Package 'bivariatemaps'

October 12, 2022

Title Creates Bivariate Maps

Version 1.0

Description
Contains functions to plot bivariate maps and to generate grids from shapefiles based on area coverage. For more info, see: Hidasi-Neto, J (2015) <https://rfunctions.blogspot.com/2015/03/bivariate-maps-bivariatemap-function.html>, Hidasi-Neto, J (2014) <https://rfunctions.blogspot.com/2014/12/gridfilter-intersect-grid-with-shape.html>.

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Encoding UTF-8

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NeedsCompilation no

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R topics documented:

`bivariate.map` *bivariate.map: Create a Bivariate Map*

Description

Creates a Bivariate Map using two rasters and a color matrix created with colmat() function.

Usage

```
bivariate.map(rasterx, rastery, colormatrix, nquantiles = 10)
```

Arguments

`rasterx`	raster
`rastery`	raster
`colormatrix`	color matrix from colmat() function
`nquantiles`	number of quantiles in color matrix (same as used when using colmat() function)

Value

A plot with the bivariate map.

Examples

```
# https://rfunctions.blogspot.com/2015/03/bivariate-maps-bivariatemap-function.html
```

`colmat` *colmat: Create a Color Matrix*

Description

Creates a color matrix to be used in bivariate.map() function.

Usage

```
colmat(
  nquantiles = 10,
  upperleft = "blue",
  upperright = "red",
  bottomleft = "grey",
  bottomright = "yellow",
  xlab = "x label",
  ylab = "y label"
)
```

Arguments

nquantiles	numeric variable for number of quantiles in color matrix
upperleft	upperleft color of color matrix
upperright	upperright color of color matrix
bottomleft	bottomleft color of color matrix
bottomright	bottomright color of color matrix
xlab	character variable
ylab	character variable

Value

Two outputs: a color matrix object to be used in bivariate.map() function, and a plot of the color matrix.

Examples

```
col.matrix<-colmat(nquantiles=10, xlab="My x label", ylab="My y label")

# https://rfunctions.blogspot.com/2015/03/bivariate-maps-bivariatemap-function.html
```

GridFilter *GridFilter: Intersect Shape with a Grid and Exclude Cells Based on Area Coverage*

Description

Creates a shape intersected with a grid. The user can exclude cells based on area coverage. For example, if the shape covers only 50 percent of some cells, the user can choose to exclude or maintain these cells.

Usage

```
GridFilter(shape, resol = 1, prop = 0)
```

Arguments

shape	shapefile
resol	resolution
prop	minimum value of area covered by the grid cell. The default is 0 (i.e. it does not delete any grid cell)

Value

A "gridded" shapefile. Plot this output to take a look at it.

Examples

```
# https://rfunctions.blogspot.com/2014/12/gridfilter-intersect-grid-with-shape.html
```

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