

## Comment trouver de l'aide ?

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# [ Aide "papier" ]

- Manuels et documents de référence

<http://cran.r-project.org/manuals.html>

<http://cran.r-project.org/other-docs.html>

Refcard de Tom Short (pense-bête très utile):

<http://cran.r-project.org/doc/contrib/Short-refcard.pdf>

R pour les débutants par Emmanuel Paradis (indispensable):

[http://cran.r-project.org/doc/contrib/Paradis-rdebuts\\_fr.pdf](http://cran.r-project.org/doc/contrib/Paradis-rdebuts_fr.pdf)

SimpleR par John Vernazi

<http://cran.r-project.org/doc/contrib/Verzani-SimpleR.pdf>

- Livres

<http://www.r-project.org/doc/bib/R-books.html>

Introductory Statistics With R par Peter Dalgaard (2002)

Using R for Introductory Statistics par John Verzani (2004)

...

# Aide depuis la console

- Cas 1 : on connaît le nom de la fonction à utiliser

?boxplot ouvre l'aide de la fonction boxplot

help(boxplot) idem

- Cas 2 : recherche par mot-clé

help.search("boxplot")

retourne une liste de fonctions où le mot *boxplot* apparaît  
attention ne cherche que dans les librairies chargées par défaut (base, tseries, stats, etc) ou appelées précédemment avec library() !

help.start()

créé l'index et ouvre une page html locale (sur votre DD)  
ouvrir [Search Engine & Keywords](#) et faire une recherche  
dans ce cas la recherche s'effectue dans toutes les librairie installées sur  
le DD qu'elles aient été chargées ou non avec library()

RSiteSearch("boxplot")

connexion au site de Jonathan Baron <http://finzi.psych.upenn.edu/search.html>

# Aide depuis la console

- Les exemples sont probablement les meilleures aides possibles pour l'utilisation des fonctions

?boxplot

example(boxplot)

## Examples

```
## boxplot on a formula:
boxplot(count ~ spray, data = InsectSprays, col = "lightgray")
# *add* notches (somewhat funny here):
boxplot(count ~ spray, data = InsectSprays,
        notch = TRUE, add = TRUE, col = "blue")

boxplot(decrease ~ treatment, data = OrchardSprays,
        log = "y", col = "bisque")

rb <- boxplot(decrease ~ treatment, data = OrchardSprays, col="bisque")
title("Comparing boxplot()s and non-robust mean +/- SD")

mn.t <- tapply(OrchardSprays$decrease, OrchardSprays$treatment, mean)
sd.t <- tapply(OrchardSprays$decrease, OrchardSprays$treatment, sd)
xi <- 0.3 + seq(rb$n)
points(xi, mn.t, col = "orange", pch = 18)
arrows(xi, mn.t - sd.t, xi, mn.t + sd.t,
       code = 3, col = "pink", angle = 75, length = .1)

## boxplot on a matrix:
mat <- cbind(Uni05 = (1:100)/21, Norm = rnorm(100),
            `ST` = rt(100, df = 5), Gam2 = rgamma(100, shape = 2))
boxplot(as.data.frame(mat), main = "boxplot(as.data.frame(mat), main = ...)")
par(las=1)# all axis labels horizontal
boxplot(as.data.frame(mat), main = "boxplot(*, horizontal = TRUE)",
        horizontal = TRUE)

## Using 'at = ' and adding boxplots -- example idea by Roger Bivand :

boxplot(len ~ dose, data = ToothGrowth,
        boxwex = 0.25, at = 1:3 - 0.2,
        subset = supp == "VC", col = "yellow",
        main = "Guinea Pigs' Tooth Growth",
        xlab = "Vitamin C dose mg",
        ylab = "tooth length",
        xlim = c(0.5, 3.5), ylim = c(0, 35), yaxs = "i")
boxplot(len ~ dose, data = ToothGrowth, add = TRUE,
        boxwex = 0.25, at = 1:3 + 0.2,
        subset = supp == "OJ", col = "orange")
legend(2, 9, c("Ascorbic acid", "Orange juice"),
      fill = c("yellow", "orange"))

## more examples in help(bxp)
```

