

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 61912 - L2 Version 001
Chandra X-Ray Center

L2 Processing Date : Jun 8 2007

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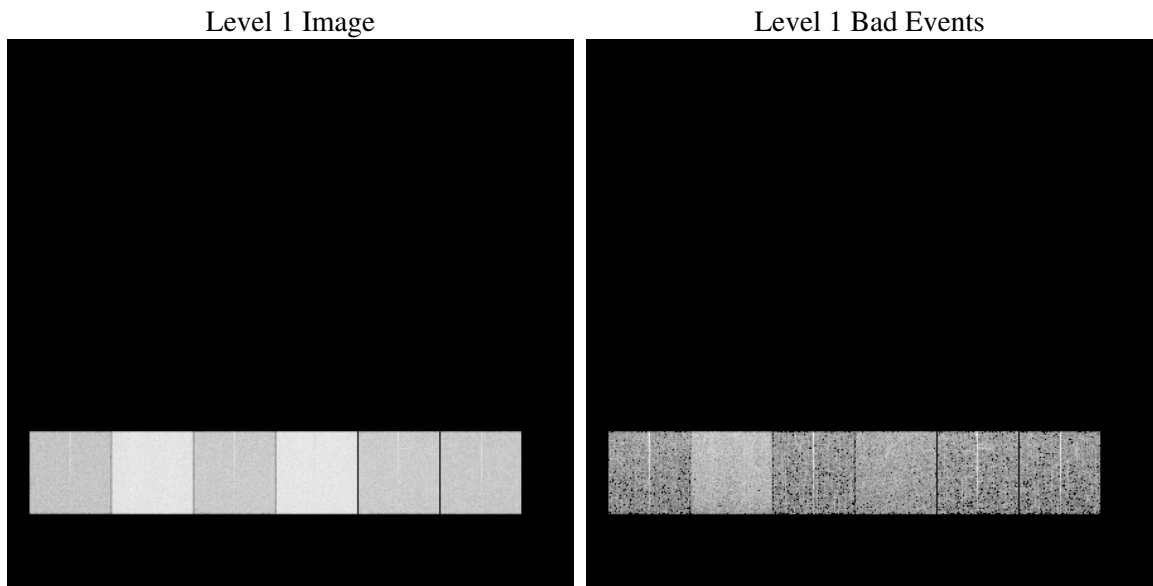
1 Front

| | |
|----------|---|
| seq_num | |
| obs_id | 61912 |
| 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 | 15.778262179888 |
| dec_nom | 24.37161863243 |
| roll_nom | 144.32245839579 |
| revision | 2 |
| ontime | 4903.3904742897 |
| livetime | 4841.3007916369 |
| ontime4 | 2074.1068845242 |
| ontime5 | 5305.3111912906 |
| ontime6 | 2268.5281343758 |
| ontime7 | 4903.3904742897 |
| ontime8 | 2284.8152947426 |
| ontime9 | 2190.6200446486 |
| l2events | 1358113 |

