

# Package ‘RGraphics’

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

**Version** 3.0-2

**Author** Paul Murrell

**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.

**Maintainer** Paul Murrell <paul@stat.auckland.ac.nz>

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

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

**Suggests** cluster, colorspace, jpeg, KernSmooth, mapdata, maps, party, pixmap, png, quantmod, rsvg, showtext, sysfonts, tikzDevice, XML, zoo

**License** GPL

**LazyData** yes

**URL** <https://www.stat.auckland.ac.nz/~paul/RG3e/index.html>

**NeedsCompilation** no

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AABA *Finance Data for Altaba*

### Description

Daily finance data for Altaba from 2007-01-03 to 2019-10-11. Obtained from Yahoo! Finance with the **quantmod** package.

### 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).

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fluoro.predict	<i>Predicted Surface of Fluorescence</i>
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**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**

S. McClatchie and T.M. Ward. (in press), *Alongshore variation in upwelling intensity in the eastern Great Australian Bight*, Journal of Geophysical Research.

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grid.utext	<i>Draw Underlined Text</i>
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---

**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	<i>Draw Underlined Text</i>
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---

**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	<i>Auckland Wind Data</i>
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**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/>).

---

ozTemp	<i>Temperatures for Australian Cities</i>
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**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.

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plot.newclass	<i>A Traditional Graphics Function Template</i>
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**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.

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splitString	<i>Split text into multiple lines</i>
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**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.
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splitTextGrob	<i>Split text into multiple lines</i>
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**Description**

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

**Usage**

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

**Arguments**

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

---

utextDynamic	<i>Draw Underlined Text</i>
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---

**Description**

Creates a grob representing underlined text.

**Usage**

```
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	<i>Draw Underlined Text</i>
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---

**Description**

Creates a grob representing underlined text.

**Usage**

```
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	<i>Draw Underlined Text</i>
----------------	-----------------------------

---

**Description**

Creates a grob representing underlined text.

**Usage**

```
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	<i>Draw Underlined Text</i>
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---

### Description

Creates a grob representing underlined text.

### Usage

```
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.

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wind9am	<i>Auckland Wind Data</i>
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### 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

```
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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