

Atrévete con R



UNIVERSIDADE DA CORUÑA

Universidade de Vigo



Saúdos

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II Xornada Usuarios R en Galicia

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Autor:
Jorge Mejía Peralta

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E que licenza ten R?



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What is R?

Introduction to R

R is a language and environment for statistical computing and graphics. It is a [GNU project](#) which is similar to the S language and environment which was developed at Bell Laboratories (formerly AT&T, now Lucent Technologies) by John Chambers and colleagues. R can be considered as a different implementation of S. There are some important differences, but much code written for S runs unaltered under R.

R provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, ...) and graphical techniques, and is highly extensible. The S language is often the vehicle of choice for research in statistical methodology, and R provides an Open Source route to participation in that activity.

One of R's strengths is the ease with which well-designed publication-quality plots can be produced, including mathematical symbols and formulae where needed. Great care has been taken over the defaults for the minor design choices in graphics, but the user retains full control.

R is available as Free Software under the terms of the [Free Software Foundation's GNU General Public License](#) in source code form. It compiles and runs on a wide variety of UNIX platforms and similar systems (including FreeBSD and Linux), Windows and MacOS.

The R environment

R is an integrated suite of software facilities for data manipulation, calculation and graphical display. It includes

Seguro?

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> license()
```

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this software and which can be displayed by RShowDoc("COPYING").  
Version 3 of the license can be displayed by RShowDoc("GPL-3").
```

```
Copies of both versions 2 and 3 of the license can be found  
at https://www.R-project.org/Licenses/.
```

```
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```

