

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 52747 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : May 27 2014

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 |

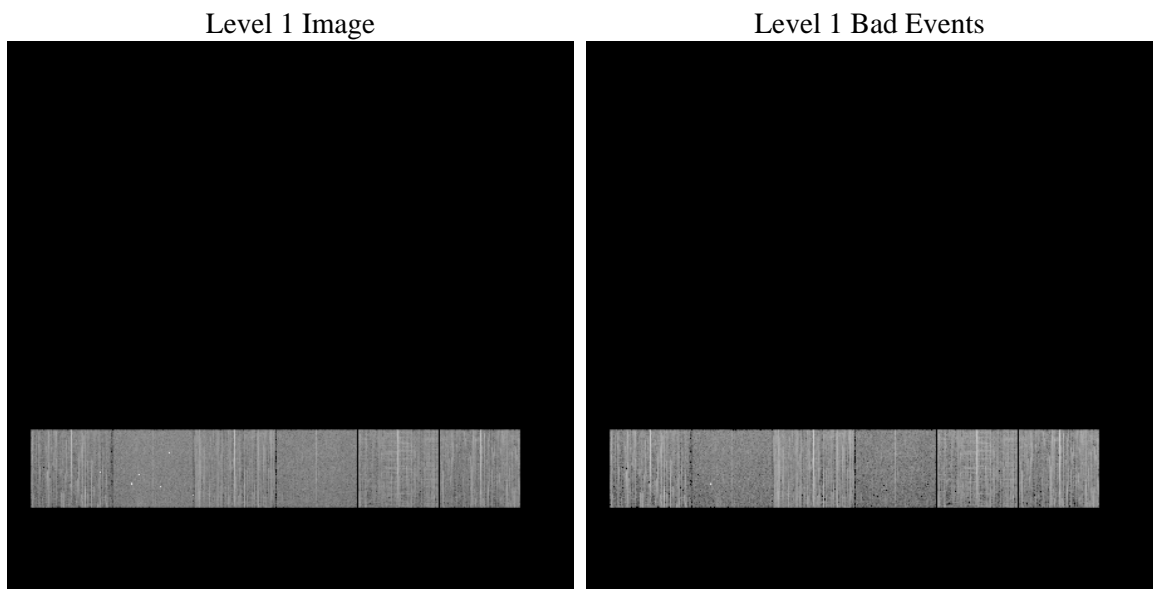
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 52747 | 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 | 260.01802841068 | Nominal RA [deg] |
| dec_nom | -47.97389351177 | Nominal Dec [deg] |
| roll_nom | 32.253607669904 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 5615.9999791384 | Sum of GTIs [s] |
| livetime | 5544.8868058533 | Livetime [s] |
| ontime4 | 5615.9999791384 | Sum of GTIs [s] |
| ontime5 | 5615.9999791384 | Sum of GTIs [s] |
| ontime6 | 5615.9999791384 | Sum of GTIs [s] |
| ontime7 | 5615.9999791384 | Sum of GTIs [s] |
| ontime8 | 5615.9999791384 | Sum of GTIs [s] |
| ontime9 | 5615.9999791384 | Sum of GTIs [s] |
| l2events | 136754 | Number of level 2 events |

