

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 61958 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jun 5 2007

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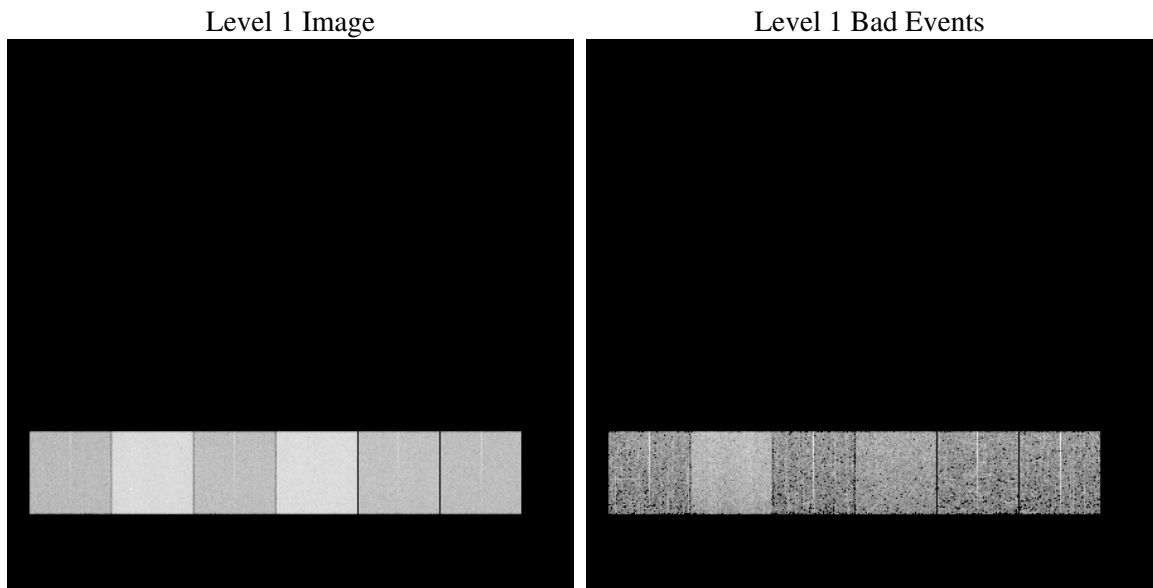
1 Front

| | |
|----------|---|
| seq_num | |
| obs_id | 61958 |
| title | ACIS-456789 diagnostics |
| observer | CHANDRA engineering request/realtime commanding |
| object | |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 0.0 |
| dec_targ | 0.0 |
| ra_nom | 6.4688231334874 |
| dec_nom | 38.274432195503 |
| roll_nom | 138.59186600343 |
| revision | 2 |
| ontime | 4894.8783051521 |
| livetime | 4832.8964087104 |
| ontime4 | 2024.0638848394 |
| ontime5 | 5254.6254702657 |
| ontime6 | 2140.7002246678 |
| ontime7 | 4894.8783051521 |
| ontime8 | 2267.1828145087 |
| ontime9 | 2143.8180649281 |
| l2events | 1354419 |

