Package ‘RGraphics’

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Title Data and Functions from the Book R Graphics, Third Edition

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Description Data and Functions from the book R Graphics, Third Edition. There is a function to produce each figure in the book, plus several functions, classes, and methods defined in Chapter 8.

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Depends R (>= 3.4.0), datasets, stats, grDevices, graphics, methods, grid

Imports lattice, ggplot2, grImport, grImport2, gridBase, gridGraphics, gridSVG

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License GPL

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**AABA**  
*Finance Data for Altaba*

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**Description**


**Usage**

AABA

**Format**

A time series.

---

**face**  
*Draw a face*

---

**Description**

Draws a face, consisting of a rectangle for the border, circles for eyes, and a line for the mouth.

**Usage**

`faceA(x, y, width, height)`  
`faceB(x, y, width, height)`  
`faceC(x, y, width, height)`  
`faceD(x, y, width, height)`

**Arguments**

*x, y, width, height*  
Numeric values or unit objects specifying the location and size of the face.

**Details**

The functions `faceA` and `faceB` are graphics functions to be used for their side effect of producing graphical output. The functions `faceC` and `faceD` return a grob representing a face (and produce no output).
fluoro.predict  Predicted Surface of Fluorescence

Description
These data give a prediction surface for fluorescence at the thermocline over a region off the coast of South Australia.

Usage
fluoro.predict

Format
A list with elements: x containing longitude at 50 locations; y containing latitude at 50 locations; and z containing a 50 by 50 matrix of surface predictions.

References

grid.utext  Draw Underlined Text

Description
Draws a single piece of text with a line beneath.

Usage
grid.utext(label, x=.5, y=.5, ..., name="utext")
textCorners(x)

Arguments
label            A character value.
x,y              Numeric or unit value.
...              Further arguments passed to grid.text.
name             Character value.
grid.utextvp  

*Draw Underlined Text*

**Description**

Draws a single piece of text with a line beneath.

**Usage**

```
grid.utextvp(label, x=.5, y=.5, ..., name="utext")
utextvp(label, x, y, ..., name="utextvp")
```

**Arguments**

- `label`: A character value.
- `x,y`: Numeric or unit value.
- `...`: Further arguments passed to `grid.text`.
- `name`: Character value.

**hourlySpeed**  

*Auckland Wind Data*

**Description**

These data give measurements of hourly average wind speed based on data from 11 weather stations located around Auckland, New Zealand. There are hourly readings every day for one month (September 2010).

**Usage**

`hourlySpeed`

**Format**

A data frame with columns:

- **Speed**: The wind speed.
- **day**: Day of the year, from 237 to 271.
- **hour**: Hour of the day, from 0 to 23.

**References**

The data were obtained from the New Zealand National Climate Database ([http://cliflo.niwa.co.nz/](http://cliflo.niwa.co.nz/)).
Description
These data give average minimum and maximum monthly temperatures for several major cities in Australia. The longitude and latitude for each city is also given.

Usage
data(ozTemp)

Format
A data frame with elements: city names of cities; min and max average minimum and maximum monthly temperatures; long and lat longitudes and latitudes of cities.

Source
Was originally http://www.auinfo.com/sydney-climate.html but that URL is no longer alive.

plot.newclass
A Traditional Graphics Function Template

Description
A template that provides a starting point for writing a new traditional graphics function.

Details
Type plot.newclass to see the body of this template.

splitString
Split text into multiple lines

Description
Splits a single string into multiple lines (by inserting line breaks) so that the output will fit within the current viewport.

Usage
splitString(text)

Arguments
text The string to split.
**splitTextGrob**  
*Split text into multiple lines*

**Description**

Splits a single string into multiple lines (by inserting line breaks) so that the output will fit within the current viewport.

**Usage**

```r
splitTextGrob(text, ...)
```

**Arguments**

- `text`  
The string to split.
- `...`  
Arguments passed to the `grob()` function.

---

**utextDynamic**  
*Draw Underlined Text*

**Description**

Creates a grob representing underlined text.

**Usage**

```r
utextDynamic(label, x=.5, y=.5, default.units="npc", 
just="centre", name="utext")
```

**Arguments**

- `label`  
A character value.
- `x, y`  
Numeric or unit value.
- `default.units`  
Units to use if location is not a unit.
- `just`  
Character vector indicating justification of text relative to its location.
- `name`  
Character value.
utextStatic  

*Draw Underlined Text*

**Description**

Creates a grob representing underlined text.

**Usage**

```r
utextStatic(label, x=.5, y=.5, default.units="npc",
            just="centre", name="utext")
utextChildren(label, x, y, just, name)
```

**Arguments**

- **label**  
  A character value.
- **x,y**  
  Numeric or unit value.
- **default.units**  
  Units to use if location is not a unit.
- **just**  
  Character vector indicating justification of text relative to its location.
- **name**  
  Character value.

utextvpDynamic  

*Draw Underlined Text*

**Description**

Creates a grob representing underlined text.

**Usage**

```r
utextvpDynamic(label, x=.5, y=.5, default.units="npc",
                just="centre", angle=0, name="utext")
```

**Arguments**

- **label**  
  A character value.
- **x,y**  
  Numeric or unit value.
- **default.units**  
  Units to use if location is not a unit.
- **just**  
  Character vector indicating justification of text relative to its location.
- **angle**  
  Numeric angle of text (in degrees).
- **name**  
  Character value.
**utextvpStatic**  
*Draw Underlined Text*

**Description**

Creates a grob representing underlined text.

**Usage**

```r
utextvpStatic(label, x=.5, y=.5, default.units="npc",
               angle=0, just="centre", name="utext")

utextvpChildren(label, name)
```

**Arguments**

- `label` A character value.
- `x, y` Numeric or unit value.
- `default.units` Units to use if location is not a unit.
- `angle` Numeric angle of text (in degrees).
- `just` Character vector indicating justification of text relative to its location.
- `name` Character value.

---

**wind9am**  
*Auckland Wind Data*

**Description**

These data give measurements of wind speed and direction at several weather stations located around Auckland New Zealand. The measurements are daily recordings taken at 9:00am each day spanning a period of approximately two years (September 2008 to September 2010).

**Usage**

```r
wind9am
```

**Format**

A data frame with columns:

- **Station** A unique identifier for each weather station.
- **Date** A Date-Time for each observation (essentially just the day).
- **Speed** The wind speed.
- **Dir** The wind direction (in degrees).
References

The data were obtained from the New Zealand National Climate Database (http://cliflo.niwa.co.nz/).
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