

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 61909 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jun 8 2007

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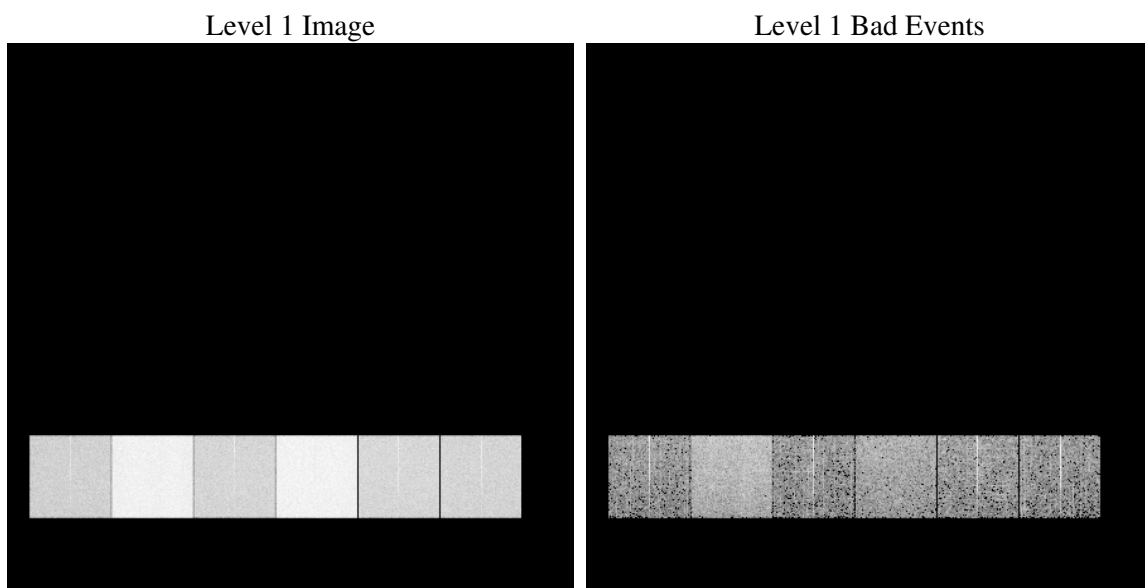
1 Front

| | |
|----------|---|
| seq_num | |
| obs_id | 61909 |
| 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 | 327.92804392393 |
| dec_nom | -42.327789280942 |
| roll_nom | 315.97538696776 |
| revision | 2 |
| ontime | 4933.7695785016 |
| livetime | 4871.2952173392 |
| ontime4 | 2058.9893354028 |
| ontime5 | 5322.6864127517 |
| ontime6 | 2204.835875839 |
| ontime7 | 4933.7695785016 |
| ontime8 | 2272.8977655023 |
| ontime9 | 2186.9644743949 |
| l2events | 1357779 |

