Package ‘rCarto’

February 20, 2015

Type Package
Title This package builds maps with a full cartographic layout.
Version 0.8
Date 2013-03-19
Author Timothee Giraud - UMS RIATE (CNRS)
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Description This package makes some maps using shapefiles and
dataframes. Five kinds of maps are available: proportionnal
circles, proportionnal circles colored by a discretized
quantitative variable, proportionnal circles colored by the
modalities of a qualitative variable, choropleth and typology.

Depends RColorBrewer,maptools,classInt
License GPL (>= 2.0)
NeedsCompilation no
Repository CRAN
Date/Publication 2013-03-20 13:15:27

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Description

This package makes some maps using shapefiles and dataframes. Five kinds of maps are available:

- proportionnal circles
- proportionnal circles colored by discretized quantitative data
- proportionnal circles colored by modalities of qualitative data
- choropleth
- typology

Details

Package: rCarto
Type: Package
Version: 0.8
Date: 2013-03-19
License: GPL (>=2.0)

Note

Some part of the code (legend position, management of diverging color palettes) are inspired by some functions of the rgrs package.

Author(s)

Timothee Giraud - UMS RIATE (CNRS)
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References

RCColorBrewer, maptools, classInt and rgrs packages

See Also

rCarto-package rCarto package
mapCircles proportional circles
Description

Shapefile of communes of the Martinique island (France). This shapefile is a GEOFLA extract.

Format

A shapefile with 34 observations on 18 variables.

ID_GEOFLA  identifier of the polygons
CODE_COMM  other identifier of the polygons
INSEE_COMM  identifier of the polygons to be used in examples
NOM_COMM  names of the communes
... not used

Source

http://professionnels.ign.fr/geofla#tab-3

Original data can be retrieved here (page reached on 2012-11-19):
http://professionnels.ign.fr/sites/default/files/GEOFLA_1-1_SHP_UTM20W84_MQ-ED111.tar.gz

See Also

rCarto-package  rCarto package
mapCircles  proportional circles
mapCirclesChoro  proportional circles colored by a discretized quantitative variable
mapCirclesTypo  proportional circles colored by the modalities of a qualitative variable
mapChoropleth  choropleth
mapChoroTypo  typology
mtq  data
commune  shapefile
Examples

```r
# to read the shapefile in R
shpMtg <- readShapeSpatial(file.path(path.package("rCarto"), "shapes/COMMUNE"))
```

Description

This function represents a numeric variable through a choropleth map.

Usage

```r
mapChoropleth(shpFile, shpId, df, dfId, var,
              nclass = 6, style = "quantile",
              fixBrks = FALSE, listBrks = NULL, diverg = FALSE, divergBrk = 0,
              lgdRnd = 2, posLeg = "bottomleft",
              palCol = "Greens", palColPos = "Reds", palColNeg = "Blues",
              NACol = "grey",
              title = var, legend = var, author = "author", sources = "sources",
              scalebar = FALSE, scalebarSize, scalebarText,
              northArrow = FALSE, northArrowSize,
              width = NULL, height = NULL, txtCex = NULL)
```

Arguments

- `shpFile`: Path to a polygon shapefile.
- `shpId`: Unique identifier of the shapefile. It must correspond to `dfId`.
- `df`: Data frame that contains the variable to be mapped.
- `dfId`: Unique identifier of the data frame. It must correspond to `shpId`.
- `var`: Name of the numeric variable to be mapped.
- `nclass`: Number of classes to be represented.
- `style`: Method used to provide the class intervals. See `style` in the classIntervals function from the classInt package.
- `fixBrks`: FALSE (default): the class intervals are computed through the style argument. TRUE: the class intervals are provided through the listBrks argument, nclass and style are not used.
- `listBrks`: Vector of values used as breaks for the class intervals when `fixBrks = TRUE`.
- `diverg`: FALSE (default): there is no color break in the color palette. TRUE: a break is introduced in the color palette. Palettes are defined through the `palColPos` and `palColNeg` arguments, respectively for values superior to the divergBrk value and inferior to the divergBrk value.
mapChoropleth