# Aide depuis la console

- Accès depuis le menu déroulant

The screenshot shows the RGui interface with the 'Aide' menu open. The 'R Console' window displays the following text:

```
R version 2.6.1 (2007-11-26)
Copyright (C) 2007 The R Foundat
ISBN 3-900051-07-0

R est un logiciel libre livré se
Vous pouvez le redistribuer sous
Tapez 'license()' ou 'licence()'

R est un projet collaboratif ave
Tapez 'contributors()' pour plus
'citation()' pour la façon de le citer dans les publications.
```

Annotations and their targets:

- raccourcis clavier**: Points to the 'Aide' menu.
- le plus utile**: Points to 'An Introduction to R'.
- la bible (1 572 pages)**: Points to 'R Reference Manual'.
- pour la programmation, l'écriture de fonctions**: Points to 'R Language Definition'.
- help()**: Points to the first line of the console output.
- help.start()**: Points to the second line of the console output.
- help.search()**: Points to the third line of the console output.
- RSiteSearch()**: Points to the fourth line of the console output.

# Aide depuis *R-project.org*

## Moteur de recherche

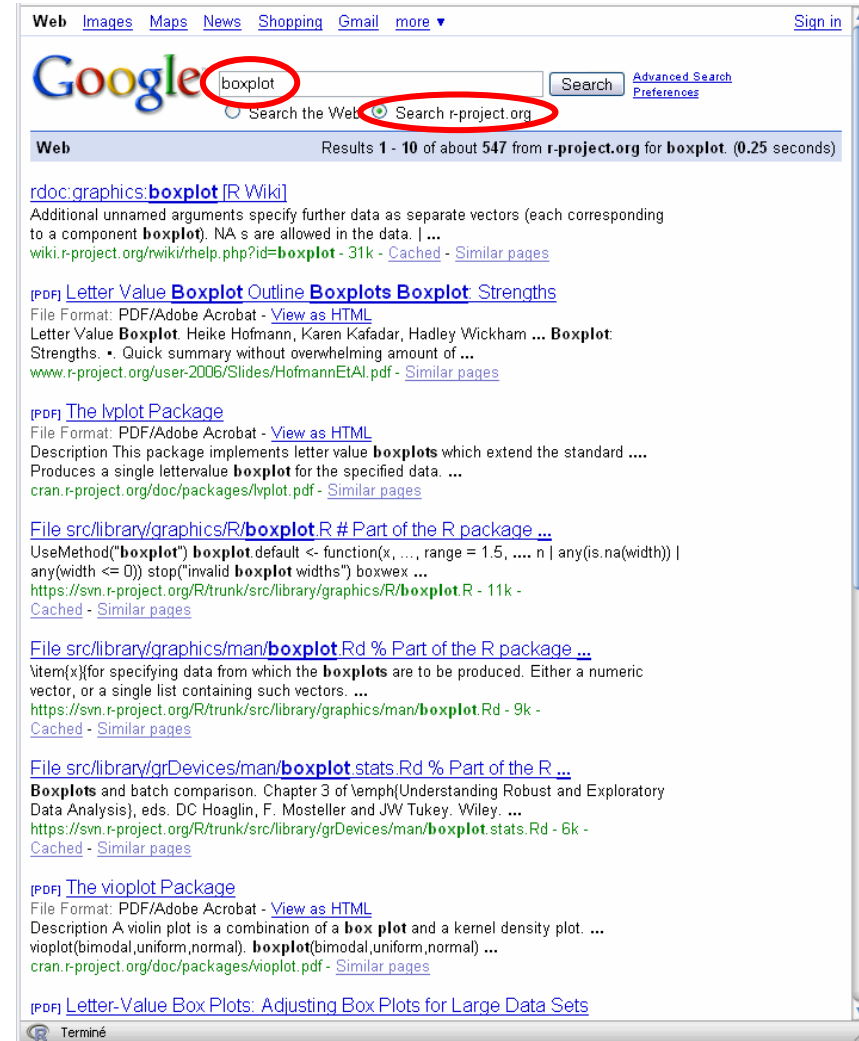
<http://www.r-project.org/search.html>

Recherche Google sans grand intérêt

## FAQ

<http://cran.r-project.org/doc/FAQ/R-FAQ.html>

Sans grand intérêt



The screenshot shows a Google search interface. The search bar contains the word "boxplot". Below the search bar, there are two radio buttons: "Search the Web" and "Search r-project.org". The "Search r-project.org" option is selected and circled in red. The search results are displayed below, showing a list of links related to "boxplot" on the R-project.org domain. The results include:

- [rdoc.graphics: boxplot \[R Wiki\]](#)  
Additional unnamed arguments specify further data as separate vectors (each corresponding to a component **boxplot**). NA s are allowed in the data. | ...  
[wiki.r-project.org/wiki/rhelp.php?id=boxplot - 31k - Cached - Similar pages](#)
- [\[PDF\] Letter Value Boxplot Outline Boxplots Boxplot Strengths](#)  
File Format: PDF/Adobe Acrobat - [View as HTML](#)  
