NAG Library Chapter Contents

G08 – Nonparametric Statistics

G08 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

Routine Name	Mark of Introduction	Purpose
G08AAF	8	nagf_nonpar_test_sign Sign test on two paired samples
G08ACF	8	nagf_nonpar_test_median Median test on two samples of unequal size
G08AEF	8	nagf_nonpar_test_friedman Friedman two-way analysis of variance on k matched samples
G08AFF	8	nagf_nonpar_test_kruskal Kruskal–Wallis one-way analysis of variance on k samples of unequal size
G08AGF	14	nagf_nonpar_test_wilcoxon Performs the Wilcoxon one-sample (matched pairs) signed rank test
G08AHF	14	nagf_nonpar_test_mwu Performs the Mann–Whitney U test on two independent samples
G08AJF	14	nagf_nonpar_prob_mwu_noties Computes the exact probabilities for the Mann–Whitney U statistic, no ties in pooled sample
G08AKF	14	nagf_nonpar_prob_mwu_ties Computes the exact probabilities for the Mann–Whitney U statistic, ties in pooled sample
G08ALF	15	nagf_nonpar_test_cochranq Performs the Cochran Q test on cross-classified binary data
G08BAF	8	nagf_nonpar_test_mooddavid Mood's and David's tests on two samples of unequal size
G08CBF	14	nagf_nonpar_test_ks_1sample Performs the one-sample Kolmogorov–Smirnov test for standard distributions
G08CCF	14	nagf_nonpar_test_ks_1sample_user Performs the one-sample Kolmogorov–Smirnov test for a user-supplied distribution
G08CDF	14	nagf_nonpar_test_ks_2sample Performs the two-sample Kolmogorov–Smirnov test
G08CGF	14	nagf_nonpar_test_chisq Performs the χ^2 goodness-of-fit test, for standard continuous distributions
G08CHF	23	nagf_nonpar_gofstat_anddar Calculates the Anderson–Darling goodness-of-fit test statistic
G08CJF	23	nagf_nonpar_gofstat_anddar_unif Calculates the Anderson–Darling goodness-of-fit test statistic and its probability for the case of uniformly distributed data
G08CKF	23	nagf_nonpar_gofstat_anddar_normal Calculates the Anderson–Darling goodness-of-fit test statistic and its probability for the case of a fully-unspecified Normal distribution
G08CLF	23	nagf_nonpar_gofstat_anddar_exp Calculates the Anderson–Darling goodness-of-fit test statistic and its probability for the case of an unspecified exponential distribution
G08DAF	8	nagf_nonpar_concordance_kendall Kendall's coefficient of concordance
G08EAF	14	nagf_nonpar_randtest_runs Performs the runs up or runs down test for randomness