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(tradución)

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Pero, R de quen é?

R
é teu
é meu
é NOSO



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Contributors

The current R is the result of a collaborative effort with contributions from all over the world. R was initially written by Robert Gentleman and Ross Ihaka—also known as “R & F” of the Statistics Department of the University of Auckland. Since mid-1997 there has been a core group with write access to the R source, currently consisting of

- Douglas Bates
- John Chambers
- Peter Dalgaard
- Robert Gentleman
- Kurt Hornik
- Ross Ihaka
- Michael Lawrence
- Friedrich Leisch
- Uwe Ligges
- Thomas Lumley
- Martin Maechler
- Martin Morgan
- Duncan Murdoch
- Paul Murrell
- Marlyn Plummer
- Brian Ripley
- Deepayan Sarkar
- Duncan Temple Lang
- Luke Tierney
- Simon Urbanek

plus Heiner Schwarte up to October 1999, Guido Masarotto up to June 2003, Stefano Iacus up to July 2014 and Seth Falcon up to August 2015.

R would not be what it is today without the invaluable help of these people, who contributed by donating code, bug fixes and documentation:

Valerio Almata, Thomas Baier, Henrik Bengtsson, Roger Bivand, Ben Bolker, David Brahm, Göran Broström, Patrick Burns, Vince Carey, Saikat DebRoy, Brian D'Urso, Lyndon Drake, Dirk Eddelbuettel, Claus Ekstrom, Sebastian Fischmeister, John Fox, Paul Gilbert, Yu Gong, Gabor Grothendieck, Frank E Harrell Jr, Torsten Hothorn, Robert King, Kjetil Kjemsno, Roger Koenker, Philippe Lambert, Jan de Leeuw, Jim Lindsey, Patrick Lindsey, Catherine Loader, Gordon Maclean, John Maindonald, David Meyer, Ei-ji Nakama, Jens Oehlschlägel, Steve Orlney, Richard O'Keefe, Hubert Palme, Roger D. Peng, José C. Pinheiro, Tony Plate, Anthony Rossini, Jonathan Rougier, Petr Savicky, Günther Sawitzki, Marc Schwartz, Delfel Steuer, Bill Simpson, Gordon Smyth, Adrian Trapletti, Terry Therneau, Rolf Turner, Bill Venables, Gregory R. Warnes, Andreas Weingessel, Morten Welinder, James Wettenhall, Simon Wood, and Achim Zeileis.