- **divergBrk**: Value used to define the break in the color palette if `diverg=TRUE`.
- **lgdRnd**: Rounding of the class intervals presented in the legend.
- **posLeg**: Position of the legend (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).
- **palCol**: Color palette, provided through `RColorBrewer`, to be used in the map. Use `display.brewer.all()` to see the available color ramps. For a more detailed overview: `RColorBrewer`.
- **palColPos**: Palette used for values superior to `divergBrk` if `diverg=TRUE`. See `palCol` for details.
- **palColNeg**: Palette used for values inferior to `divergBrk` if `diverg=TRUE`. See `palCol` for details.
- **NACol**: Color used to draw units with no data (NA).
- **title**: Title of the map.
- **legend**: Title of the legend.
- **author**: Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
- **sources**: Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
- **scalebar**: FALSE (default): don’t draw a scale bar. TRUE: draws a scale bar. The choice of the scale bar location is interactive.
- **scalebarSize**: Size of the scale bar in map units.
- **scalebarText**: Text of the scale bar.
- **northArrow**: FALSE (default): don’t draw a North arrow. TRUE: draws a North arrow. The choice of the North arrow location is interactive.
- **northArrowSize**: Size of the North arrow in map units.
- **width**: Width of the map in cm.
- **height**: Height of the map in cm.
- **txtCex**: Size of the texts.

**Details**

Only the five first arguments are compulsory.

**Value**

A choropleth map is displayed in the graphic window. You can export the map in raster or vector format (pdf).

**Author(s)**

Timothee Giraud - UMS RIATE (CNRS)
See Also
mapChoroTypo

**rCarto-package**

**mapCircles**

**mapCirclesChoro**

**mapCirclesTypo**

**mapChoropleth**

**mapChoroTypo**

**mtq**

**commune**

### Examples

```r
library(rCarto)
data(mtq)
# minimal example
mtq$POPVAR <- (mtq$POP9 - mtq$POP99) / mtq$POP99
mapChoropleth(shpfile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
               shpid="INSEE_COM", df=mtq, dfId="ID", var="POPVAR")
# detailed example
mtq$POPVAR[3] <- NA
mapChoropleth(shpfile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
               shpid="INSEE_COM", df=mtq, dfId="ID", var="POPVAR",
               nclass=6, style="quantile",
               diverg=TRUE, divergBrk=0,
               lgdRnd=2, posLeg="bottomleft",
               palColPos="Greens", palColNeg="Blues", NACol="grey",
               title="Population growth in Martinique",
               legend="Population growth\nrate between\n1999 and 2009",
               author=sys.getenv("USERNAME"),
               sources="data : INSEE, 2009; basemap : IGN, 2012")
```

---

**mapChoroTypo**

**Typology**

### Description

This function represents a qualitative variable through a map. Polygons are filled in relation to the variable modalities.

### Usage

```r
mapChoroTypo(shpFile, shpId, df, dfId, var,
              posLeg = "bottomleft", palCol = "Paired", NACol = "grey",
              title = var, legend = var, author = "author", sources = "sources",
              scalebar = FALSE, scalebarSize, scalebarText,
              northArrow = FALSE, northArrowSize,
              width = NULL, height = NULL, txtCex = NULL)
```
Arguments

shpFile  Path to a polygon shapefile.
shpid  Unique identifier of the shapefile. It must correspond to dfId.
df  Data frame that contains the variable to be mapped.
dfId  Unique identifier of the data frame. It must correspond to shpid.
var  Name of the qualitative variable to be mapped.
posLeg  Position of the legend (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).
palCol  Color palette, provided through RColorBrewer, to be used in the map. Use display.brewer.all() to see the available color ramps. For a more detailed overview: RColorBrewer.
NACol  Color used to draw units with no data (NA).
title  Title of the map.
legend  Title of the legend.
author  Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
sources  Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
scalebar  FALSE (default): don’t draw a scale bar. TRUE: draws a scale bar. The choice of the scale bar location is interactive.
scalebarSize  Size of the scale bar in map units.
scalebarText  Text of the scale bar.
northArrow  FALSE (default): don’t draw a North arrow. TRUE: draws a North arrow. The choice of the North arrow location is interactive.
northArrowSize  Size of the North arrow in map units.
width  Width of the map in cm.
height  Height of the map in cm.
txtCex  Size of the texts.

