V&V Summary Report L2 ASCDS Version: 8.4.3

Observation 12146 - L2 Version 2 Chandra X-Ray Center

L2 Processing Date: Feb 6 2012

See axaff12146N002_VV001_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.045

Comments

Roll constraint met. ==== WARNING: there are no standard ciao tools for analysis of grating spectra from extended sources. The shape of an emission 'line' will be the shape of the zero order spatial structure convolved with the instrumental LSF. Grating extractions can be used, but need to be combined with custom spatial-spectral analysis, since wavelength is multi-valued at any particular diffraction angle. ==== WARNING::Zeroth order selected by pipeline tools is well-centered in the SNR but is not at the position(s) of brightest emission. The user may want to select a region or source of interest, then use software tools such as CIAO to specify the coordinates of the zeroth order source of interest before running the tools to resolve the dispersed events.

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function

has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use acis_process_events to reprocess the data with the parameter pix_adj=NONE or RANDOMIZE, respectively.

seq_num	501361	Sequence number
obs_id	12146	Observation id
title	SN 1987A Deep HETG Spectrum II: More than just a shocked ring	Prop
observer	Prof. Claude Canizares	Principal investigator
object	SN 1987A	Source name
dtycycle	0	& #160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.269722	Observer's specified target Dec [deg]
ra_nom	83.874208981767	Nominal RA [deg]
dec_nom	-69.275972205881	Nominal Dec [deg]
roll_nom	271.16367455495	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26045.0	Sum of GTIs [s]
livetime	25624.350659572	Livetime [s]
ontime4	26045.0	Sum of GTIs [s]
ontime5	26045.0	Sum of GTIs [s]
ontime6	26045.0	Sum of GTIs [s]
ontime7	26045.0	Sum of GTIs [s]
ontime8	26045.0	Sum of GTIs [s]
ontime9	26039.917949319	Sum of GTIs [s]
12events	232493	Number of level 2 events

