

Instalación de R y RStudio



R y RStudio

Este manual le permitirá tener todo listo para poder seguir el **Rweekend**, esto es:

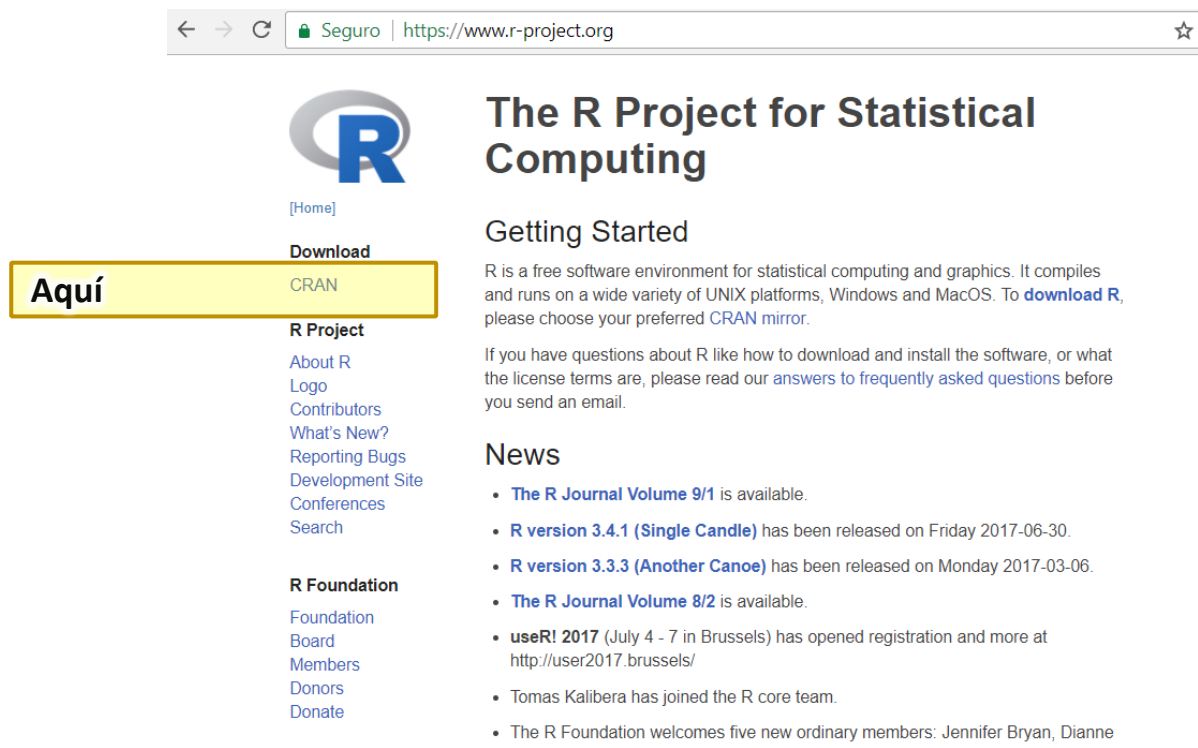
Instalar R y Rstudio adicional a algunos paquetes iniciales

Si por alguna razón no puede instalar R, puede igual seguir las charlas creando una **cuenta gratuita en Rstudio Cloud**, al final le damos las instrucciones




R y RStudio

- Dirigirse a su web (<http://www.r-project.org>)
- Seleccionar el enlace Download [CRAN](#).



The screenshot shows a web browser window with the address bar displaying "Seguro | https://www.r-project.org". The website content includes the R logo, the title "The R Project for Statistical Computing", and a "Getting Started" section. A yellow box highlights the "Download" link in the navigation menu, which points to the "CRAN" link. The "CRAN" link is also highlighted in the "Download" section. The "Getting Started" section provides information about R as a free software environment and includes a list of news items.

← → ↻ Seguro | https://www.r-project.org ☆


[Home]
Download
Aquí [CRAN](#)
R Project
[About R](#)
[Logo](#)
[Contributors](#)
[What's New?](#)
[Reporting Bugs](#)
[Development Site](#)
[Conferences](#)
[Search](#)
R Foundation
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The R Project for Statistical Computing

Getting Started

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. To **download R**, please choose your preferred [CRAN mirror](#).

