

Keywords in Context for the NAG Fortran 90 Library

The entries in this Keywords in Context (KWIC) index have been derived automatically from selected keywords in the description (List of Contents entry) of each module and procedure, and may therefore not reflect the full functionality of the modules and procedures.

We are considering dropping this index in future releases of the Library, and would therefore be interested in receiving any comments about its usefulness.

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Computes the deviate associated with a given lower tail probability of a ...	<code>nag_beta_deviate</code>	Procedure	20.5
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... lower tail, upper tail or point probability for a binomial distribution with parameters n and p	<code>nag_binom_prob</code>	Procedure	20.7
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... a real or complex, symmetric or Hermitian system of linear equations with one or many right-hand sides	<code>nag_sym_lin_sys</code>	Module	5.2
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Solves a general real or complex banded system of linear equations , with coefficient matrix previously factorized by ...	<code>nag_gen_bnd_lin_sol</code>	Procedure	5.4
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Solves a real or complex, symmetric or Hermitian system of linear equations, with coefficient matrix previously ...	nag_sym_lin_sol	Procedure	5.2
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... or complex Hermitian positive definite banded system of linear equations, with coefficient matrix previously ...	nag_sym_bnd_lin_sol	Procedure	5.5
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... factorization of a real or complex, symmetric or Hermitian matrix	nag_sym_lin_fac	Procedure	5.2
... or Hermitian system of linear equations, with coefficient matrix previously factorized by nag_sym_lin_fac	nag_sym_lin_sol_fac	Procedure	5.2
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... that a singular value decomposition of the coefficient matrix has already been computed	<code>nag_lin_lsq_sol_svd</code>	Procedure	6.4
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Form or apply the matrix Q determined by <code>nag_qr_fac</code>	<code>nag_qr_orth</code>	Procedure	6.4
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Computes the variance-covariance matrix for a nonlinear least-squares problem	<code>nag_nlin_lsq_cov</code>	Procedure	9.2
... Normal distribution with mean vector a and covariance matrix C	<code>nag_rand_mv_normal</code>	Procedure	21.2
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Generates a 2-d interpolating function using a modified Shepard method	<code>nag_scat_2d_interp</code>	Procedure	8.4
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Performs a general multiple linear regression analysis for any given predictor ...	<code>nag_mult_lin_reg</code>	Procedure	25.1
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Computes probabilities for various parts of a multivariate Normal distribution	<code>nag_mv_normal_prob</code>	Procedure	20.1
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... random number generating procedures to give a repeatable or non-repeatable sequence of random numbers	<code>nag_rand_seed_set</code>	Procedure	21.1
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Computes a norm , of a real or complex square banded matrix	<code>nag_gen_bnd_mat_norm</code>	Procedure	4.1
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Computes a norm , of a real or complex, symmetric ... banded ...	<code>nag_sym_bnd_mat_norm</code>	Procedure	4.1
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Computes orthogonal rotation, using a generalized orthomax rotations	<code>nag_orthomax</code>	Procedure	28.3
Computes orthogonal rotation, using a generalized orthomax rotations	<code>nag_orthomax</code>	Procedure	28.3
... singularities at user-specified break-points, suitable for oscillatory integrands	<code>nag_quad_1d_gen</code>	Procedure	11.1
... symmetric or Hermitian matrix, stored in conventional or packed storage	<code>nag_sym_mat_norm</code>	Procedure	4.1
... real or complex triangular matrix, stored in conventional or packed storage	<code>nag_tri_mat_norm</code>	Procedure	4.1
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Integrates a system of parabolic PDE's ... with ODE's; using a Chebyshev C^0 ...	<code>nag_pde_parab_1d_fd</code>	Procedure	13.3
	<code>nag_pde_parab_1d_coll</code>	Procedure	13.3
... generated by <code>nag_scat_2d_interp</code> and its partial derivatives	<code>nag_scat_2d_eval</code>	Procedure	8.4
... generated by <code>nag_scat_3d_interp</code> and its partial derivatives	<code>nag_scat_3d_eval</code>	Procedure	8.4
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Calculates the partial variance-covariance matrix and the partial ...	<code>nag_part_correl</code>	Procedure	25.2
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... which arises from the discretization of a two-dimensional elliptic PDE 's on a rectangle	<code>nag_pde_ell_rect</code>	Procedure	13.2
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... vector from a discrete distribution defined in terms of its PDF or CDF	<code>nag_rand_user_dist</code>	Procedure	21.3
Calculates the variance-covariance matrix and the Pearson product-moment correlation coefficients for a set of data	<code>nag_prod_mom_correl</code>	Procedure	25.2
Generalized Schur factorization of a real or complex matrix pencil	<code>nag_gen_schur_fac</code>	Procedure	6.6
Inverts a permutation , thus converts a rank vector to an index vector, ...	<code>nag_invert_perm</code>	Procedure	1.4
Checks the validity of a permutation	<code>nag_check_perm</code>	Procedure	1.4
Decomposes a permutation into cycles, as an aid to reordering ranked data	<code>nag_decomp_perm</code>	Procedure	1.4
Returns an approximation to π	<code>nag_pi</code>	Procedure	1.5
... the squared coherency, the cross amplitude, the gain and the phase spectra	<code>nag_bivar_spectral_coh</code>	Procedure	29.3
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Performs a Cholesky or Bunch–Kaufman factorization of a real or complex, symmetric or Hermitian matrix	<code>nag_sym_lin_fac</code>	Procedure	5.2
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... deviate associated with a given probability of a Student's <i>t</i> -distribution	<code>nag_t_deviate</code>	Procedure	20.2
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Selected eigenvalues of a real symmetric tridiagonal matrix	<code>nag_sym_tridiag_eig_val</code>	Procedure	6.1
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Basic Descriptive Statistics for Univariate Data	<code>nag_basic_stats</code>	Module	22.1
Computes basic descriptive statistics for univariate data	<code>nag_summary_stats_1v</code>	Procedure	22.1
Calculates the sample autocorrelation function of a univariate time series	<code>nag_tsa_acf</code>	Procedure	29.1
Calculates the sample partial autocorrelation function of a univariate time series	<code>nag_tsa_pacf</code>	Procedure	29.1
Calculates the smoothed sample spectrum of a univariate time series	<code>nag_spectral_data</code>	Procedure	29.3
Calculates the smoothed sample spectrum of a univariate time series using autocovariances data	<code>nag_spectral_cov</code>	Procedure	29.3
... the element of largest absolute value, of a real or complex upper Hessenberg matrix	<code>nag_hessen_mat_norm</code>	Procedure	4.1
Computes lower or upper tail probability for a χ^2 -distribution with ν ...	<code>nag_chisq_prob</code>	Procedure	20.3
Computes lower or upper tail probability for an F -distribution with ν_1 ...	<code>nag_f_prob</code>	Procedure	20.4
Computes lower or upper tail probability for a beta distribution with ...	<code>nag_beta_prob</code>	Procedure	20.5
Computes lower or upper tail probability for a gamma distribution with shape ...	<code>nag_gamma_prob</code>	Procedure	20.6
Computes lower tail, upper tail or point probability for a binomial distribution ...	<code>nag_binom_prob</code>	Procedure	20.7
Computes lower tail, upper tail or point probability for a Poisson distribution ...	<code>nag_poisson_prob</code>	Procedure	20.7
Computes lower tail, upper tail or point probability for a hypergeometric ...	<code>nag_hypergeo_prob</code>	Procedure	20.7
Computes the variance-covariance matrix for a nonlinear least-squares problem	<code>nag_nlin_lsq_cov</code>	Procedure	9.2
Calculates the variance-covariance matrix and the Pearson product-moment ...	<code>nag_prod_mom_correl</code>	Procedure	25.2
Calculates the partial variance-covariance matrix and the partial correlation matrix ...	<code>nag_part_correl</code>	Procedure	25.2