We have probably omitted some important names here because of incomplete record keeping. If we have overlooked you, please let us know and we'll update the list. Many more, too numerous to mention here, have contributed by sending bug reports and suggesting various improvements. Simon Davies whilst at the University of Auckland wrote the original version of glm(). Julian Harris and Wing Kwong (Tiki) Wan whilst at the University of Auckland assisted Ross Ihaka with the original Macintosh port.

R was inspired by the S environment which has been principally developed by John Chambers, with substantial input from Douglas Bates, Rick Becker, Bill Cleveland, Trevor Hastie, Daryl Pregibon and Allan Wilks. A special debt is owed to John Chambers who has graciously contributed advice and encouragement in the early days of R and later became a member of the core team.

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30 9 26 g+ in

Euskaltel compra R Cable por 1.155 millones a cambio de efectivo y acciones para Abanca

La firma vasca se hace con el 70% que tenía el fondo CVC en la operadora y el 30% de la entidad -La operadora gallega mantendrá su marca o la atención en gallego a los clientes

Lara Graña | Vigo | 24.07.2015 | 04:55

La salida a Bolsa de Euskaltel se había fraguado no solo sobre los hornillos de su propia fortaleza financiera y posición de liderazgo en el País Vasco, sino que estaba aderezada ante los inversores con el compromiso de expansión. Y eso pasaba por adquirir, al menos, una de las dos operadoras de cable del norte peninsular: Telecable (asturiana) o la gallega R Cable. Y la segunda, gran apuesta de la desaparecida Caixanova, ha sido la elegida. La firma vasca confirmó a las 22:11 horas de la noche lo que muchos sabían desde la mañana: que compraba la empresa gallega al fondo de capital riesgo CVC -que tiene el 70% del accionariado- y a la heredera de las antiguas cajas, Abanca, que mantenía el 30% restante. R Cable ha sido valorada por 1.155 millones de euros. Tanto desde el banco como desde Euskaltel optaron por calificar la operación como una integración,



Economía

La economía española pierde fuelle en el tercer trimestre

El Banco de España calcula que el PIB creció un 0,8%, dos décimas menos que en anterior trimestre



'El Gobierno no puede intervenir en el conflicto de Coca-Cola'