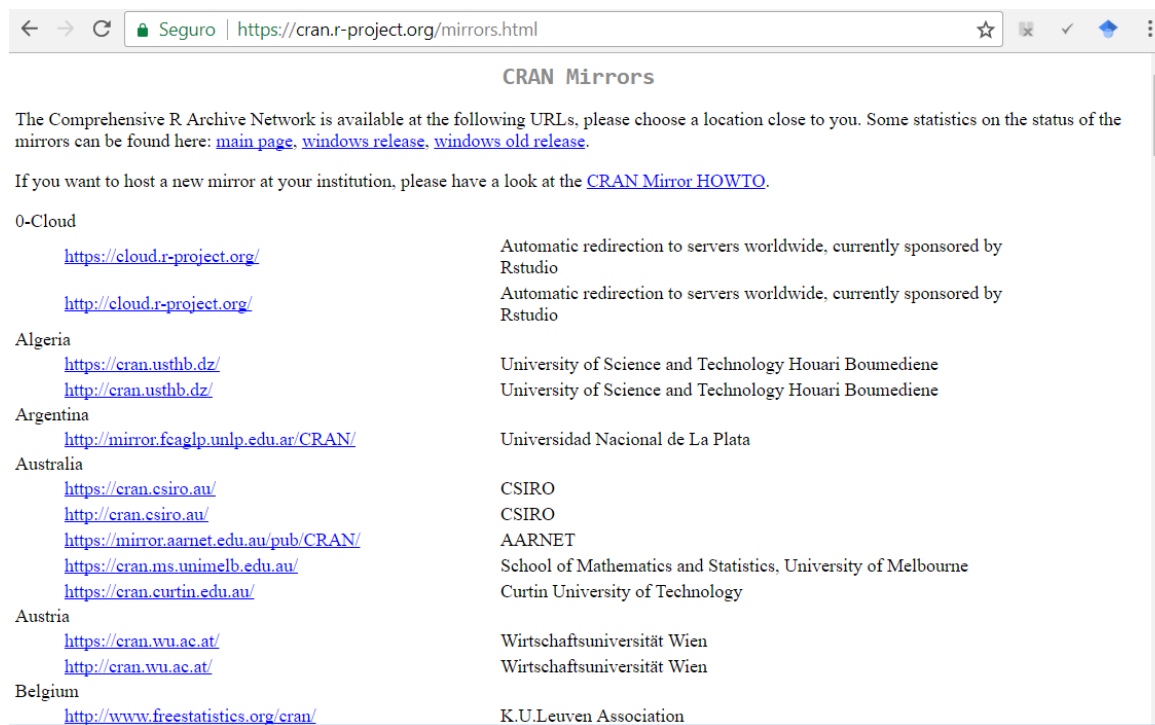
If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.

News

- [The R Journal Volume 9/1](#) is available.
- [R version 3.4.1 \(Single Candle\)](#) has been released on Friday 2017-06-30.
- [R version 3.3.3 \(Another Canoe\)](#) has been released on Monday 2017-03-06.
- [The R Journal Volume 8/2](#) is available.
- [useR! 2017](#) (July 4 - 7 in Brussels) has opened registration and more at <http://user2017.brussels/>
- Tomas Kalibera has joined the R core team.
- The R Foundation welcomes five new ordinary members: Jennifer Bryan, Dianne

