

V&V Reference Report

L2 ASCDS Version : 7.6.7.2

Observation 60190 - L2 Version _e1
Chandra X-Ray Center

L2 Processing Date : May 23 2006

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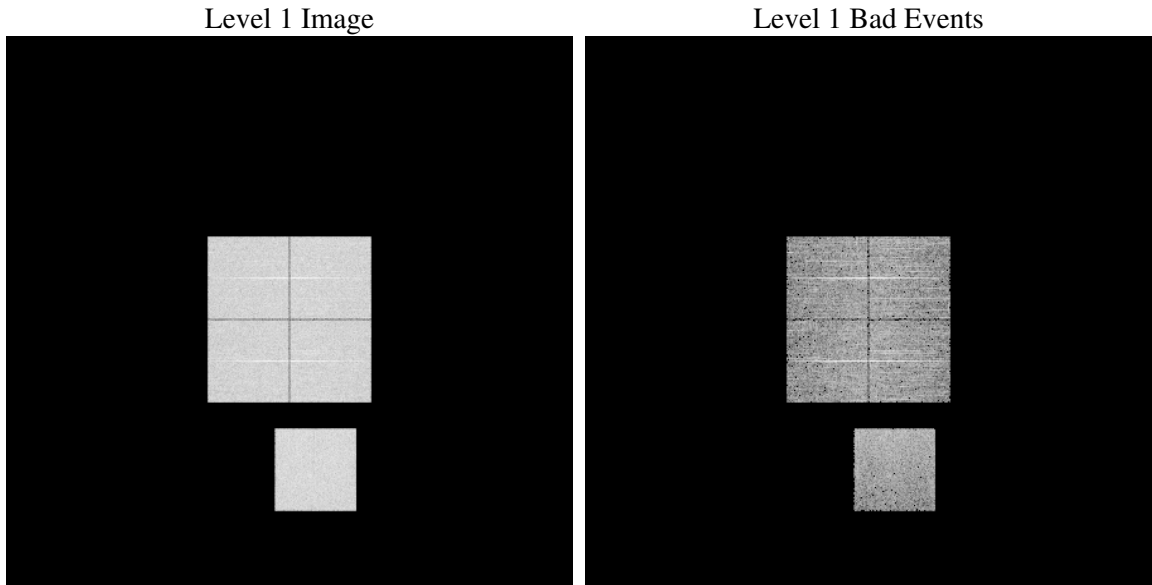
1 Front

| | |
|----------|-------------------------------------------------|
| seq_num | |
| obs_id | 60190 |
| title | ACIS-01237 diagnostics |
| observer | CHANDRA engineering request/realtime commanding |
| object | |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 0.0 |
| dec_targ | 0.0 |
| ra_nom | 350.77352995973 |
| dec_nom | -33.681751283373 |
| roll_nom | 107.42548288864 |
| revision | 2 |
| ontime | 4365.3948639035 |
| livetime | 4314.8007431891 |
| ontime0 | 4202.5070237517 |
| ontime1 | 4266.2457438111 |
| ontime2 | 4100.7001266778 |
| ontime3 | 4142.3093436956 |
| ontime7 | 4365.3948639035 |
| l2events | 607400 |

