1 Program 3dFriedman

1.1 Purpose

Program 3dFriedman compares blocked multiple treatments. This program performs the nonparametric Friedman test for randomized complete block design experiments, on a voxel-by-voxel basis. Output includes the index of the best (highest ranking) treatment, as well as the Friedman chi-square statistic, for each voxel.

The Friedman test is the nonparametric counterpart of the mixed effects two-way ANOVA. As such, program 3dFriedman roughly corresponds to program 3dANOVA2, which may be used to compare blocked multiple treatments, assuming that the underlying populations are normally distributed with equal variances.

1.2 Further Details

For further details, see Section 4 of *Nonparametric Statistical Analysis of FMRI Data*, contained in file Nonparametric.ps.