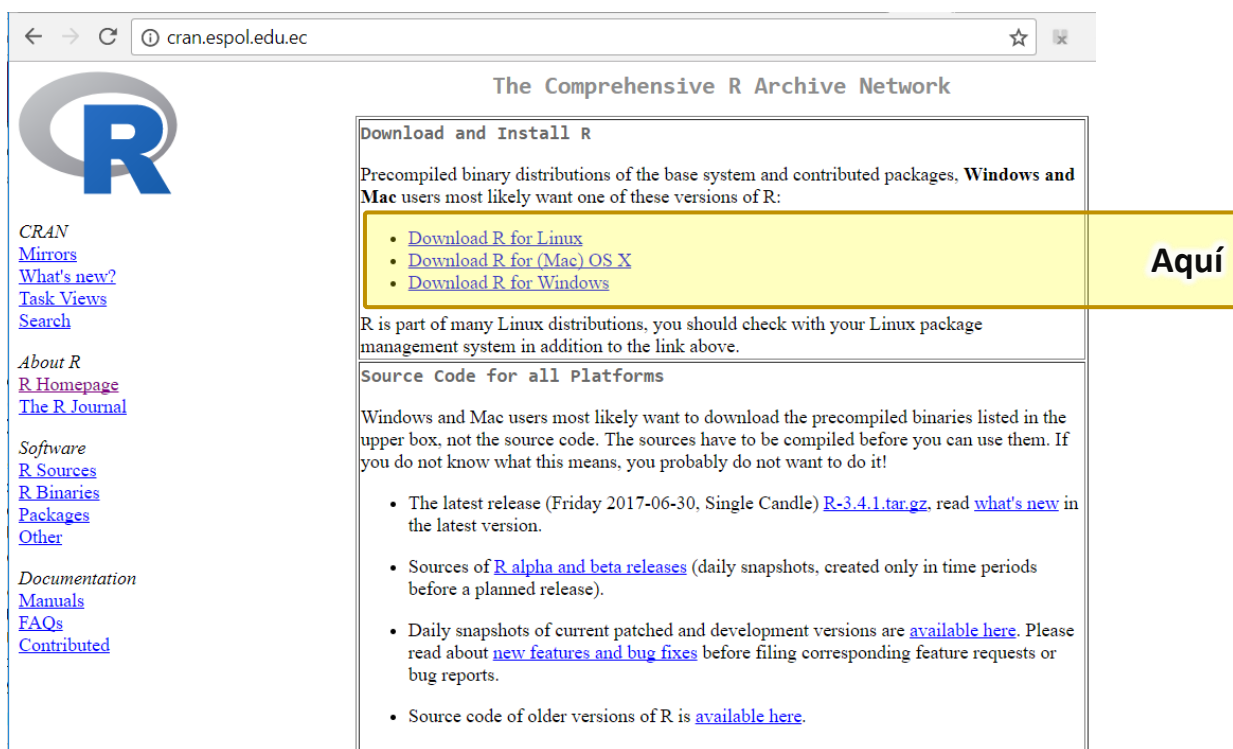
R y RStudio

- Buscar y dar click en el enlace que nos permite descargar R desde Ecuador u otro país cercano



R y RStudio

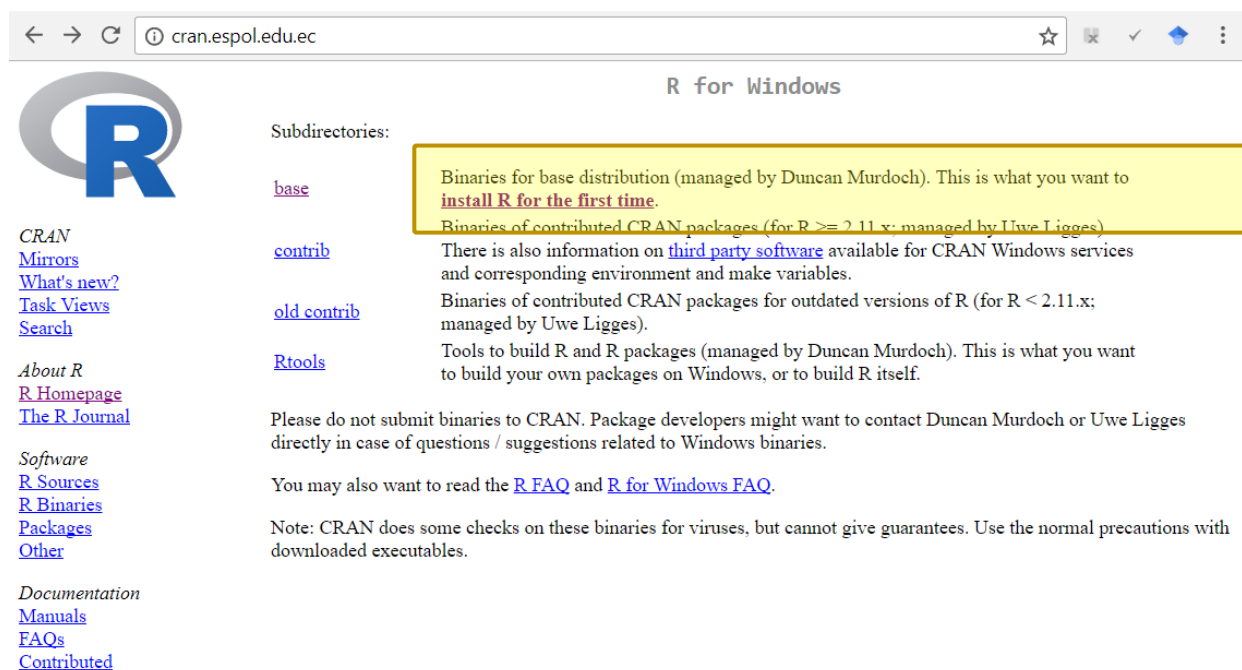
- Elegir la versión que corresponde a nuestro sistema operativo (Windows, Linux o Mac), en este curso se usará Windows.



