Package 'cptcity'

March 7, 2019

Type Package

Title 'cpt-city' Colour Gradients

Version 1.0.4

Description Incorporates colour gradients from the 'cpt-city' web archive available at <http://soliton.vm.bytemark.co.uk/pub/cpt-city/>.

Depends R (>= 2.10)

Imports grDevices

License GPL-3

URL https://github.com/ibarraespinosa/cptcity

BugReports https://github.com/ibarraespinosa/cptcity/issues/

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Suggests covr, testthat

NeedsCompilation no

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R topics documented:

cpt *Function to return colour palettes functions from 'cpt-city'*

Description

This function return a collor palette based on the name or position of the palette.

Usage

```
cpt(pal = "mpl_inferno", n = 100, colorRampPalette = FALSE,
  rev = FALSE)
```

Arguments

`pal`	Palette of colors available or the number of the position
`n`	integer; number of colors
`colorRampPalette`	Logical; to be used in sf and mapview.
`rev`	Logical; to internally revert order of rgb color vectors.

Details

The cpt-city web archive comes from: http://soliton.vm.bytemark.co.uk/pub/cpt-city/index.html

Value

A colour palette function.

Examples

```
{
library(cptcity)
image(matrix(1:100), col = cpt(pal = "mpl_inferno"))
find_cpt("temperature")
image(matrix(1:100), col = cpt("idv_temperature"))
image(matrix(1:100), col = cpt("idv_temperature", rev = TRUE))
## Not run:
# Do not run
library(ggplot2)
ggplot(faithfuld, aes(waiting, eruptions)) +
geom_raster(aes(fill = density))

 ggplot(faithfuld, aes(waiting, eruptions)) +
 geom_raster(aes(fill = density)) +
 scale_fill_gradientn(colours = cpt(n = 100))

## End(Not run)
}
```

cptcity *A package to return colour gradients from CPTCITY*

Description

Colour palettes comes from http://soliton.vm.bytemark.co.uk/pub/cpt-city/index.html Rhw function `cpt` has two arguments **n** for the numbers and **pal** for the name or number of the palette:

Details

The palettes are available here: http://soliton.vm.bytemark.co.uk/pub/cpt-city/index.html

cpt_names *Names of the 7140 color gradients of cptcity R Package*

Description

This dataset os a vector with al the names of the gradients of the archive cptcity (http://soliton.vm.bytemark.co.uk/pub/cpt-city/) availale in this package. Please, read the documentation of each color gradient in the web page shown above.

Usage

```
data(cpt_names)
```

Format

A vector with the 7140 names of the color gradients

Source

`http://soliton.vm.bytemark.co.uk/pub/cpt-city/`

find_cpt *Function to return colour palettes names*

Description

find_cpt returns the name of the colour gradient that satisfy the search. It is a searcher. It is a mini mini mini google.

Usage

```
find_cpt(name)
```

Arguments

name	character; Word to be searched among the names of the cpt gradients.

Value

names that satisfy the search.

Note

This functions runs grep.

Examples

```
{
library(cptcity)
find_cpt("temperature")
image(matrix(1:100), col = cpt("idv_temperature"))
## Not run:
library(cptcity)
# Do not run
# data names_cpt lazy loaded, already in environment
library(ggplot2)
ggplot(faithfuld, aes(waiting, eruptions)) +
geom_raster(aes(fill = density))

find_cpt("radar")
ggplot(faithfuld, aes(waiting, eruptions)) +
geom_raster(aes(fill = density)) +
scale_fill_gradientn(colours = cpt(n = 10, "ncl_radar"))

find_cpt("rain")
ggplot(faithfuld, aes(waiting, eruptions)) +
geom_raster(aes(fill = density)) +
scale_fill_gradientn(colours = cpt(pal = "pj_1_a_rainbow"))

## End(Not run)
}
```

lucky *Random colour gradient!*

Description

Based on "I'm Feeling Lucky" from Google. As this package includes 7140 colour gradients, it might be hard to find the 'right'

Usage

```
lucky(n = 100, colorRampPalette = FALSE, rev = FALSE,
  message = TRUE, nseed)
```

Arguments

n	integer; number of colors
colorRampPalette	Logical; to be used in sf and mapview.
rev	Logical; to internally revert order of rgb color vectors.
message	Logical; for printing or not the name of the colour gradient
nseed	integer; for reproducing the same colour gradient. See set.seed

Details

The cpt-city web archive comes from: http://soliton.vm.bytemark.co.uk/pub/cpt-city/index.html

Value

A RANDOM colour palette function including name of the colour gradient and number.

Examples

```
{
library(cptcity)
image(matrix(1:100), col = lucky())
image(matrix(1:100), col = lucky())
image(matrix(1:100), col = lucky())
image(matrix(1:100), col = lucky())
image(matrix(1:100), col = lucky())
image(matrix(1:100), col = lucky(rev = TRUE))
image(matrix(1:100), col = lucky(nseed = 1))
}
```

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