Package ‘colorRamps’

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Type Package
Title Builds Color Tables
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Description Builds gradient color maps.
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| colorRamps-package | Builds color maps |
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)

<table>
<thead>
<tr>
<th>blue2red</th>
<th>Returns a gradient color map</th>
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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 = blue2red(400))
**primary.colors**

**Value**

a color palette

**Author(s)**

Timothy H. Keitt

**References**


**Examples**

```r
image(matrix(1:400, 20), col = blue2yellow(400))
```

**Description**

Combines red, green and blue values to create primary colors

**Usage**

```r
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 redily 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))
```

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**rgb.tables**

*constructs color palettes with sharp breaks*

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
ygobb

References

See Also
colorRamp

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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