

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 56307 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Jun 24 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 |

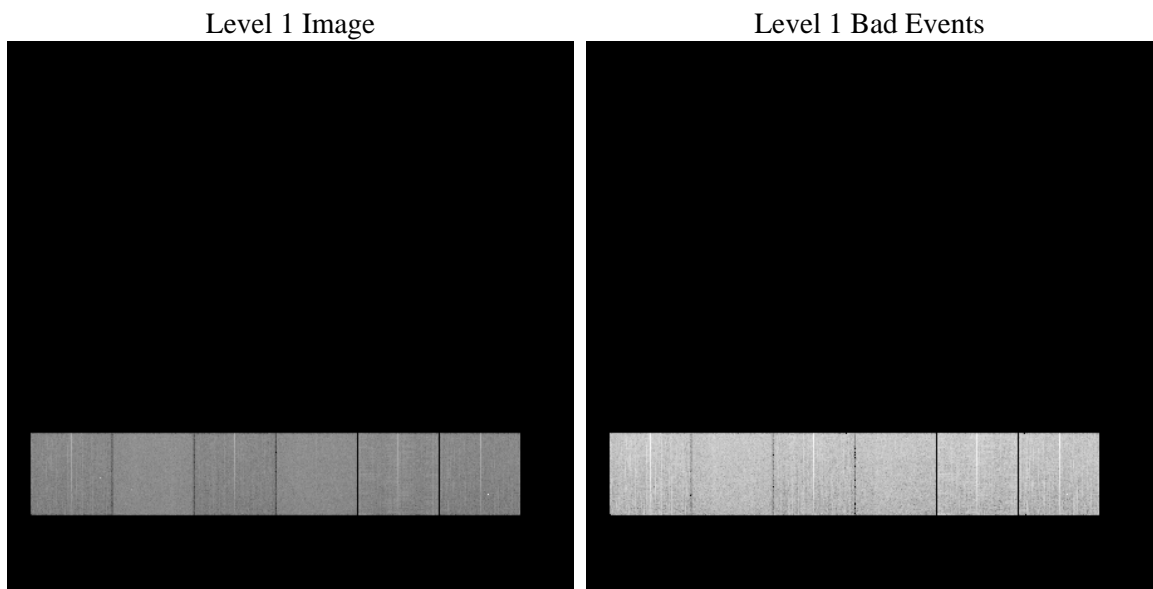
1 Front

| | | |
|----------|-------------------------------------------------|---------------------------------------------|
| seq_num | | Sequence number |
| obs_id | 56307 | 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 | 221.5111151316 | Nominal RA [deg] |
| dec_nom | -21.050255289233 | Nominal Dec [deg] |
| roll_nom | 61.12141916445 | Nominal Roll [deg] |
| revision | 2 | Processing version of data |
| ontime | 8251.4945431352 | Sum of GTIs [s] |
| livetime | 8147.0091507765 | Livetime [s] |
| ontime4 | 8251.3714231253 | Sum of GTIs [s] |
| ontime5 | 8251.4535031319 | Sum of GTIs [s] |
| ontime6 | 8251.4124631286 | Sum of GTIs [s] |
| ontime7 | 8251.4945431352 | Sum of GTIs [s] |
| ontime8 | 8251.330383122 | Sum of GTIs [s] |
| ontime9 | 8251.5355831385 | Sum of GTIs [s] |
| l2events | 430830 | Number of level 2 events |

