

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 51621 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Sep 17 2015

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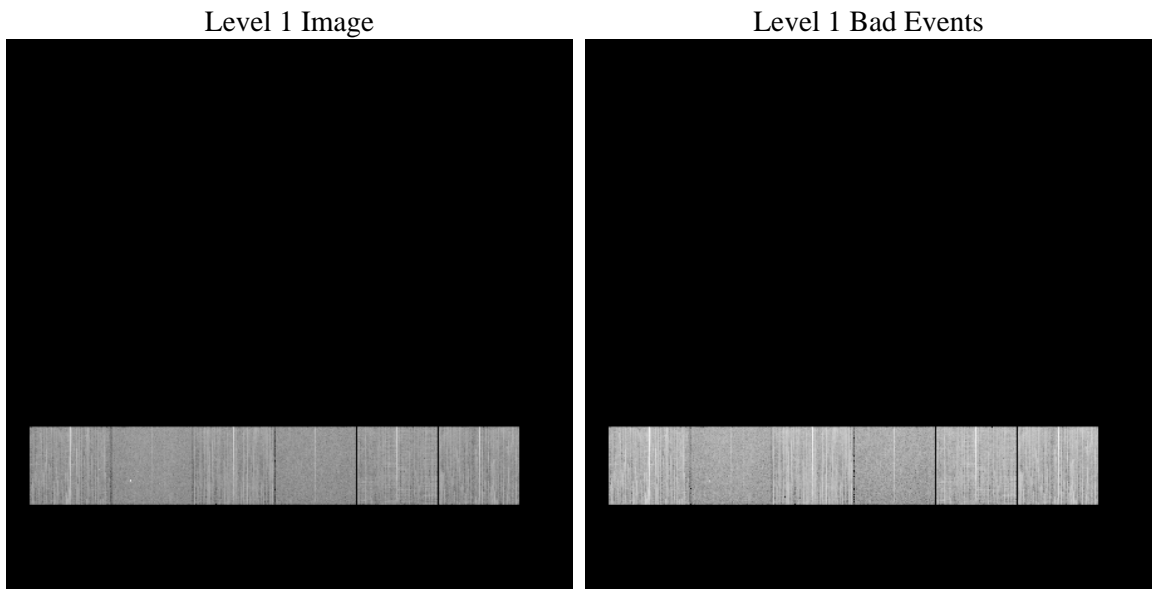
1 Front

| | | |
|----------|-------------------------------------------------|---------------------------------------------|
| seq_num | | Sequence number |
| obs_id | 51621 | 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 | 2.0182195070261 | Nominal RA [deg] |
| dec_nom | -25.477572582033 | Nominal Dec [deg] |
| roll_nom | 18.20147900376 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8272.0001232624 | Sum of GTIs [s] |
| livetime | 8167.2550769012 | Livetime [s] |
| ontime4 | 8181.249268055 | Sum of GTIs [s] |
| ontime5 | 8272.0001232624 | Sum of GTIs [s] |
| ontime6 | 8174.7671576738 | Sum of GTIs [s] |
| ontime7 | 8272.0001232624 | Sum of GTIs [s] |
| ontime8 | 8171.5261883736 | Sum of GTIs [s] |
| ontime9 | 8165.045732379 | Sum of GTIs [s] |
| l2events | 171577 | Number of level 2 events |