Letter Value **Boxplot**. Heike Hofmann, Karen Kafadar, Hadley Wickham ... **Boxplot** Strengths. • Quick summary without overwhelming amount of ...  
[www.r-project.org/user-2006/Slides/HofmannEtAl.pdf - Similar pages](#)
- [\[PDF\] The lvplot Package](#)  
File Format: PDF/Adobe Acrobat - [View as HTML](#)  
Description This package implements letter value **boxplots** which extend the standard ...  
Produces a single lettervalue **boxplot** for the specified data. ...  
[cran.r-project.org/doc/packages/lvplot.pdf - Similar pages](#)
- [File src/library/graphics/R/boxplot.R # Part of the R package ...](#)  
UseMethod("boxplot") boxplot default <- function(x, ..., range = 1.5, .... n | any(is.na(width)) | any(width <= 0)) stop("invalid boxplot widths") boxwex ...  
[https://svn.r-project.org/R/trunk/src/library/graphics/R/boxplot.R - 11k - Cached - Similar pages](#)
- [File src/library/graphics/man/boxplot.Rd % Part of the R package ...](#)  
item{x} for specifying data from which the **boxplots** are to be produced. Either a numeric vector, or a single list containing such vectors. ...  
[https://svn.r-project.org/R/trunk/src/library/graphics/man/boxplot.Rd - 9k - Cached - Similar pages](#)
- [File src/library/grDevices/man/boxplot.stats.Rd % Part of the R ...](#)  
**Boxplots** and batch comparison. Chapter 3 of *Understanding Robust and Exploratory Data Analysis*, eds. DC Hoaglin, F. Mosteller and JW Tukey. Wiley. ...  
[https://svn.r-project.org/R/trunk/src/library/grDevices/man/boxplot.stats.Rd - 6k - Cached - Similar pages](#)
- [\[PDF\] The vioplot Package](#)  
File Format: PDF/Adobe Acrobat - [View as HTML](#)  
Description A violin plot is a combination of a **box plot** and a kernel density plot. ...  
vioplot(bimodal, uniform, normal). **boxplot**(bimodal, uniform, normal) ...  
[cran.r-project.org/doc/packages/vioplot.pdf - Similar pages](#)
- [\[PDF\] Letter-Value Box Plots: Adjusting Box Plots for Large Data Sets](#)

At the bottom of the browser window, there is a "Terminé" status indicator.