Performs canonical variate analysis	<code>nag_canon_var</code>	Procedure	28.2
Sorts a vector of numeric or character data into ascending or ...	<code>nag_sort_vec</code>	Procedure	1.4
Ranks a vector of numeric or character data in ascending or ...	<code>nag_rank_vec</code>	Procedure	1.4
Reorders a vector of numeric or character data into the order specified ...	<code>nag_reorder_vec</code>	Procedure	1.4
Inverts a permutation, thus converts a rank vector to an index vector, or vice versa	<code>nag_invert_perm</code>	Procedure	1.4
Matrix and Vector Operations		Chapter	4
Matrix- vector multiply for a sparse matrix	<code>nag_sparse_matvec</code>	Procedure	4.3
Generates a vector of n random numbers from a multivariate Normal ...	<code>nag_rand_mv_normal</code>	Procedure	21.2
... from a binomial distribution and/or returns a reference vector for the distribution	<code>nag_rand_binom</code>	Procedure	21.3
... a negative binomial distribution and/or returns a reference vector for the distribution	<code>nag_rand_neg_binom</code>	Procedure	21.3
... an hypergeometric distribution and/or returns a reference vector for the distribution	<code>nag_rand_hypergeo</code>	Procedure	21.3
Generates random integers and/or returns a reference vector from a discrete distribution defined in terms of its ...	<code>nag_rand_user_dist</code>	Procedure	21.3
... integers from a discrete distribution, using a reference vector	<code>nag_rand_ref_vec</code>	Procedure	21.3
Computes the convolution or correlation of two real or complex vectors	<code>nag_fft_conv</code>	Procedure	7.3
1-d quadrature, adaptive, finite interval, weight function $\cos(\omega x)$ or $\sin(\omega x)$	<code>nag_quad_1d_wt_trig</code>	Procedure	11.1
1-d quadrature, adaptive, finite interval, weight function with end-point singularities of ...	<code>nag_quad_1d_wt_end_sing</code>	Procedure	11.1
1-d quadrature, adaptive, finite interval, weight function $1/(x - c)$, Cauchy principal value (Hilbert ...)	<code>nag_quad_1d_wt_hilb</code>	Procedure	11.1
1-d quadrature, adaptive, semi-infinite interval, weight function $\cos(\omega x)$ or $\sin(\omega x)$	<code>nag_quad_1d_inf_wt_trig</code>	Procedure	11.2
Generates a weighted least-squares cubic spline fit to an arbitrary 1-d ...	<code>nag_spline_1d_lsq_fit</code>	Procedure	8.2
Generates a minimal, weighted least-squares bicubic spline surface fit to a given ...	<code>nag_spline_2d_lsq_fit</code>	Procedure	8.3
Calculation of weights and abscissae for Gaussian quadrature rules, general ...	<code>nag_quad_gs_wt_absc</code>	Procedure	11.4
Writes a real, complex or integer general matrix	<code>nag_write_gen_mat</code>	Procedure	1.3
Writes a real or complex triangular matrix	<code>nag_write_tri_mat</code>	Procedure	1.3
Writes a real or complex band matrix	<code>nag_write_bnd_mat</code>	Procedure	1.3
Solves ' zero-one ', 'general', 'mixed' or 'all' integer linear ...	<code>nag_ip_sol</code>	Procedure	19.1