Package: AovBay (via r-universe)

October 8, 2026

Type Package

Title Classic, Nonparametric and Bayesian One-Way Analysis of Variance Panel

Version 0.1.0

Description It covers various approaches to analysis of variance, provides an assumption testing section in order to provide a decision diagram that allows selecting the most appropriate technique. It provides the classical analysis of variance, the nonparametric equivalent of Kruskal Wallis, and the Bayesian approach. These results are shown in an interactive shiny panel, which allows modifying the arguments of the tests, contains interactive graphics and presents automatic conclusions depending on the tests in order to contribute to the interpretation of these analyzes. 'AovBay' uses 'Stan' and 'FactorBayes' for Bayesian analysis and 'Highcharts' for interactive charts.

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Encoding UTF-8

LazyData true

Biarch true

Depends R (>= 3.4.0)

Imports methods, DT, shiny, shinydashboardPlus, shinydashboard, Rcpp (>= 0.12.0), RcppParallel (>= 5.0.1), rstan (>= 2.18.1), rstantools (>= 2.1.1), dplyr, tibble, BayesFactor, broom, car, highcharter, moments, reshape, nortest, purrr, shinycssloaders, stringr, waiter, htmltools

LinkingTo BH (>= 1.66.0), Rcpp (>= 0.12.0), RcppEigen (>= 0.3.3.3.0), RcppParallel (>= 5.0.1), rstan (>= 2.18.1), StanHeaders (>= 2.18.0)

SystemRequirements GNU make

RoxygenNote 7.1.1

NeedsCompilation yes

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Config/pak/sysreqs make

Repository https://cran.r-universe.dev

Date/Publication 2021-07-22 05:30:02 UTC

RemoteUrl https://github.com/cran/AovBay

RemoteRef HEAD

RemoteSha c2a88cc02d6f9113cf7905b4386dea0b78d373aa

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`AovBay-package` *The 'AovBay' package.*

Description

Package developed for the visualization and presentation of one-way analysis of variance models, with a classical, non-parametric and Bayesian approach.

References

Stan Development Team (2020). RStan: the R interface to Stan. R package version 2.19.3. https://mc-stan.org

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`aovbayes` *Interactive panel ANOVA classic, non parametric and bayesian*

Description

Interactive panel to visualize and develop one-way analysis of variance models, from the classical, non-parametric and Bayesian approach.

Usage

```
aovbayes(dataset = FALSE)
```

Arguments

dataset	Data set

Value

A shiny panel with the classical, non-parametric and Bayesian analyzes of variance, based on the specification of the dependent and independent variable of the data set provided in dataset, also provides a decision diagram that suggests which method is appropriate, based on the assumptions of the models.

Examples

```
data(PollutionData)
aovbayes(PollutionData)
```

PollutionData *Pollutions Data Set*

Description

A data set of removal of a pharmaceutical product classified as emerging pollutants in aqueous medium using the vetiver species (Chrysopogon zizanioides).

Usage

```
PollutionData
```

Format

A data frame:

CONC.ppm Concentration of the pollution in parts per million.

RemocionPorc Remotion Percent.

Source

<http://revistabionatura.com/2021.06.01.7.html>

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