

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 62713 - L2 Version 5

Chandra X-Ray Center

L2 Processing Date : Mar 31 2010

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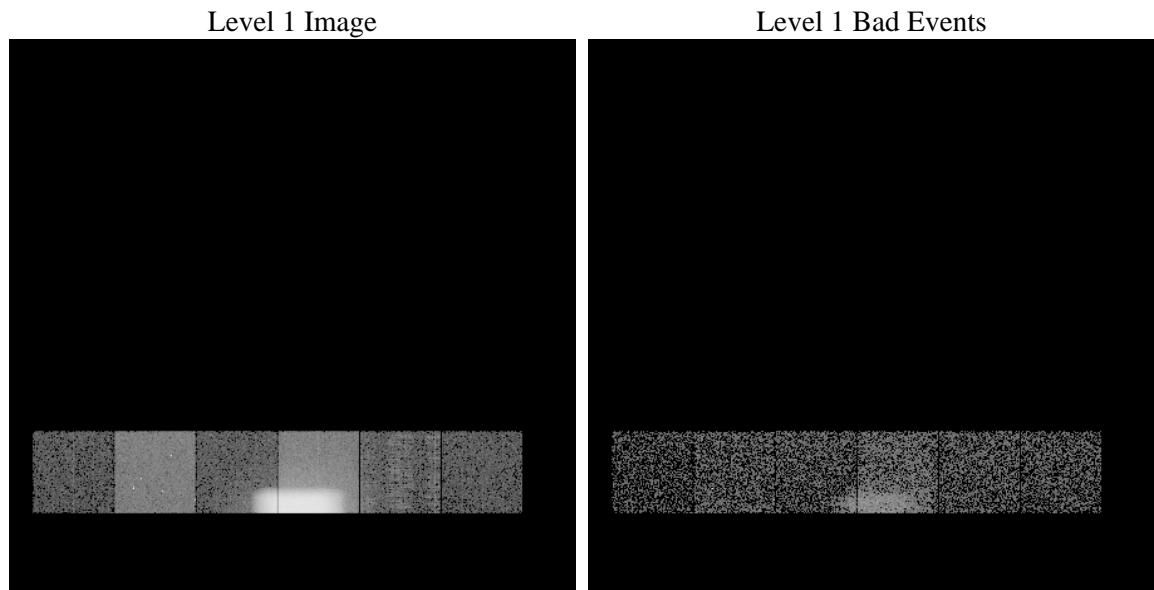
1 Front

| | | |
|----------|---|---|
| seq_num | 0 | Sequence number |
| obs_id | 62713 | Observation id |
| title | ACIS internal cal | Proposal title |
| observer | CHANDRA orbital activation and checkout | Principal investigator |
| object | | Source name |
| dtycycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 0.0 | Target RA |
| dec_targ | 0.0 | Target Dec |
| ra_nom | 181.22170020523 | Nominal RA |
| dec_nom | 5.1290627122754 | Nominal Dec |
| roll_nom | 251.9180079456 | Nominal Roll |
| revision | 5 | Processing version of data |
| ontime | 4085.3976731375 | Sum of GTIs [s] |
| livetime | 4035.2142809885 | Livetime [s] |
| ontime4 | 4085.3155931383 | Sum of GTIs [s] |
| ontime5 | 4085.3566331342 | Sum of GTIs [s] |
| ontime6 | 4085.1924731359 | Sum of GTIs [s] |
| ontime7 | 4085.3976731375 | Sum of GTIs [s] |
| ontime8 | 4085.274553135 | Sum of GTIs [s] |
| ontime9 | 4081.8925629258 | Sum of GTIs [s] |
| l2events | 359849 | Number of level 2 events |

