

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 53757 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Apr 22 2013

Contents

| | | |
|----------|-------------------------------|----------|
| 1 | Front | 2 |
| 2 | OBI | 3 |
| 2.1 | OBI | 3 |
| 2.1.1 | Images | 3 |
| 2.1.2 | Bias | 3 |
| 2.1.3 | Parameters | 4 |
| 2.1.4 | Events | 4 |
| 2.2 | Compared Parameters | 5 |
| 2.3 | Star Slots | 6 |
| 2.4 | FID Slots | 6 |
| A | Summary | 7 |
| A.1 | Status | 7 |
| A.2 | Comments | 7 |

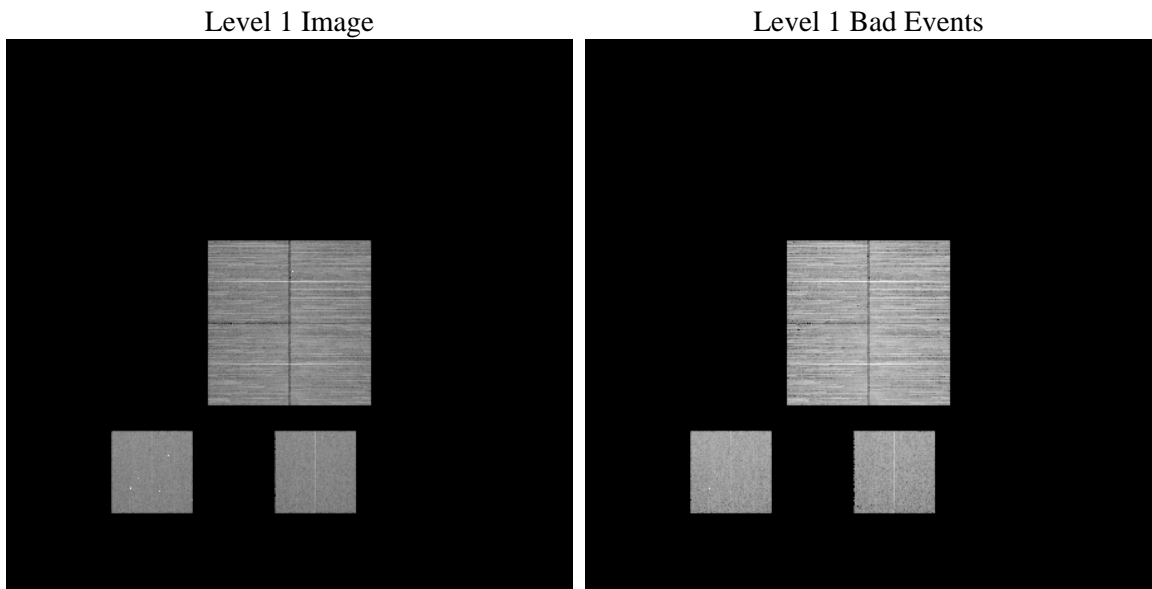
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 53757 | Observation id |
| title | ACIS-012357 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 | 178.83965567938 | Nominal RA [deg] |
| dec_nom | -24.990799397381 | Nominal Dec [deg] |
| roll_nom | 288.0499646125 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 7826.8891772628 | Sum of GTIs [s] |
| livetime | 7727.7803937134 | Livetime [s] |
| ontime0 | 7826.8481372595 | Sum of GTIs [s] |
| ontime1 | 7826.8070972562 | Sum of GTIs [s] |
| ontime2 | 7826.7660572529 | Sum of GTIs [s] |
| ontime3 | 7826.9302172661 | Sum of GTIs [s] |
| ontime5 | 7826.7250172496 | Sum of GTIs [s] |
| ontime7 | 7826.8891772628 | Sum of GTIs [s] |
| l2events | 231894 | Number of level 2 events |

