

Package ‘cptcity’

April 18, 2018

Type Package

Title 'cpt-city' Colour Gradients

Version 1.0.3

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://ibarraespinosa.github.io/cptcity/>

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

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Suggests covr, testthat

NeedsCompilation no

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R topics documented:

cpt	2
cptcity	3
cpt_names	3
find_cpt	4
lucky	5
Index	6

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

Description

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

Usage

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

Arguments

<code>pal</code>	Palette of colors available or the number of the position
<code>n</code>	integer; number of colors
<code>colorRampPalette</code>	Logical; to be used in sf and mapview.

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"))
  ## 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	<i>A package to return colour gradients from CPTCITY</i>
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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	<i>Names of the 7140 color gradients of cptcity R Package</i>
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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 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)
}
```


Index

*Topic **datasets**

`cpt_names`, 3

`cpt`, 2, 3

`cpt_names`, 3

`cptcity`, 3

`cptcity-package (cptcity)`, 3

`find_cpt`, 4, 4

`lucky`, 5

`set.seed`, 5