Details

Only the five first arguments are compulsory.

Value

A typology map is displayed in the graphic window.
You can export the map in raster or vector format (pdf).

Author(s)

Timothee Giraud - UMS RIATE (CNRS)
mapCircles

See Also

rCarto-package rCarto package
mapCircles proportional circles
mapCirclesChoro proportional circles colored by a discretized quantitative variable
mapCirclesTypo proportional circles colored by the modalities of a qualitative variable
mapChoropleth choropleth
cmpChoroTypo typology
mtq data
commune shapefile

Examples

library(rCarto)
data(mtg)
# minimal example
mtq[c(1,12,18,23,33,8,24),"beach"] <- "No access to the beach"
mtq[c(2,4,5,6,9,13,17,20,21,25,26,29,31,34,11,27,7,19),"beach"] <- "Caribbean Sea"
mtq[c(14,15,16,22,28,30,32,10,3),"beach"] <- "Atlantic Ocean"
mapChoroTypo(shpFile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
shapeId="INSEE_COM", df=mtq, dfId="ID", var="beach")

mapCircles

Description

This function represents a variable through a proportional circles map. The areas of the circles are proportional to values of a numeric variable.

Usage

mapCircles(shpFile, shpId, df, dfId, var,
fixedNorm = FALSE, shareOfCircles = 0.02,
radiusMax = 0.5, valueMax = max(df[, var], na.rm = TRUE),
lgdRnd = 0, posLeg = "bottomleft",
circleCol = "#F8D03C", baseCol = "#FFEDA0",
title = var, legend = var, author = "author", sources = "sources",
scalebar = FALSE, scalebarSize, scalebarText,
northArrow = FALSE, northArrowSize,
width = NULL, height = NULL, txtCex = NULL)
Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>shpFile</td>
<td>Path to a polygon shapefile.</td>
</tr>
<tr>
<td>shpId</td>
<td>Unique identifier of the shapefile. It must correspond to dfId.</td>
</tr>
<tr>
<td>df</td>
<td>Data frame that contains the variable to be mapped.</td>
</tr>
<tr>
<td>dfId</td>
<td>Unique identifier of the data frame. It must correspond to shpId.</td>
</tr>
<tr>
<td>var</td>
<td>Name of the positive numeric variable to be mapped.</td>
</tr>
<tr>
<td>fixedNorm</td>
<td>FALSE (default): the sum of the surfaces occupied by circles is proportional to the size of the map and is declared by the shareOfCircles argument, radiusMax and valueMax are not used.</td>
</tr>
<tr>
<td></td>
<td>TRUE: the size of the largest circle is defined by a radius size (radiusMax) and a fixed variable value (valueMax), the shareOfCircles argument is not used.</td>
</tr>
<tr>
<td>shareOfCircles</td>
<td>Share of the surface of the map occupied by circles (0.02 is 2%).</td>
</tr>
<tr>
<td>radiusMax</td>
<td>Size (in cm) of the radius of the biggest circle.</td>
</tr>
<tr>
<td>valueMax</td>
<td>Value used to normalize the size of the largest circle (in variable units).</td>
</tr>
<tr>
<td>lgdRnd</td>
<td>Rounding of the values of the variable presented in the legend.</td>
</tr>
<tr>
<td>posLeg</td>
<td>Position of the legend (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).</td>
</tr>
<tr>
<td>circleCol</td>
<td>Color of the circles.</td>
</tr>
<tr>
<td>baseCol</td>
<td>Color of the base map.</td>
</tr>
<tr>
<td>title</td>
<td>Title of the map.</td>
</tr>
<tr>
<td>legend</td>
<td>Title of the legend.</td>
</tr>
<tr>
<td>author</td>
<td>Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.</td>
</tr>
<tr>
<td>sources</td>
<td>Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.</td>
</tr>
<tr>
<td>(scalebar</td>
<td>FALSE (default): don’t draw a scale bar.</td>
</tr>
<tr>
<td>scalebarSize</td>
<td>Size of the scale bar in map units.</td>
</tr>
<tr>
<td>scalebarText</td>
<td>Text of the scale bar.</td>
</tr>
<tr>
<td>northArrow</td>
<td>FALSE (default): don’t draw a North arrow.</td>
</tr>
<tr>
<td>northArrowSize</td>
<td>Size of the North arrow in map units.</td>
</tr>
<tr>
<td>width</td>
<td>Width of the map in cm.</td>
</tr>
<tr>
<td>height</td>
<td>Height of the map in cm.</td>
</tr>
<tr>
<td>txtCex</td>
<td>Size of the texts.</td>
</tr>
</tbody>
</table>
mapCircles

Details

The circles are centered on the centroids of the polygons.
Only the five first arguments are compulsory.