The screenshot shows the CRAN website (cran.espol.edu.ec) with the title "The Comprehensive R Archive Network". On the left is a navigation menu with links: CRAN, Mirrors, What's new?, Task Views, Search, About R, R Homepage, The R Journal, Software, R Sources, R Binaries, Packages, Other, Documentation, Manuals, FAQs, and Contributed. The main content area has a section "Download and Install R" with the text: "Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:". Below this, a yellow box highlights three links: "Download R for Linux", "Download R for (Mac) OS X", and "Download R for Windows". A yellow callout box with the word "Aquí" points to this highlighted area. Below the highlighted links, there is a section "Source Code for all Platforms" with text explaining that Windows and Mac users should download precompiled binaries, not source code. It lists three bullet points: the latest release (R-3.4.1.tar.gz), sources of alpha and beta releases, and daily snapshots of current patched and development versions.

R y RStudio


- Escoger, Install R for the first time



The screenshot shows a web browser window with the address bar displaying "cran.espol.edu.ec". The page title is "R for Windows". On the left, there is a sidebar with the R logo and several links: "CRAN", "Mirrors", "What's new?", "Task Views", "Search", "About R", "R Homepage", "The R Journal", "Software", "R Sources", "R Binaries", "Packages", "Other", "Documentation", "Manuals", "FAQs", and "Contributed". The main content area is titled "Subdirectories:" and lists four options: "base", "contrib", "old contrib", and "Rtools". Each option has a corresponding description. The "base" option is highlighted with a yellow box and the word "Aquí" (Here) next to it. The descriptions for "base", "contrib", and "Rtools" mention that they are managed by Duncan Murdoch, while "old contrib" is managed by Uwe Ligges. A note at the bottom states that CRAN does some checks for viruses but cannot give guarantees.

← → ↻ ⓘ cran.espol.edu.ec ☆

R for Windows



Subdirectories:

- [base](#): Binaries for base distribution (managed by Duncan Murdoch). This is what you want to **install R for the first time.** **Aquí**
- [contrib](#): Binaries of contributed CRAN packages (for R ≥ 2.11.x; managed by Uwe Ligges). There is also information on [third party software](#) available for CRAN Windows services and corresponding environment and make variables.
- [old contrib](#): Binaries of contributed CRAN packages for outdated versions of R (for R < 2.11.x; managed by Uwe Ligges).
- [Rtools](#): Tools to build R and R packages (managed by Duncan Murdoch). This is what you want to build your own packages on Windows, or to build R itself.

Please do not submit binaries to CRAN. Package developers might want to contact Duncan Murdoch or Uwe Ligges directly in case of questions / suggestions related to Windows binaries.

You may also want to read the [R FAQ](#) and [R for Windows FAQ](#).

Note: CRAN does some checks on these binaries for viruses, but cannot give guarantees. Use the normal precautions with downloaded executables.

CRAN
[Mirrors](#)
[What's new?](#)
[Task Views](#)
[Search](#)

