

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 53781 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Apr 12 2013

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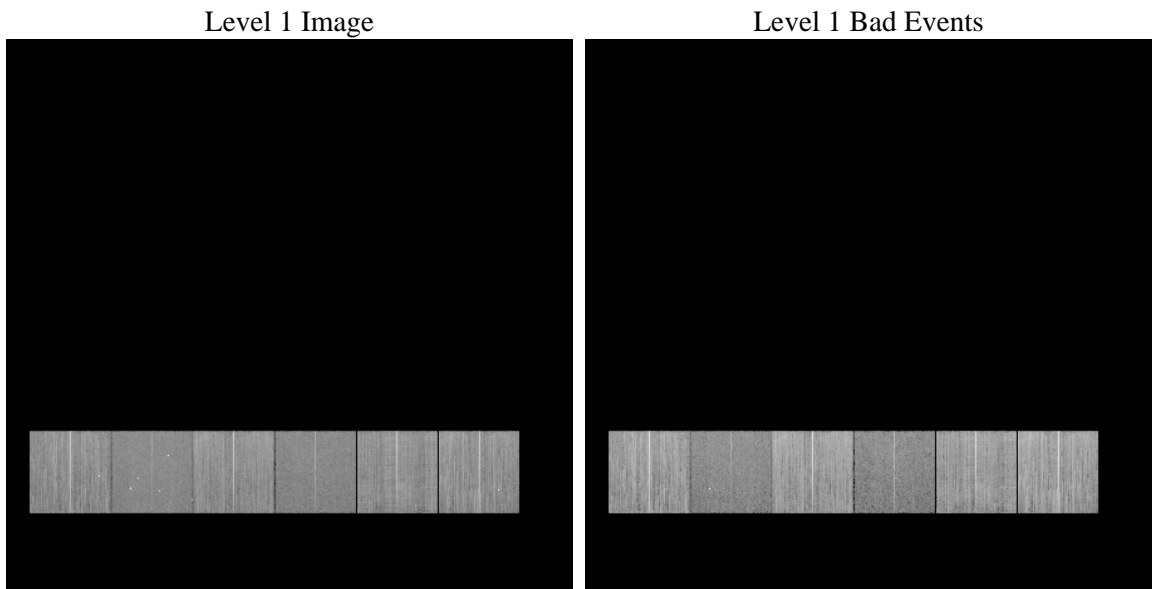
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 53781 | 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 | 226.97470705931 | Nominal RA [deg] |
| dec_nom | -20.125244531103 | Nominal Dec [deg] |
| roll_nom | 69.723134331283 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8275.1999692321 | Sum of GTIs [s] |
| livetime | 8170.4144044945 | Livetime [s] |
| ontime4 | 8275.1999692321 | Sum of GTIs [s] |
| ontime5 | 8275.1999692321 | Sum of GTIs [s] |
| ontime6 | 8275.1999692321 | Sum of GTIs [s] |
| ontime7 | 8275.1999692321 | Sum of GTIs [s] |
| ontime8 | 8275.1999692321 | Sum of GTIs [s] |
| ontime9 | 8275.1999692321 | Sum of GTIs [s] |
| l2events | 269442 | Number of level 2 events |