Value

A proportionnal circle map is displayed in the graphic window.
You can export the map in raster or vector format (pdf).

Author(s)

Timothee Giraud - UMS RIATE (CNRS)

See Also

rCarto-package  rCarto package
mapCircles  proportional circles
mapCirclesChoro  proportional circles colored by a discretized quantitative variable
mapCirclesTypo  proportional circles colored by the modalities of a qualitative variable
mapChoropleth  choropleth
mapChoroTypo  typology
mtq  data
commune  shapefile

Examples

library(rCarto)
data(mtq)
# minimal example
mapCircles(shpFile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
    shpId="INSEE_COM", df=mtq, dfId="ID", var="P09_POP", )

# detailed example
mapCircles(shpFile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
    shpId="INSEE_COM", df=mtq, dfId="ID", var="P09_POP",
    shareOfCircle=0.1,
    lgdRnd=0, circleCol="Red",
    title="Population distribution in Martinique",
    legend="Total resident\npopulation in 2009",
    author=Sys.getenv("USERNAME"),
    sources="data : INSEE,2009; basemap : IGN, 2012")
mapCirclesChoro  

Proportional Circles Colored by a Discretized Quantitative Variable

**Description**

This function represents two variables through a proportional circles map. The areas of the circles are proportional to values of a quantitative variable and their colors reflect the discretization of an other numeric variable.

**Usage**

```r
mapCirclesChoro(shpFile, shpId, df, dfId, var, var2, 
    fixedNorm = FALSE, shareOfCircles = 0.02, 
    radiusMax = 0.5, valueMax = max(df[, var], na.rm = TRUE), 
    lgdRndCircles = 0, posLegCircles = "topright", 
    circleCol = "grey", baseCol = "#FED40", 
    nclass = 6, style = "quantile", fixBrks = FALSE, listBrks = NULL, 
    diverg = FALSE, divergBrk = 0, 
    palCol = "Greens", palColPos = "Reds", palColNeg = "Blues", 
    NACol = "grey", 
    lgdRndDistr = 2, posLegDistr = "bottomleft", 
    title = paste(var, var2, sep = " & ")
```

**Arguments**

- **shpFile**: Path to a polygon shapefile.
- **shpId**: Unique identifier of the shapefile. It must correspond to `dfId`.
- **df**: Data frame that contains the variables to be mapped.
- **dfId**: Unique identifier of the data frame. It must correspond to `shpId`.
- **var**: Name of the positive numeric variable to be mapped through the sizes of the circles.
- **var2**: Name of the positive numeric variable to be mapped through the colors of the circles.
- **fixedNorm**: `FALSE` (default): the sum of the surfaces occupied by circles is proportional to the size of the map and is declared by the `shareOfCircles` argument, `radiusMax` and `valueMax` are not used. `TRUE`: the size of the largest circle is defined by a radius size (`radiusMax`) and a fixed variable value (`valueMax`), the `shareOfCircles` argument is not used.
- **shareOfCircles**: Share of the surface of the map occupied by circles (0.02 is 2%).
- **radiusMax**: Size (in cm) of the radius of the biggest circle.
mapCirclesChoro

valueMax

Value used to normalize the size of the largest circle (in variable units).

lgdRndCircles

Rounding of the values of the variable presented in the legend of the circles.

posLegCircles

Position of the legend of the circles (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).

circleCol

Color of the circles in the legend

baseCol

Color of the base map.

nclass

Number of classes to be represented.

style

Method used to provide the class intervals. See style in the classIntervals function from the classInt package.

fixBrks

FALSE (default): the class intervals are computed through the style argument. TRUE: the class intervals are provided through the listBrks argument, nclass and style are not used.

