Package 'vizdraws'

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Title Visualize Draws from the Prior and Posterior Distributions

Version 1.2

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Description Interactive visualization for Bayesian prior and posterior distributions.
When both distributions are provided the animation shows a transition from
prior to posterior. Finally, the animation splits the distribution using the provided
'breaks' into bars that show the probability for each region.
If no 'breaks' are providers it will use zero by default.

License GPL-3

Encoding UTF-8

URL <https://github.com/ignacio82/vizdraws/>,
<https://vizdraws.martinez.fyi/>

Imports dplyr, htmlwidgets, magrittr, stats, stringr

Suggests knitr, rmarkdown

RoxygenNote 7.1.1

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

| vizdraws | *vizdraws* |

Description

vizdraws

Usage

```
vizdraws(
  prior = NULL,
  posterior = NULL,
  MME = 0,
  threshold = NULL,
  units = NULL,
  quantity = FALSE,
  tense = c("future", "past"),
  xlab = NULL,
  breaks = NULL,
  break_names = NULL,
  colors = NULL,
  width = NULL,
  height = NULL,
  xlim = NULL,
  font_scale = 1,
  display_mode_name = FALSE,
  title = "",
  stop_trans = FALSE,
  percentage = FALSE,
  elementId = NULL
)
```

Arguments

prior	prior distribution or draws from it. Currently 'Normal', 'uniform', 'beta', and 'gamma' are supported. This is an optional parameter but either this or posterior should be provided
posterior	draws from the posterior distribution. This is an optional parameter but either this or prior should be provided
MME	minimum meaningful effect. If not provided MME is set to zero
threshold	if the probability is greater than this threshold, you would feel comfortable making a decision
units	optional argument to specify the units of x. For example, dollars or applications
quantity	defaults to FALSE. When set to true text will change to reflect that you are predicting a quantity rather than a treatment effect

tense	either "future" or "past". This is the tense that it will be use in the description if quantity is set to TRUE. NULL
xlab	defaults to NULL
breaks	defaults to NULL
break_names	defaults to NULL
colors	colors for the left, middle, and right areas. The defaults are c("#e41a1c", "#377eb8", "#4daf4a")
width	width for shiny
height	height for shiny
xlim	defaults to NULL
font_scale	defaults to 1
display_mode_name	
	defaults to FALSE
title	defaults to ''
stop_trans	defaults to FALSE. When set to true, initial transition stops at posterior density.
percentage	defaults to FALSE. When set to true, the x axis tick format will be set to percentage.
elementId	Use an explicit element ID for the widget (rather than an automatically generated one).elementID for shiny

Value

A HTML widget object

Examples

```
if(interactive()){
set.seed(9782)
library(vizdraws)
vizdraws(prior= rnorm(100000))
 }
```

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vizdraws-shiny	*Shiny bindings for vizdraws*

Description

Output and render functions for using vizdraws within Shiny applications and interactive Rmd documents.

Usage

```
vizdrawsOutput(outputId, width = "100%", height = "100%")

rendervizdraws(expr, env = parent.frame(), quoted = FALSE)
```

Arguments

`outputId`	output variable to read from
`width, height`	Must be a valid CSS unit (like `'100%'`, `'400px'`, `'auto'`) or a number, which will be coerced to a string and have `'px'` appended.
`expr`	An expression that generates a vizdraws
`env`	The environment in which to evaluate `expr`.
`quoted`	Is `expr` a quoted expression (with `quote()`)? This is useful if you want to save an expression in a variable.

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