V&V Summary Report L2 ASCDS Version: 10.5.2

Observation 18618 - L2 Version 3 Chandra X-Ray Center

L2 Processing Date: Jan 25 2018

See axaff18618N003_VV002_vvref2.pdf for the full report

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.02.06
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	120.06610092354

Comments

The SIM dy drift of 9.2 arcsec is acceptable for this 120ks observation.

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Zeroth order piled up. The zeroth order sky position was determined using a software tool developed by CXC called findzero, which is available in CIAO as part of the tgdetect2 tool. The tool calculates the point of intersection of the readout streak on the ACIS CCD and the meg or leg dispersed spectral arm, rather than using a centroid position of the source. The findzero results are more accurate than source centroid in this case.

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Note: the streaks on chip S4 might be stronger than usual, which can happen sometimes if radiation is high. This observation was processed with default "destreak" parameters. Some of the streaks are still visible in the Level 2 event file. Order-sorting probably removes the rest. If noise seems higher near HEG +1 m*lambda~ 8A (or MEG +1 m*lambda~16A), then destreak can be re-run with more aggressive filtering.

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To compensate for a few bad pixels not marked as bad that were not removed in the Level 2 processing, a custom bad pixel file with

additional bad pixels at (chipx, chipy) = (232:234,322:339) in S1 was added in this processing. As a result, the user will NOT find a relatively bright square of pixels on the S1 chip for level 2 data caused by the application of the dither algorithm to the bad pixels in question, as opposed to previous processing(s).

seq_num	703292	Sequence number
obs_id	18618	Observation id
title	Chandra-HETG Observations of NGC 3227	Proposal title
observer	Claude Canizares	Principal investigator
object	NGC 3227	Source name
dtycycle	0	& #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	155.8775	Observer's specified target RA [deg]
dec_targ	19.865056	Observer's specified target Dec [deg]
ra_nom	155.87439556625	Nominal RA [deg]
dec_nom	19.86820276572	Nominal Dec [deg]
roll_nom	80.15768412579	Nominal Roll [deg]
revision	3	Processing version of data
ontime	120066.10092354	Sum of GTIs [s]
livetime	118497.34892359	Livetime [s]
ontime5	120066.10092354	Sum of GTIs [s]
ontime6	120062.92217135	Sum of GTIs [s]
ontime7	120066.10092354	Sum of GTIs [s]
ontime8	120059.74016154	Sum of GTIs [s]
12events	1338780	Number of level 2 events