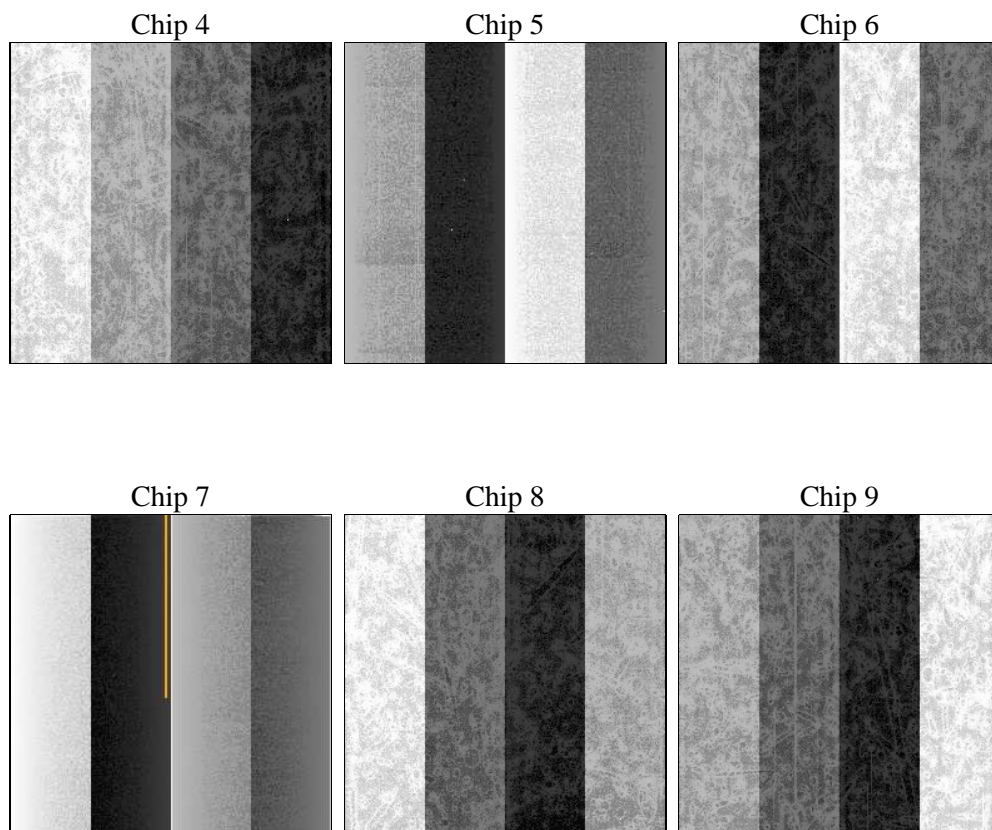
2 OBI

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 | 8251.4945431352 | Sum of GTIs [s] |
| caldsver | 4.4.10 | | ontime4 | 8251.3714231253 | Sum of GTIs [s] |
| date | 2012-06-24T20:45:35 | Date and time of file creation | ontime5 | 8251.4535031319 | Sum of GTIs [s] |
| revision | 2 | Processing version of data | ontime6 | 8251.4124631286 | Sum of GTIs [s] |
| | | | ontime7 | 8251.4945431352 | Sum of GTIs [s] |
| | | | ontime8 | 8251.330383122 | Sum of GTIs [s] |
| | | | ontime9 | 8251.5355831385 | Sum of GTIs [s] |
| | | | l1events | 922968 | 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 | 142344 | 171958 | 137795 | 168175 | 160473 | 142223 | grade 0 events | 36264 | 12532 | 35078 | 17657 | 39225 | 34729 |
| rejected events | 79729 | 73130 | 71960 | 70006 | 81095 | 75836 | | 25% | 7% | 25% | 10% | 24% | 24% |
| rejected % | 56% | 42% | 52% | 41% | 50% | 53% | grade 1 events | 342 | 178 | 227 | 128 | 277 | 246 |
| | | | | | | | | 0% | 0% | 0% | 0% | 0% | 0% |
| | | | | | | | grade 2 events | 10357 | 36617 | 12417 | 21871 | 15329 | 14107 |
| | | | | | | | | 7% | 21% | 9% | 13% | 9% | 9% |
| | | | | | | | grade 3 events | 4514 | 4345 | 4524 | 9239 | 5984 | 4358 |
| | | | | | | | | 3% | 2% | 3% | 5% | 3% | 3% |
| | | | | | | | grade 4 events | 4528 | 4288 | 4388 | 9076 | 5966 | 4415 |
| | | | | | | | | 3% | 2% | 3% | 5% | 3% | 3% |
| | | | | | | | grade 5 events | 4222 | 9238 | 4341 | 10957 | 5547 | 4745 |
| | | | | | | | | 2% | 5% | 3% | 6% | 3% | 3% |
| | | | | | | | grade 6 events | 8503 | 43472 | 11049 | 42758 | 14737 | 10504 |
| | | | | | | | | 5% | 25% | 8% | 25% | 9% | 7% |
| | | | | | | | grade 7 events | 73614 | 61288 | 65771 | 56489 | 73408 | 69119 |
| | | | | | | | | 51% | 35% | 47% | 33% | 45% | 48% |

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 | 221.5111151315999 |
| [deg] Pointing Dec | 0 | -21.05025528923337 |
| [deg] Pointing Roll | 0.0 | 61.12141916445027 |
| [mm] SIM focus pos | -0.68282252473119 | -0.68282252473119 |
| [mm] SIM defocus | 0.8505140384245534 | 0.8505140384245534 |
| [mm] SIM translation stage pos | 250.4660330802 | 250.4660330802 |
| [mm] SIM translation stage offset | -0.01005726120527584 | -0.01005726120527584 |
| [s] Observation start time (MET) | 388198611.781296 | 388198611.781296 |
| Observation start date | 2010-04-21T00:56:52 | 2010-04-21T00:56:51 |
| [s] Observation end time (MET) | 388208609.710165 | 388208609.710165 |
| Observation end date | 2010-04-21T03:43:30 | 2010-04-21T03:43:29 |
| 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) | 2012.07.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 8.2514945431352 |

A.2 Comments