# Aide depuis *R-project.org*

- R-wiki <http://wiki.r-project.org>

[[tips:graphics-base:boxplot\_with\_points]]

Show pagesource | Old revisions | Recent changes | Search

Trace: > graph2 > graph\_gallery > reference-cards > getting-started > start > tips > smooth\_line > graphics-base > boxplot\_with\_points

## Create a box plot with individual data values overlaid

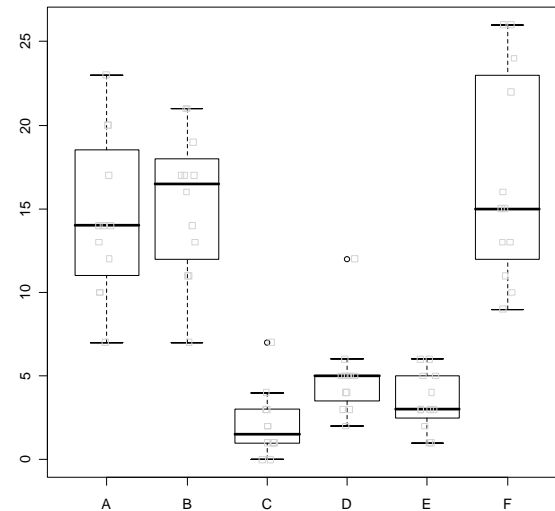
Contributed by *Kevin Wright*

Box plots are great for some tasks, such as comparing the location and central tendency of groups of data.

For some data, for example if the number of observations in each group is highly unbalanced, it can be nice to see the individual data points.

Here is an example that displays a boxplot for each group, then adds the (jittered) values overlotted in a light color:

```
boxplot(count ~ spray, data = InsectSprays, boxfill="white")
with(InsectSprays, stripchart(count~spray, method="jitter", vertical=TRUE, add=TRUE, col="lightgray"))
```



# Aide en ligne extérieure

## ■ Rseek

Moteur de recherche multiple basé sur Google par Sasha Goodman

<http://www.rseek.org/>

The screenshot shows the Rseek.org search engine interface in a Mozilla Firefox browser window. The search term "boxplot" is entered in the search bar and is circled in red. Below the search bar, the results are displayed for "boxplot" (0.15 seconds). The results include:

- Box Plot Statistics**: This function is typically called by **boxplot** to gather the statistics necessary for producing box plots, but may be invoked separately. ... [www.math.montana.edu/Rweb/Rhelp/boxplot.stats.html](http://www.math.montana.edu/Rweb/Rhelp/boxplot.stats.html)
- rdoc:graphics:boxplot [R Wiki]**: Additional unnamed arguments specify further data as separate vectors (each corresponding to a component **boxplot**). NA s are allowed in the data. | ... [wiki.r-project.org/nwiki/rhelp.php?id=boxplot](http://wiki.r-project.org/nwiki/rhelp.php?id=boxplot)
- The lplot Package**: File Format: PDF/Adobe Acrobat - [View as HTML](#). Description This package implements letter value **boxplots** which extend the standard .... Produces a single lettervalue **boxplot** for the specified data. ... [cran.r-project.org/doc/packages/lplot.pdf](http://cran.r-project.org/doc/packages/lplot.pdf)
- Introductions**, **Support Lists**, **Functions**, **R code**, **Books**, **Related Tools**: A horizontal menu of navigation links, with "Support Lists" highlighted in yellow.
- Gmane -- Mail To News And Back Again**: Subject: Re: **boxplot** and number of observations per box ... Also note that **boxplot's** varwidth parameter provides a graphical > indication of group size; ... [article.gmane.org/gmane.comp.lang.r.general/104906](http://article.gmane.org/gmane.comp.lang.r.general/104906)
- R help archive: Re: [R] boxplot and xlim confusion?**: I guess you want the horizontal layout or your **boxplot**. **boxplot**(split(rnorm(30), ... it seems like **boxplot** does not respect the xlim setting. I've tried ... [tolstoy.newcastle.edu.au/R/help/05/09/12892.html](http://tolstoy.newcastle.edu.au/R/help/05/09/12892.html)
- Gmane -- Mail To News And Back Again**: Try this also: `y<-rnorm(50) x<-factor(sample(letters[1:5],50,replace=T)) bp <- boxplot(y~x) text(1:5, bp$stats[3,]+.1, paste("n", bp$n, sep=" "))` On ... [article.gmane.org/gmane.comp.lang.r.general/104911](http://article.gmane.org/gmane.comp.lang.r.general/104911)
- R help archive: Re: [R] labels outliers in boxplot**: I have done **boxplot** for each slide on the > same graph. There are outliers for each slide and I tried to >



# Aide en ligne extérieure

## ■ R site search

<http://finzi.psych.upenn.edu/search.html> par Jonathan Baron

fonctions →  
documentation →  
liste de discussion →

### R Site Search

Note: more than two search terms may fail.