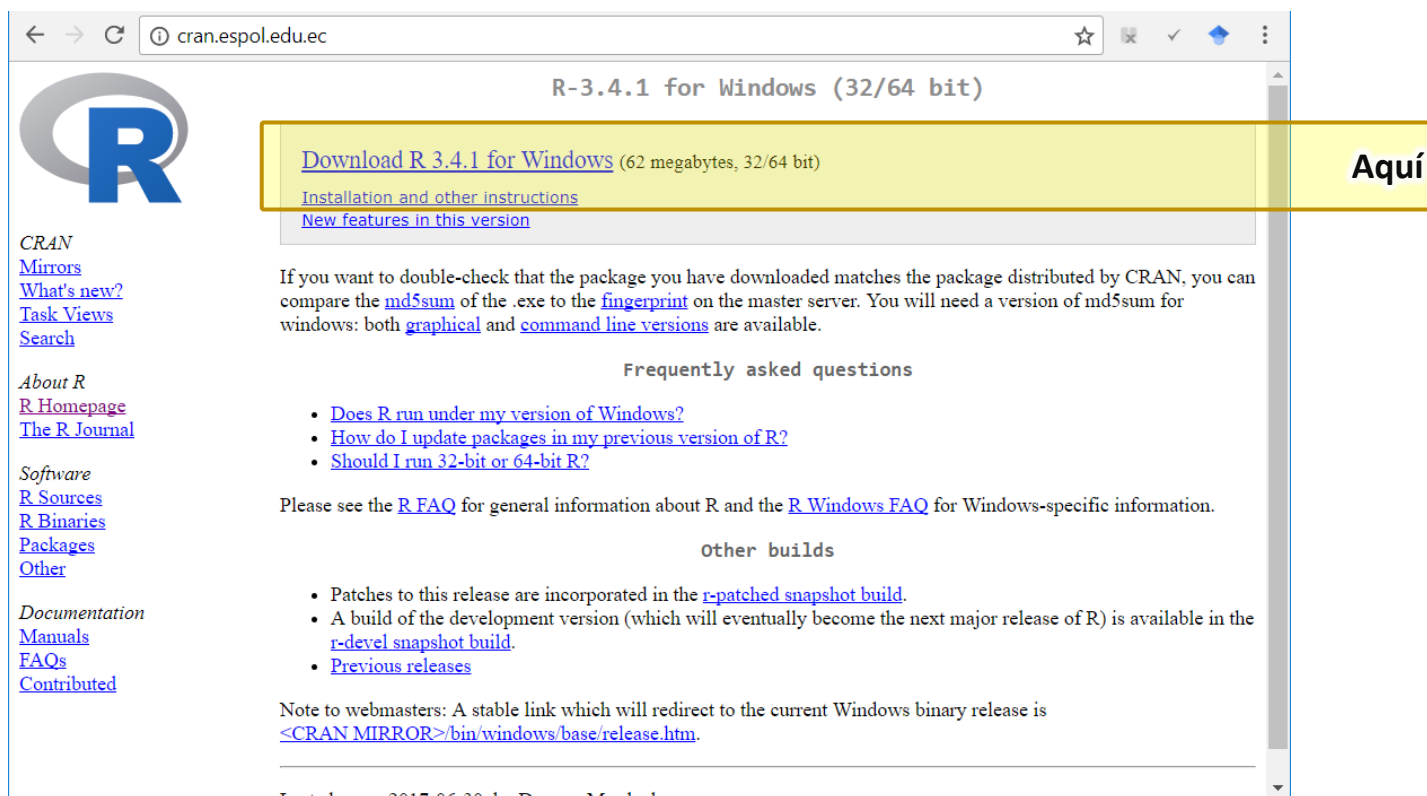
About R
[R Homepage](#)
[The R Journal](#)

Software
[R Sources](#)
[R Binaries](#)
[Packages](#)
[Other](#)

Documentation
[Manuals](#)
[FAQs](#)
[Contributed](#)

R y RStudio

- Escoger Download R X.Y.Z for Windows, descargar e instalar.



The screenshot shows the CRAN website for R 3.4.1 for Windows (32/64 bit). The page title is "R-3.4.1 for Windows (32/64 bit)". The main content area has a yellow box highlighting the link "Download R 3.4.1 for Windows (62 megabytes, 32/64 bit)". To the right of this box, a red box with the word "Aquí" points to the link. Below the link, there are links for "Installation and other instructions" and "New features in this version". The page also includes a sidebar with links for "CRAN", "Mirrors", "What's new?", "Task Views", "Search", "About R", "R Homepage", "The R Journal", "Software", "R Sources", "R Binaries", "Packages", "Other", "Documentation", "Manuals", "FAQs", and "Contributed". The main content area also includes a section for "Frequently asked questions" and a section for "Other builds".

R-3.4.1 for Windows (32/64 bit)

[Download R 3.4.1 for Windows](#) (62 megabytes, 32/64 bit)

[Installation and other instructions](#)

[New features in this version](#)

If you want to double-check that the package you have downloaded matches the package distributed by CRAN, you can compare the [md5sum](#) of the .exe to the [fingerprint](#) on the master server. You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available.

Frequently asked questions

- [Does R run under my version of Windows?](#)
- [How do I update packages in my previous version of R?](#)
- [Should I run 32-bit or 64-bit R?](#)

Please see the [R FAQ](#) for general information about R and the [R Windows FAQ](#) for Windows-specific information.