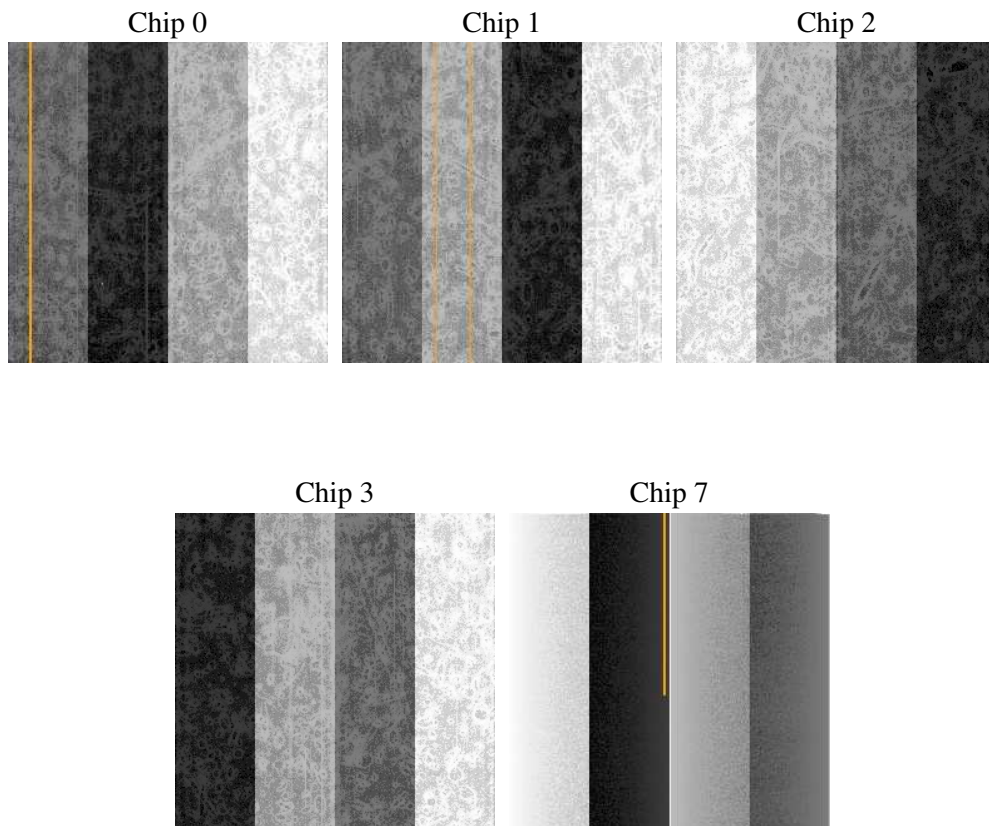
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.7.2 |
| caldbver | 3.2.2 |
| date | 2006-05-24T01:23:11 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 0.0 |
| ontime | 4401.5127241015 |
| ontime0 | 4238.6248839498 |
| ontime1 | 4302.3636040092 |
| ontime2 | 4135.9347238541 |
| ontime3 | 4178.4272038937 |
| ontime7 | 4401.5127241015 |
| llevents | 794537 |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 154529 | 159005 | 153755 | 157227 | 170021 |
| rejected events | 28960 | 31304 | 30531 | 32205 | 33069 |
| rejected % | 18% | 19% | 19% | 20% | 19% |

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 69796 | 70289 | 69659 | 71099 | 22953 |
| | 45% | 44% | 45% | 45% | 13% |
| grade 1 events | 419 | 365 | 466 | 448 | 61 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 22067 | 23331 | 20876 | 21527 | 42686 |
| | 14% | 14% | 13% | 13% | 25% |
| grade 3 events | 8194 | 8034 | 8027 | 8272 | 9590 |
| | 5% | 5% | 5% | 5% | 5% |
| grade 4 events | 8237 | 8013 | 8146 | 8051 | 9647 |
| | 5% | 5% | 5% | 5% | 5% |
| grade 5 events | 1934 | 1941 | 1781 | 1937 | 3814 |
| | 1% | 1% | 1% | 1% | 2% |
| grade 6 events | 18339 | 19064 | 17620 | 17139 | 53091 |
| | 11% | 11% | 11% | 10% | 31% |
| grade 7 events | 25543 | 27968 | 27180 | 28754 | 28179 |
| | 16% | 17% | 17% | 18% | 16% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-01237 | ACIS-01237 | 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 | 350.7735299597251 | Alternating exposures requested | N | Y |
| Pointing Dec | 0 | -33.68175128337293 | Primary exposure time | 0.000000 | 3.5 |
| Pointing Roll | 0.0 | 107.4254828886355 | Secondary exposure time | N/A | 3.2 |
| SIM focus pos (mm) | -0.782348 | -0.6828225247311905 | Duty cycle | N/A | 1 |
| SIM defocus (mm) | 0 | 0.8505141146731063 | | | |
| SIM translation stage pos (mm) | -233.592463 | 250.466033080201 | | | |
| SIM translation stage offset (mm) | 0 | -0.01005468664627074 | | | |
| Observation start time | 203819730.022961 | 203819728.99796 | | | |
| Observation start date | 2004-06-17T00:35:30 | 2004-06-17T00:35:28 | | | |
| Observation end time | 203842144.723954 | 203842143.69895 | | | |
| Observation end date | 2004-06-17T06:49:05 | 2004-06-17T06:49:03 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect

