

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 60313 - L2 Version 3
Chandra X-Ray Center

L2 Processing Date : Nov 13 2012

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 |

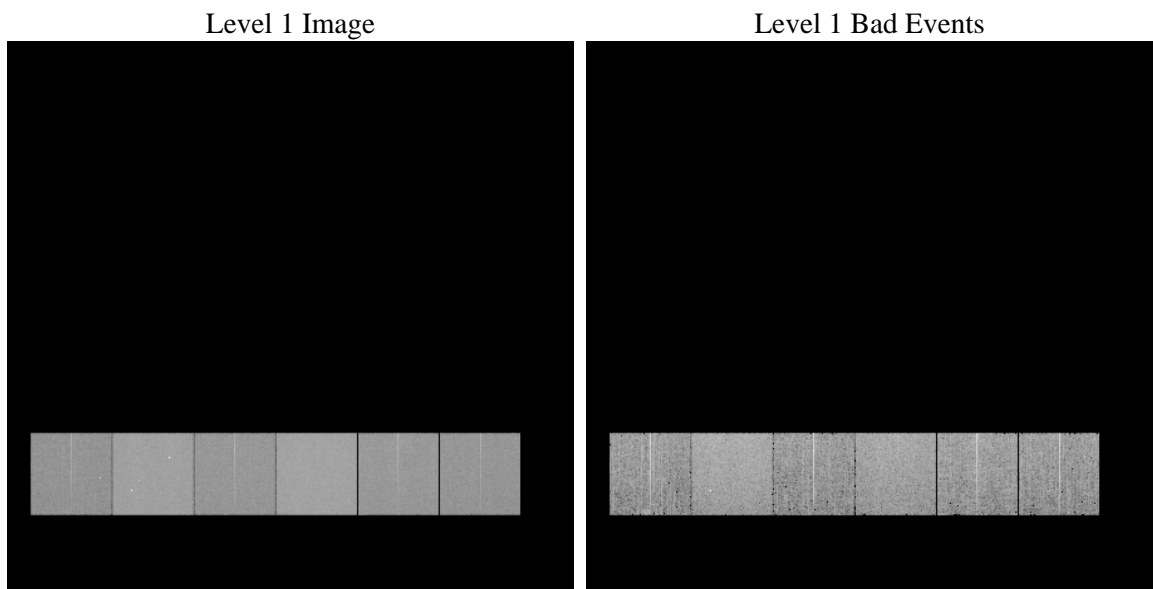
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 60313 | 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 | 186.97240268412 | Nominal RA [deg] |
| dec_nom | 12.390368020049 | Nominal Dec [deg] |
| roll_nom | 166.77921109386 | Nominal Roll [deg] |
| revision | 3 | Processing version of data |
| ontime | 8406.3589883745 | Sum of GTIs [s] |
| livetime | 8299.912609162 | Livetime [s] |
| ontime4 | 5045.4654977024 | Sum of GTIs [s] |
| ontime5 | 8406.3589883745 | Sum of GTIs [s] |
| ontime6 | 5580.228562206 | Sum of GTIs [s] |
| ontime7 | 8406.3589883745 | Sum of GTIs [s] |
| ontime8 | 5690.4220307171 | Sum of GTIs [s] |
| ontime9 | 5372.8056766987 | Sum of GTIs [s] |
| l2events | 1187996 | Number of level 2 events |