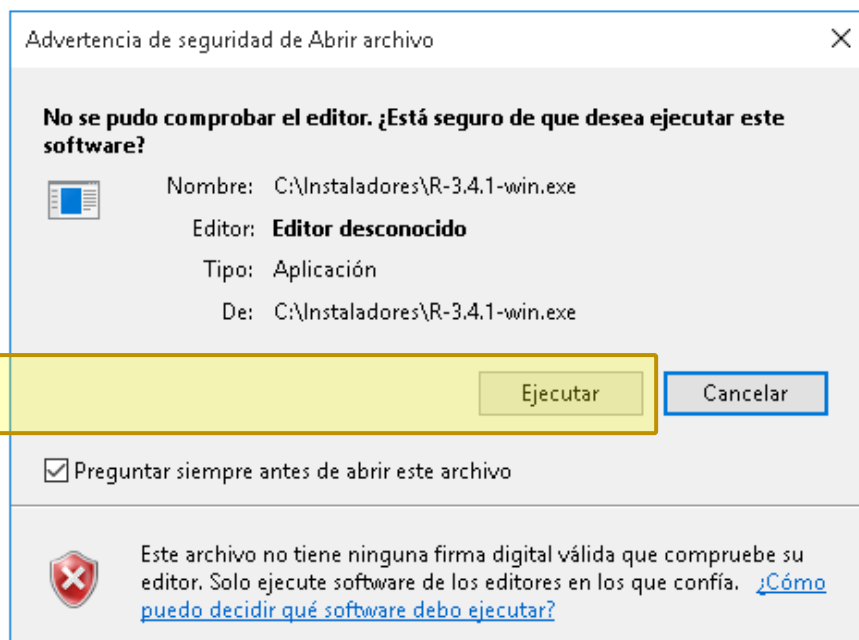
Other builds

- Patches to this release are incorporated in the [r-patched snapshot build](#).
- A build of the development version (which will eventually become the next major release of R) is available in the [r-devel snapshot build](#).
- [Previous releases](#)

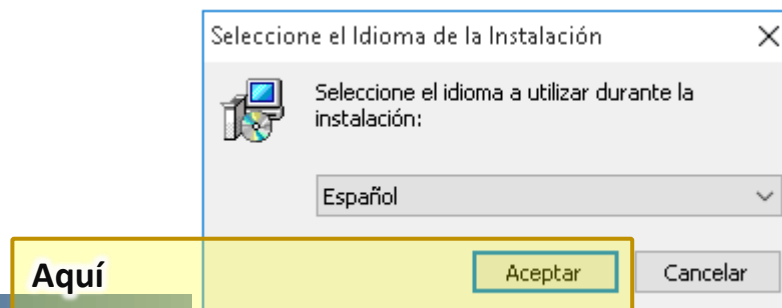
Note to webmasters: A stable link which will redirect to the current Windows binary release is [<CRAN MIRROR>/bin/windows/base/release.htm](#).

Last changes: 2017-06-30, by Duncan Murdoch

Instalar R



- En ciertos Windows sale una pantalla intermedia pidiendo permisos, dar OK.



