

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 53753 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : Apr 23 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 |

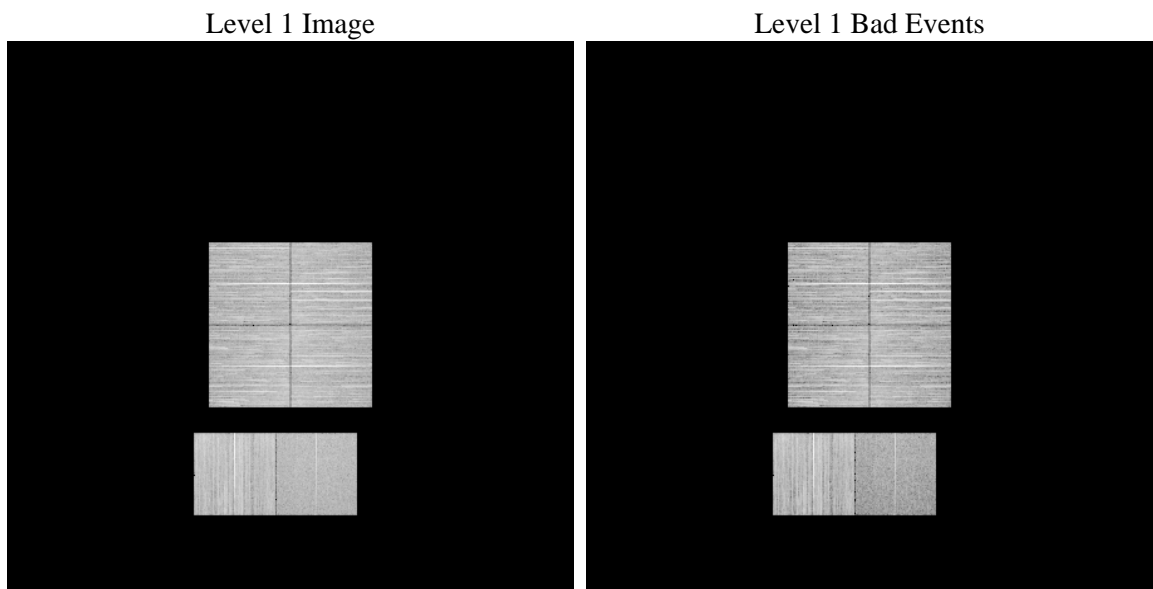
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 53753 | Observation id |
| title | ACIS-012367 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 | 179.98409265371 | Nominal RA [deg] |
| dec_nom | -11.725216772195 | Nominal Dec [deg] |
| roll_nom | 265.78886710056 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8287.9999691844 | Sum of GTIs [s] |
| livetime | 8183.0523231401 | Livetime [s] |
| ontime0 | 8287.9999691844 | Sum of GTIs [s] |
| ontime1 | 8284.7589288354 | Sum of GTIs [s] |
| ontime2 | 8287.9999691844 | Sum of GTIs [s] |
| ontime3 | 8287.9999691844 | Sum of GTIs [s] |
| ontime6 | 8287.9999691844 | Sum of GTIs [s] |
| ontime7 | 8287.9999691844 | Sum of GTIs [s] |
| l2events | 214669 | Number of level 2 events |

