

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 53810 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Apr 4 2013

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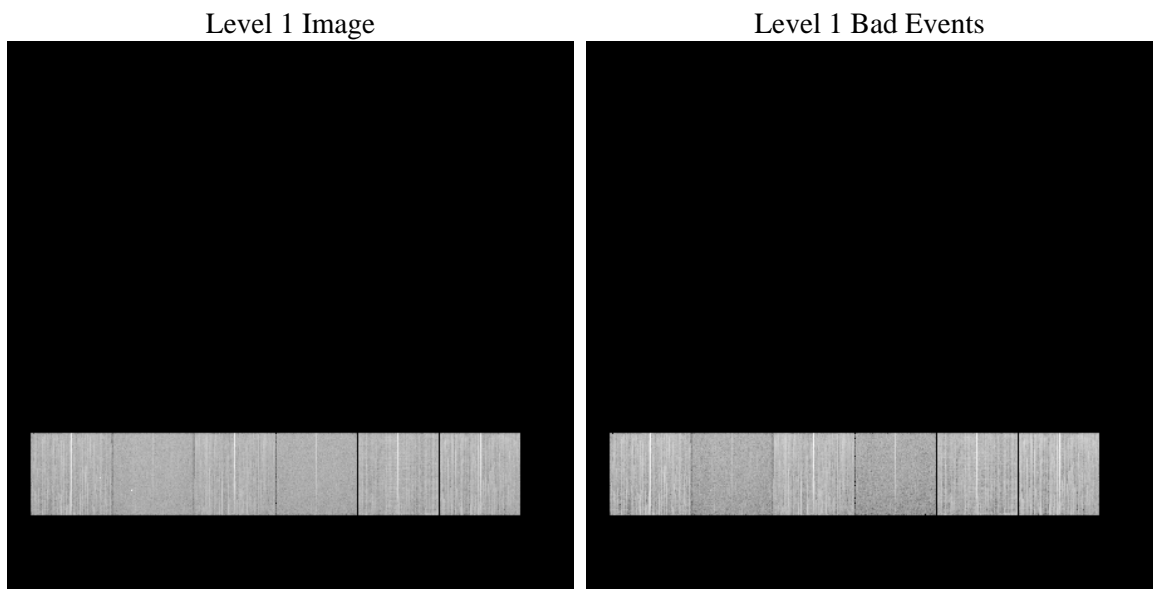
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 53810 | Observation id |
| title | ACIS-456789 diagnostics | Proposal title |
| observer | CHANDRA engineering request/realtime commanding | Principal investig |
| object | | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 0.0 | Observer's specified target RA [deg] |
| dec_targ | 0.0 | Observer's specified target Dec [deg] |
| ra_nom | 164.01698913667 | Nominal RA [deg] |
| dec_nom | -0.025599132359599 | Nominal Dec [deg] |
| roll_nom | 258.66995384738 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8275.1999692321 | Sum of GTIs [s] |
| livetime | 8170.4144044945 | Livetime [s] |
| ontime4 | 8275.1999692321 | Sum of GTIs [s] |
| ontime5 | 8275.1999692321 | Sum of GTIs [s] |
| ontime6 | 8275.1999692321 | Sum of GTIs [s] |
| ontime7 | 8275.1999692321 | Sum of GTIs [s] |
| ontime8 | 8275.1999692321 | Sum of GTIs [s] |
| ontime9 | 8275.1999692321 | Sum of GTIs [s] |
| l2events | 252880 | Number of level 2 events |

