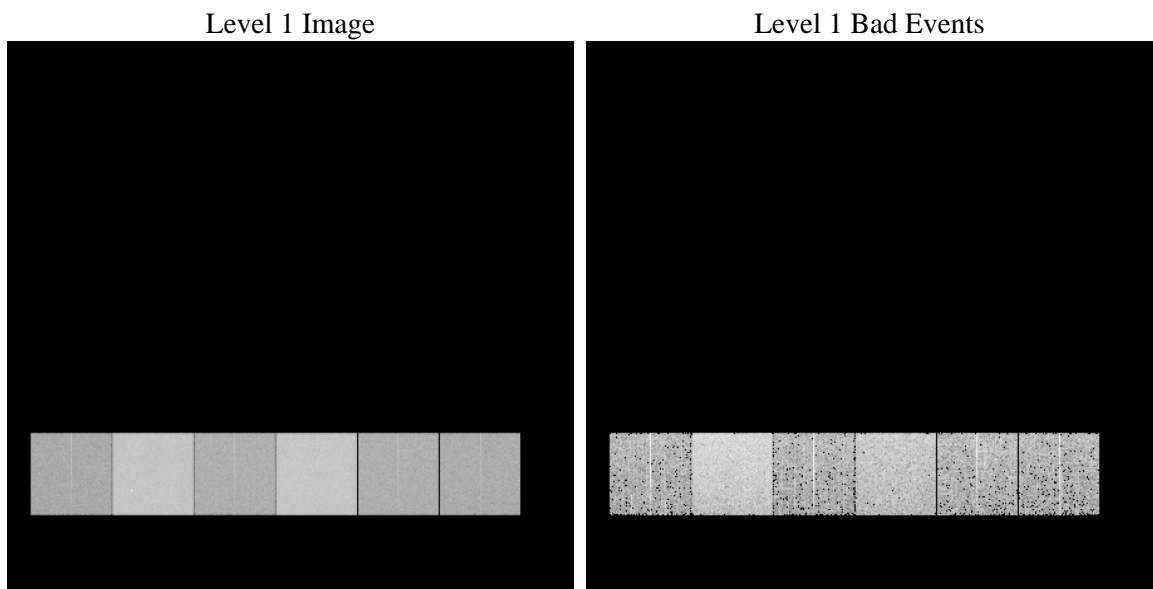
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 61592 | 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 | 154.00248787081 | Nominal RA [deg] |
| dec_nom | -24.028563153489 | Nominal Dec [deg] |
| roll_nom | 241.87055154 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 5967.4909829646 | Sum of GTIs [s] |
| livetime | 5891.9270189467 | Livetime [s] |
| ontime4 | 2297.8953701258 | Sum of GTIs [s] |
| ontime5 | 6447.1113613248 | Sum of GTIs [s] |
| ontime6 | 2566.9012507647 | Sum of GTIs [s] |
| ontime7 | 5967.4909829646 | Sum of GTIs [s] |
| ontime8 | 2544.2140904218 | Sum of GTIs [s] |
| ontime9 | 2414.5725007355 | Sum of GTIs [s] |
| l2events | 1334644 | Number of level 2 events |