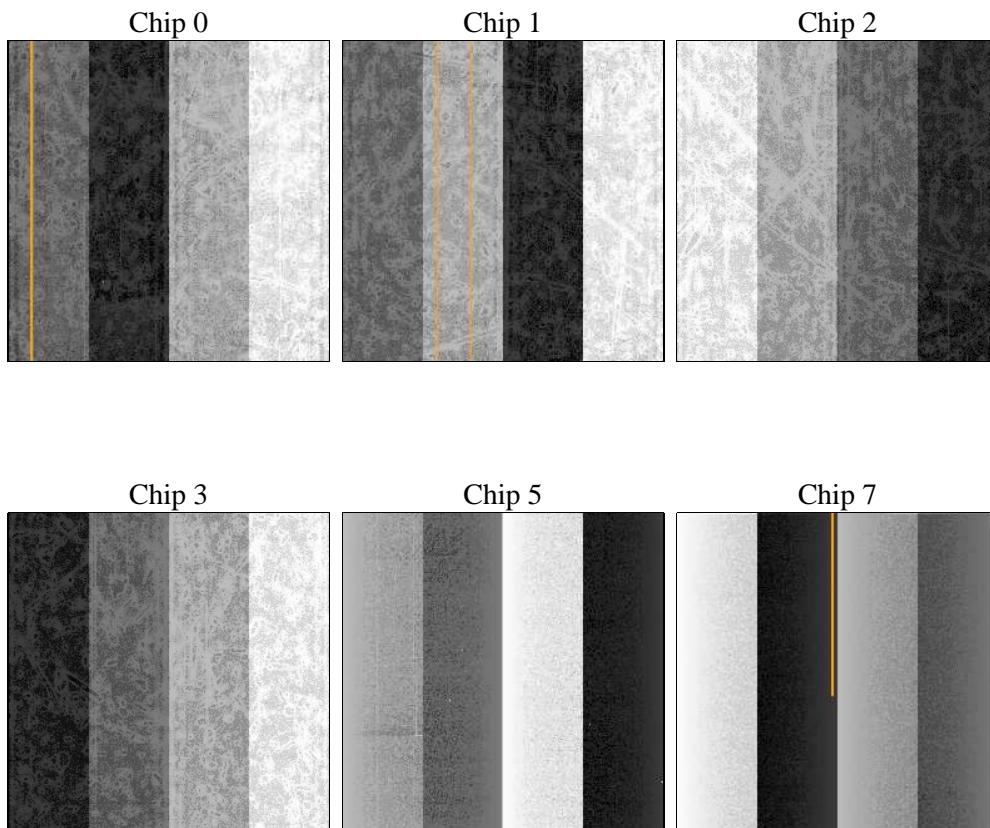
2 OBI

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 | 7826.8891772628 | Sum of GTIs [s] |
| caldsver | 4.5.6 | | ontime0 | 7826.8481372595 | Sum of GTIs [s] |
| date | 2013-04-22T19:15:48 | Date and time of file creation | ontime1 | 7826.8070972562 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 7826.7660572529 | Sum of GTIs [s] |
| | | | ontime3 | 7826.9302172661 | Sum of GTIs [s] |
| | | | ontime5 | 7826.7250172496 | Sum of GTIs [s] |
| | | | ontime7 | 7826.8891772628 | Sum of GTIs [s] |
| | | | l1events | 864016 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 5 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|-------|-------|
| level 1 events | 142942 | 160707 | 144020 | 158624 | 133825 | 123898 | grade 0 events | 15904 | 18040 | 16472 | 16615 | 9299 | 8397 |
| rejected events | 111825 | 126730 | 112225 | 126740 | 70003 | 66421 | | 11% | 11% | 11% | 10% | 6% | 6% |
| rejected % | 78% | 78% | 77% | 79% | 52% | 53% | grade 1 events | 89 | 86 | 85 | 110 | 211 | 88 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 6150 | 6592 | 6203 | 6046 | 23158 | 13907 |
| | | | | | | | | 4% | 4% | 4% | 3% | 17% | 11% |
| | | | | | | | grade 3 events | 2095 | 2142 | 2197 | 2289 | 2284 | 4876 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 2060 | 2088 | 2267 | 2185 | 2233 | 4742 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 2863 | 2907 | 2586 | 3228 | 6294 | 7800 |
| | | | | | | | | 2% | 1% | 1% | 2% | 4% | 6% |
| | | | | | | | grade 6 events | 4908 | 5115 | 4656 | 4749 | 26848 | 25555 |
| | | | | | | | | 3% | 3% | 3% | 2% | 20% | 20% |
| | | | | | | | grade 7 events | 108873 | 123737 | 109554 | 123402 | 63498 | 58533 |
| | | | | | | | | 76% | 76% | 76% | 77% | 47% | 47% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012357 | ACIS-012357 | 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 | 178.8396556793814 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -24.99079939738133 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 288.049964612501 | [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) | 482987554.497641 | 482987553.47264 | | | |
| Observation start date | 2013-04-22T03:12:34 | 2013-04-22T03:12:33 | | | |
| [s] Observation end time (MET) | 482996947.598149 | 482996946.57315 | | | |
| Observation end date | 2013-04-22T05:49:08 | 2013-04-22T05:49:06 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2013.04.23 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 7.8268891772628 |

A.2 Comments