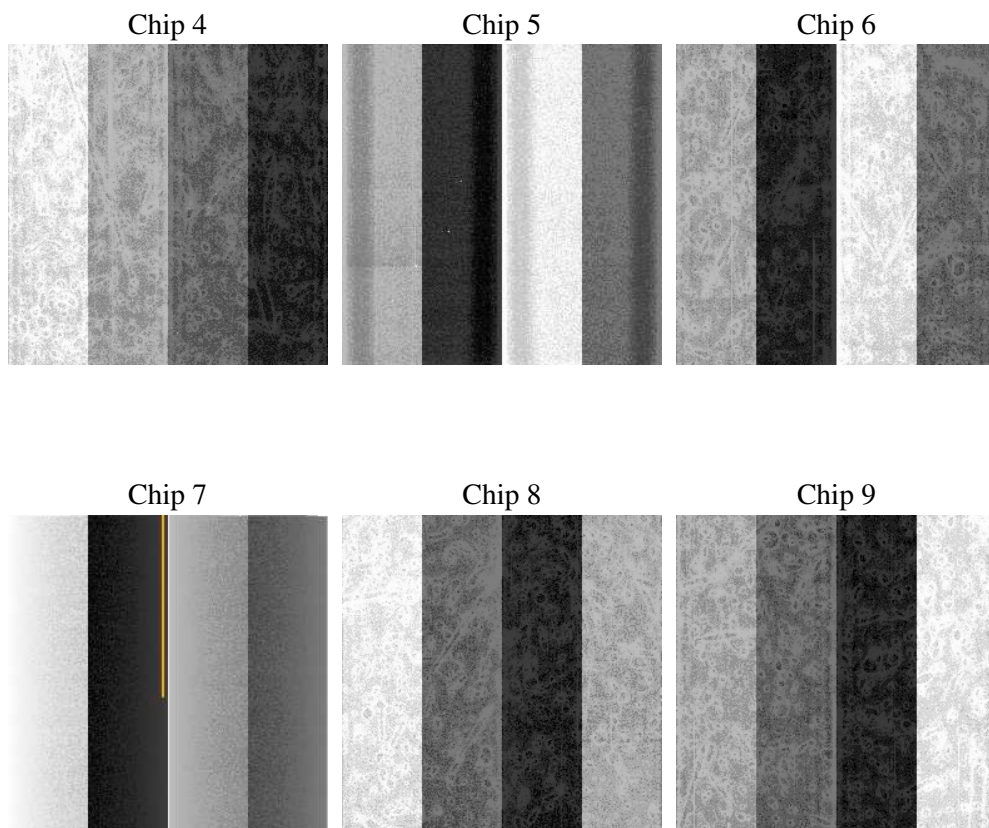
2 OBI

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 | 2007-06-08T15:25:21 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 0.0 |
| ontime | 4903.3904742897 |
| ontime4 | 2074.1068845242 |
| ontime5 | 5305.3111912906 |
| ontime6 | 2268.5281343758 |
| ontime7 | 4903.3904742897 |
| ontime8 | 2284.8152947426 |
| ontime9 | 2190.6200446486 |
| l1events | 1554336 |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 169622 | 393834 | 197584 | 406581 | 201612 | 185103 |
| rejected events | 18811 | 40322 | 18529 | 24472 | 19604 | 18056 |
| rejected % | 11% | 10% | 9% | 6% | 9% | 9% |

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|-------|--------|-------|--------|--------|-------|
| grade 0 events | 82087 | 78211 | 96723 | 97780 | 100168 | 90753 |
| | 48% | 19% | 48% | 24% | 49% | 49% |
| grade 1 events | 406 | 263 | 413 | 284 | 463 | 450 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 30666 | 135329 | 32758 | 83680 | 32876 | 30869 |
| | 18% | 34% | 16% | 20% | 16% | 16% |
| grade 3 events | 8596 | 20762 | 10495 | 39233 | 11035 | 10012 |
| | 5% | 5% | 5% | 9% | 5% | 5% |
| grade 4 events | 8491 | 20177 | 10538 | 38200 | 11156 | 9868 |
| | 5% | 5% | 5% | 9% | 5% | 5% |
| grade 5 events | 1308 | 7982 | 1447 | 5475 | 1525 | 1376 |
| | 0% | 2% | 0% | 1% | 0% | 0% |
| grade 6 events | 20971 | 99033 | 28541 | 123378 | 26773 | 25674 |
| | 12% | 25% | 14% | 30% | 13% | 13% |
| grade 7 events | 17097 | 32077 | 16669 | 18551 | 17616 | 16101 |
| | 10% | 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 | 15.77826217988827 | Alternating exposures requested | N | N |
| Pointing Dec | 0 | 24.37161863242964 | Primary exposure time | 0.000000 | 3.2 |
| Pointing Roll | 0.0 | 144.3224583957852 | | | |
| 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 | 85934772.17399999 | 85934771.406029 | | | |
| Observation start date | 2000-09-21T14:46:12 | 2000-09-21T14:46:11 | | | |
| Observation end time | 85945280.47499999 | 85945279.706424 | | | |
| Observation end date | 2000-09-21T17:41:20 | 2000-09-21T17:41:19 | | | |
| 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 | 4.90339047 |

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.