

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 51010 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : May 20 2016

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 |

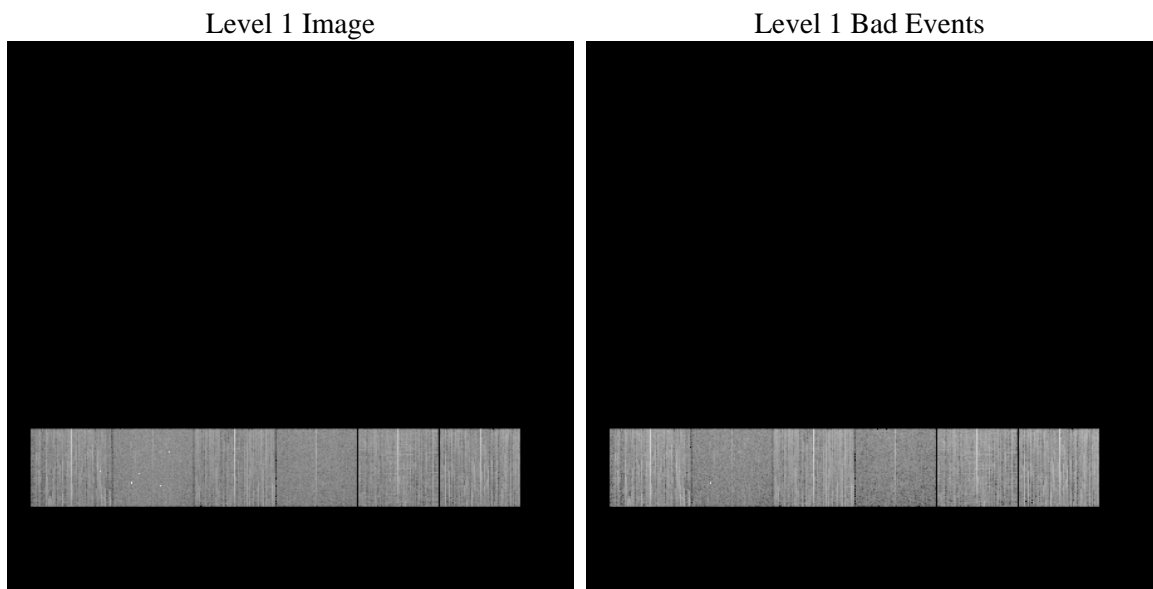
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 51010 | 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 | 304.41542510497 | Nominal RA [deg] |
| dec_nom | -23.541986879249 | Nominal Dec [deg] |
| roll_nom | 89.016364623226 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 5526.4000823498 | Sum of GTIs [s] |
| livetime | 5456.4214769084 | Livetime [s] |
| ontime4 | 5526.4000823498 | Sum of GTIs [s] |
| ontime5 | 5526.4000823498 | Sum of GTIs [s] |
| ontime6 | 5526.4000823498 | Sum of GTIs [s] |
| ontime7 | 5526.4000823498 | Sum of GTIs [s] |
| ontime8 | 5526.4000823498 | Sum of GTIs [s] |
| ontime9 | 5526.4000823498 | Sum of GTIs [s] |
| l2events | 117510 | Number of level 2 events |