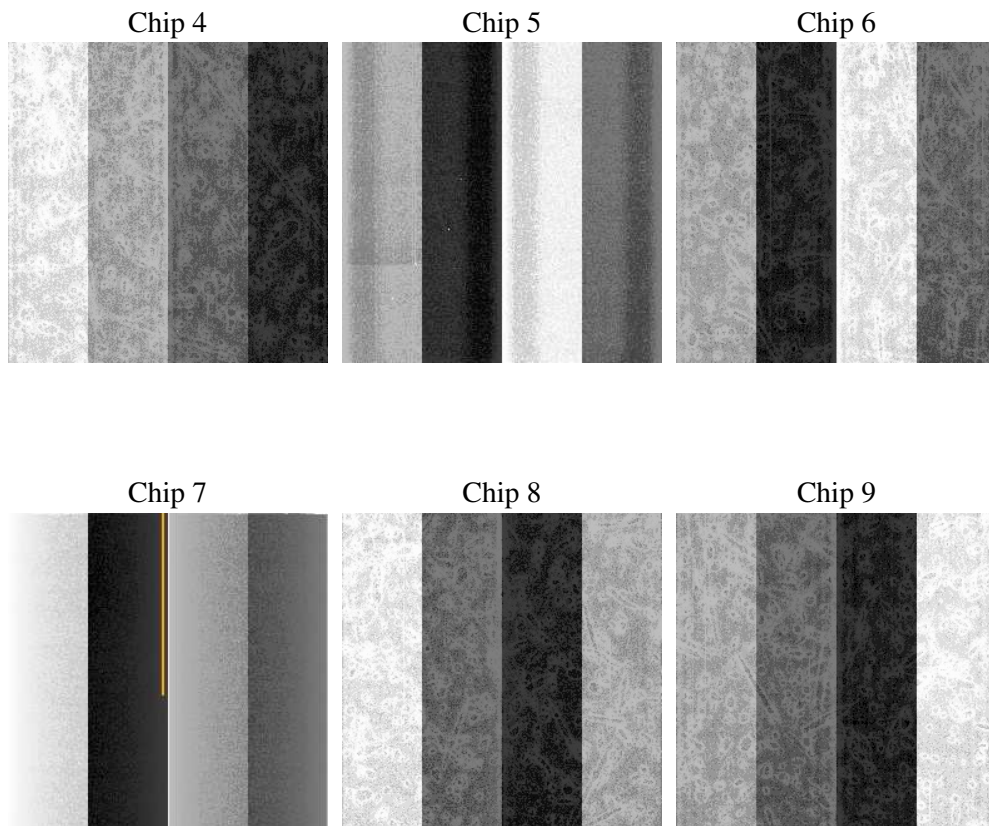
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.10 |
| caldbver | 3.4.0 |
| date | 2007-06-05T13:23:12 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 0.0 |
| ontime | 4894.8783051521 |
| ontime4 | 2024.0638848394 |
| ontime5 | 5254.6254702657 |
| ontime6 | 2140.7002246678 |
| ontime7 | 4894.8783051521 |
| ontime8 | 2267.1828145087 |
| ontime9 | 2143.8180649281 |
| l1events | 1554414 |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 168816 | 398609 | 189832 | 411963 | 200898 | 184296 |
| rejected events | 19578 | 42477 | 18920 | 25009 | 19209 | 18899 |
| rejected % | 11% | 10% | 9% | 6% | 9% | 10% |

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|-------|--------|-------|--------|-------|-------|
| grade 0 events | 79473 | 78118 | 91284 | 98798 | 99785 | 90035 |
| | 47% | 19% | 48% | 23% | 49% | 48% |
| grade 1 events | 379 | 233 | 428 | 267 | 484 | 417 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 32446 | 136408 | 32312 | 84291 | 33099 | 30870 |
| | 19% | 34% | 17% | 20% | 16% | 16% |
| grade 3 events | 8324 | 20696 | 9981 | 39896 | 11100 | 9815 |
| | 4% | 5% | 5% | 9% | 5% | 5% |
| grade 4 events | 8339 | 20199 | 10053 | 39407 | 11020 | 9680 |
| | 4% | 5% | 5% | 9% | 5% | 5% |
| grade 5 events | 1375 | 8414 | 1512 | 5727 | 1566 | 1436 |
| | 0% | 2% | 0% | 1% | 0% | 0% |
| grade 6 events | 20986 | 100933 | 27552 | 124808 | 26685 | 25245 |
| | 12% | 25% | 14% | 30% | 13% | 13% |
| grade 7 events | 17494 | 33608 | 16710 | 18769 | 17159 | 16798 |
| | 10% | 8% | 8% | 4% | 8% | 9% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|-----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| 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 |
| Pointing RA | 0 | 6.46882313348741 | Alternating exposures requested | N | N |
| Pointing Dec | 0 | 38.2744321955028 | Primary exposure time | 3.2 | 3.2 |
| Pointing Roll | 0.0 | 138.5918660034311 | | | |
| SIM focus pos (mm) | -0.684267 | -0.7809083437167272 | | | |
| SIM defocus (mm) | 0 | 0.7524282956875696 | | | |
| SIM translation stage pos (mm) | -190.132523 | 250.4635187648994 | | | |
| SIM translation stage offset (mm) | 0 | -0.007540371344731511 | | | |
| Observation start time | 83191072.57145 | 83191071.802984 | | | |
| Observation start date | 2000-08-20T20:37:53 | 2000-08-20T20:37:51 | | | |
| Observation end time | 83201582.92184401 | 83201582.15337799 | | | |
| Observation end date | 2000-08-20T23:33:03 | 2000-08-20T23:33:02 | | | |
| 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) | 2007.06.05 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.8948783 |

A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for the entire observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.