Mariano Rajoy recuerda que es la Audiencia Nacional la que tiene que dirimir este conflicto laboral

El Ibex rebota un 1,8% y recupera los 9.500 puntos

El selectivo español compensa parte de las pérdidas de una semana en la que se deja cerca de un 7%



Barreras asegura actividad para otros 29 meses con un segundo flotel para Pemex

La compañía lo adjudicará de forma directa - Feijóo: "La petrolera cumple con Galicia" - Roa:...



Nace la Nueva Pescanova en una junta histórica que anticipa la salida a Bolsa

El consejo confía en que la CNMV no ponga objeciones. Los accionistas arrollan el plan de la banca...

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Microsoft compra la empresa Revolution Analytics

Jaime Domenech, 7 de abril de 2015, 8:08 pm



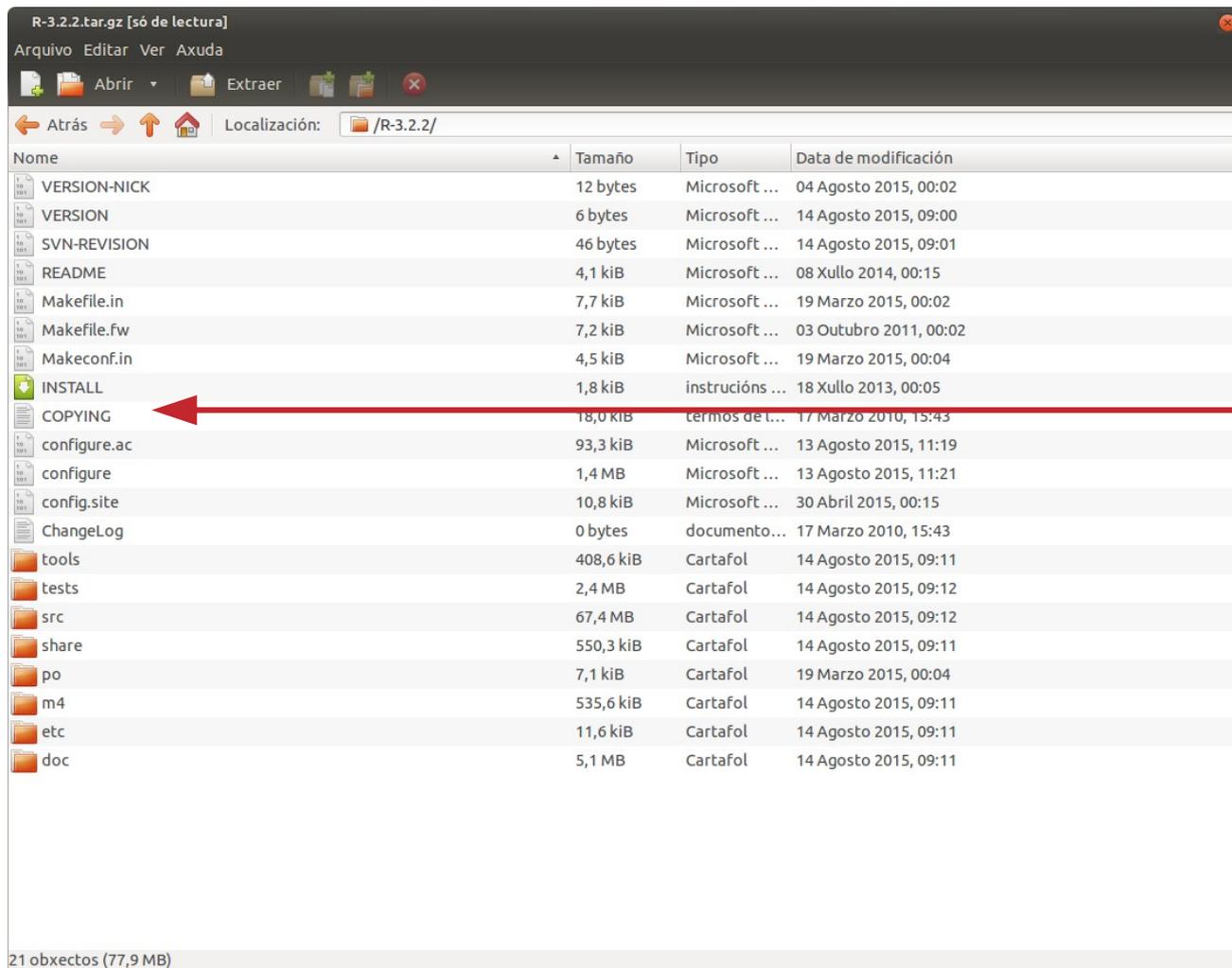
Microsoft



TEMÁTICAS RELACIONADAS

- Adquisicion
- Big Data
- Compra
- Lenguaje R
- Microsoft
- Revolution Analytics

E onde está a licenza?



R-3.2.2.tar.gz [só de lectura]

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Abrir Extraer

Localización: /R-3.2.2/

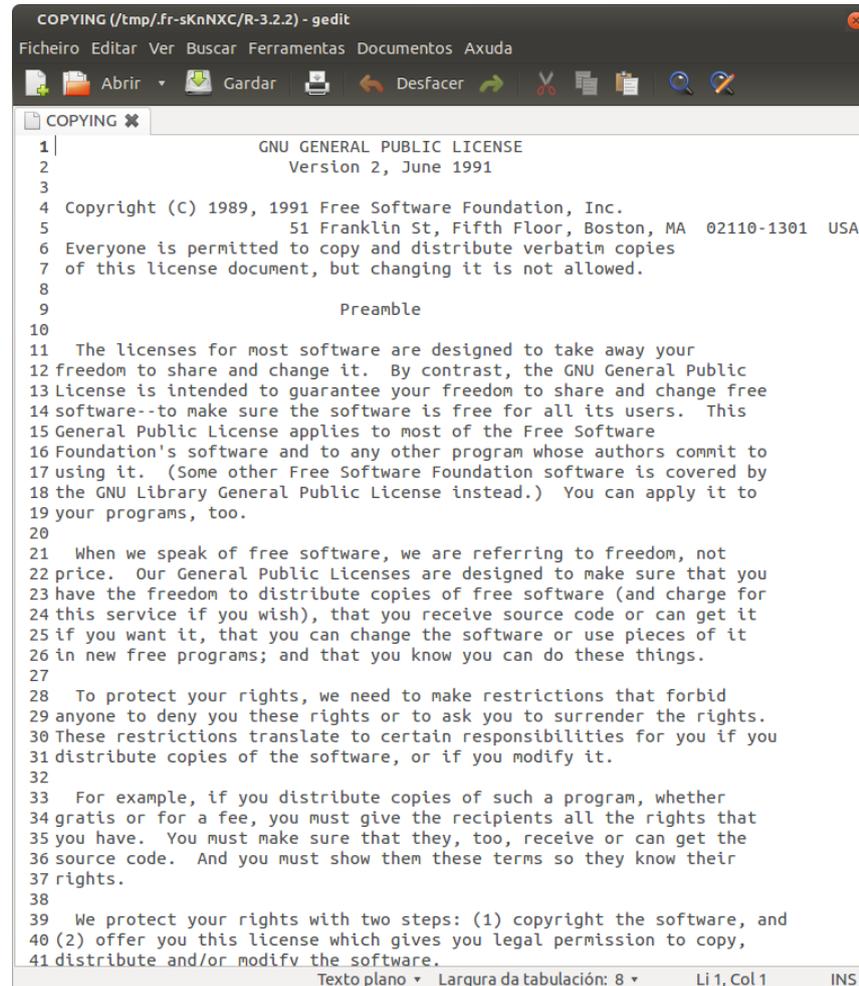
Nome	Tamaño	Tipo	Data de modificación
VERSION-NICK	12 bytes	Microsoft ...	04 Agosto 2015, 00:02
VERSION	6 bytes	Microsoft ...	14 Agosto 2015, 09:00
SVN-REVISION	46 bytes	Microsoft ...	14 Agosto 2015, 09:01
README	4,1 kiB	Microsoft ...	08 Xullo 2014, 00:15
Makefile.in	7,7 kiB	Microsoft ...	19 Marzo 2015, 00:02
Makefile.fw	7,2 kiB	Microsoft ...	03 Outubro 2011, 00:02
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configure.ac	93,3 kiB	Microsoft ...	13 Agosto 2015, 11:19
configure	1,4 MB	Microsoft ...	13 Agosto 2015, 11:21
config.site	10,8 kiB	Microsoft ...	30 Abril 2015, 00:15
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po	7,1 kiB	Cartafol	19 Marzo 2015, 00:04
m4	535,6 kiB	Cartafol	14 Agosto 2015, 09:11
etc	11,6 kiB	Cartafol	14 Agosto 2015, 09:11
doc	5,1 MB	Cartafol	14 Agosto 2015, 09:11

21 obxectos (77,9 MB)

R-3.2.tar.gz

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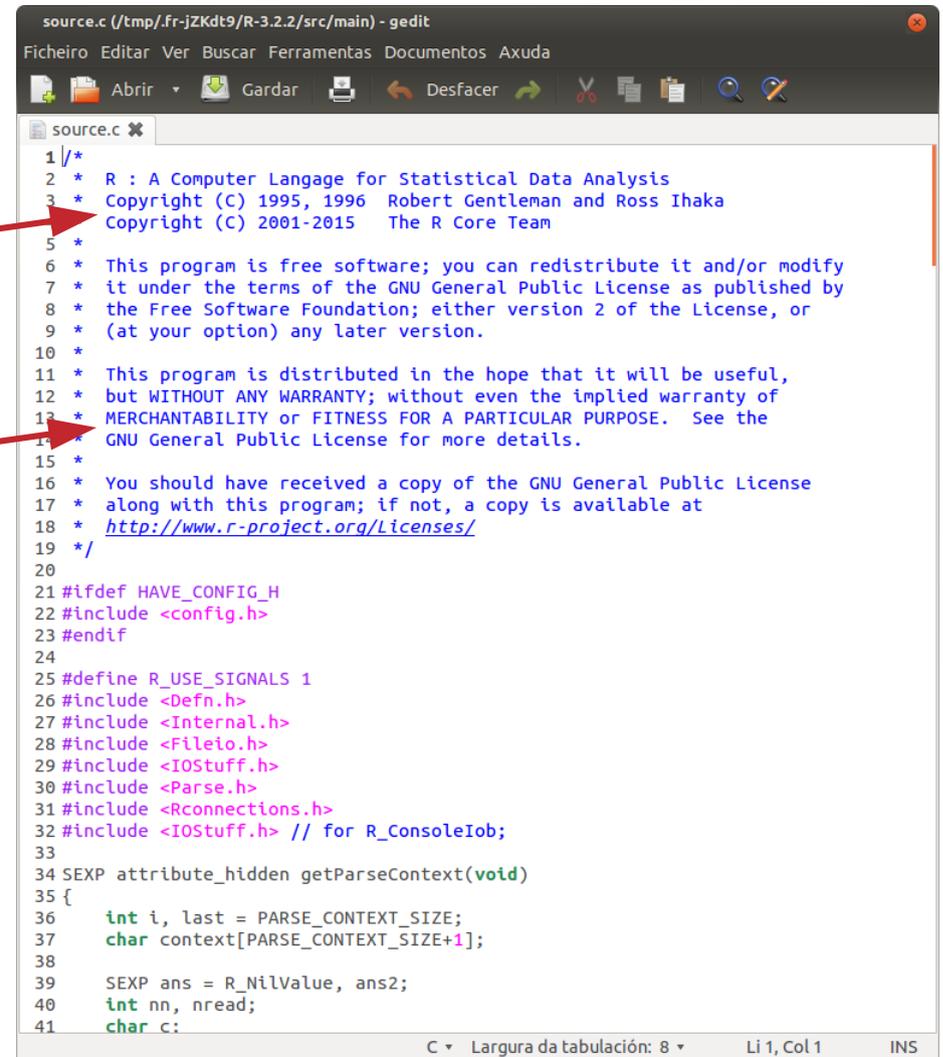
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```

Iso é todo?

**Ficheiro
source.c**

Autores

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licenza GPL**