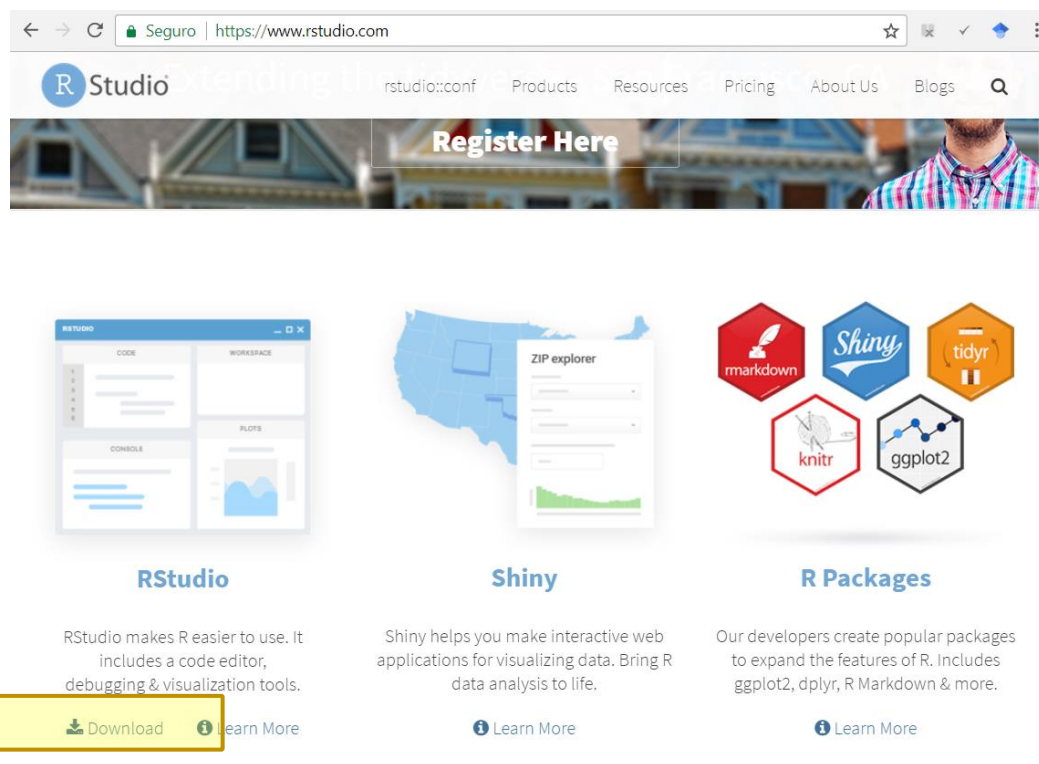
Instalar R

- Luego es dar todo Next > Next (Siguiente > Siguiente)



RStudio

- Dirigirse a su web (<http://www.rstudio.com>)
- Seleccionar el enlace Rstudio - Download



RStudio

- Seleccionar la version de Rstudio a utilizar, en este caso

RStudio Desktop - Open Source License

<https://www.rstudio.com/products/rstudio/download/>

RStudio

[rstudio:conf](#) [Products](#) [Resources](#) [Pricing](#) [About Us](#) [Blogs](#) [Q](#)



Choose Your Version of RStudio

RStudio is a set of integrated tools designed to help you be more productive with R. It includes a console, syntax-highlighting editor that supports direct code execution, and a variety of robust tools for plotting, viewing history, debugging and managing your workspace. [Learn More about RStudio features.](#)

| | RStudio Desktop Open Source License | RStudio Desktop Commercial License | RStudio Server Open Source License | RStudio Server Pro Commercial License | RStudio Server Pro + RStudio Connect Commercial License |
|---------------------------------------|--|---------------------------------------|---------------------------------------|--|---|
| | FREE | \$995 per year | FREE | \$9,995 per year | \$29,995 per year |
| Integrated Tools for R | ● | ● | ● | ● | ● |
| Priority Support | | ● | | ● | ● |
| Access via Web Browser | | | ● | ● | ● |
| Enterprise Security | | | | ● | ● |
| Project Sharing | | | | ● | ● |
| Manage Multiple R Sessions & Versions | | | | ● | ● |
| Admin Dashboard | | | | ● | ● |
| Load Balancing | | | | ● | ● |
| Push-Button Publishing | | | | | ● |
| Self-Managed Content | | | | | ● |
| Scheduled Updates & Distribution | | | | | ● |
| License | AGPL | Commercial | AGPL | Commercial | Commercial |
| Price | FREE | \$995/yr | FREE | \$9,995/yr | \$29,995/yr |

Aquí

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R y RStudio

- Seleccionar [RStudio 1.0.153 - Windows Vista/7/8/10](https://www.rstudio.com/products/rstudio/download/#download), descargar e instalar.

