

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 51066 - L2 Version 1
Chandra X-Ray Center

L2 Processing Date : May 4 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 |

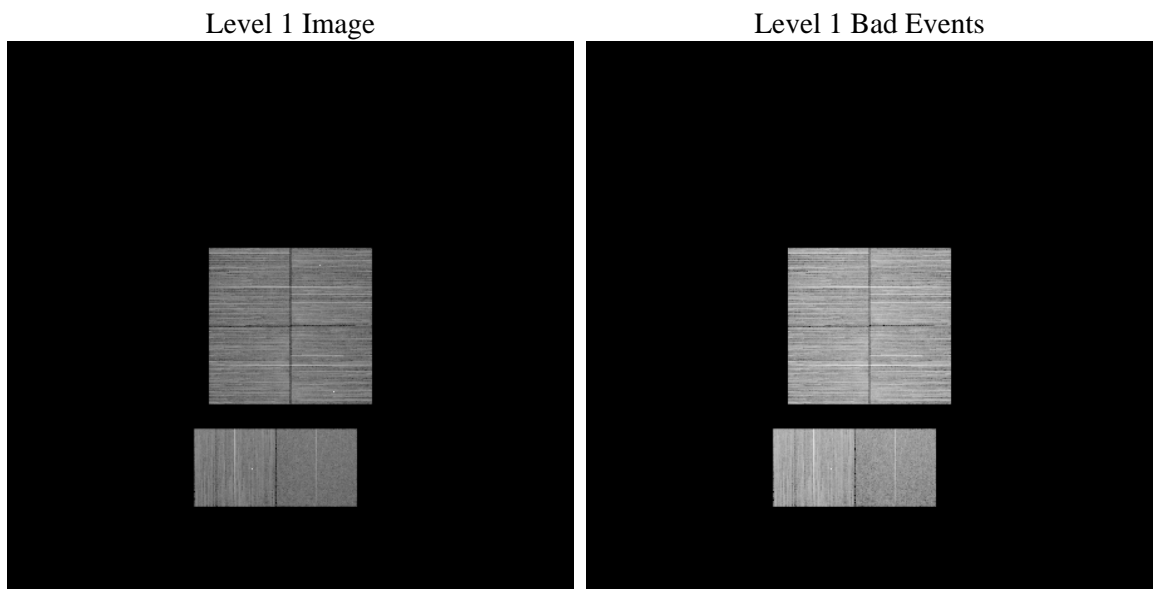
1 Front

| | | |
|----------|---|---|
| seq_num | | Sequence number |
| obs_id | 51066 | 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 | 236.35349019622 | Nominal RA [deg] |
| dec_nom | 6.8874509366672 | Nominal Dec [deg] |
| roll_nom | 147.26613704052 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 8252.7797528505 | Sum of GTIs [s] |
| livetime | 8148.2780863926 | Livetime [s] |
| ontime0 | 8252.7387127876 | Sum of GTIs [s] |
| ontime1 | 8252.6976728439 | Sum of GTIs [s] |
| ontime2 | 8252.656632781 | Sum of GTIs [s] |
| ontime3 | 8251.696932435 | Sum of GTIs [s] |
| ontime6 | 8252.6155928373 | Sum of GTIs [s] |
| ontime7 | 8252.7797528505 | Sum of GTIs [s] |
| l2events | 153255 | Number of level 2 events |

