

Package ‘DescribeDisplay’

August 25, 2023

Version 0.2.11

Title An Interface to the 'DescribeDisplay' 'GGobi' Plugin

Description Produce publication quality graphics from output of 'GGobi'
describe display plugin.

License MIT + file LICENSE

URL <https://github.com/ggobi/DescribeDisplay>

BugReports <https://github.com/ggobi/DescribeDisplay/issues>

Imports reshape2, ggplot2 (>= 3.4.1), plyr, scales, grid, GGally (>=
2.1.2)

Suggests testthat

RoxygenNote 7.2.3

Encoding UTF-8

NeedsCompilation no

Author Dianne Cook [aut, cre],
Hadley Wickham [aut],
Andreas Buja [aut],
Barret Schloerke [aut]

Maintainer Dianne Cook <dicook@monash.edu>

Repository CRAN

Date/Publication 2023-08-25 08:50:15 UTC

R topics documented:

addbrush	2
dd_load	3
describedisplayreshape	3
ggplot.barplot	4
ggplot.dd	4
ggplot.ddplot	5
ggplot.histogram	6

ggplot.parcoords	6
ggplot.scatmat	7
ggplot.timeseries	8
plot.ddplot	8
removehiddens	9
zeeThemAll	10

Index	11
--------------	-----------

addbrush	<i>Add brush to plot This adds a rectangle to a ggplot plot indicating the brush position.</i>
----------	--

Description

Add brush to plot This adds a rectangle to a ggplot plot indicating the brush position.

Usage

```
addbrush(
  plot,
  x,
  y,
  width = 0.5,
  height = 0.5,
  just = c("left", "top"),
  fill = "transparent",
  col = "black"
)
```

Arguments

plot	plot object
x	x position of brush
y	y position of brush
width	width of brush
height	height of brush
just	which corner of brush should be determined by x and y position
fill	fill colour for brush. Use ggplot-alpha for alpha blending.
col	outline colour of brush

Author(s)

Hadley Wickham <h.wickham@gmail.com>

dd_load	<i>Load describe display Retrieve output of from describe display plugin</i>
---------	--

Description

Also performs some conversion of data structures to more convenient form so that other functions do not have to repeatedly recompute. Some of these conversions could probably be moved into the Describe Display plugin, but it may be easier to just do them on the R side..

Usage

```
dd_load(path)
```

Arguments

path	file path
------	-----------

Value

object of class dd

Author(s)

Hadley Wickham <h.wickham@gmail.com>

See Also

[dd_example](#) for an easier way of loading example files

describdisplayreshape	<i>R interface to DescribeDisplay (GGobi plugin).</i>
-----------------------	---

Description

Produce publication quality graphics from output of GGobi's describe display plugin

References

<http://ggobi.org> <https://ggplot2.tidyverse.org>

ggplot.barplot	<i>Create a nice plot for Bar Plots Create a nice looking plot complete with axes using ggplot.</i>
----------------	---

Description

Create a nice plot for Bar Plots Create a nice looking plot complete with axes using ggplot.

Usage

```
## S3 method for class 'barplot'
ggplot(data, ..., spine = FALSE)
```

Arguments

data	plot to display, object created by dd_load()
...	arguments passed through to the ggplot function
spine	(not implemented currently) whether to display the barchart as a spine plot

Author(s)

Barret Schloerke <schloerke@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("barchart")))
```

ggplot.dd	<i>Create a nice plot Create a nice looking plot complete with axes using ggplot.</i>
-----------	---

Description

Create a nice plot Create a nice looking plot complete with axes using ggplot.

Usage

```
## S3 method for class 'dd'
ggplot(data, ...)
```

Arguments

data	plot to display, object created by dd_load()
...	not used

Author(s)

Hadley Wickham <h.wickham@gmail.com>

Examples

```
library(ggplot2)
print(example(ggplot.ddplot))
print(example(ggplot.histogram))
print(example(ggplot.barplot))
```

ggplot.ddplot	<i>Create a nice plot Create a nice looking plot complete with axes using ggplot.</i>
---------------	---

Description

Create a nice plot Create a nice looking plot complete with axes using ggplot.

Usage

```
## S3 method for class 'ddplot'
ggplot(data, ..., axis.location = c(0.2, 0.2))
```

Arguments

data	plot to display, object created by dd_load()
...	arguments passed to the grob function
axis.location	grob function to use for drawing

Author(s)

Hadley Wickham <h.wickham@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("xyplot")))
print(ggplot(dd_example("tour2d")))
print(ggplot(dd_example("tour1d")))
print(ggplot(dd_example("plot1d")))
print(
  ggplot(dd_example("plot1d")) +
  geom_segment(aes(x = x, xend = x, y = 0, yend = y), size = 0.3)
)
```

ggplot.histogram	<i>Create a nice plot for Histograms Create a nice looking plot complete with axes using ggplot.</i>
------------------	--

Description

Create a nice plot for Histograms Create a nice looking plot complete with axes using ggplot.