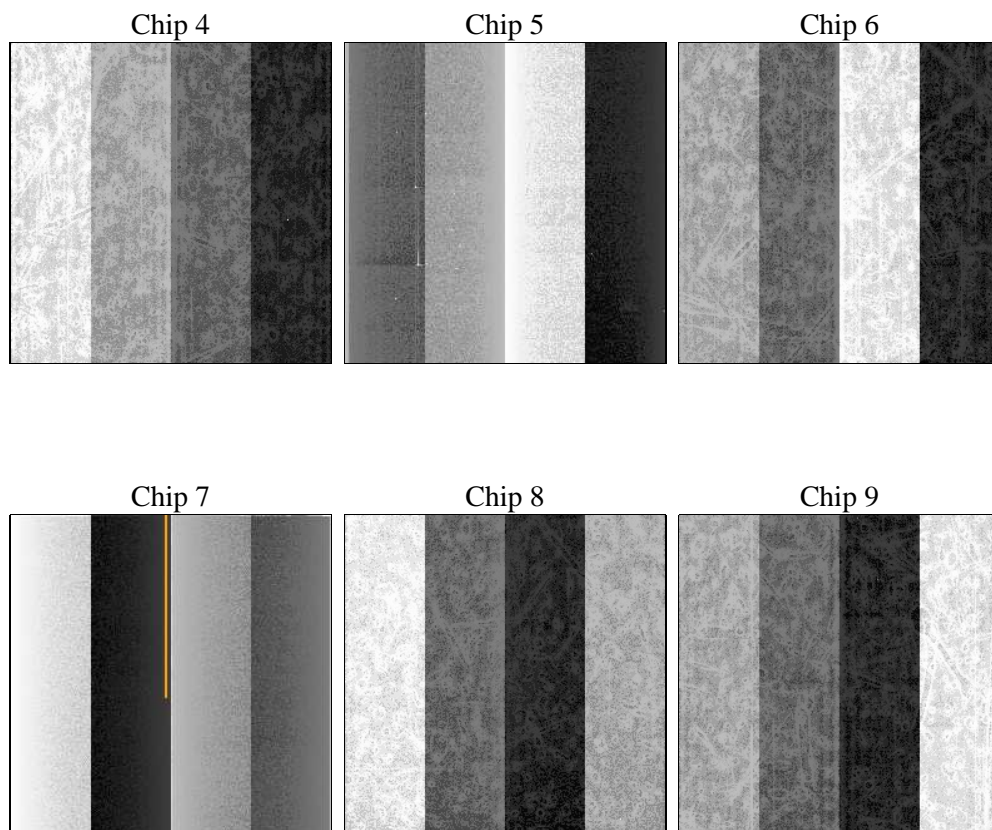
2 OBI

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 | [s] Scheduled observation exposure time |
| ascdsver | 8.5.1.1 | Processing system revision | ontime | 8275.1999692321 | Sum of GTIs [s] |
| caldbver | 4.5.6 | | ontime4 | 8275.1999692321 | Sum of GTIs [s] |
| date | 2013-04-04T13:28:05 | Date and time of file creation | ontime5 | 8275.1999692321 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime7 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime8 | 8275.1999692321 | Sum of GTIs [s] |
| | | | ontime9 | 8275.1999692321 | Sum of GTIs [s] |
| | | | l1events | 993130 | Number of level 1 events |

2.1.4 Events

| | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 | | ccd 4 | ccd 5 | ccd 6 | ccd 7 | ccd 8 | ccd 9 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|-------|--------|-------|--------|--------|
| level 1 events | 175157 | 143881 | 176818 | 135769 | 175175 | 186330 | grade 0 events | 18570 | 4946 | 14958 | 8299 | 19886 | 16568 |
| rejected events | 140249 | 79828 | 141516 | 73790 | 130064 | 151290 | | 10% | 3% | 8% | 6% | 11% | 8% |
| rejected % | 80% | 55% | 80% | 54% | 74% | 81% | grade 1 events | 163 | 155 | 62 | 87 | 112 | 105 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 6678 | 24017 | 9868 | 15543 | 10140 | 7942 |
| | | | | | | | | 3% | 16% | 5% | 11% | 5% | 4% |
| | | | | | | | grade 3 events | 2414 | 2108 | 1906 | 4688 | 3291 | 2174 |
| | | | | | | | | 1% | 1% | 1% | 3% | 1% | 1% |
| | | | | | | | grade 4 events | 2435 | 1949 | 1909 | 4606 | 3142 | 2239 |
| | | | | | | | | 1% | 1% | 1% | 3% | 1% | 1% |
| | | | | | | | grade 5 events | 3233 | 5861 | 2901 | 7525 | 4060 | 3542 |
| | | | | | | | | 1% | 4% | 1% | 5% | 2% | 1% |
| | | | | | | | grade 6 events | 4828 | 31051 | 6677 | 28860 | 8672 | 6134 |
| | | | | | | | | 2% | 21% | 3% | 21% | 4% | 3% |
| | | | | | | | grade 7 events | 136836 | 73794 | 138537 | 66161 | 125872 | 147626 |
| | | | | | | | | 78% | 51% | 78% | 48% | 71% | 79% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-456789 | ACIS-456789 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | FAINT | FAINT | Number of optional ACIS chips dropped | 0 | 0 |
| Observation mode | SECONDARY | SECONDARY | On-chip summing requested | N | N |
| [deg] Pointing RA | 0 | 164.0169891366704 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -0.02559913235959881 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 258.6699538473841 | [s] Primary exposure time | 3.2 | 3.2 |
| [mm] SIM focus pos | -1.429586 | -1.428180813131781 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.1051558262725154 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 481417615.212665 | 481417614.18766 | | | |
| Observation start date | 2013-04-03T23:06:55 | 2013-04-03T23:06:54 | | | |
| [s] Observation end time (MET) | 481429078.813285 | 481429077.78829 | | | |
| Observation end date | 2013-04-04T02:17:59 | 2013-04-04T02:17:57 | | | |
| 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) | 2013.04.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2751999692321 |

A.2 Comments