

## NAG Library Chapter Contents

### C09 – Wavelet Transforms

C09 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

<b>Routine Name</b>	<b>Mark of Introduction</b>	<b>Purpose</b>
C09AAF	22	nagf_wav_1d_init One-dimensional wavelet filter initialization
C09ABF	23	nagf_wav_2d_init Two-dimensional wavelet filter initialization
C09ACF	24	nagf_wav_3d_init Three-dimensional wavelet filter initialization
C09BAF	23	nagf_wav_1d_cont One-dimensional real continuous wavelet transform
C09CAF	22	nagf_wav_1d_sngl_fwd One-dimensional discrete wavelet transform
C09CBF	22	nagf_wav_1d_sngl_inv One-dimensional inverse discrete wavelet transform
C09CCF	22	nagf_wav_1d_multi_fwd One-dimensional multi-level discrete wavelet transform
C09CDF	22	nagf_wav_1d_multi_inv One-dimensional inverse multi-level discrete wavelet transform
C09DAF	25	nagf_wav_1d_mxolap_fwd One-dimensional maximal overlap discrete wavelet transform (MODWT)
C09DBF	25	nagf_wav_1d_mxolap_inv One-dimensional inverse maximal overlap discrete wavelet transform (IMODWT)
C09DCF	25	nagf_wav_1d_mxolap_multi_fwd One-dimensional multi-level maximal overlap discrete wavelet transform (MODWT)
C09DDF	25	nagf_wav_1d_mxolap_multi_inv One-dimensional inverse multi-level maximal overlap discrete wavelet transform (IMODWT)
C09EAF	23	nagf_wav_2d_sngl_fwd Two-dimensional discrete wavelet transform
C09EBF	23	nagf_wav_2d_sngl_inv Two-dimensional inverse discrete wavelet transform
C09ECF	23	nagf_wav_2d_multi_fwd Two-dimensional multi-level discrete wavelet transform
C09EDF	23	nagf_wav_2d_multi_inv Two-dimensional inverse multi-level discrete wavelet transform
C09EYF	25	nagf_wav_2d_coeff_ext Two-dimensional discrete wavelet transform coefficient extraction
C09EZF	25	nagf_wav_2d_coeff_ins Two-dimensional discrete wavelet transform coefficient insertion
C09FAF	24	nagf_wav_3d_sngl_fwd Three-dimensional discrete wavelet transform
C09FBF	24	nagf_wav_3d_sngl_inv Three-dimensional inverse discrete wavelet transform
C09FCF	24	nagf_wav_3d_multi_fwd Three-dimensional multi-level discrete wavelet transform
C09FDF	24	nagf_wav_3d_mxolap_multi_inv Three-dimensional inverse multi-level discrete wavelet transform

C09FYF	25	nagf_wav_3d_coeff_ext Three-dimensional discrete wavelet transform coefficient extraction
C09FZF	25	nagf_wav_3d_coeff_ins Three-dimensional discrete wavelet transform coefficient insertion

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