

# V&V Summary Report

## L2 ASCDS Version : 8.4.5

Observation 12071 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Jun 19 2012

See axaff12071N003\_VV001\_vvref2.pdf for the full report

|                            |                 |
|----------------------------|-----------------|
| V&V Scientist              | Joy Nichols     |
| V&V Date (YYYY-MM-DD)      | 2012.06.21      |
| V&V Edition                | 1               |
| V&V Disposition and Status | OK              |
| V&V Charge Time            | 4.1870999706984 |

## Comments

Zeroth order piled up. Standard data processing software did not correctly locate the zeroth order due to pileup. Manual intervention was used to input the correct sky coordinates ( $x=4131.55$ ,  $y=4090.48$ ) into the \*src1a.fits file table. These corrected coordinates were determined using a software tool developed by CXC called findzero, which is expected to be released in CIAO (currently in ISIS). The tool calculates the point of intersection of the readout streak and the meg arm (preferred position), or the readout streak and the heg arm. The zeroth order source position determined by the standard pipeline processing using the tool tgdetect was not used in this processing. The newly determined zeroth order coordinates have been placed in the \*src1a.fits file, replacing the coordinates determined by tgdetect. Note that these corrected coordinates of the zeroth order cannot be reproduced by running tgdetect on the data.

|          |   |   |
|----------|---|---|
| seq_num  | 401109  | Sequence number                             |
| obs_id   | 12071   | Observation id                              |
| title    | Deep Chandra Observations of the Black Hole LMC X-1 | Proposal title                              |
| observer | Dr. Michael Nowak                                   | Principal investigator                      |
| object   | LMC X-1   | Source name                                 |
| dtcycle  | 0   | &#160                                       |
| cycle    | P   | events from which exps?<br>Prim/Second/Both |
| ra_targ  | 84.911667   | Observer's specified<br>target RA [deg]     |
| dec_targ | -69.74325   | Observer's specified<br>target Dec [deg]    |
| ra_nom   | 84.925579247986                                     | Nominal RA [deg]                            |
| dec_nom  | -69.742363743089                                    | Nominal Dec [deg]                           |
| roll_nom | 339.16965753099                                     | Nominal Roll [deg]                          |
| revision | 3   | Processing version of<br>data               |
| ontime   | 4187.0999706984                                     | Sum of GTIs [s]                             |
| livetime | 4088.4011568874                                     | Livetime [s]                                |
| ontime4  | 4187.0999706984                                     | Sum of GTIs [s]                             |
| ontime5  | 4187.0999706984                                     | Sum of GTIs [s]                             |
| ontime6  | 4187.0999706984                                     | Sum of GTIs [s]                             |
| ontime7  | 4187.0999706984                                     | Sum of GTIs [s]                             |
| ontime8  | 4185.3589305282                                     | Sum of GTIs [s]                             |
| ontime9  | 4187.0999706984                                     | Sum of GTIs [s]                             |
| l2events | 104976  | Number of level 2 events                    |