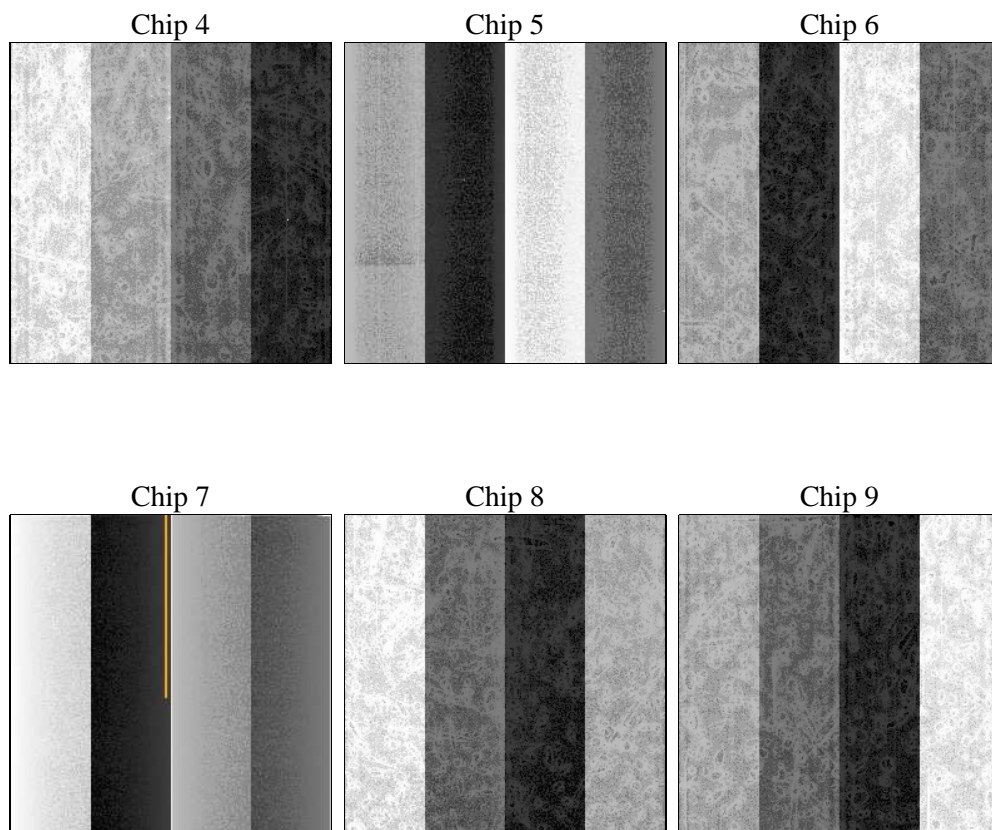
2 OBI

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 | 8.4.5 | Processing system revision | ontime | 8406.3589883745 | Sum of GTIs [s] |
| caldsver | 4.5.2 | | ontime4 | 5045.4654977024 | Sum of GTIs [s] |
| date | 2012-11-13T19:59:38 | Date and time of file creation | ontime5 | 8406.3589883745 | Sum of GTIs [s] |
| revision | 3 | Processing version of data | ontime6 | 5580.228562206 | Sum of GTIs [s] |
| | | | ontime7 | 8406.3589883745 | Sum of GTIs [s] |
| | | | ontime8 | 5690.4220307171 | Sum of GTIs [s] |
| | | | ontime9 | 5372.8056766987 | Sum of GTIs [s] |
| | | | l1events | 1533433 | 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 | 198262 | 318454 | 225595 | 340495 | 238215 | 212412 | grade 0 events | 92028 | 59287 | 101468 | 71361 | 105547 | 95491 |
| rejected events | 41377 | 58999 | 39933 | 50943 | 45976 | 40607 | | 46% | 18% | 44% | 20% | 44% | 44% |
| rejected % | 20% | 18% | 17% | 14% | 19% | 19% | grade 1 events | 725 | 219 | 493 | 219 | 563 | 571 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 25082 | 93781 | 32318 | 64216 | 33726 | 29449 |
| | | | | | | | | 12% | 29% | 14% | 18% | 14% | 13% |
| | | | | | | | grade 3 events | 10488 | 15630 | 11725 | 28765 | 12681 | 11104 |
| | | | | | | | | 5% | 4% | 5% | 8% | 5% | 5% |
| | | | | | | | grade 4 events | 10518 | 15262 | 11524 | 28849 | 12674 | 11123 |
| | | | | | | | | 5% | 4% | 5% | 8% | 5% | 5% |
| | | | | | | | grade 5 events | 2310 | 9541 | 2655 | 9019 | 3220 | 2802 |
| | | | | | | | | 1% | 2% | 1% | 2% | 1% | 1% |
| | | | | | | | grade 6 events | 20014 | 77158 | 29777 | 98237 | 28809 | 25940 |
| | | | | | | | | 10% | 24% | 13% | 28% | 12% | 12% |
| | | | | | | | grade 7 events | 37097 | 47576 | 35635 | 39829 | 40995 | 35932 |
| | | | | | | | | 18% | 14% | 15% | 11% | 17% | 16% |

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 | 186.9724026841199 |
| [deg] Pointing Dec | 0 | 12.39036802004889 |
| [deg] Pointing Roll | 0.0 | 166.7792110938593 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 |
| [mm] SIM defocus | 0 | 0.8505141146731063 |
| [mm] SIM translation stage pos | -190.132523 | 250.466033080201 |
| [mm] SIM translation stage offset | 0 | -0.01005468664627074 |
| [s] Observation start time (MET) | 196508285.800521 | 196508284.77554 |
| Observation start date | 2004-03-24T09:38:06 | 2004-03-24T09:38:04 |
| [s] Observation end time (MET) | 196532338.451577 | 196532337.42659 |
| Observation end date | 2004-03-24T16:18:58 | 2004-03-24T16:18:57 |
| Read mode | TIMED | TIMED |

| Parameter | Planned | Actual |
|---------------------------------|-----------|---------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | NONE | UPDATED |
| On-chip summing requested | N | N |
| Subarray requested | NONE | NONE |
| Alternating exposures requested | N | N |
| [s] Primary exposure time | 0.000000 | 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) | 2012.12.20 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.4063589883745 |

A.2 Comments