

V&V Summary Report

L2 ASCDS Version : 8.4.5

Observation 706 - L2 Version 7
Chandra X-Ray Center

L2 Processing Date : Aug 24 2012

See axaff00706N003_VV001_vvref2.pdf for the full report

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| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2012.08.29 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 27.945 |

Comments

Phase and window constraints met.

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Target location near edge of chip, outside of requested spatial filter window.

ZerOTH order not filtered. The placement of the target near the edge of the chip resulted in truncation of the negative HEG spectral arm (at about 4 A) and positive MEG spectral arm (at about 9 A).

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ZerOTH order very 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=4123.76, y=4071.4) 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

as tg_findzo (currently in ISIS as findzo). The tool calculates the point of intersection of the readout streak and the meg 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.

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Possible telemetry saturation. Bad events image shows grating arms, meaning grating spectra are piled.

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| seq_num | 400073 | Sequence number |
| obs_id | 706 | Observation id |
| title | HETG ZERO PHASE SPECTROSCOPY OF CIRCINUS X-1 | Proposal title |
| observer | Prof. William Brandt | Principal investigator |
| object | CIR X-1 | Source name |
| dtycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 230.170833 | Observer's specified target RA [deg] |
| dec_targ | -57.166667 | Observer's specified target Dec [deg] |
| ra_nom | 230.17707558785 | Nominal RA [deg] |
| dec_nom | -57.163296715078 | Nominal Dec [deg] |
| roll_nom | 67.507885163571 | Nominal Roll [deg] |
| revision | 7 | Processing version of data |
| ontime | 27945.313495874 | Sum of GTIs [s] |
| lifetime | 27286.583273783 | Lifetime [s] |
| ontime5 | 29204.011113673 | Sum of GTIs [s] |
| ontime6 | 28267.314104185 | Sum of GTIs [s] |
| ontime7 | 27945.313495874 | Sum of GTIs [s] |
| ontime8 | 29203.929033682 | Sum of GTIs [s] |
| l2events | 8169298 | Number of level 2 events |

