

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4459 - L2 Version 5
Chandra X-Ray Center

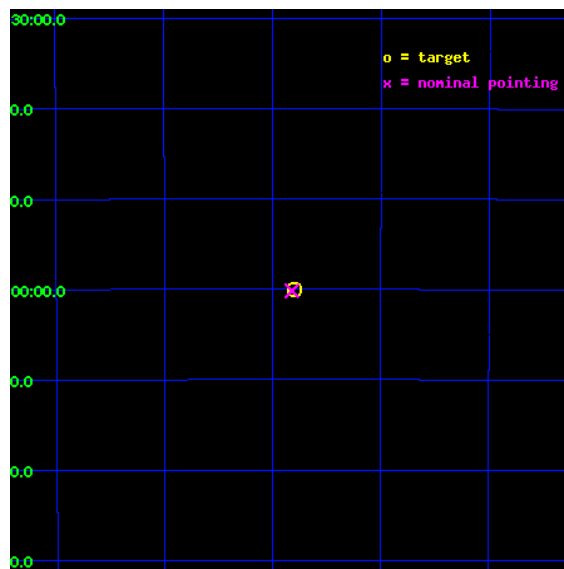
L2 Processing Date : Nov 10 2012

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1 Front

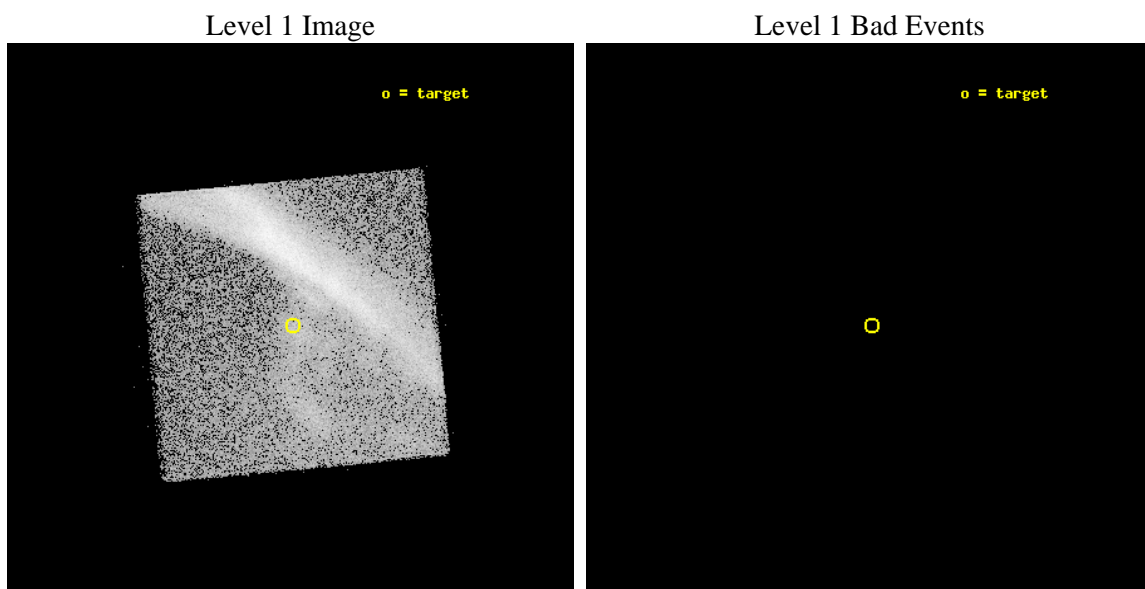
| | | |
|----------|--|---------------------------------------|
| seq_num | 100042 | Sequence number |
| obs_id | 4459 | Observation id |
| title | A Search for Soft X-Ray Auroras on Earth | Proposal title |
| observer | Dr. Ronald Elsner | Principal investigator |
| object | EARTH | Source name |
| ra_targ | 74.7 | Observer's specified target RA [deg] |
| dec_targ | -36.0 | Observer's specified target Dec [deg] |
| ra_nom | 74.70546738996 | Nominal RA [deg] |
| dec_nom | -36.002927663174 | Nominal Dec [deg] |
| roll_nom | 309.34955145828 | Nominal Roll [deg] |
| revision | 5 | Processing version of data |
| ontime | 0.0 | [s] |
| livetime | 0.0 | Ontime multiplied by DTCOR |
| l2events | 0 | Number of level 2 events |



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-------------|---|
| obi_num | 1 | Obi number | sched_exp_time | 1200.000000 | [s] Scheduled observation exposure time |
| ascdsver | 8.4.5 | Processing system revision | ontime | 0.0 | [s] |
| caldbver | 4.5.2 | | l1events | 177581 | Number of level 1 events |
| date | 2012-11-11T00:41:53 | Date and time of file creation | | | |
| revision | 5 | Processing version of data | | | |

2.1.3 Events

Level 1 Events

| | |
|-----------------|----------------------|
| | segment 0 |
| level 1 events | 177581 |
| rejected events | 0 |
| rejected % | 0% |

2.2 Compared Parameters

| Parameter | Planned | Actual |
|-----------------------------------|----------------------|----------------------|
| Instrument | HRC | HRC |
| Detector | HRC-I | HRC-I |
| Grating | NONE | NONE |
| Data mode | OBSERVING | OBSERVING |
| Observation mode | POINTING | POINTING |
| [deg] Pointing RA | 74.70544557469591 | 74.70546738995962 |
| [deg] Pointing Dec | -36.00290621222052 | -36.00292766317434 |
| [deg] Pointing Roll | 309.3495386278776 | 309.3495514582753 |
| [s] Window start time (MET) | 191361664.184000 | 191361664.184000 |
| [s] Window stop time (MET) | 191364364.184000 | 191364364.184000 |
| [mm] SIM focus pos | -1.0388663562 | -1.0388663562 |
| [mm] SIM defocus | 0.00142623215544524 | 0.00142623215544524 |
| [mm] SIM translation stage pos | 126.98297999 | 126.98297999 |
| [mm] SIM translation stage offset | 0.002514315287797331 | 0.002514315287797331 |
| [s] Observation start time (MET) | 191361685.749885 | 191361685.749885 |
| Observation start date | 2004-01-24T20:00:00 | 2004-01-24T20:01:25 |
| [s] Observation end time (MET) | 191362939.32494 | 191362939.32494 |
| Observation end date | 2004-01-24T20:20:00 | 2004-01-24T20:22:19 |

| Parameter | Planned | Actual |
|------------------------------|-----------|----------|
| Obspar format version number | 7 | 7 |
| Obspar file type | PREDICTED | ACTUAL |
| Obspar update status | OVERRIDE | OVERRIDE |

2.3 Star Slots

2.4 FID Slots

A Summary

A.1 Status

| | |
|----------------------------|-------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2013.01.17 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 1.18 |

A.2 Comments

On-Board-Computer aspect solution used. Due to violation of the earth angle constraint, there are no L2 events, and therefore no ontime or GTI. Charge time is set to the L1 time.

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Spacecraft attitude control was maintained at a single fixed attitude using gyros only, without any reference stars or any other external attitude references. This is an observation of a moving target. Event positions are in the reference frame of Chandra, not of the Earth. Users should run a software tool such as sso_freeze to reposition the events in the reference frame of the Earth, then run normal data analysis tools.