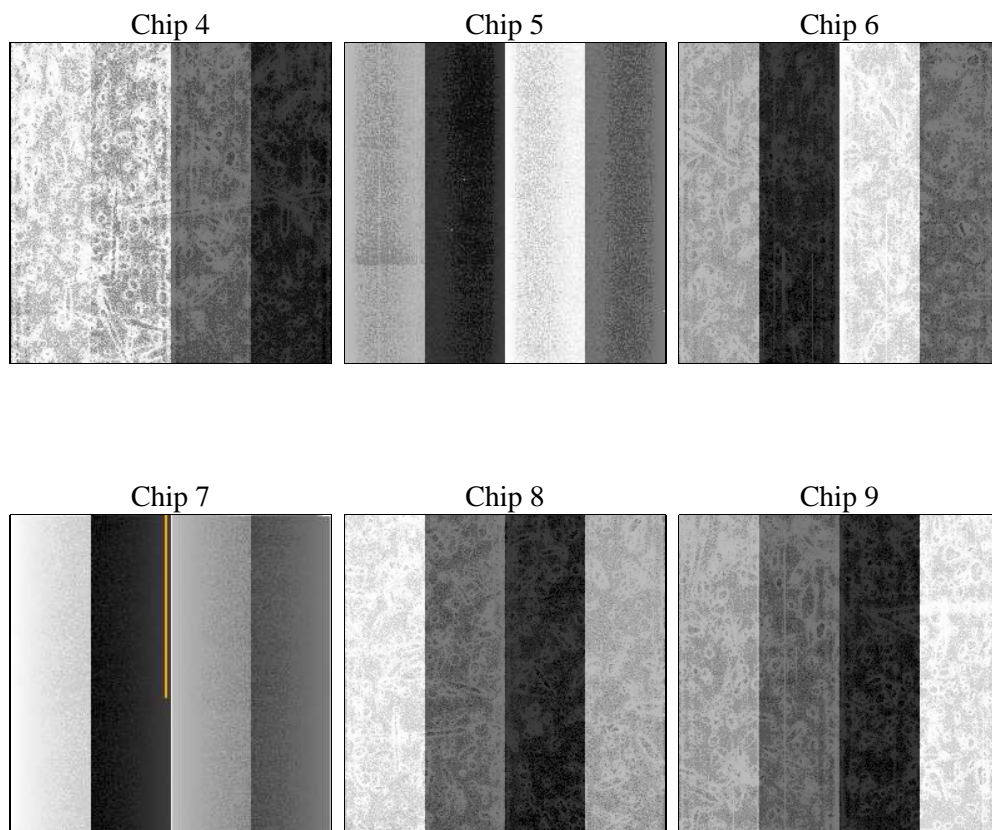
2 OBI

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 | 5967.4909829646 | Sum of GTIs [s] |
| caldsver | 4.5.1.1 | | ontime4 | 2297.8953701258 | Sum of GTIs [s] |
| date | 2012-09-18T01:54:02 | Date and time of file creation | ontime5 | 6447.1113613248 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 2566.9012507647 | Sum of GTIs [s] |
| | | | ontime7 | 5967.4909829646 | Sum of GTIs [s] |
| | | | ontime8 | 2544.2140904218 | Sum of GTIs [s] |
| | | | ontime9 | 2414.5725007355 | Sum of GTIs [s] |
| | | | l1events | 1550272 | 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 | 161348 | 411930 | 190871 | 422776 | 190636 | 172711 | grade 0 events | 80092 | 88850 | 93324 | 100463 | 93400 | 84119 |
| rejected events | 19782 | 46350 | 19796 | 31791 | 21645 | 19177 | | 49% | 21% | 48% | 23% | 48% | 48% |
| rejected % | 12% | 11% | 10% | 7% | 11% | 11% | grade 1 events | 446 | 299 | 482 | 271 | 463 | 416 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 25049 | 131176 | 29842 | 86041 | 29616 | 27194 |
| | | | | | | | | 15% | 31% | 15% | 20% | 15% | 15% |
| | | | | | | | grade 3 events | 8712 | 23509 | 10548 | 39892 | 10919 | 9515 |
| | | | | | | | | 5% | 5% | 5% | 9% | 5% | 5% |
| | | | | | | | grade 4 events | 8589 | 23044 | 10368 | 39581 | 10618 | 9533 |
| | | | | | | | | 5% | 5% | 5% | 9% | 5% | 5% |
| | | | | | | | grade 5 events | 1334 | 8862 | 1582 | 6462 | 1622 | 1483 |
| | | | | | | | | 0% | 2% | 0% | 1% | 0% | 0% |
| | | | | | | | grade 6 events | 19124 | 99175 | 26993 | 125224 | 24438 | 23173 |
| | | | | | | | | 11% | 24% | 14% | 29% | 12% | 13% |
| | | | | | | | grade 7 events | 18002 | 37015 | 17732 | 24842 | 19560 | 17278 |
| | | | | | | | | 11% | 8% | 9% | 5% | 10% | 10% |

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 | 154.0024878708129 | Alternating exposures requested | N | N |
| [deg] Pointing Dec | 0 | -24.02856315348871 | [s] Primary exposure time | 0.000000 | 3.2 |
| [deg] Pointing Roll | 0.0 | 241.8705515399995 | | | |
| [mm] SIM focus pos | -0.684267 | -0.7809083437167272 | | | |
| [mm] SIM defocus | 0 | 0.7524282956875696 | | | |
| [mm] SIM translation stage pos | -190.132523 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 108769028.102 | 108769027.33317 | | | |
| Observation start date | 2001-06-12T21:37:08 | 2001-06-12T21:37:07 | | | |
| [s] Observation end time (MET) | 108790337.852 | 108790337.084 | | | |
| Observation end date | 2001-06-13T03:32:18 | 2001-06-13T03:32:17 | | | |
| 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) | 2012.09.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.9674909829646 |

A.2 Comments