Package ‘colorRamps’

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Type Package

Title Builds color tables

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Description Builds gradient color maps

License GPL

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NeedsCompilation no

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Description

This (v2) is a rewrite of the colorRamps package. It now contains two function `table.ramp` and `rgb.tables` that allow easy construction of color palettes. This version contains two new palettes similar to the Matlab default palette (`matlab.like` and `matlab.like2`).

I built colorRamps because I needed to use a particular palette and got tired of sourcing in my code into every session. Now I can install and forget. Despite using R for years, I had not noticed the alternative `colorRamp` which may suit your needs. If you want really attractive palettes, get the RColorBrewer package from CRAN. For certain applications the RColorBrewer palettes do not work for me, hence this package.

Details

```
Package: colorRamps
Type: Package
Version: 2.0
Date: 2007-09-09
License: GPL
```

Most functions take a single argument `n` that specifies the number of colors to generate.

Author(s)

Tim Keitt

Maintainer: Tim Keitt <tkeitt@gmail.com>

References


Examples

```
filled.contour(volcano, col = ygobb(21), asp = 1)
```
blue2red

Returns a gradient color map

Description
blue2red makes a color map that runs from blue -> cyan -> yellow -> red. blue2green makes a color map that runs from blue -> magenta -> yellow -> green. green2red makes a color map that runs from green -> cyan -> magenta -> red.

Usage
blue2red(n)
blue2green(n)
green2red(n)

Arguments
n number of colors

Details
These are double-ramp maps with a sharp transition from cooler colors to warmer colors at the midpoint. With proper scaling, this will highlight the mean, median, etc.

Value
A colormap

Author(s)
Tim Keitt <tkeitt@gmail.com>

References

See Also
rgb

Examples
image(matrix(1:400, 20), col = blue2red(400))
image(matrix(1:400, 20), col = blue2green(400))
image(matrix(1:400, 20), col = green2red(400))
blue2yellow  

Returns a gradient color map

Description

blue2yellow makes a blue to yellow gradient color map

Usage

blue2yellow(n)
cyan2yellow(n)
magenta2green(n)

Arguments

n  number of colors

Details

These are single gradient maps that smoothly transition from cooler to warmer colors. See blue2red for double gradient maps.

Value

A color map

Author(s)

Tim Keitt <tkeitt@gmail.com>

References


See Also

rgb

Examples

image(matrix(1:400, 20), col = blue2yellow(400))
**Description**

Generates matlab-like color palettes

**Usage**

matlab.like(n)
matlab.like2(n)
blue2green2red(n)

**Arguments**

- **n**  
  number of colors

**Details**

blue2green2red is simply an alias for matlab.like2.

**Value**

a color palette

**Author(s)**

Timothy H. Keitt

**References**


**Examples**

image(matrix(1:400, 20), col = blue2yellow(400))
primary.colors generates expanded sets of primary colors

Description
Combines red, green and blue values to create primary colors

Usage
primary.colors(n, steps = 3, no.white = TRUE)

Arguments
- n: number of colors to generate (optional)
- steps: number of rgb intensity levels
- no.white: boolean indicating whether to return white

Details
The standard R palette only provides 8 colors after which colors are recycled. If you need a few more colors that are readily distinguished in multivariate plots, this function can help.

Value
An R color palette

Author(s)
Timothy H. Keitt

References

Examples
```r
x <- matrix(rnorm(100), 10)
x <- sapply(1:10, function(i, x) cumsum(x[,i]), x=x)
par(mfrow = c(1, 2))
matplot(1:10, x, type = 'l', lty = 1, lwd = 3)
matplot(1:10, x, type = 'l', lty = 1, lwd = 3, col = primary.colors(10))
```
**Description**

rgb.tables wraps `table.ramp` and simply passes values supplied in the red, green and blue arguments. `table.ramp` makes a color ramp with a flat top.

**Usage**

```r
rgb.tables(n, red = c(0.75, 0.25, 1), green = c(0.5, 0.25, 1), blue = c(0.25, 0.25, 1))
table.ramp(n, mid = 0.5, sill = 0.5, base = 1, height = 1)
```

**Arguments**

- `n` number of colors to generate
- `red` a length 3 vector with values `mid`, `sill` and `base`
- `green` same as `red`
- `blue` same as `red`
- `mid` table center on (0, 1)
- `sill` width of table top on (0, 1)
- `base` width of table base on (0, 1)
- `height` sill height on (0, 1)

**Value**

`rgb.tables` returns a color palette. `table.ramp` returns a simple vector of values.

**Author(s)**

Timothy H. Keitt

**References**


**See Also**

colorRamp

**Examples**

```r
table.ramp(10)
rgb.tables(10)
```
ygobb  

Returns a gradient color map

Description

ygobb makes a color map that runs from yellow -> green -> olive -> blue -> black.

Usage

ygobb(n)

Arguments

n  number of colors

Details

I am still working on this one.

Value

A colormap

Author(s)

Tim Keitt <tkeitt@gmail.com>

References


See Also

rgb

Examples

image(matrix(1:400, 20), col = ygobb(400))
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