Package ‘AovBay’

July 22, 2021

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.
License MIT + file LICENSE
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
Author Mauricio Rojas-Campuzano [aut, cre, ctb],
       Johny Pambabay-Calero [aut, ctb],
       Sergio Bauz-Olvera [ctb],
       Omar Ruiz-Barzola [ctb]
R topics documented:

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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


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.
PollutionData

Examples

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

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**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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