

# Package ‘vizdraws’

November 30, 2023

**Title** Visualize Draws from the Prior and Posterior Distributions

**Version** 1.3

**Date** 2023-11-30

**Description** Interactive visualization for Bayesian prior and posterior distributions.

This package facilitates an animated transition between prior and posterior distributions. Additionally, it splits the distribution into bars based on the provided 'breaks,' displaying the probability for each region. If no 'breaks' are provided, it defaults to zero.

**License** GPL-3

**Encoding** UTF-8

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

**Imports** dplyr, htmlwidgets, magrittr, stats, stringr

**Suggests** glue, knitr, rmarkdown

**RoxygenNote** 7.2.3

**VignetteBuilder** knitr

**BugReports** <https://github.com/ignacio82/vizdraws/issues>

**NeedsCompilation** no

**Author** Ignacio Martinez [aut, cre],  
Linus Marco [aut],  
Dan Thal [aut]

**Maintainer** Ignacio Martinez <ignacio@protonmail.com>

**Repository** CRAN

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 vizdraws
 

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*vizdraws*


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## Description

vizdraws

## Usage

```
vizdraws(
  prior = NULL,
  posterior = NULL,
  MME = 0,
  threshold = NULL,
  units = NULL,
  quantity = FALSE,
  tense = c("future", "past"),
  backgroundColor = "#FFFFFF",
  backgroundOpacity = 0.9,
  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
backgroundColor	defaults to '"#FFFFFF"'
backgroundOpacity	defaults to '0.9'
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*

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**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**

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

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