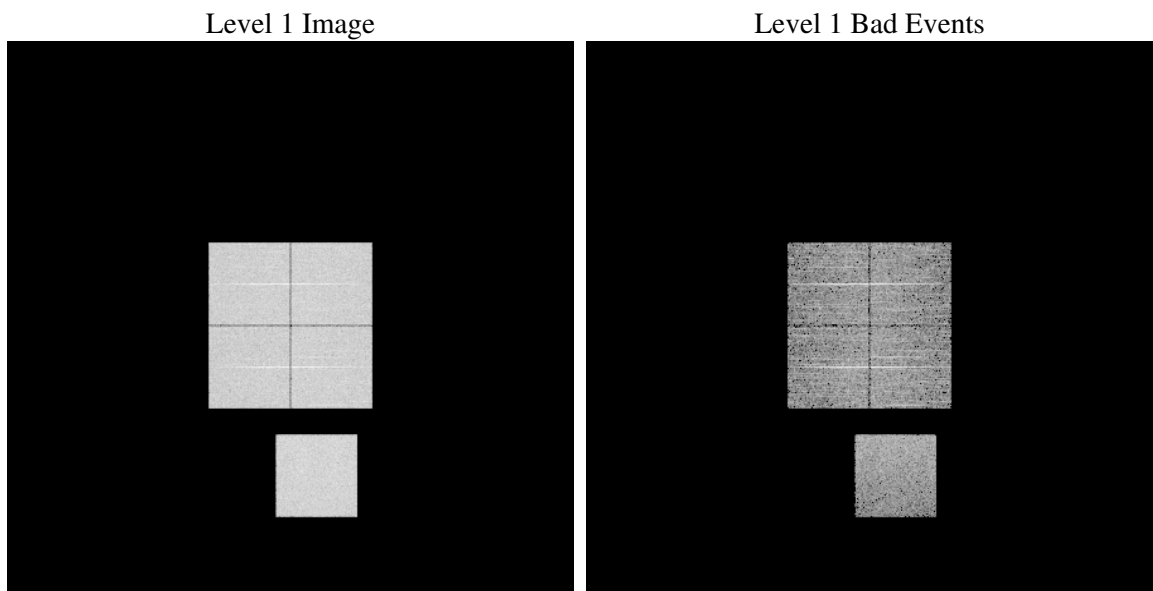
2.4 Star Slots

2.5 FID Slots

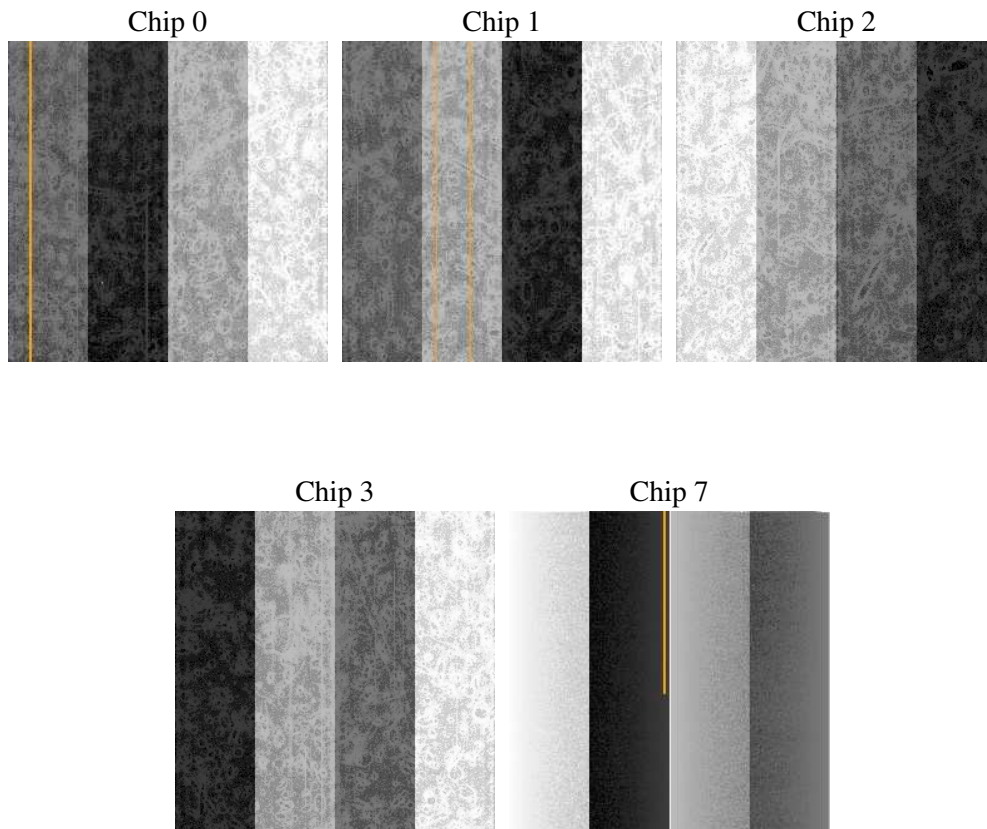
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.7.2 |
| caldsver | 3.2.2 |
| date | 2006-05-24T01:29:16 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 0.0 |
| ontime | 4028.6127092838 |
| ontime0 | 3902.2121496201 |
| ontime1 | 3934.6225495338 |
| ontime2 | 3688.3035101891 |
| ontime3 | 3830.9092698097 |
| ontime7 | 4028.6127092838 |
| l1events | 730807 |

3.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|
| level 1 events | 143512 | 145390 | 139453 | 145655 | 156797 |
| rejected events | 27892 | 28192 | 29141 | 30773 | 31175 |
| rejected % | 19% | 19% | 20% | 21% | 19% |

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 7 |
|----------------|-------|-------|-------|-------|-------|
| grade 0 events | 64320 | 64728 | 62380 | 65163 | 21065 |
| | 44% | 44% | 44% | 44% | 13% |
| grade 1 events | 365 | 323 | 377 | 438 | 56 |
| | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 20320 | 21204 | 18413 | 19566 | 38911 |
| | 14% | 14% | 13% | 13% | 24% |
| grade 3 events | 7353 | 7534 | 7205 | 7607 | 8887 |
| | 5% | 5% | 5% | 5% | 5% |
| grade 4 events | 7484 | 7369 | 7370 | 7563 | 8662 |
| | 5% | 5% | 5% | 5% | 5% |
| grade 5 events | 1730 | 1745 | 1570 | 1734 | 3485 |
| | 1% | 1% | 1% | 1% | 2% |
| grade 6 events | 16991 | 17379 | 15788 | 16043 | 49115 |
| | 11% | 11% | 11% | 11% | 31% |
| grade 7 events | 24949 | 25108 | 26350 | 27541 | 26616 |
| | 17% | 17% | 18% | 18% | 16% |

A Summary

A.1 Status

| | |
|----------------------------|------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2006.05.24 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.3616499 |

A.2 Comments

The ACIS focal plane temperature decreased by 1.5 degrees over the observation, and was above calibration limits for the first 5 ksec of the obsid.