listBrks

Vector of values used as breaks for the class intervals when fixBrks = TRUE.

diverg

FALSE (default): there is no color break in the color palette. TRUE: a break is introduced in the color palette. Palettes are defined through the palColPos and palColNeg arguments, respectively for values superior to the divergBrk value and inferior to the divergBrk value.

divergBrk

Value used to define the break in the color palette if diverg=TRUE.

palCol

Color palette, provided through RColorBrewer, to be used in the map. Use display.brewer.all() to see the available color ramps. For a more detailed overview: RColorBrewer.

palColPos

Palette used for values superior to divergBrk if diverg=TRUE. See palCol for details.

palColNeg

Palette used for values inferior to divergBrk if diverg=TRUE. See palCol for details.

NACol

Color used to draw units with no data (NA).

lgdRndDistr

Rounding of the class intervals presented in the legend.

posLegDistr

Position of the legend of the discretization (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).

title

Title of the map.

legendCircles

Title of the legend for the circles

legendDistr

Title of the legend for the discretization

author

Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.

sources

Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.

scalebar

FALSE (default): don’t draw a scale bar. TRUE: draws a scale bar. The choice of the scale bar location is interactive.

scalebarSize

Size of the scale bar in map units.
scalebarText Text of the scale bar.
northArrow FALSE (default): don’t draw a North arrow.
TRUE: draws a North arrow. The choice of the North arrow location is interactive.
northArrowSize Size of the North arrow in map units.
width Width of the map in cm.
height Height of the map in cm.
txtCex Size of the texts.

Details
The circles are centered on the centroids of the polygons.
Only the six first arguments are compulsory.

Value
A map is displayed in the graphic window.
You can export the map in raster or vector format (pdf).

Author(s)
Timothee Giraud - UMS RIATE (CNRS)

See Also
rCarto-package rCarto package
mapCircles proportional circles
mapCirclesChoro proportional circles colored by a discretized quantitative variable
mapCirclesTypo proportional circles colored by the modalities of a qualitative variable
mapChoropleth choropleth
mapChoroTypo typology
mtq data
commune shapefile

Examples
library(rCarto)
data(mtq)

# minimal example
mtq$PO9_POP <- (mtq$P09_POP - mtq$P99_POP) / mtq$P99_POP
mapCirclesChoro(shpFile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
                 shpId="INSEE_COM", df=mtq, dfId="ID", var="P09_POP", var2="PO9_POP")
mapCirclesTypo

Proportionnal Circles Colored by the Modalities of a Qualitative Variable

Description

This function represents two variables through a proportional circles map. The areas of the circles are proportional to values in a quantitative variable and their colors reflect a the modalities of a qualitative variable.

Usage

```r
mapCirclesTypo(shpFile, shpId, df, dfId, var, var2,
fixedNorm = FALSE, shareOfCircles = 0.02,
radiusMax = 0.5, valueMax = max(df[, var], na.rm = TRUE),
lgdRndCircles = 0, posLegCircles = "topright",
circleCol = "grey", baseCol = "#FFEDA0",
posLegTypo = "bottomleft", palCol = "Paired", NACol = "grey",
title = paste(var, var2, sep = " & "),
legendCircles = var, legendTypo = var2,
author = "author", sources = "sources",
scalebar = FALSE, scalebarSize, scalebarText,
northArrow = FALSE, northArrowSize,
width = NULL, height = NULL, txtCex = NULL)
```