Query:   [\[How to search\]](#)

Display:  Description:  Sort:

**Target:**

- Functions
- Documents
- R-help 2002-
- Rhelp 1997-2001
- R-devel

**Results:**

References:

- [Rhelp02a](#): [ boxplot: 1597 ]
- [docs](#): [ boxplot: 1 ]
- [functions](#): [ boxplot: 424 ]

Total 2022 documents matching your query.

- [\[R\] Debugging R's code: boxplot.stats from Duncan Murdoch on 2006-10-29 \(stdin\)](#) (score: 126)  
*Author:* Duncan Murdoch (murdoch)" /> <meta name="Subject" content="[R] Debugging R's code: **boxplot.stats**" /> <meta name="Date" content="2006-10-29" /> <style type="text/css">  
*Date:* Wed, 01 Nov 2006 05:56:23 -0500  
[R] Debugging R's code: **boxplot.stats** This message: [ Message body ] [ More options ] Related messages: [ Tova Fuller: "[R] Cannot be coerced to logical?" Next message ] [ Gabor Grothendieck: "[R] D  
<http://finzi.psych.upenn.edu/R/Rhelp02a/archive/88150.html> (11,941 bytes)
- [\[R\] Debugging R's code: boxplot.stats from Gabor Grothendieck on 2006-10-29 \(stdin\)](#) (score: 125)  
*Author:* Gabor Grothendieck (ggrothendieck)" /> <meta name="Subject" content="[R] Debugging R's code: **boxplot.stats**" /> <meta name="Date" content="2006-10-29" /> <style type="text/css">

# Aide en ligne extérieure

## ■ R Site Search pour Firefox

<http://addictedtor.free.fr/rsitesearch/> par Romain François

site de J. Baron  
ou R Wiki

boxplot (graphics) R Documentation

Description

Produce box-and-whisker plot(s) of the given (grouped) values.

Usage

```
boxplot(x, ...)
```

## S3 method for class 'formula':  
boxplot(formula, data = NULL, ..., subset, na.action = NULL)

## Default S3 method:  
boxplot(x, ..., range = 1.5, width = NULL, varwidth = FALSE,  
notch = FALSE, outline = TRUE, names, plot = TRUE,  
border = par("fg"), col = NULL, log = "",  
pars = list(boxwex = 0.8, staplewex = 0.5, outwex = 0.5),  
horizontal = FALSE, add = FALSE, at = NULL)

Arguments

**formula** a formula, such as  $y \sim grp$ , where  $y$  is a numeric vector of data values to be split into groups according to the grouping variable  $grp$  (usually a factor).

**data** a data frame (or list) from which the variables in **formula** should be taken.

**subset** an optional vector specifying a subset of observations to be used for plotting.

**na.action** a function which indicates what should happen when the data contain *NA*s. The default is to ignore missing values in either the response or the group.

**x** for specifying data from which the boxplots are to be produced. Either a numeric vector, or a single list containing such vectors. Additional unnamed arguments specify further data as separate vectors (each corresponding to a component boxplot). *NA*s are allowed in the data.

**...** For the **formula** method, named arguments to be passed to the default method. For the default method, unnamed arguments are additional data vectors (unless **x** is a list when they are ignored), and named arguments are arguments and graphical parameters to be passed to **bxp** in addition to the ones given by argument **pars** (and override those in **pars**).

**range** this determines how far the plot whiskers extend out from the box. If **range** is positive, the whiskers extend to the most extreme data point which is no more than **range** times the interquartile range from the box. A value of zero causes the whiskers to extend to the data extremes.

