

# V&V Summary Report

## L2 ASCDS Version : 8.5

Observation 5363 - L2 Version 3  
Chandra X-Ray Center

L2 Processing Date : Dec 8 2012

See axaff05363N002\_VV001\_vvref2.pdf for the full report

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.236

## Comments

The spatial flux distribution of the source is asymmetric and extended. The wavelength solution is pertinent only to the zeroth order position determined by the tool `tgdetect`. For extended sources, there is no unique mapping from position to wavelength.

===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 necessarily at the position 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.

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Gain and CTI correction are not well calibrated on CCD\_ID 5 (ACIS-S1). Default order sorting can clip some regions, particularly longward of 30A (first order). User-specified custom processing parameters may be required in `tg_resolve_events` (`osipfile=none`, `osort_lo`, `osort_hi ~0.5`) though this can allow more zeroth order background at short wavelengths.

seq_num	500460	Sequence number
obs_id	5363	Observation id
title	Spatially resolved grating spectrometry of the newborn supernova remnant SNR1987A	Proposal title
observer	Dr. Richard McCray	Principal investigator
object	SNR1987A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.866667	Observer's specified target RA [deg]
dec_targ	-69.26975	Observer's specified target Dec [deg]
ra_nom	83.886565705467	Nominal RA [deg]
dec_nom	-69.289559376999	Nominal Dec [deg]
roll_nom	105.17524603261	Nominal Roll [deg]
revision	3	Processing version of data
ontime	45236.0	Sum of GTIs [s]
livetime	43452.701145009	Livetime [s]
ontime4	45236.0	Sum of GTIs [s]
ontime5	45236.0	Sum of GTIs [s]
ontime6	45236.0	Sum of GTIs [s]
ontime7	45236.0	Sum of GTIs [s]
ontime8	45236.0	Sum of GTIs [s]
ontime9	45236.0	Sum of GTIs [s]
l2events	154843	Number of level 2 events

