Package 'permutes'

May 1, 2017

Title Permutation Tests for Time Series Data

Version 0.1

Description The permutes package helps you determine the analysis window to use when analyzing densely-sampled time-series data, such as EEG data. The package uses permutation tests to identify the timepoints where significance of an effects begins and ends, and plots the resulting p-values in a heatmap for your future perusal.

Depends lmPerm, ggplot2, viridis

License 2-clause BSD

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

R topics documented:

`permu.plot` *Create a heatmap of the results of permutation testing*

Description

Create a heatmap of the results of permutation testing

Usage

```
permu.plot(data)
```

Arguments

`data`	Output of permu.test. You may want to subset it if you want to simulate zooming in.

Value

A ggplot2 object containing a heatmap of p-values. You may want to add a 'scale_x_continuous(expand=c(0,0),breaks=(.. to it to increase the granularity of the spacing to your satisfaction.

permu.test *Permutation tests for time series data.*

Description

Permutation tests for time series data.

Usage

```
permu.test(formula, data, parallel = FALSE)
```

Arguments

formula	A formula of the following form: outcome ~ predictors | timepoint variables. Multivariate outcomes (e.g. 32 EEG electrodes) are supported; use 'cbind(Fp1,Fp2,etc) ~ predictors | timepoint'.
data	The dataset referencing these predictors.
parallel	Whether to parallelize the permutation testing using plyr's 'parallel' option. Needs some additional set-up; see the plyr documentation.

Value

A dataframe of p-values.

Index