

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 52041 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Feb 28 2015

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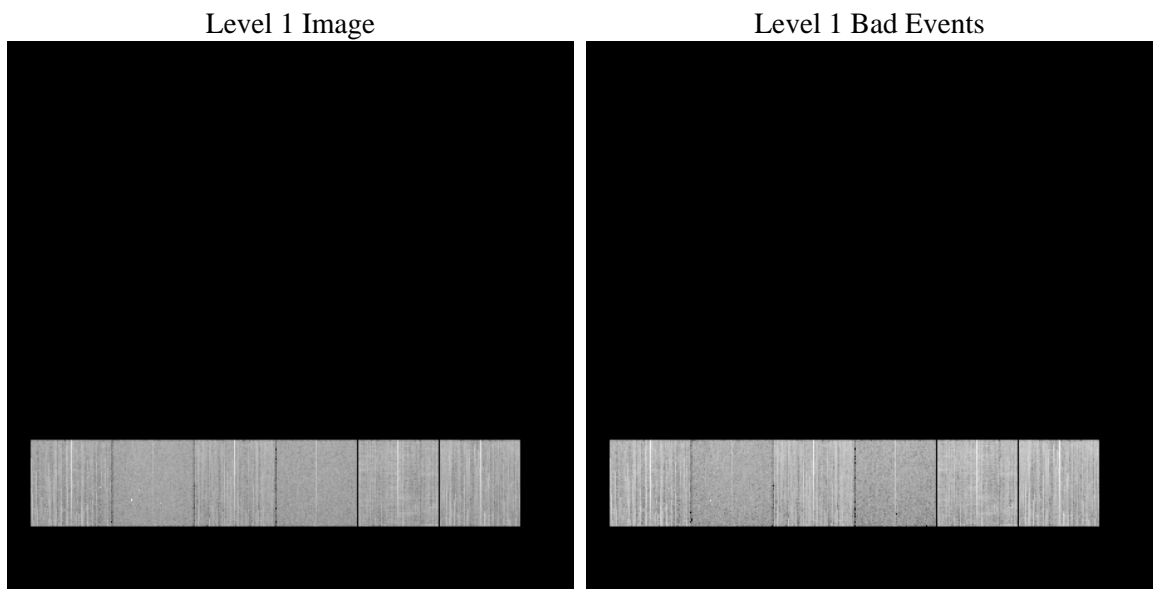
1 Front

| | | |
|----------|-------------------------------------------------|---------------------------------------------|
| seq_num | | Sequence number |
| obs_id | 52041 | 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 | 156.6354153577 | Nominal RA [deg] |
| dec_nom | -16.469504175677 | Nominal Dec [deg] |
| roll_nom | 349.62382673707 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8454.1553623676 | Sum of GTIs [s] |
| livetime | 8347.1037566881 | Livetime [s] |
| ontime4 | 8454.0322422981 | Sum of GTIs [s] |
| ontime5 | 8454.1143223047 | Sum of GTIs [s] |
| ontime6 | 8454.073282361 | Sum of GTIs [s] |
| ontime7 | 8454.1553623676 | Sum of GTIs [s] |
| ontime8 | 8453.9912023544 | Sum of GTIs [s] |
| ontime9 | 8454.1964023113 | Sum of GTIs [s] |
| l2events | 184761 | Number of level 2 events |