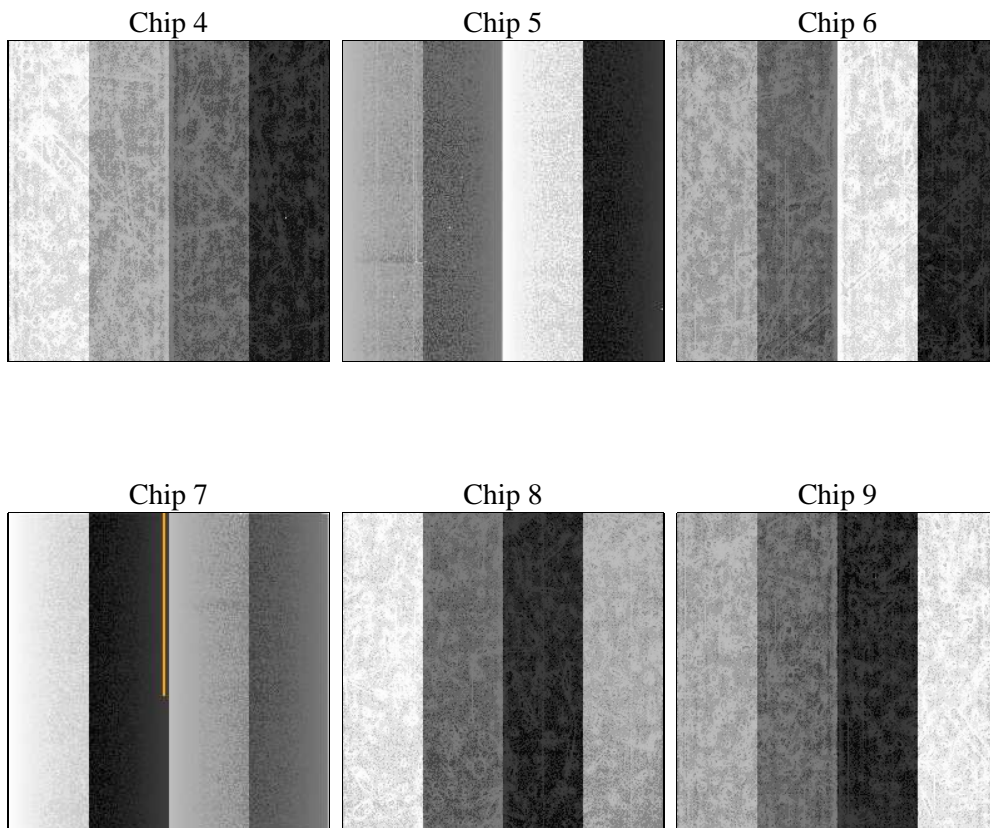
2 OBI

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 | 10.4.1 | Processing system revision | ontime | 8272.0001232624 | Sum of GTIs [s] |
| caldsver | 4.6.8 | | ontime4 | 8181.249268055 | Sum of GTIs [s] |
| date | 2015-09-18T02:47:35 | Date and time of file creation | ontime5 | 8272.0001232624 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 8174.7671576738 | Sum of GTIs [s] |
| | | | ontime7 | 8272.0001232624 | Sum of GTIs [s] |
| | | | ontime8 | 8171.5261883736 | Sum of GTIs [s] |
| | | | ontime9 | 8165.045732379 | Sum of GTIs [s] |
| | | | l1events | 856925 | 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 | 149140 | 126521 | 155390 | 119212 | 151744 | 154918 | grade 0 events | 10877 | 4201 | 8914 | 5161 | 12131 | 9799 |
| rejected events | 127923 | 74415 | 134274 | 72575 | 121574 | 133960 | | 7% | 3% | 5% | 4% | 7% | 6% |
| rejected % | 85% | 58% | 86% | 60% | 80% | 86% | grade 1 events | 120 | 147 | 43 | 84 | 61 | 76 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 4361 | 18604 | 5627 | 11788 | 6990 | 4593 |
| | | | | | | | | 2% | 14% | 3% | 9% | 4% | 2% |
| | | | | | | | grade 3 events | 1542 | 1450 | 1243 | 3185 | 2306 | 1451 |
| | | | | | | | | 1% | 1% | 0% | 2% | 1% | 0% |
| | | | | | | | grade 4 events | 1470 | 1423 | 1252 | 3105 | 2285 | 1352 |
| | | | | | | | | 0% | 1% | 0% | 2% | 1% | 0% |
| | | | | | | | grade 5 events | 3093 | 5521 | 2857 | 6897 | 3830 | 3269 |
| | | | | | | | | 2% | 4% | 1% | 5% | 2% | 2% |
| | | | | | | | grade 6 events | 2976 | 26451 | 4090 | 23398 | 6467 | 3763 |
| | | | | | | | | 1% | 20% | 2% | 19% | 4% | 2% |
| | | | | | | | grade 7 events | 124701 | 68724 | 131364 | 65594 | 117674 | 130615 |
| | | | | | | | | 83% | 54% | 84% | 55% | 77% | 84% |

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 | 2.018219507026117 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -25.47757258203336 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 18.20147900376044 | [s] Primary exposure time | 3.2 | 3.2 |
| [mm] SIM focus pos | -1.429586 | -0.6828225247311905 | | | |
| [mm] SIM defocus | 0.1037507710433287 | 0.8505141146731063 | | | |
| [mm] SIM translation stage pos | 250.455976 | 250.466033080201 | | | |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 | | | |
| [s] Observation start time (MET) | 558888570.897836 | 558888569.87284 | | | |
| Observation start date | 2015-09-17T14:49:31 | 2015-09-17T14:49:29 | | | |
| [s] Observation end time (MET) | 558900032.448483 | 558900031.42348 | | | |
| Observation end date | 2015-09-17T18:00:32 | 2015-09-17T18:00:31 | | | |
| 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) | 2015.09.18 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2720001232624 |

A.2 Comments

Short period of non-GTI near end of observation when format was switched to format=4 for gratings insertion.