**width** a vector giving the relative widths of the boxes making up the plot.

**varwidth** if **varwidth** is TRUE, the boxes are drawn with widths proportional to the square-roots of the number of observations in the groups.

**notch** if **notch** is TRUE, a notch is drawn in each side of the boxes. If the notches of two plots do not overlap this is 'strong evidence' that the two medians differ (Chambers *et al.*, 1983, p. 62). See [boxplot.stats](#) for the calculations used.

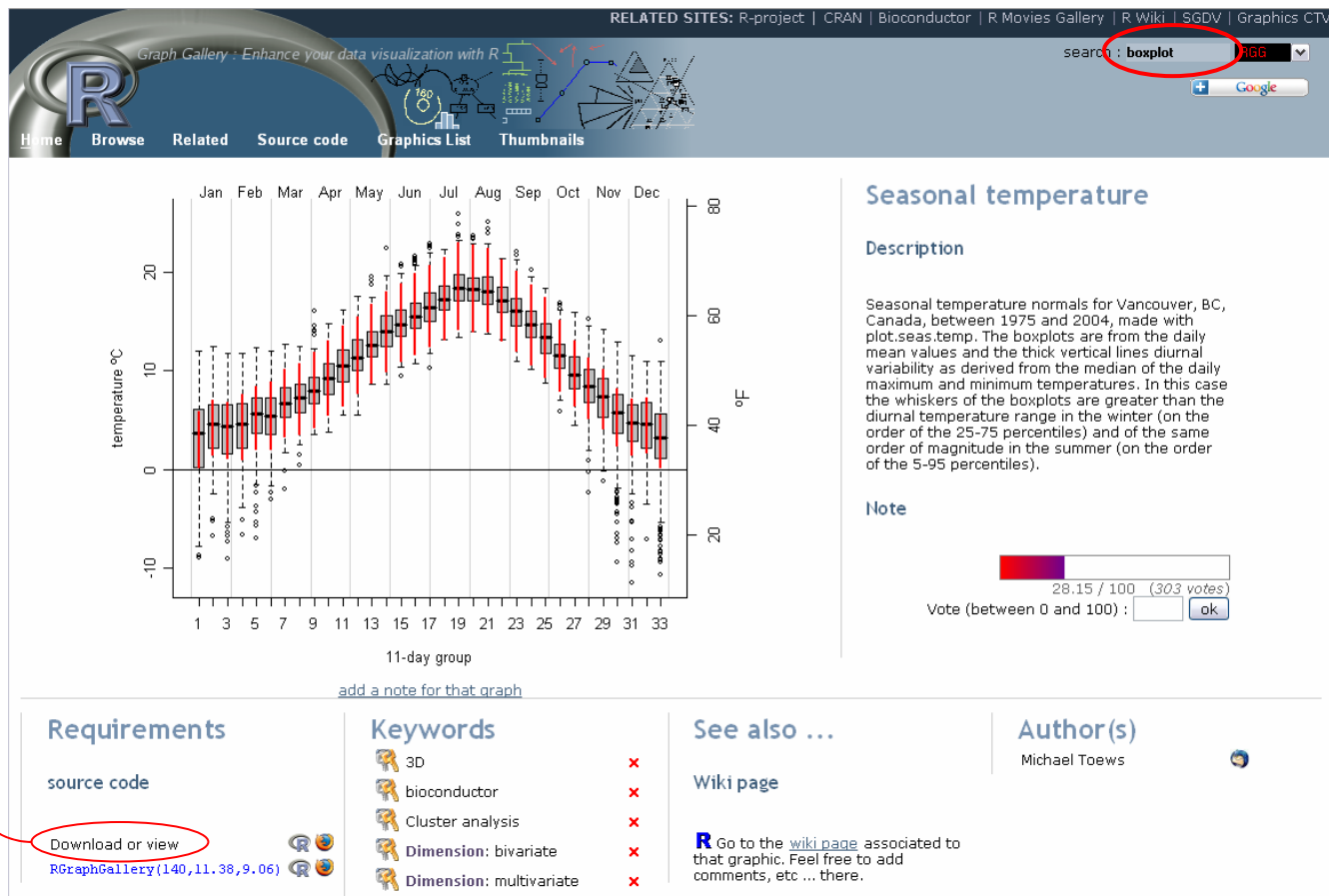
**outline** if **outline** is not true, the outliers are not drawn (as points whereas **S+** uses lines).

