

Package ‘paintmap’

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Type Package

Title Plotting Paintmaps

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Description Plots matrices of colours as grids of coloured squares - aka heatmaps, guaranteeing legible row and column names, without transformation of values, without re-ordering rows or columns, and without dendrograms.

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paintmap-package

Plotting paintmaps

Description

Plots matrices of colours as grids of coloured squares - aka heatmaps, guaranteeing legible row and column names, without transformation of values, without re-ordering rows or columns, and without dendrograms.

Details

The function 'bhm' takes a matrix of colours (i.e. a character matrix of descriptions like red or hex-codes), and creates a plot using 'grid' graphics.

Author(s)

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Examples

```
paintmap(matrix(heat.colors(9), 3, 3, dimnames=list(letters[1:3], letters[4:6])))
```

color_matrix

Convert numeric matrix to color (character) matrix

Description

Given a numeric matrix, assign to each cell a color (character) value based on linearly interpolating a given vector of colors.

Usage

```
color_matrix(x, colors = heat.colors(10))
```

Arguments

x	Numeric or logical matrix.
colors	Character vector of colors.

Value

Character matrix.

colour_matrix	<i>Convert numeric matrix to colour (character) matrix</i>
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Description

Given a numeric matrix, assign to each cell a colour (character) value based on linearly interpolating a given vector of colours.

Usage

```
colour_matrix(x, colours = heat.colors(10))
```

Arguments

x	Numeric or logical matrix.
colours	Character vector of colours.

Value

Character matrix.

inches_tall	<i>Get number of inches high a putative heatmap will be</i>
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Description

Get number of inches high a putative heatmap will be

Usage

```
inches_tall(x, row_lines = 1)
```

Arguments

x	Character matrix of colours
row_lines	Numeric value determining number of lines width each row of the heatmap should occupy.

Value

Numeric value.

`inches_wide`*Get number of inches across a putative heatmap will be*

Description

Get number of inches across a putative heatmap will be

Usage

```
inches_wide(x, col_lines = 1)
```

Arguments

<code>x</code>	Character matrix of colours
<code>col_lines</code>	Numeric value determining number of lines width each column of the heatmap should occupy.

Value

Numeric value.

`lines_between_hm_and_labels`*Lines of space between the heatmap and row/column labels*

Description

Lines of space between the heatmap and row/column labels

Usage

```
lines_between_hm_and_labels
```

Format

An object of class `numeric` of length 1.

margin_lines	<i>Lines of space at margins of paintmap</i>
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Description

Lines of space at margins of paintmap

Usage

```
margin_lines
```

Format

An object of class numeric of length 1.

paintmap	<i>Plot paintmap</i>
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Description

Plot paintmap

Usage

```
paintmap(x, add = FALSE, ...)
```

Arguments

x	Character matrix of colours
add	Add ink to current viewport.
...	Other graphical parameters for the rectangles of the grid to pass to grid function gpar, in turn passed to grid function grid.rect.

Value

Plots heatmap.

Examples

```
paintmap(matrix(heat.colors(9), 3, 3, dimnames=list(letters[1:3], letters[4:6])))
```

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