```
source.c (/tmp/.Fr-jZKdt9/R-3.2.2/src/main) - gedit
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Abrir Gardar Desfacer
source.c
1 /*
2  * R : A Computer Language for Statistical Data Analysis
3  * Copyright (C) 1995, 1996 Robert Gentleman and Ross Ihaka
4  * Copyright (C) 2001-2015 The R Core Team
5  *
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9  * (at your option) any later version.
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15 *
16 * You should have received a copy of the GNU General Public License
17 * along with this program; if not, a copy is available at
18 * http://www.r-project.org/licenses/
19 */
20
21 #ifndef HAVE_CONFIG_H
22 #include <config.h>
23 #endif
24
25 #define R_USE_SIGNALS 1
26 #include <Defn.h>
27 #include <Internal.h>
28 #include <Fileio.h>
29 #include <IOstuff.h>
30 #include <Parse.h>
31 #include <Rconnections.h>
32 #include <IOstuff.h> // for R_ConsoleIob;
33
34 SEXP attribute_hidden getParseContext(void)
35 {
36     int i, last = PARSE_CONTEXT_SIZE;
37     char context[PARSE_CONTEXT_SIZE+1];
38
39     SEXP ans = R_NilValue, ans2;
40     int nn, nread;
41     char c;
```

Estupendo !! Vou colaborar con R