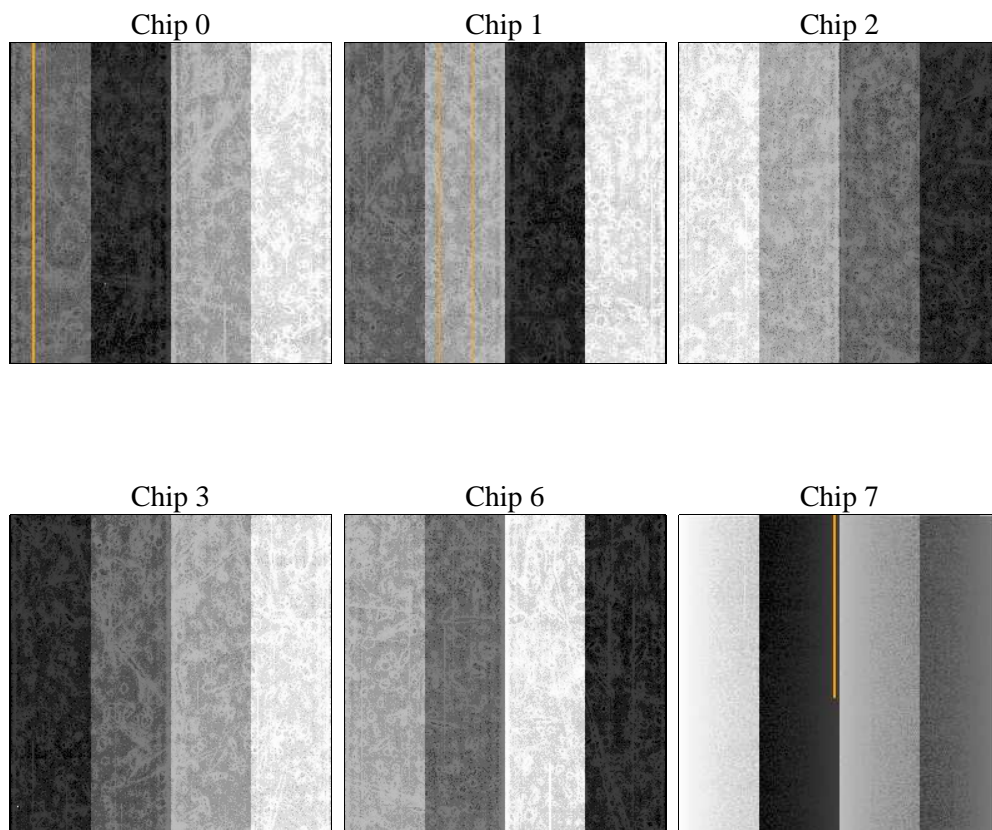
2 OBI

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 | 8287.9999691844 | Sum of GTIs [s] |
| caldsver | 4.5.6 | | ontime0 | 8287.9999691844 | Sum of GTIs [s] |
| date | 2013-04-23T06:17:31 | Date and time of file creation | ontime1 | 8284.7589288354 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 8287.9999691844 | Sum of GTIs [s] |
| | | | ontime3 | 8287.9999691844 | Sum of GTIs [s] |
| | | | ontime6 | 8287.9999691844 | Sum of GTIs [s] |
| | | | ontime7 | 8287.9999691844 | Sum of GTIs [s] |
| | | | l1events | 956629 | Number of level 1 events |

2.1.4 Events

| | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 | | ccd 0 | ccd 1 | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|-------|
| level 1 events | 154468 | 166297 | 163152 | 161601 | 179038 | 132073 | grade 0 events | 16346 | 15895 | 17324 | 17208 | 16336 | 8405 |
| rejected events | 121669 | 132723 | 129814 | 128235 | 144605 | 72329 | | 10% | 9% | 10% | 10% | 9% | 6% |
| rejected % | 78% | 79% | 79% | 79% | 80% | 54% | grade 1 events | 94 | 78 | 85 | 102 | 76 | 94 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 6848 | 7721 | 6474 | 6604 | 7737 | 14651 |
| | | | | | | | | 4% | 4% | 3% | 4% | 4% | 11% |
| | | | | | | | grade 3 events | 2248 | 2100 | 2300 | 2306 | 2169 | 4682 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 4 events | 2191 | 2125 | 2278 | 2288 | 2123 | 4590 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 3% |
| | | | | | | | grade 5 events | 2965 | 2979 | 2732 | 3343 | 3064 | 7546 |
| | | | | | | | | 1% | 1% | 1% | 2% | 1% | 5% |
| | | | | | | | grade 6 events | 5186 | 5746 | 4976 | 4960 | 6079 | 27416 |
| | | | | | | | | 3% | 3% | 3% | 3% | 3% | 20% |
| | | | | | | | grade 7 events | 118590 | 129653 | 126983 | 124790 | 141454 | 64689 |
| | | | | | | | | 76% | 77% | 77% | 77% | 79% | 48% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-012367 | ACIS-012367 | 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 | 179.9840926537083 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | -11.7252167721953 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 265.7888671005649 | [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) | 483015860.899173 | 483015859.87417 | | | |
| Observation start date | 2013-04-22T11:04:21 | 2013-04-22T11:04:19 | | | |
| [s] Observation end time (MET) | 483027359.349796 | 483027358.3248 | | | |
| Observation end date | 2013-04-22T14:15:59 | 2013-04-22T14:15:58 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Jen Lauer |
| V&V Date (YYYY-MM-DD) | 2013.04.23 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2879999691844 |

A.2 Comments