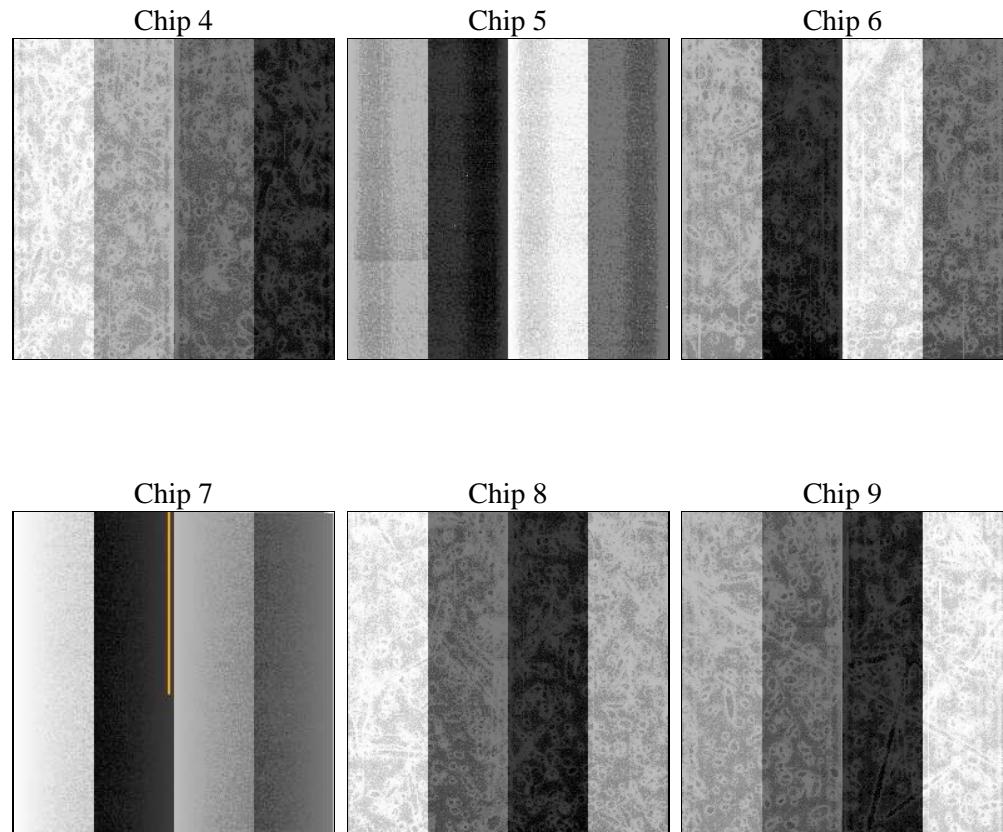
2 OBI

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 | Scheduled observation exposure time |
| ascdsver | 8.2.1 | ASCDs version number | | ontime | 4085.3976731375 | Sum of GTIs [s] |
| caldbver | 4.1.5 | | | ontime4 | 4085.3155931383 | Sum of GTIs [s] |
| date | 2010-03-31T19:57:25 | Date and time of file creation | | ontime5 | 4085.3566331342 | Sum of GTIs [s] |
| revision | 5 | Processing version of data | | ontime6 | 4085.1924731359 | Sum of GTIs [s] |
| | | | | ontime7 | 4085.3976731375 | Sum of GTIs [s] |
| | | | | ontime8 | 4085.274553135 | Sum of GTIs [s] |
| | | | | ontime9 | 4081.8925629258 | Sum of GTIs [s] |
| | | | | l1events | 395084 | Number of level 1 events |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|-------|-------|-------|--------|-------|-------|
| level 1 events | 10095 | 39857 | 58102 | 259194 | 17176 | 10660 |
| rejected events | 2597 | 4193 | 3831 | 7141 | 3608 | 3151 |
| rejected % | 25% | 10% | 6% | 2% | 21% | 29% |

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|----------------|-------|-------|-------|--------|-------|-------|
| grade 0 events | 1920 | 2748 | 22178 | 51627 | 3464 | 1806 |
| | 19% | 6% | 38% | 19% | 20% | 16% |
| grade 1 events | 24 | 323 | 174 | 238 | 33 | 21 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 1676 | 8654 | 10313 | 57630 | 2876 | 1603 |
| | 16% | 21% | 17% | 22% | 16% | 15% |
| grade 3 events | 749 | 650 | 3904 | 20811 | 1316 | 711 |
| | 7% | 1% | 6% | 8% | 7% | 6% |
| grade 4 events | 663 | 646 | 3910 | 20398 | 1199 | 660 |
| | 6% | 1% | 6% | 7% | 6% | 6% |
| grade 5 events | 2573 | 3870 | 3657 | 6903 | 3575 | 3130 |
| | 25% | 9% | 6% | 2% | 20% | 29% |
| grade 6 events | 2490 | 22966 | 13966 | 101587 | 4713 | 2729 |
| | 24% | 57% | 24% | 39% | 27% | 25% |
| grade 7 events | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0% | 0% | 0% | 0% | 0% | 0% |

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 | 181.2217002052325 | Alternating exposures requested | N | N |
| Pointing Dec | 0 | 5.129062712275371 | Primary exposure time | 0 | 3.3 |
| Pointing Roll | 0.0 | 251.9180079455999 | | | |
| SIM focus pos (mm) | -0.684267 | 0.255451383487682 | | | |
| SIM defocus (mm) | 0 | 0.9397188447875782 | | | |
| SIM translation stage pos (mm) | -190.132523 | -190.1325231039672 | | | |
| SIM translation stage offset (mm) | 0 | 5.209593894051068e-07 | | | |
| Observation start time | 50457180.029 | 50457179.517216 | | | |
| Observation start date | 1999-08-07T23:53:00 | 1999-08-07T23:52:59 | | | |
| Observation stop time | 50462823.68 | 50462823.167415 | | | |
| Observation end date | 1999-08-08T01:27:04 | 1999-08-08T01:27:03 | | | |
| 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) | 2010.08.16 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 4.0853976731375 |

A.2 Comments

This ACIS internal calibration observation was acquired before the ACIS door was open. A reflection of the door is visible in the image.

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Focal plane temperature is warmer than -118.7 C degrees during this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation.