

Package ‘layer’

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Title Tilts your Maps and Turns Them into Ggplot Objects

Version 0.0.1

Description

Simplifies the whole process of creating stacked tilted maps, that are often used in scientific publications to show different environmental layers for a geographical region. Tilting maps and layering them allows to easily draw visual correlations between these environmental layers.

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Encoding UTF-8

RoxygenNote 7.1.2

Depends R (>= 2.10)

Imports raster, stars, sf, dplyr, scico, ggplot2, ggnewscale

LazyData true

NeedsCompilation no

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landscape_1

Landscape 1.

Description

Random curd neutral landscape model.

Usage

landscape_1

Format

raster object

Source

NLMR package

landscape_2

Landscape 2.

Description

Fractional Brownian motion neutral landscape model.

Usage

landscape_2

Format

raster object

Source

NLMR package

landscape_3

Landscape 3.

Description

Distance gradient neutral landscape model.

Usage

landscape_3

Format

raster object

Source

NLMR package

landscape_points

Landscape Points.

Description

Random curd neutral landscape model.

Usage

landscape_points

Format

raster object

Source

NLMR package

plot_tiltedmaps *Tilt raster and sf data*

Description

Takes tilted maps and plots them with ggplot.

Usage

```
plot_tiltedmaps(  
  map_list,  
  layer = NA,  
  palette = "viridis",  
  color = "grey50",  
  direction = 1,  
  begin = 0,  
  end = 1,  
  alpha = 1  
)
```

Arguments

map_list	sf or terra/stars/raster object.
layer	vector or list of names of each column in tilted sf object that should be used for coloring
palette	vector of palettes provided by the viridis and scico packages for rasters
color	a single color applied multiple times or a vector of color strings for points or linestrings
direction	vector of directions for viridis and scico color palettes
begin	vector of the of the start of interval the palette to sample colours from for viridis and scico color palettes
end	vector of the of the end of interval the palette to sample colours from for viridis and scico color palettes
alpha	vector of opacity for viridis and scico color palettes

Value

ggplot

Examples

```
# tilt data  
tilt_landscape_1 <- tilt_map(landscape_1)  
tilt_landscape_2 <- tilt_map(landscape_2, x_shift = 50, y_shift = 50)  
  
# put in list
```

```
map_list <- list(tilt_landscape_1, tilt_landscape_2)

# plot
plot_tiltedmaps(map_list, palette = "turbo")
```

tilt_map	<i>Tilt raster and sf data</i>
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Description

Tilt and shift maps in any direction.#'

Usage

```
tilt_map(  
  data,  
  x_stretch = 2,  
  y_stretch = 1.2,  
  x_tilt = 0,  
  y_tilt = 1,  
  x_shift = 0,  
  y_shift = 0  
)
```

Arguments

data	sf or terra/stars/raster object.
x_stretch	Stretch in x dimension
y_stretch	Stretch in y dimension
x_tilt	Tilt in x dimension
y_tilt	Tilt in y dimension
x_shift	Shift in x dimension
y_shift	Shift in y dimension

Details

Code adopted from <https://www.mzes.uni-mannheim.de/socialsciencedatalab/article/geospatial-data/>.

Value

sf

Examples

```
tilt_map(landscape_1)
```

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