```
> package.skeleton("abeancos")
Creating directories ...
Creating DESCRIPTION ...
Creating Read-and-delete-me ...
Saving functions and data ...
Making help files ...
Done.
Further steps are described in './abeancos/Read-and-delete-me'
```

Creo que me esquezo de algo ...

```
$ cat DESCRIPTION
```

```
Package: abeancos
```

```
Type: Package
```

```
Title: What the package does (short line)
```

```
Version: 1.0
```

```
Date: 2015-08-11
```

```
Author: Who wrote it
```

```
Maintainer: Who to complain to
```

```
<yourfault@somewhere.net>
```

```
Description: More about what it does (maybe  
more than one line)
```

```
License: What license is it under?
```

Exemplos en CRAN:

Rcmdr: R Commander

A platform-independent basic-statistics GUI (graphical user interface) for R, based on the tcltk package.

Version: 2.2-1
Depends: R (≥ 3.0.0), grDevices, utils, splines, [RcmdrMisc](#) (≥ 1.0-3), [car](#) (≥ 2.0-26)
Imports: tcltk, [tcltk2](#) (≥ 1.2-6), [abind](#), graphics, methods, stats
Suggests: [aplpack](#), [colorspace](#), [effects](#) (≥ 3.0-1), [e1071](#), [foreign](#), grid, [Hmisc](#), [knitr](#), [lattice](#), [leaps](#), [lmtest](#), [markdown](#), [MASS](#), [mgcv](#), [multcomp](#) (≥ 0.991-2), [nlme](#), [nnet](#), [readxl](#), [relimp](#), [rgl](#), [rmarkdown](#), [sem](#) (≥ 2.1-1)
Published: 2015-09-17
