Package 'ggQQunif'

October 13, 2022

Type Package

Title Compare Big Datasets to the Uniform Distribution

Version 0.1.5

Description A quantile-quantile plot can be used to compare a sample of p-values
to the uniform distribution. But when the dataset is big (i.e. > 1e4 p-values),
plotting the quantile-quantile plot can be slow. geom_QQ uses all the data to
calculate the quantiles, but thins it out in a way that focuses on points near zero
before plotting to speed up plotting and decrease file size, when vector graphics are stored.

License GPL-3

Encoding UTF-8

LazyData true

Imports scales, ggplot2, dplyr

RoxygenNote 6.0.1

NeedsCompilation no

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R topics documented:

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geom_QQ_unif   *geom_QQ_unif*

Description

geom_QQ_unif

Usage

```
geom_QQ_unif(mapping = NULL, data = NULL, geom = "point",
  position = "identity", show.legend = NA, inherit.aes = TRUE,
  keep_first_n = 1024, step = 8, sorted = FALSE)
```

Arguments

mapping	Default list of aesthetic mappings to use for plot. If not specified, must be sup-pled in each layer added to the plot.
data	Default dataset to use for plot. If not already a data.frame, will be converted to one by fortify. If not specified, must be suppled in each layer added to the plot.
geom	Specify which geom to plot – 'point' and 'line' are the two choices that make sense.
position	Position adjustment, either as a string, or the result of a call to a position adjust-ment function.
show.legend	logical. Should this layer be included in the legends? NA, the default, includes if any aesthetics are mapped. FALSE never includes, and TRUE always includes.
inherit.aes	If FALSE, overrides the default aesthetics, rather than combining with them. This is most useful for helper functions that define both data and aesthetics and shouldn't inherit behaviour from the default plot specification.
keep_first_n	Keep the first n p-values (closest to 0).
step	How many points to plot with each doubling, e.g. between 1/8 and 1/4, between 1/4 and 1/2, etc.
sorted	logical. Are the p-values already sorted?

Value

a ggplot

Examples

```
library(ggplot2)
library(dplyr)

set.seed(27599)
d <- data.frame(s = runif(n = 5e3))
```

```
d %>%
ggplot(mapping = aes(sample = s)) +
 geom_QQ_unif() +
 scale_x_QQ() +
 scale_y_QQ() +
 theme_minimal()
```

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  scale_x_QQ   *scale_x_QQ*

Description

Scale the axes to show negative log 10 of the p-values.

Usage

```
scale_x_QQ()
```

```
scale_y_QQ()
```

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