Package 'free1way.docreg'

November 1, 2026

Title Additional Documentation and Regression Tests for 'stats::free1way()'

Version 1.1-0

Description Function 'stats::free1way()' implements semiparametrically efficient population- and permutation-based inference in distribution-free stratified K-sample oneway layouts. This package provides additional documentation, including a detailed description of the implementation, and serves as a home for extensive regression tests.

Depends R (>= 4.6.2)

Suggests Matrix, rms, survival, MASS, tram, coin, multcomp, TH.data, Hmisc, lattice, latticeExtra, daewr, brglm2, ordinalCont, bibtex, memisc

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URL https://codeberg.org/thothorn/coin/

BugReports https://codeberg.org/thothorn/coin/issues

NeedsCompilation no

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Repository CRAN

Date/Publication 2026-11-01 12:50:02 UTC

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`scaleTest` *Distribution-free Permutation Scale Tests in a Stratified One-Way Layout*

Description

Permutation tests for scale parameters in the distribution-free stratified K-sample one-way layout for binary, ordinal, numeric and potentially independently right-censored outcomes.

Usage

```
scaleTest(object, B = 0, ...)
```

Arguments

`object`	an object of class `free1way`.
`B`	an integer specifying the number of replicates used in the permutation test. The default (`B = 0`) performs an asymptotic permutation test, `B > 0` uses `B` Monte Carlo replications to approximate the permutation distribution.
`...`	additional parameters, currently ignored.

Details

The distribution function F_1 of the response in the control group (defined by the first factor level of the grouping factor `groups`) is compared to the distribution functions in the remaining groups F_k for $k = 2, \ldots, K$. No assumptions are made regarding the form of F_1, and thus inference is distribution-free. However, a semiparametric model assumes that each distribution function F_k only depends on F_1 and a scalar parameter ξ_k. The link function Q defines the scale model

$$F_k(y) = Q^{-1}(Q(F_1(y))/\exp(\xi_k))$$

for testing $H_0^k : \xi_k = 0, k = 2, \ldots, K$. Under the null, the model is fitted using `free1way` and permutation tests are reported.

Value

An object of class `htest`.

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