Author: John Fox [aut, cre], Milan Bouchet-Valat [aut], Liviu Andronic [ctb], Michael Ash [ctb], Theophilus Boye [ctb], Stefano Calza [ctb], Andy Chang [ctb], Philippe Grosjean [ctb], Richard Heiberger [ctb], Kosar Karimi Pour [ctb], G. Jay Kerns [ctb], Renaud Lancelot [ctb], Matthieu Lesnoff [ctb], Uwe Ligges [ctb], Samir Messad [ctb], Martin Maechler [ctb], Robert Muenchen [ctb], Duncan Murdoch [ctb], Erich Neuwirth [ctb], Dan Putler [ctb], Brian Ripley [ctb], Miroslav Ristic [ctb], Peter Wolf [ctb], Kevin Wright [ctb]
Maintainer: John Fox <jfox at mcmaster.ca>
License: [GPL-2](#) | [GPL-3](#) [expanded from: GPL (≥ 2)]
URL: <http://www.r-project.org>, <http://socserv.socsci.mcmaster.ca/jfox/Misc/Rcmdr/>
NeedsCompilation: yes
Citation: [Rcmdr citation info](#)
Materials: [NEWS](#)
In views: [Finance](#)
CRAN checks: [Rcmdr results](#)

Downloads:

Reference manual: [Rcmdr.pdf](#)
Package source: [Rcmdr 2.2-1.tar.gz](#)
Windows binaries: r-devel: [Rcmdr 2.2-1.zip](#), r-release: [Rcmdr 2.2-1.zip](#), r-oldrel: [Rcmdr 2.1-7.zip](#)
OS X Snow Leopard binaries: r-release: [Rcmdr 2.2-0.tgz](#), r-oldrel: [Rcmdr 2.1-7.tgz](#)
OS X Mavericks binaries: r-release: [Rcmdr 2.2-1.tgz](#)
Old sources: [Rcmdr archive](#)

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<http://r.adu.org.za/>

<http://cran.mirror.ac.za/>

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<http://ftp.cixug.es/CRAN>

<http://cran.es.r-project.org/>

Sweden

<http://ftp.sunet.se/pub/lang/CRAN/>

Switzerland

<http://stat.ethz.ch/CRAN/>

Taiwan

<http://ftp.yzu.edu.tw/CRAN/>

<http://cran.cs.pu.edu.tw/>

<http://cran.csie.ntu.edu.tw/>

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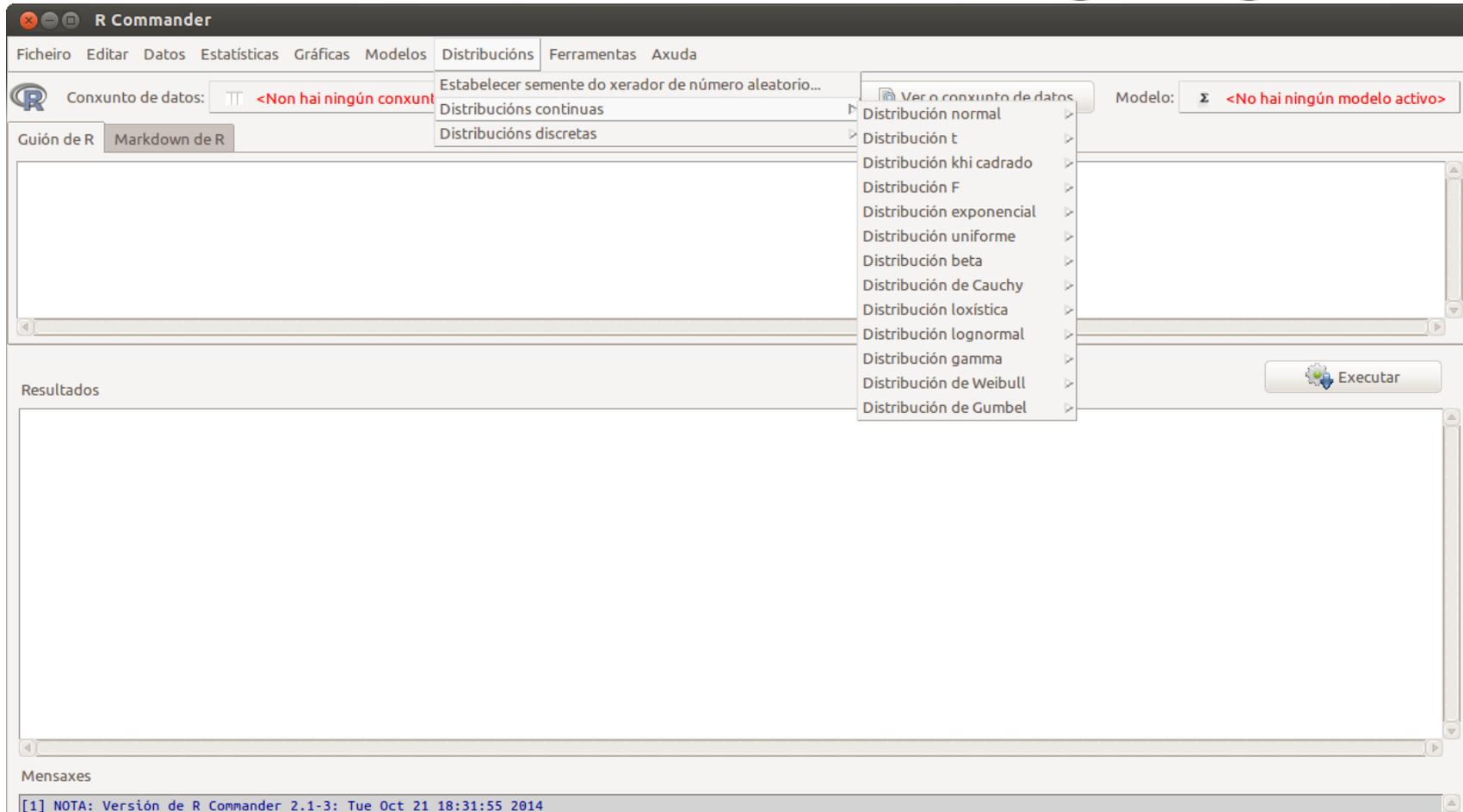
Curso de RCommander



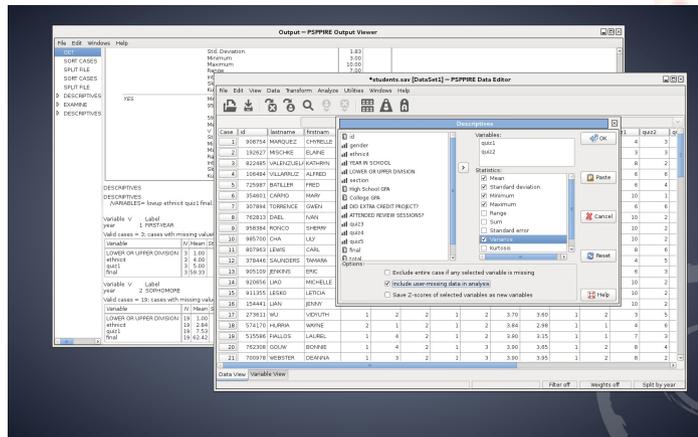