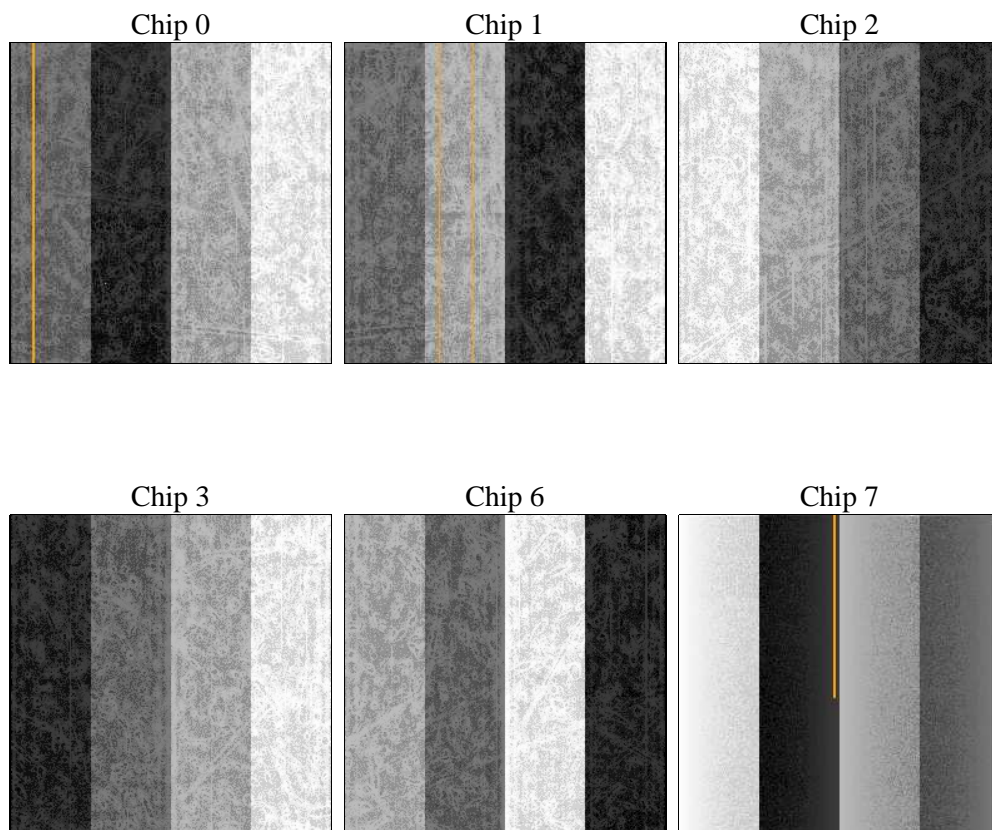
2 OBI

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 | 8252.7797528505 | Sum of GTIs [s] |
| caldsver | 4.7.1 | | ontime0 | 8252.7387127876 | Sum of GTIs [s] |
| date | 2016-05-04T23:33:35 | Date and time of file creation | ontime1 | 8252.6976728439 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime2 | 8252.656632781 | Sum of GTIs [s] |
| | | | ontime3 | 8251.696932435 | Sum of GTIs [s] |
| | | | ontime6 | 8252.6155928373 | Sum of GTIs [s] |
| | | | ontime7 | 8252.7797528505 | Sum of GTIs [s] |
| | | | l1events | 1056562 | 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 | 176958 | 186181 | 182938 | 188394 | 187376 | 134715 | grade 0 events | 9856 | 10021 | 10525 | 12666 | 9152 | 5452 |
| rejected events | 154896 | 162765 | 161051 | 161325 | 162405 | 82895 | | 5% | 5% | 5% | 6% | 4% | 4% |
| rejected % | 87% | 87% | 88% | 85% | 86% | 61% | grade 1 events | 71 | 69 | 77 | 71 | 43 | 120 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 5193 | 6355 | 4712 | 7425 | 8306 | 13201 |
| | | | | | | | | 2% | 3% | 2% | 3% | 4% | 9% |
| | | | | | | | grade 3 events | 1482 | 1392 | 1545 | 1584 | 1349 | 3529 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 2% |
| | | | | | | | grade 4 events | 1505 | 1406 | 1490 | 1519 | 1358 | 3294 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 2% |
| | | | | | | | grade 5 events | 3002 | 3065 | 2901 | 3441 | 3214 | 7848 |
| | | | | | | | | 1% | 1% | 1% | 1% | 1% | 5% |
| | | | | | | | grade 6 events | 4038 | 4255 | 3622 | 3875 | 4818 | 26357 |
| | | | | | | | | 2% | 2% | 1% | 2% | 2% | 19% |
| | | | | | | | grade 7 events | 151811 | 159618 | 158066 | 157813 | 159136 | 74914 |
| | | | | | | | | 85% | 85% | 86% | 83% | 84% | 55% |

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 | 236.3534901962223 | Subarray requested | NONE | NONE |
| [deg] Pointing Dec | 0 | 6.887450936667242 | Alternating exposures requested | N | N |
| [deg] Pointing Roll | 0.0 | 147.2661370405215 | [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) | 578721633.949156 | 578721632.92416 | | | |
| Observation start date | 2016-05-04T04:00:34 | 2016-05-04T04:00:32 | | | |
| [s] Observation end time (MET) | 578747535.700637 | 578747534.67564 | | | |
| Observation end date | 2016-05-04T11:12:16 | 2016-05-04T11:12:14 | | | |
| 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) | 2016.05.04 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2527797528505 |

A.2 Comments