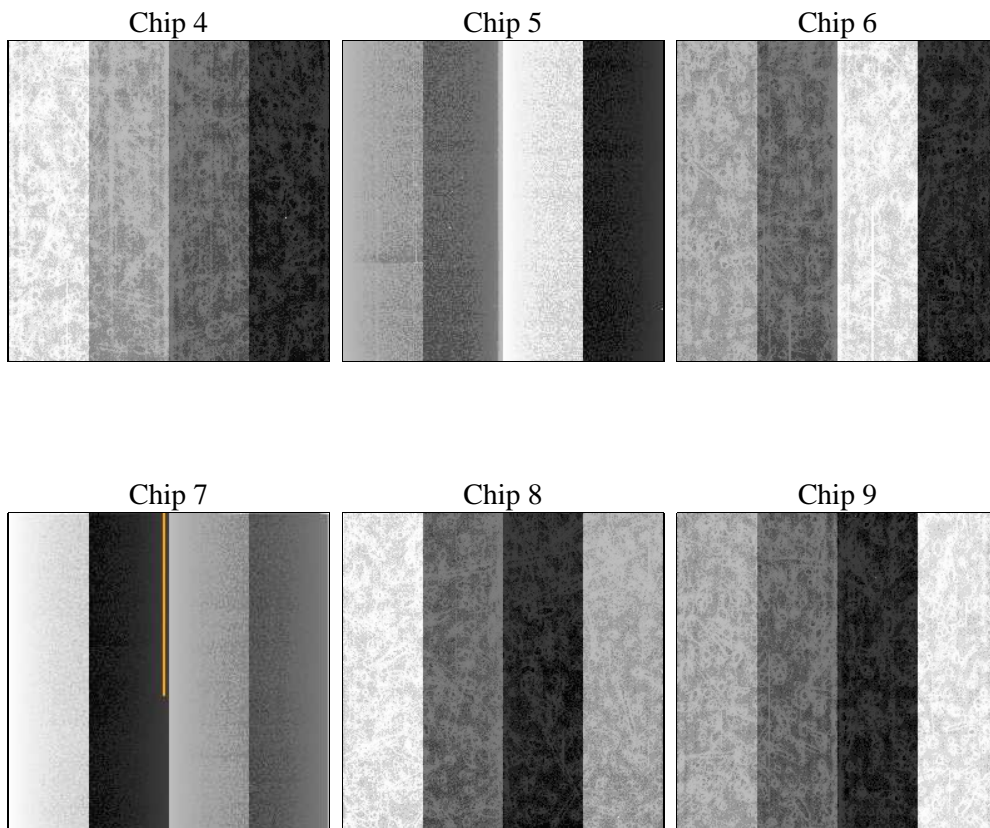
2 OBI

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 | 8275.1999692321 | Sum of GTIs [s] |
| caldsver | 4.5.6 | | ontime4 | 8275.1999692321 | Sum of GTIs [s] |
| date | 2013-04-12T09:28:24 | Date and time of file creation | ontime5 | 8275.1999692321 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime7 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime8 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime9 | 8275.1999692321 | Sum of GTIs [s] |
| | | | l1events | 1177961 | 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 | 204257 | 164134 | 219072 | 146919 | 216442 | 227137 | grade 0 events | 21545 | 11749 | 18785 | 9793 | 24822 | 18599 |
| rejected events | 166180 | 86529 | 181294 | 78984 | 159887 | 188241 | | 10% | 7% | 8% | 6% | 11% | 8% |
| rejected % | 81% | 52% | 82% | 53% | 73% | 82% | grade 1 events | 201 | 271 | 105 | 137 | 153 | 117 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 6902 | 28540 | 7813 | 17382 | 11667 | 9518 |
| | | | | | | | | 3% | 17% | 3% | 11% | 5% | 4% |
| | | | | | | | grade 3 events | 2497 | 2843 | 2434 | 5616 | 4910 | 2506 |
| | | | | | | | | 1% | 1% | 1% | 3% | 2% | 1% |
| | | | | | | | grade 4 events | 2424 | 2825 | 2336 | 5306 | 4621 | 2469 |
| | | | | | | | | 1% | 1% | 1% | 3% | 2% | 1% |
| | | | | | | | grade 5 events | 3539 | 7373 | 3325 | 8519 | 4564 | 3682 |
| | | | | | | | | 1% | 4% | 1% | 5% | 2% | 1% |
| | | | | | | | grade 6 events | 4720 | 31684 | 6422 | 29864 | 10551 | 5818 |
| | | | | | | | | 2% | 19% | 2% | 20% | 4% | 2% |
| | | | | | | | grade 7 events | 162429 | 78849 | 177852 | 70302 | 155154 | 184428 |
| | | | | | | | | 79% | 48% | 81% | 47% | 71% | 81% |

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 | 226.9747070593115 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -20.12524453110344 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 69.72313433128348 | [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) | 482101823.249709 | 482101822.22471 | | | |
| Observation start date | 2013-04-11T21:10:23 | 2013-04-11T21:10:22 | | | |
| [s] Observation end time (MET) | 482114209.35038 | 482114208.32538 | | | |
| Observation end date | 2013-04-12T00:36:49 | 2013-04-12T00:36:48 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2013.04.12 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2751999692321 |

A.2 Comments