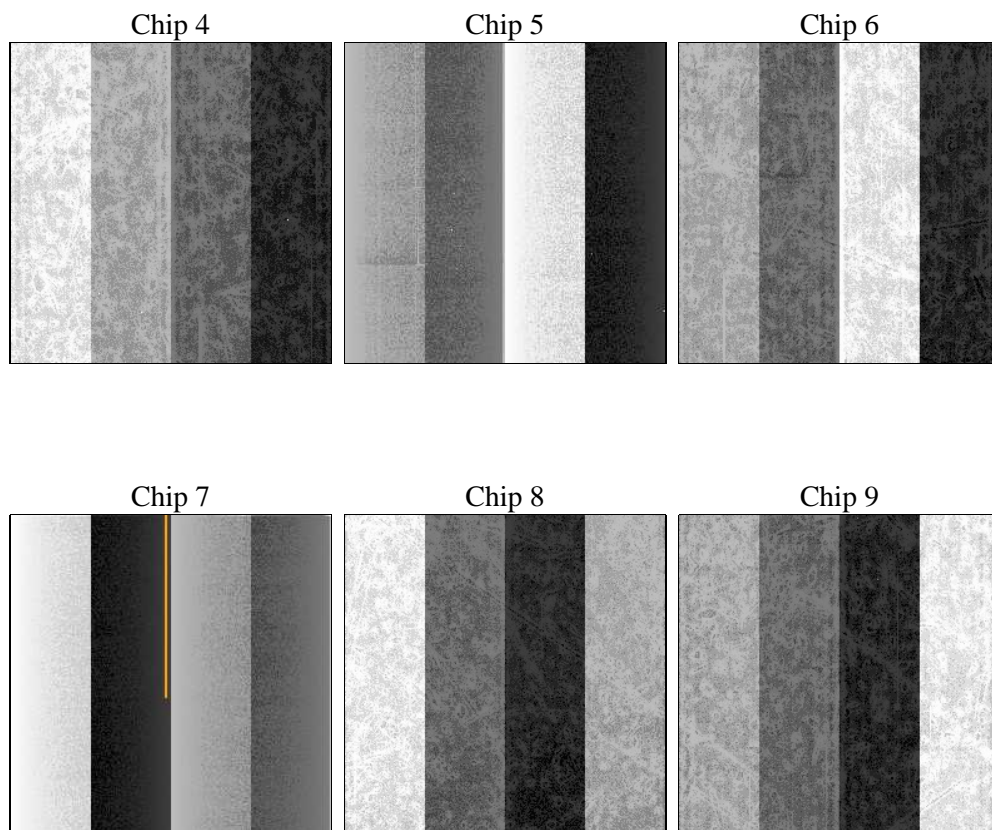
2 OBI

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 | 10.4.3.1 | Processing system revision | ontime | 5526.4000823498 | Sum of GTIs [s] |
| caldsver | 4.7.1 | | ontime4 | 5526.4000823498 | Sum of GTIs [s] |
| date | 2016-05-20T22:13:20 | Date and time of file creation | ontime5 | 5526.4000823498 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 5526.4000823498 | Sum of GTIs [s] |
| | | | ontime7 | 5526.4000823498 | Sum of GTIs [s] |
| | | | ontime8 | 5526.4000823498 | Sum of GTIs [s] |
| | | | ontime9 | 5526.4000823498 | Sum of GTIs [s] |
| | | | l1events | 672085 | 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 | 114526 | 101673 | 119342 | 89925 | 119750 | 126869 | grade 0 events | 7605 | 4939 | 5772 | 3478 | 8333 | 6235 |
| rejected events | 100551 | 61051 | 105833 | 56605 | 98938 | 113523 | | 6% | 4% | 4% | 3% | 6% | 4% |
| rejected % | 87% | 60% | 88% | 62% | 82% | 89% | grade 1 events | 87 | 150 | 33 | 73 | 61 | 54 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 2933 | 14897 | 3640 | 8737 | 4983 | 3072 |
| | | | | | | | | 2% | 14% | 3% | 9% | 4% | 2% |
| | | | | | | | grade 3 events | 1018 | 1113 | 906 | 2356 | 1730 | 982 |
| | | | | | | | | 0% | 1% | 0% | 2% | 1% | 0% |
| | | | | | | | grade 4 events | 978 | 1046 | 877 | 2285 | 1630 | 961 |
| | | | | | | | | 0% | 1% | 0% | 2% | 1% | 0% |
| | | | | | | | grade 5 events | 2386 | 4610 | 2174 | 5435 | 3077 | 2636 |
| | | | | | | | | 2% | 4% | 1% | 6% | 2% | 2% |
| | | | | | | | grade 6 events | 1931 | 19940 | 2774 | 17541 | 4857 | 2611 |
| | | | | | | | | 1% | 19% | 2% | 19% | 4% | 2% |
| | | | | | | | grade 7 events | 97588 | 54978 | 103166 | 50020 | 95079 | 110318 |
| | | | | | | | | 85% | 54% | 86% | 55% | 79% | 86% |

2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|----------------------|----------------------|
| Instrument | ACIS | ACIS |
| Detector | ACIS-456789 | ACIS-456789 |
| Grating | NONE | NONE |
| Data mode | FAINT | FAINT |
| Observation mode | SECONDARY | SECONDARY |
| [deg] Pointing RA | 0 | 304.4154251049673 |
| [deg] Pointing Dec | 0 | -23.54198687924868 |
| [deg] Pointing Roll | 0.0 | 89.01636462322597 |
| SIM focus pos (mm) | -0.68282252473119 | -0.68282252473119 |
| [mm] SIM defocus | 0.8505140384245534 | 0.8505140384245534 |
| SIM translation stage pos (mm) | 250.4660330802 | 250.4660330802 |
| [mm] SIM translation stage offset | -0.01005726120527584 | -0.01005726120527584 |
| [s] Observation start time (MET) | 580138913.830212 | 580138913.830212 |
| Observation start date | 2016-05-20T13:41:54 | 2016-05-20T13:41:53 |
| [s] Observation end time (MET) | 580146183.262198 | 580146183.262198 |
| Observation end date | 2016-05-20T15:43:03 | 2016-05-20T15:43:03 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------------|-----------|----------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | OVERRIDE | OVERRIDE |
| Number of optional ACIS chips dropped | 0 | 0 |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 3.2 | 3.2 |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2016.05.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.5264000823498 |

A.2 Comments