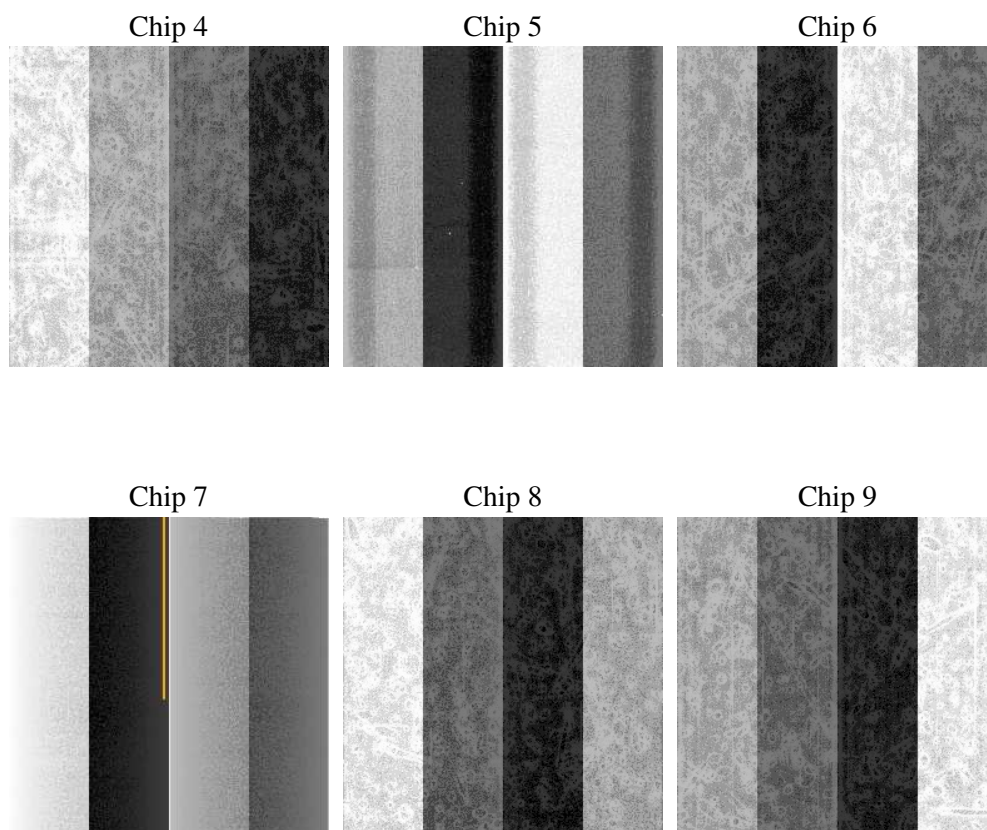
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.10 |
| caldsver | 3.4.0 |
| date | 2007-06-08T15:55:14 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 0.0 |
| ontime | 4933.7695785016 |
| ontime4 | 2058.9893354028 |
| ontime5 | 5322.6864127517 |
| ontime6 | 2204.835875839 |
| ontime7 | 4933.7695785016 |
| ontime8 | 2272.8977655023 |
| ontime9 | 2186.9644743949 |
| l1events | 1554937 |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 170053 | 395888 | 192919 | 410383 | 200440 | 185254 |
| rejected events | 18936 | 40449 | 18244 | 25384 | 20178 | 17922 |
| rejected % | 11% | 10% | 9% | 6% | 10% | 9% |

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|-------|--------|-------|--------|-------|-------|
| grade 0 events | 85532 | 82349 | 95659 | 98739 | 99934 | 91921 |
| | 50% | 20% | 49% | 24% | 49% | 49% |
| grade 1 events | 453 | 217 | 479 | 312 | 457 | 465 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 27234 | 132420 | 30218 | 84599 | 31961 | 29461 |
| | 16% | 33% | 15% | 20% | 15% | 15% |
| grade 3 events | 9103 | 21842 | 10535 | 39376 | 11171 | 10162 |
| | 5% | 5% | 5% | 9% | 5% | 5% |
| grade 4 events | 9061 | 21743 | 10830 | 39103 | 11230 | 10180 |
| | 5% | 5% | 5% | 9% | 5% | 5% |
| grade 5 events | 1282 | 7998 | 1490 | 5721 | 1523 | 1389 |
| | 0% | 2% | 0% | 1% | 0% | 0% |
| grade 6 events | 20436 | 97280 | 27673 | 123182 | 26220 | 25608 |
| | 12% | 24% | 14% | 30% | 13% | 13% |
| grade 7 events | 16952 | 32039 | 16035 | 19351 | 17944 | 16068 |
| | 9% | 8% | 8% | 4% | 8% | 8% |

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 | 327.9280439239309 | Alternating exposures requested | N | N |
| Pointing Dec | 0 | -42.32778928094247 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 0.0 | 315.9753869677551 | | | |
| SIM focus pos (mm) | -0.684267 | -0.6828225247311905 | | | |
| SIM defocus (mm) | 0 | 0.8505141146731063 | | | |
| SIM translation stage pos (mm) | -190.132523 | 250.466033080201 | | | |
| SIM translation stage offset (mm) | 0 | -0.01005468664627074 | | | |
| Observation start time | 86166774.78300001 | 86166774.014761 | | | |
| Observation start date | 2000-09-24T07:12:55 | 2000-09-24T07:12:54 | | | |
| Observation end time | 86177285.134 | 86177284.36515699 | | | |
| Observation end date | 2000-09-24T10:08:05 | 2000-09-24T10:08:04 | | | |
| 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) | 2007.06.08 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.93376957 |

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 approximately the first 1 ksec of this 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.