

NAG C Library Chapter Contents

e01 – Interpolation

e01 Chapter Introduction

Routine Name	Mark of Introduction	Purpose
e01aec	7	nag_1d_cheb_interp Interpolating functions, polynomial interpolant, data may include derivative values, one variable
e01bac	2	nag_1d_spline_interpolant Interpolating function, cubic spline interpolant, one variable
e01bec	1	nag_monotonic_interpolant Interpolating function, monotonicity-preserving, piecewise cubic Hermite, one variable
e01bfc	1	nag_monotonic_evaluate Evaluation of interpolant computed by nag_monotonic_interpolant (e01bec), function only
e01bgc	2	nag_monotonic_deriv Evaluation of interpolant computed by nag_monotonic_interpolant (e01bec), function and first derivative
e01bhc	2	nag_monotonic_intg Evaluation of interpolant computed by nag_monotonic_interpolant (e01bec), definite integral
e01dac	2	nag_2d_spline_interpolant Interpolating function, bicubic spline interpolant, two variables
e01rac	7	nag_1d_ratnl_interp Interpolating functions, rational interpolant, one variable
e01rbc	7	nag_1d_ratnl_eval Interpolated values, evaluate rational interpolant computed by nag_1d_ratnl_interp (e01rac), one variable
e01sac**	3	nag_2d_scatter_interpolant A function to generate a two-dimensional surface interpolating a set of data points, using either the method of Renka and Cline or the modified Shepard's method
e01sbc**	3	nag_2d_scatter_eval A function to evaluate, at a set of points, the two-dimensional interpolant function generated by nag_2d_scatter_interpolant (e01sac)
e01sgc	8	nag_2d_shep_interp Interpolating functions, modified Shepard's method, two variables
e01shc	8	nag_2d_shep_eval Interpolated values, evaluate interpolant computed by nag_2d_shep_interp (e01sgc), function and first derivatives, two variables
e01sjc	8	nag_2d_triangular_interp A function to generate a two-dimensional surface interpolating a set of data points, using either the method of Renka and Cline or the modified Shepard's method
e01skc	8	nag_2d_triangular_eval A function to evaluate, at a set of points, the two-dimensional interpolant function generated by nag_2d_shep_interp (e01sgc) or nag_2d_triangular_interp (e01sjc)
e01szc**	3	nag_2d_scatter_free Freeing function for use with nag_2d_scatter_eval (e01sbc)
e01tgc	7	nag_3d_shep_interp Interpolating functions, modified Shepard's method, three variables

e01thc 7 nag_3d_shep_eval
Interpolated values, evaluate interpolant computed by nag_3d_shep_interp
(e01tgc), function and first derivatives, three variables

** This routine has been superseded, although it will be retained in the Library until at least Mark 10. See the document 'Advice on Replacement Calls for Withdrawn/Superseded Routines' for details of the recommended replacement routine.
