

Package ‘rcartocolor’

May 13, 2023

Title 'CARTOCOLORS' Palettes

Version 2.1.1

Description Provides color schemes for maps and other graphics designed by 'CARTO' as described at <<https://carto.com/carto-colors/>>. It includes four types of palettes: aggregation, diverging, qualitative, and quantitative.

Depends R (>= 3.4)

Imports ggplot2, scales

URL <https://github.com/Nowosad/rcartocolor>

BugReports <https://github.com/Nowosad/rcartocolor/issues>

License MIT + file LICENSE

Encoding UTF-8

LazyData true

RoxygenNote 7.2.3

Suggests covr, MASS, testthat, vdiff, sf, spData

NeedsCompilation no

Author Jakub Nowosad [aut, cre] (<<https://orcid.org/0000-0002-1057-3721>>)

Maintainer Jakub Nowosad <nowosad.jakub@gmail.com>

Repository CRAN

Date/Publication 2023-05-13 10:00:02 UTC

R topics documented:

cartocolors	2
carto_pal	2
display_carto_all	3
display_carto_pal	4
metacartocolors	4
scale_color_carto_c	5
Index	8

 cartocolors

CARTOCOLORS database

Description

A dataset containing the information about the CARTOcolor palettes. Source: <https://github.com/CartoDB/CartoColor/blob/n>

Usage

```
cartocolors
```

Format

A data frame with 32 rows and 12 variables:

- Name: palette name
- Type: palette type
- n2 to n11: list of the color values depending on the number of colors used (between two and twelve)

 carto_pal

CARTOcolor palettes

Description

Creates a color palette from CARTOcolor

Usage

```
carto_pal(n = NULL, name, ...)
```

Arguments

n	Number of different colors in the palette, minimum depending on palette (2 or 3), maximum depending on palette (7 or 11)
name	A palette name
...	Additional arguments for grDevices::colorRampPalette

Value

A character vector

Examples

```
my_colors1 = carto_pal(7, "Burg")
my_colors1

my_colors2 = carto_pal(17, "Burg")
my_colors2

my_colors3 = carto_pal(17, "Safe")
my_colors3
```

display_carto_all *CARTOcolor palettes viewer*

Description

Displays a set of the color palettes from CARTOcolor

Usage

```
display_carto_all(n = NULL, type = "all", colorblind_friendly = NULL)
```

Arguments

n	Number of different colors in the palette, minimum depending on the palette (2 or 3), maximum depending on the palette (7 or 11)
type	Type of the palette, can be "quantitative", "diverging", "qualitative", "aggregation", or "all"
colorblind_friendly	if TRUE, display only colorblind friendly palettes

Examples

```
display_carto_all()
display_carto_all(type = "quantitative")
display_carto_all(type = c("diverging", "qualitative", "aggregation"))
display_carto_all(3, type = "quantitative")
display_carto_all(7, type = "quantitative")
display_carto_all(7, colorblind_friendly = TRUE)
display_carto_all(7, type = c("diverging", "qualitative", "aggregation"),
  colorblind_friendly = TRUE)
```

display_carto_pal *CARTOcolor palette viewer*

Description

Displays a color palette from CARTOcolor

Usage

```
display_carto_pal(n = NULL, name)
```

Arguments

n	Number of different colors in the palette, minimum depending on palette (2 or 3), maximum depending on palette (7 or 11)
name	A palette name

Examples

```
display_carto_pal(7, "Burg")
```

metacartocolors *CARTOColors database metadata*

Description

A dataset containing the information about the CARTOcolor palettes. Source: <https://github.com/CartoDB/CartoColor/blob/n>

Usage

```
metacartocolors
```

Format

A data frame with 32 rows and 12 variables:

- Name: palette name
- Type: palette type
- Min_n: minimal number of colors in a given palette
- Max_n: maximal number of colors in a given palette
- Colorblind_friendly: is the palette colorblind friendly?

scale_color_carto_c *CARTO color scales*

Description

CARTO color scales

Usage

```
scale_color_carto_c(  
  ...,  
  type = "quantitative",  
  palette = 1,  
  direction = 1,  
  na.value = "#e9e9e9",  
  guide = "colourbar"  
)
```

```
scale_color_carto_d(  
  ...,  
  type = "qualitative",  
  palette = 1,  
  direction = 1,  
  na.value = "#e9e9e9"  
)
```

```
scale_colour_carto_c(  
  ...,  
  type = "quantitative",  
  palette = 1,  
  direction = 1,  
  na.value = "#e9e9e9",  
  guide = "colourbar"  
)
```

```
scale_colour_carto_d(  
  ...,  
  type = "qualitative",  
  palette = 1,  
  direction = 1,  
  na.value = "#e9e9e9"  
)
```

```
scale_fill_carto_c(  
  ...,  
  type = "quantitative",  
  palette = 1,  
  direction = 1,  
  na.value = "#e9e9e9"  
)
```

```

direction = 1,
na.value = "#e9e9e9",
guide = "colourbar"
)

scale_fill_carto_d(
  ...,
  type = "qualitative",
  palette = 1,
  direction = 1,
  na.value = "#e9e9e9"
)

```

Arguments

...	Other arguments passed on to discrete_scale() or continuous_scale() to control name, limits, breaks, labels and so forth
type	One of <code>"aggregation"</code> , <code>"diverging"</code> , <code>"qualitative"</code> , or <code>"quantitative"</code>
palette	If a string, will use that named palette. If a number, will index into the list of palettes of appropriate type
direction	Sets the order of colors in the scale. If 1, the default, colors are as output by carto_pal() . If -1, the order of colors is reversed
na.value	Missing values will be replaced with this value.
guide	A function used to create a guide or its name. See guides() for more information.

Examples

```

library(ggplot2)

ggplot(msleep, aes(vore, sleep_total, fill = vore)) +
  geom_boxplot() +
  scale_fill_carto_d(palette = 6, direction = -1)

## Not run:
library(sf)
library(spData)
library(ggplot2)
ggplot(world, aes(fill = lifeExp)) +
  geom_sf(data = world) +
  coord_sf(crs = "+proj=robin") +
  scale_fill_carto_c(name = "Life expectancy: ",
                    type = "diverging", palette = "Earth", direction = -1) +
  theme_void()

ggplot(world, aes(fill = region_un)) +
  geom_sf(data = world) +
  coord_sf(crs = "+proj=robin") +
  scale_fill_carto_d(name = "Region: ", palette = "Safe") +

```

scale_color_carto_c

7

```
theme_void()
```

```
## End(Not run)
```

Index

* datasets

- cartocolors, 2
- metacartocolors, 4

- carto_pal, 2
- carto_pal(), 6
- cartocolors, 2
- continuous_scale(), 6

- discrete_scale(), 6
- display_carto_all, 3
- display_carto_pal, 4

- grDevices::colorRampPalette, 2
- guides(), 6

- metacartocolors, 4

- scale_color_carto_c, 5
- scale_color_carto_d
 - (scale_color_carto_c), 5
- scale_colour_carto_c
 - (scale_color_carto_c), 5
- scale_colour_carto_d
 - (scale_color_carto_c), 5
- scale_fill_carto_c
 - (scale_color_carto_c), 5
- scale_fill_carto_d
 - (scale_color_carto_c), 5