The screenshot shows the CIXUG website interface. At the top left is the CIXUG logo and name. To the right are social media icons for Twitter and Facebook. Below the header is a navigation bar with 'Campus' and a language dropdown set to 'Galego (gl)'. On the right of the navigation bar, it says 'Non está identificado. (Acceso)'. The main content area features a section for 'Cursos de LibreOffice' with a description: 'LibreOffice é un proxecto baseado en software libre, e está dispoñible de balde para ser descargado en varias plataformas. Neste curso poderás atopar vídeos e exercicios para aprender a dominar o procesador de textos Writer, e as presentacións con Impress.' There is a 'Read More' button and a LibreOffice logo. Below this is a 'Cursos dispoñíbeis' section. It lists a course: 'Análise estatística con RCommander [Segunda edición]' with an R logo. The description for this course is: 'A posta en marcha deste curso de "Análise estatística con RCommander - Segunda edición" encádrase dentro das actividades que o Consorcio para o Desenvolvemento de Aplicacións Informáticas de Xestión Universitaria (CIXUG) está a desenvolver no eido do fomento do uso e'.

<http://cursos.cixug.es>

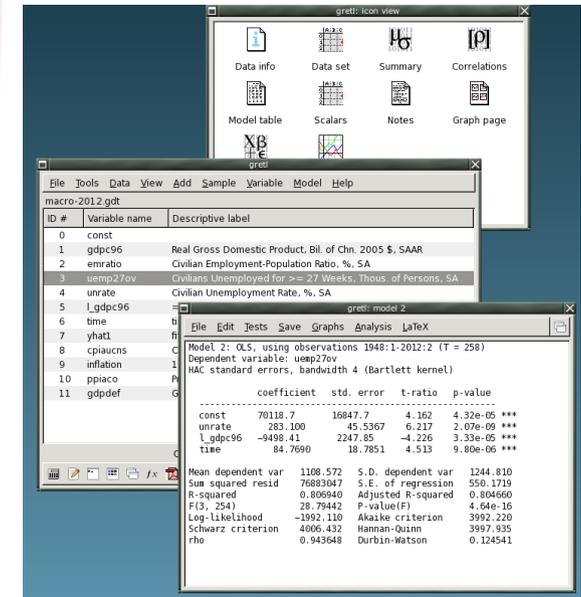
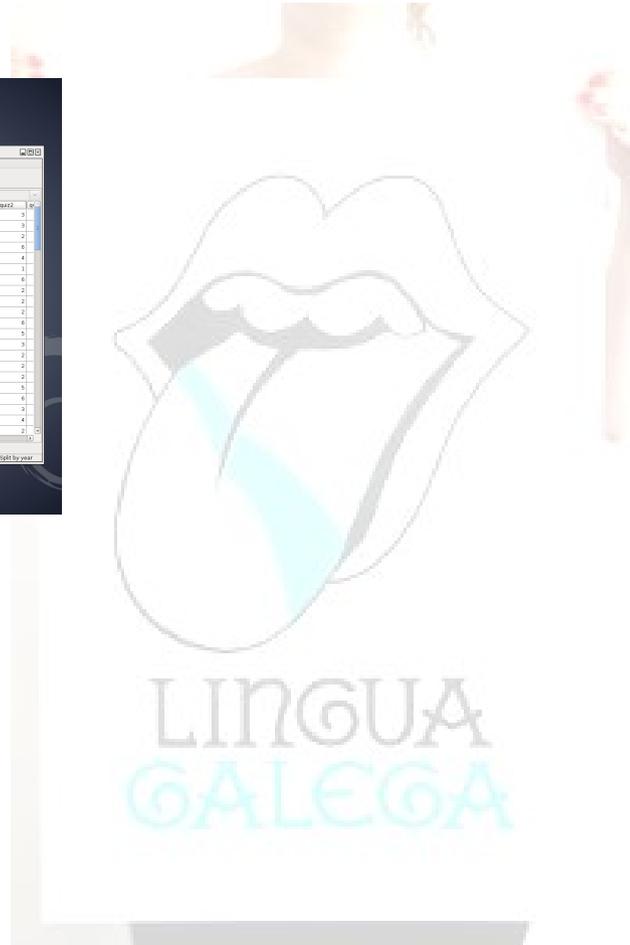
Rcommander 2.2-1 en galego



.... máis galego ;)



PSPP



gretl

Moitas grazas

Agradecementos

Xosé Antón Gómez Méixome
Roberto Martín Souto
Miguel Ángel Rodríguez Muíños
Alberto Permuy Leal
Manuel Mosquera Viso
María Dolores Abilleira

“Libre no significa gratis”

—Richard Stallman