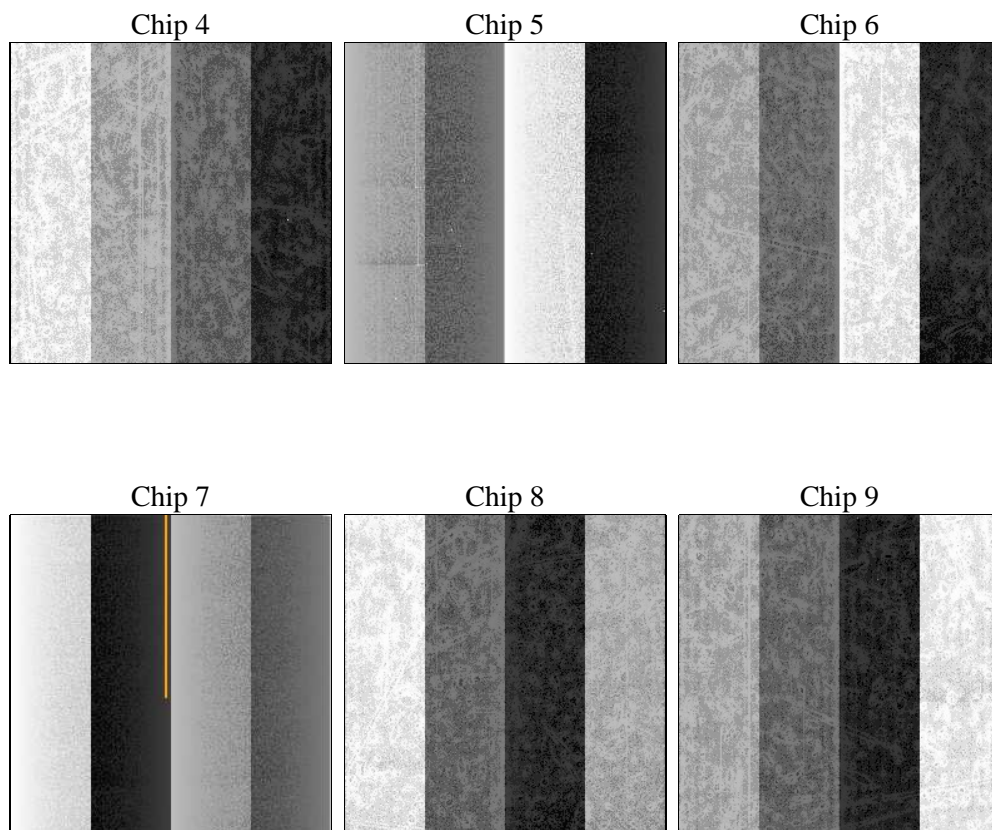
2 OBI

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 | 10.3.3 | Processing system revision | ontime | 8454.1553623676 | Sum of GTIs [s] |
| caldbver | 4.6.7 | | ontime4 | 8454.0322422981 | Sum of GTIs [s] |
| date | 2015-03-01T01:35:22 | Date and time of file creation | ontime5 | 8454.1143223047 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 8454.073282361 | Sum of GTIs [s] |
| | | | ontime7 | 8454.1553623676 | Sum of GTIs [s] |
| | | | ontime8 | 8453.9912023544 | Sum of GTIs [s] |
| | | | ontime9 | 8454.1964023113 | Sum of GTIs [s] |
| | | | l1events | 841857 | 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 | 142558 | 123426 | 148098 | 116784 | 154512 | 156479 | grade 0 events | 12544 | 4073 | 10706 | 5831 | 13856 | 11389 |
| rejected events | 118805 | 71829 | 123974 | 68720 | 122001 | 132749 | | 8% | 3% | 7% | 4% | 8% | 7% |
| rejected % | 83% | 58% | 83% | 58% | 78% | 84% | grade 1 events | 102 | 149 | 60 | 76 | 62 | 59 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4514 | 18901 | 6020 | 12034 | 7120 | 4969 |
| | | | | | | | | 3% | 15% | 4% | 10% | 4% | 3% |
| | | | | | | | grade 3 events | 1735 | 1508 | 1471 | 3541 | 2520 | 1589 |
| | | | | | | | | 1% | 1% | 0% | 3% | 1% | 1% |
| | | | | | | | grade 4 events | 1670 | 1494 | 1491 | 3435 | 2403 | 1591 |
| | | | | | | | | 1% | 1% | 1% | 2% | 1% | 1% |
| | | | | | | | grade 5 events | 3122 | 5386 | 2822 | 6769 | 4038 | 3287 |
| | | | | | | | | 2% | 4% | 1% | 5% | 2% | 2% |
| | | | | | | | grade 6 events | 3296 | 25642 | 4442 | 23248 | 6620 | 4198 |
| | | | | | | | | 2% | 20% | 2% | 19% | 4% | 2% |
| | | | | | | | grade 7 events | 115575 | 66273 | 121086 | 61850 | 117893 | 129397 |
| | | | | | | | | 81% | 53% | 81% | 52% | 76% | 82% |

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 | 156.6354153576975 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -16.46950417567665 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 349.6238267370699 | [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) | 541516070.422006 | 541516069.39701 | | | |
| Observation start date | 2015-02-28T13:07:50 | 2015-02-28T13:07:49 | | | |
| [s] Observation end time (MET) | 541529528.6727591 | 541529527.64776 | | | |
| Observation end date | 2015-02-28T16:52:09 | 2015-02-28T16:52:07 | | | |
| 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) | 2015.03.02 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.4541553623676 |

A.2 Comments