ouverture  
volet latéral

# Aide en ligne extérieure

## ■ R Graph Gallery

<http://addictedtor.free.fr/graphiques/> par Romain François



The screenshot shows the R Graph Gallery website interface. At the top, there is a navigation bar with links for Home, Browse, Related, Source code, Graphics List, and Thumbnails. A search bar contains the text "boxplot" and a dropdown menu shows "RGG". Below the navigation bar, a large boxplot displays seasonal temperature normals for Vancouver, BC, Canada, between 1975 and 2004. The x-axis is labeled "11-day group" and ranges from 1 to 33. The y-axis is labeled "temperature °C" and ranges from -10 to 80. The plot shows boxplots for each month, with whiskers extending to the 25-75 percentiles and thick vertical lines representing the diurnal range. To the right of the plot, there is a "Seasonal temperature" section with a "Description" and a "Note". Below the plot, there is a "Requirements" section with a link to "source code" and a "Download or view" button. A "Keywords" section lists various R packages and dimensions. A "See also ..." section includes a link to the "Wiki page". An "Author(s)" section lists "Michael Toews".

RELATED SITES: R-project | CRAN | Bioconductor | R Movies Gallery | R Wiki | SGDV | Graphics CTV

Graph Gallery - Enhance your data visualization with R

search: **boxplot** RGG

Home Browse Related Source code Graphics List Thumbnails

temperature °C

80  
60  
40  
20  
0  
-10

of

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33

11-day group

add a note for that graph

**Seasonal temperature**

**Description**

Seasonal temperature normals for Vancouver, BC, Canada, between 1975 and 2004, made with plot.seas.temp. The boxplots are from the daily mean values and the thick vertical lines diurnal variability as derived from the median of the daily maximum and minimum temperatures. In this case the whiskers of the boxplots are greater than the diurnal temperature range in the winter (on the order of the 25-75 percentiles) and of the same order of magnitude in the summer (on the order of the 5-95 percentiles).

**Note**

28.15 / 100 (303 votes)

Vote (between 0 and 100):

**Requirements**

source code

Download or view

RGraphGallery (140,11.38,9.06)

**Keywords**

- 3D
- bioconductor
- Cluster analysis
- Dimension: bivariate
- Dimension: multivariate

**See also ...**

Wiki page

**Author(s)**

Michael Toews

Go to the [wiki page](#) associated to that graphic. Feel free to add comments, etc ... there.

Code

# [ Aide en ligne extérieure ]

- Consulter les sites propres aux librairies
- Quelques autres sites

*Statistics with R* par Vincent Zoonkynd

[http://zoonek2.free.fr/UNIX/48\\_R/all.html](http://zoonek2.free.fr/UNIX/48_R/all.html)

Cours / TD de l'Université de Lyon, en français, une mine...

<http://pbil.univ-lyon1.fr/R/enseignement.html>

# Listes de discussion

## ■ Liste officielle

<http://www.r-project.org/mail.html>

Pour s'inscrire: <https://stat.ethz.ch/mailman/listinfo/r-help>

Très utile mais vite envahissant !!!!

## ■ Forum en français du CIRAD

<http://forums.cirad.fr/logiciel-R/index.php>

## ■ Liste de discussion du MNHN

○ pour s'abonner: envoyer un mail à [sympa@mnhn.fr](mailto:sympa@mnhn.fr) avec pour titre **SUBSCRIBE** **semin-r** Prénom Nom

○ pour écrire à la liste: envoyer un mail à [semin-r@mnhn.fr](mailto:semin-r@mnhn.fr)