Arguments

- **shpFile**: Path to a polygon shapefile.
- **shpId**: Unique identifier of the shapefile. It must correspond to dfId.
- **df**: Data frame that contains the variables to be mapped.
- **dfId**: Unique identifier of the data frame. It must correspond to shpId.
- **var**: Name of the positive numeric variable to be mapped through the sizes of the circles.
- **var2**: Name of the qualitative variable to be mapped.
- **fixedNorm**: FALSE (default): the sum of the surfaces occupied by circles is proportional to the size of the map and is declared by the shareOfCircles argument, radiusMax and valueMax are not used. TRUE: the size of the largest circle is defined by a radius size (radiusMax) and a fixed variable value (valueMax), the shareOfCircles argument is not used.
- **shareOfCircles**: Share of the surface of the map occupied by circles (0.02 is 2%).
- **radiusMax**: Size (in cm) of the radius of the biggest circle.
- **valueMax**: Value used to normalize the size of the largest circle (in variable units).
- **lgdRndCircles**: Rounding of the values of the variable presented in the legend of the circles.
posLegCircles  Position of the legend of the circles (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).
circleCol  Color of the circles in the legend
baseCol  Color of the base map.
posLegTypo  Position of the legend of the typology (top, bottom, left, right, center, topleft, topright, bottomleft or bottomright).
palCol  Color palette, provided through RColorBrewer, to be used in the map. Use display.brewer.all() to see the available color ramps. For a more detailed overview: RColorBrewer.
NACol  Color used to draw units with no data (NA).
title  Title of the map.
legendCircles  Title of the legend for the circles
legendTypo  Title of the legend for the typology
author  Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
sources  Two lines (author and sources) at the bottom of the map are available to display additional information. It is recommended to display the name of the author and the sources of the data and the base map.
scalebar  FALSE (default): don’t draw a scale bar.
TRUE : draws a scale bar. The choice of the scale bar location is interactive.
scalebarSize  Size of the scale bar in map units.
scalebarText  Text of the scale bar.
northArrow  FALSE (default): don’t draw a North arrow.
TRUE : draws a North arrow. The choice of the North arrow location is interactive.
northArrowSize  Size of the North arrow in map units.
width  Width of the map in cm.
height  Height of the map in cm.
txtCex  Size of the texts.

Details

The circles are centered on the centroids of the polygons.
Only the six first arguments are compulsory.

Value

A map is displayed in the graphic window.
You can export the map in raster or vector format (pdf).

Author(s)

Timothee Giraud - UMS RIATE (CNRS)
mapCirclesTypo

See Also
Examples

```r
library(rCarto)
data(mtq)

# minimal example
mtq[c(1, 12, 18, 23, 33, 8, 24), ][, "beach"] <- "No access to the beach"
mtq[c(2, 4, 5, 6, 9, 13, 17, 20, 21, 25, 26, 29, 31, 34, 11, 27, 7, 19), ][, "beach"] <- "Caribbean Sea"
mtq[c(14, 15, 16, 22, 28, 30, 32, 18, 3), ][, "beach"] <- "Atlantic Ocean"
mapCirclesTypo(shpFile=file.path(path.package("rCarto"), "shapes/COMMUNE"),
               shpId="INSEE_COM", df=mtq, dfId="ID", var="P09_POP", var2="beach")
```

**mtq**

*Census Data on Communes of the Martinique Island*

Description

Some demographic variables from censuses (1999 and 2009).

Usage

data(mtq)

Format

A data frame with 34 observations on the following 16 variables.

- **ID**: a numeric vector, INSEE IDs of the communes
- **P09_POP**: total population in 2009
- **P99_POP**: total population in 1999
- **P09_POP014**: population of 00-14 years population in 2009
- **P09_POP1529**: population of 15-29 years population in 2009
- **P09_POP3044**: population of 30-44 years population in 2009
- **P09_POP4559**: population of 45-59 years population in 2009
mtq

P09_POP074 population of 60-74 years population in 2009
P09_POP75P population of 75 and more years population in 2009
P99_POP014 population of 00-14 years population in 2009
P99_POP1529 population of 15-29 years population in 2009
P99_POP3044 population of 30-44 years population in 2009
P99_POP4559 population of 45-59 years population in 2009
P99_POP6074 population of 60-74 years population in 2009
P99_POP75P population of 75 and more years population in 2009

Source
Chiffres cles - Evolution et structure de la population
Decoupage geographique au 01/01/2011 - Mise en ligne le 28 juin 2012
Insee, Recensements de la population - Etat civil.
Original data can be retrieved here (page reached on 2012-11-16):

See Also
rCarto-package rCarto package
mapCircles proportional circles
mapCirclesChoro proportional circles colored by a discretized quantitative variable
mapCirclesTypo proportional circles colored by the modalities of a qualitative variable
mapChoropleth choropleth
mapChoroTypo typology
mtq data
commune shapefile

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