Package: HatchedPolygons (via r-universe)

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Type Package

Title Create a hatched area for SpatialPolygons

Version 0.3.0.9000

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Description This package allows to create a area filled by SpatialLines to allow for hatched areas in SpatialPolygons. This may be particularly useful when SpatialPolygons show holes but also for drawing hatched areas in leaflet Polygons.

License GPL-3

URL https://github.com/statnmap/HatchedPolygons

BugReports https://github.com/statnmap/HatchedPolygons/issues

Depends R (>= 3.2.0)

Imports dplyr, graphics, methods, sf, sp

Suggests broom, ggplot2, knitr, leaflet, raster, rmarkdown, tidyr, tmap

VignetteBuilder knitr

Encoding UTF-8

LazyData true

RoxygenNote 7.3.1

Repository https://statnmap.r-universe.dev

RemoteUrl https://github.com/statnmap/HatchedPolygons

RemoteRef HEAD

RemoteSha 1e14748c13665986dd093689ee1886f496756119

Contents

`hatched.SpatialPolygons` *Return a SpatialLinesDataframe as hatched area for a SpatialPolygons*

Description

Return a SpatialLinesDataframe as hatched area for a SpatialPolygons

Usage

```
hatched.SpatialPolygons(x, density = 10, angle = 45, fillOddEven = FALSE)
```

Arguments

`x`	SpatialPolygons* from library sp
`density`	the density of shading lines, in lines per inch. The default value of `NULL` means that no shading lines are drawn. A zero value of `density` means no shading nor filling whereas negative values and `NA` suppress shading (and so allow color filling).
`angle`	the slope of shading lines, given as an angle in degrees (counter-clockwise).
`fillOddEven`	logical controlling the polygon shading mode: see below for details. Default `FALSE`.

`polygon.fullhatch` *Create hatch area of one polygon*

Description

Create hatch area of one polygon

Usage

```
polygon.fullhatch(
  x,
  y = NULL,
  density,
  angle,
  ..debug.hatch = FALSE,
  fillOddEven = FALSE,
  ...
)
```

Arguments

x, y	vectors containing the coordinates of the vertices of the polygon.
density	the density of shading lines, in lines per inch. The default value of NULL means that no shading lines are drawn. A zero value of density means no shading nor filling whereas negative values and NA suppress shading (and so allow color filling).
angle	the slope of shading lines, given as an angle in degrees (counter-clockwise).
..debug.hatch	for drawing when debugging function
fillOddEven	logical controlling the polygon shading mode: see below for details. Default FALSE.
...	graphical parameters such as xpd, lend, ljoin and lmitre can be given as arguments.

Examples

```
## Not run:
res <- polygon.fullhatch(x, density = 10, angle = 45)
arrows(res$lx1, res$ly1, res$lx2, res$ly2, col = "red", code = 0)

## End(Not run)
```

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polygon.onehatch *Create one line for hatch area of one polygon*

Description

Create one line for hatch area of one polygon

Usage

```
polygon.onehatch(
  x,
  y,
  x0,
  y0,
  xd,
  yd,
  ..debug.hatch = FALSE,
  fillOddEven = FALSE,
  ...
)
```

Arguments

x, y	vectors containing the coordinates of the vertices of the polygon.
x0	parameter as issued from polygon.fullhatch
y0	parameter as issued from polygon.fullhatch
xd	parameter as issued from polygon.fullhatch
yd	parameter as issued from polygon.fullhatch
..debug.hatch	for drawing when debugging function
fillOddEven	logical controlling the polygon shading mode: see below for details. Default FALSE.
...	graphical parameters such as xpd, lend, ljoin and lmitre can be given as arguments.

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polygonRingHolesLines *Get SpatialLines of one Polygons feature*

Description

Get SpatialLines of one Polygons feature

Usage

```
polygonRingHolesLines(
  Sr,
  density = 0.5,
  angle = 45,
  ID = 1,
  fillOddEven = FALSE
)
```

Arguments

Sr	An object of class Polygons
density	the density of shading lines, in lines per inch. The default value of NULL means that no shading lines are drawn. A zero value of density means no shading nor filling whereas negative values and NA suppress shading (and so allow color filling).
angle	the slope of shading lines, given as an angle in degrees (counter-clockwise).
ID	Number or string identifying the Polygon inside Polygons
fillOddEven	logical controlling the polygon shading mode: see below for details. Default FALSE.

Index