

NAG Library Chapter Contents

G03 – Multivariate Methods

G03 Chapter Introduction

| Routine Name | Mark of Introduction | Purpose |
|--------------|----------------------|--|
| G03AAF | 14 | nagf_mv_prin_comp Performs principal component analysis |
| G03ACF | 14 | nagf_mv_canon_var Performs canonical variate analysis |
| G03ADF | 14 | nagf_mv_canon_corr Performs canonical correlation analysis |
| G03BAF | 15 | nagf_mv_rot_orthomax Computes orthogonal rotations for loading matrix, generalized orthomax criterion |
| G03BCF | 15 | nagf_mv_rot_procrustes Computes Procrustes rotations |
| G03BDF | 22 | nagf_mv_rot_promax ProMax rotations |
| G03CAF | 15 | nagf_mv_factor Computes maximum likelihood estimates of the parameters of a factor analysis model, factor loadings, communalities and residual correlations |
| G03CCF | 15 | nagf_mv_factor_score Computes factor score coefficients (for use after G03CAF) |
| G03DAF | 15 | nagf_mv_discrim Computes test statistic for equality of within-group covariance matrices and matrices for discriminant analysis |
| G03DBF | 15 | nagf_mv_discrim_mahal Computes Mahalanobis squared distances for group or pooled variance-covariance matrices (for use after G03DAF) |
| G03DCF | 15 | nagf_mv_discrim_group Allocates observations to groups according to selected rules (for use after G03DAF) |
| G03EAF | 16 | nagf_mv_distance_mat Computes distance matrix |
| G03ECF | 16 | nagf_mv_cluster_hier Hierarchical cluster analysis |
| G03EFF | 16 | nagf_mv_cluster_kmeans <i>K</i> -means cluster analysis |
| G03EHF | 16 | nagf_mv_cluster_hier_dendrogram Constructs dendrogram (for use after G03ECF) |
| G03EJF | 16 | nagf_mv_cluster_hier_indicator Computes cluster indicator variable (for use after G03ECF) |
| G03FAF | 17 | nagf_mv_multidimscal_metric Performs principal coordinate analysis, classical metric scaling |
| G03FCF | 17 | nagf_mv_multidimscal_ordinal Performs non-metric (ordinal) multidimensional scaling |
| G03GAF | 24 | nagf_mv_gaussian_mixture Fits a Gaussian mixture model |
| G03ZAF | 15 | nagf_mv_z_scores Produces standardized values (<i>z</i> -scores) for a data matrix |