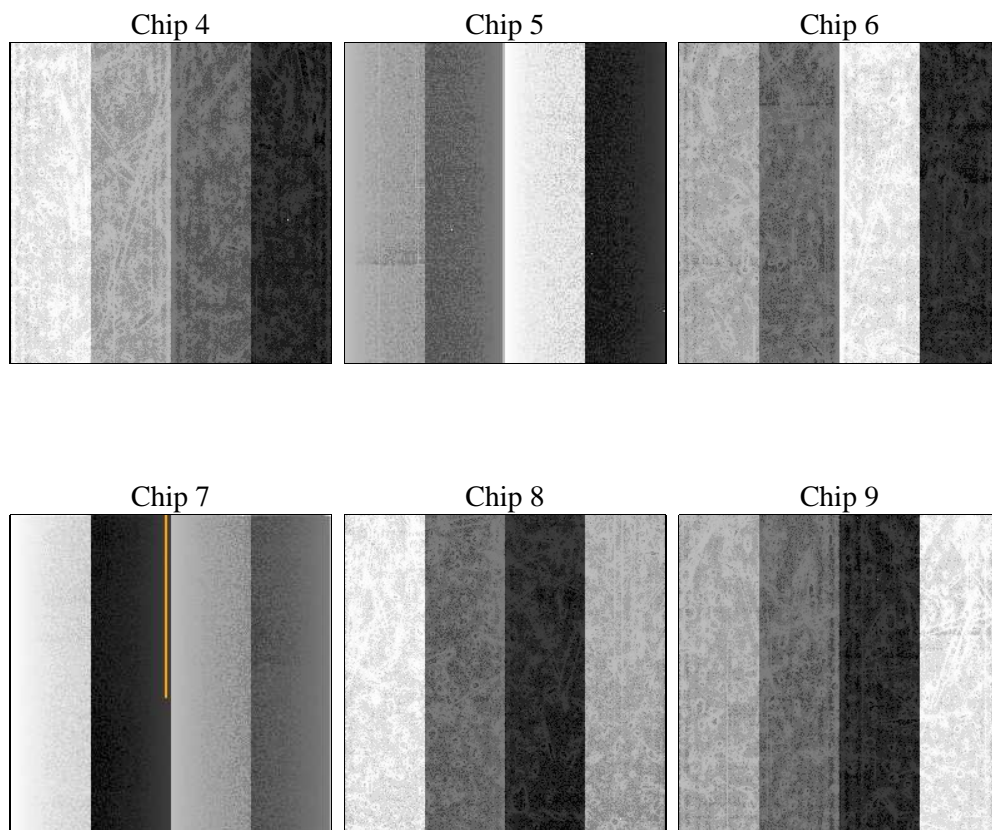
2 OBI

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 | 10.2.2 | Processing system revision | ontime | 5615.9999791384 | Sum of GTIs [s] |
| caldsver | 4.6.1 | | ontime4 | 5615.9999791384 | Sum of GTIs [s] |
| date | 2014-05-27T17:06:06 | Date and time of file creation | ontime5 | 5615.9999791384 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 5615.9999791384 | Sum of GTIs [s] |
| | | | ontime7 | 5615.9999791384 | Sum of GTIs [s] |
| | | | ontime8 | 5615.9999791384 | Sum of GTIs [s] |
| | | | ontime9 | 5615.9999791384 | Sum of GTIs [s] |
| | | | l1events | 578279 | 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 | 95032 | 90392 | 109280 | 79088 | 104246 | 100241 | grade 0 events | 10960 | 7251 | 9159 | 4764 | 10912 | 9184 |
| rejected events | 75786 | 48928 | 90737 | 44369 | 79628 | 82039 | | 11% | 8% | 8% | 6% | 10% | 9% |
| rejected % | 79% | 54% | 83% | 56% | 76% | 81% | grade 1 events | 71 | 120 | 28 | 58 | 63 | 59 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 3515 | 14477 | 3882 | 8676 | 5102 | 3614 |
| | | | | | | | | 3% | 16% | 3% | 10% | 4% | 3% |
| | | | | | | | grade 3 events | 1222 | 1306 | 1208 | 2834 | 2017 | 1283 |
| | | | | | | | | 1% | 1% | 1% | 3% | 1% | 1% |
| | | | | | | | grade 4 events | 1241 | 1315 | 1205 | 2757 | 1907 | 1260 |
| | | | | | | | | 1% | 1% | 1% | 3% | 1% | 1% |
| | | | | | | | grade 5 events | 2148 | 3989 | 2049 | 4834 | 2745 | 2255 |
| | | | | | | | | 2% | 4% | 1% | 6% | 2% | 2% |
| | | | | | | | grade 6 events | 2496 | 17550 | 3283 | 16054 | 4991 | 3041 |
| | | | | | | | | 2% | 19% | 3% | 20% | 4% | 3% |
| | | | | | | | grade 7 events | 73379 | 44384 | 88466 | 39111 | 76509 | 79545 |
| | | | | | | | | 77% | 49% | 80% | 49% | 73% | 79% |

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 | 260.0180284106783 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -47.97389351177039 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 32.2536076699045 | [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) | 517523935.088391 | 517523934.06339 | | | |
| Observation start date | 2014-05-26T20:38:55 | 2014-05-26T20:38:54 | | | |
| [s] Observation end time (MET) | 517534148.188955 | 517534147.16396 | | | |
| Observation end date | 2014-05-26T23:29:08 | 2014-05-26T23:29:07 | | | |
| 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) | 2014.05.27 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 5.6159999791384 |

A.2 Comments