Usage

```
## S3 method for class 'histogram'
ggplot(data, ..., spine = FALSE)
```

Arguments

data	plot to display, object created by dd_load()
...	arguments passed through to the ggplot function
spine	(not implemented currently) whether to display the barchart as a spine plot

Author(s)

Barret Schloerke <schloerke@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("barchart")))
print(ggplot(dd_example("histogram")))
```

ggplot.parcoords	<i>Create a nice plot for parallel coordinates plot Create a nice looking plot complete with axes using ggplot.</i>
------------------	---

Description

Create a nice plot for parallel coordinates plot Create a nice looking plot complete with axes using ggplot.

Usage

```
## S3 method for class 'parcoords'
ggplot(data, ..., absoluteX = FALSE, absoluteY = FALSE, edges = TRUE)
```

Arguments

data	plot to display
...	arguments passed to the grob function
absoluteX	make the sections proportional horizontally to eachother
absoluteY	make the sections proportional vertically to eachother
edges	boolean value to print edges. Defaults to TRUE.

Author(s)

Barret Schloerke <schloerke@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("parcoord")))
```

ggplot.scatmat	<i>Create a nice plots in a scatter plot matrix Create a nice looking plots in a matrix. The 1d sections along the diagonal have a smooth density while the values are compared to eachother within the matrix.</i>
----------------	---

Description

Create a nice plots in a scatter plot matrix Create a nice looking plots in a matrix. The 1d sections along the diagonal have a smooth density while the values are compared to eachother within the matrix.

Usage

```
## S3 method for class 'scatmat'
ggplot(data, ...)
```

Arguments

data	data to display
...	(currently) unused arguments

Author(s)

Barret Schloerke <schloerke@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("scatmat")))
```

<code>ggplot.timeseries</code>	<i>Create nice plots for a time series Create nice looking plots complete with axes using ggplot. Produces graphics with a uniform x axis.</i>
--------------------------------	--

Description

Create nice plots for a time series Create nice looking plots complete with axes using ggplot. Produces graphics with a uniform x axis.

Usage

```
## S3 method for class 'timeseries'
ggplot(data, ..., edges = FALSE)
```

Arguments

<code>data</code>	to display
<code>...</code>	(currently) unused arguments
<code>edges</code>	Boolean operator to tell whether to try to force the edges or not. Will not work to remove the edges.

Author(s)

Barret Schloerke <schloerke@gmail.com>

Examples

```
library(ggplot2)
print(ggplot(dd_example("timeseries")))
print(ggplot(dd_example("timeseries"), edges = TRUE))
```

<code>plot.ddplot</code>	<i>Plot a dd plot Convenient method to draw a single panel.</i>
--------------------------	---

Description

This is mainly used for bug testing so that you can pull out a single panel quickly and easily.

Usage

```
## S3 method for class 'ddplot'
plot(
  x,
  y = NULL,
  ...,
  axislocation = c(0.1, 0.1),
  axis.gp = gpar(col = "black"),
  background.color = "grey90"
)
```

Arguments

x	object to plot
y	NULL to satisfy generic functions and methods rules
...	(not used)
axislocation	location of axes (as x and y position in npc coordinates, ie. between 0 and 1)
axis.gp	frame grob containing all panels, note that this does not contain the title or border
background.color	color of in the background of the plot

Author(s)

Hadley Wickham <h.wickham@gmail.com>

Examples

```
scatmat <- dd_example("scatmat")
plot(scatmat)
plot(scatmat$plots[[1]])
plot(scatmat$plots[[3]])
plot(scatmat$plots[[4]])
```

removehiddens

Remove hidden points Will remove all hidden points from the plot.

Description

Remove hidden points Will remove all hidden points from the plot.

Usage

```
removehiddens(d)
```

Arguments

d ddplot object

Author(s)

Hadley Wickham <h.wickham@gmail.com>

zeeThemAll

Run All Examples Will run all examples within the package

Description

Run All Examples Will run all examples within the package

Usage

zeeThemAll()

Author(s)

Barret Schloerke schloerke@gmail.com

Index

* **hplot**

- addbrush, 2
- ggplot.barplot, 4
- ggplot.dd, 4
- ggplot.ddplot, 5
- ggplot.histogram, 6
- ggplot.parcoords, 6
- ggplot.scatmat, 7
- ggplot.timeseries, 8
- plot.ddplot, 8
- zeeThemAll, 10

* **manip**

- dd_load, 3
- removehiddens, 9

addbrush, 2

dd_example, 3

dd_load, 3

DescribeDisplay-package

(describdisplayreshape), 3

describdisplayreshape, 3

ggplot.barplot, 4

ggplot.dd, 4

ggplot.ddplot, 5

ggplot.histogram, 6

ggplot.parcoords, 6

ggplot.scatmat, 7

ggplot.timeseries, 8

plot.ddplot, 8

removehiddens, 9

zeeThemAll, 10