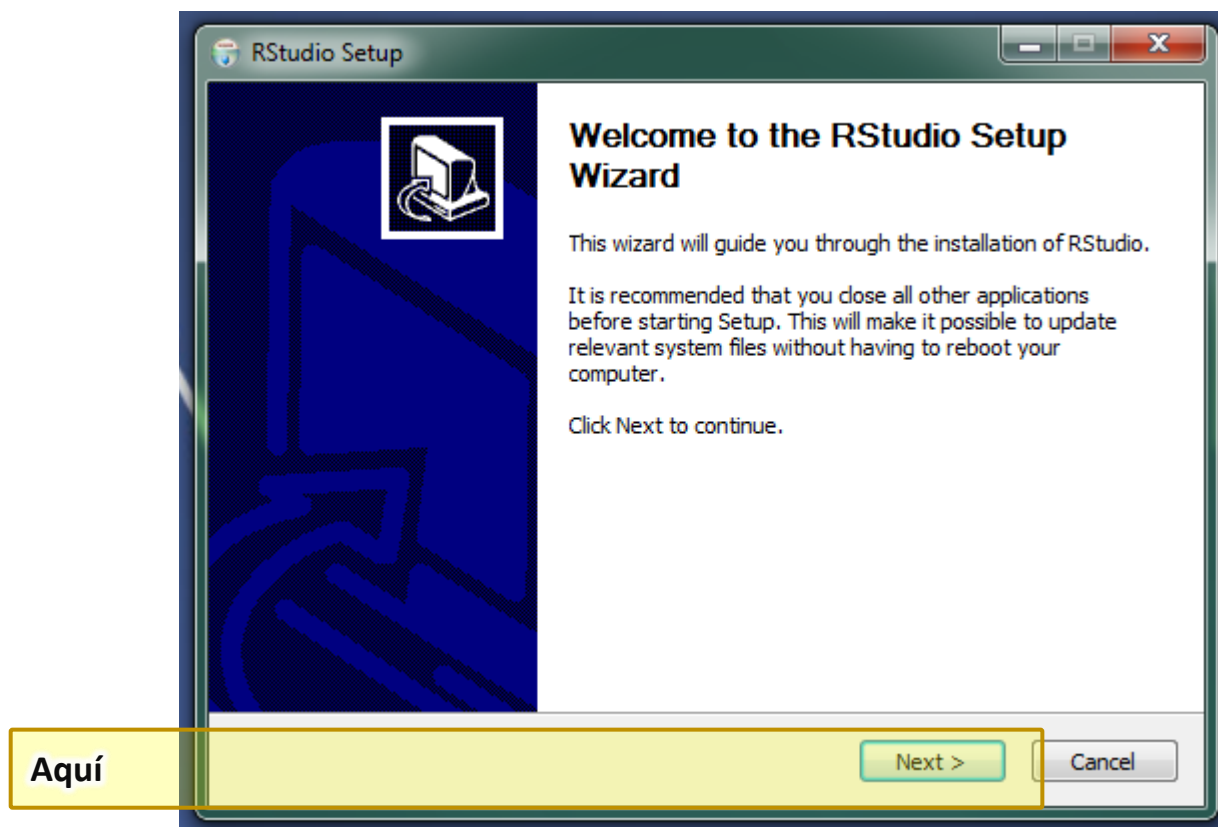
The screenshot shows the RStudio download page. A yellow box highlights the 'RStudio 1.0.153 - Windows Vista/7/8/10' installer. Below the table, there is a section for 'Zip/Tarballs'.

| Installers | Size | Date | MD5 |
|--|---------|------------|----------------------------------|
| RStudio 1.0.153 - Windows Vista/7/8/10 | 81.9 MB | 2017-07-20 | b3b4bbc82865ab105c21cb70b17271b3 |
| RStudio 1.0.153 - Mac OS X 10.6+ (64-bit) | 71.2 MB | 2017-07-20 | 8773610566b74ec3e1a88b2fdb10c8b5 |
| RStudio 1.0.153 - Ubuntu 12.04-15.10/Debian 8 (32-bit) | 85.5 MB | 2017-07-20 | 981be44f91fc07e5f69f52330da32659 |
| RStudio 1.0.153 - Ubuntu 12.04-15.10/Debian 8 (64-bit) | 91.7 MB | 2017-07-20 | 2d0769bea2bf6041511d6901a1cf69c3 |
| RStudio 1.0.153 - Ubuntu 16.04+/Debian 9+ (64-bit) | 61.9 MB | 2017-07-20 | d584cbab01041777a15d62cbef69a976 |
| RStudio 1.0.153 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit) | 84.7 MB | 2017-07-20 | 8dfce96059b05a063c49b705eca0ceb4 |
| RStudio 1.0.153 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit) | 85.7 MB | 2017-07-20 | 16c2c8334f961c65d9bfa8fb813ad7e7 |

| Zip/tar archives | Size | Date | MD5 |
|--|----------|------------|----------------------------------|
| RStudio 1.0.153 - Windows Vista/7/8/10 | 117.6 MB | 2017-07-20 | 024b5714fa6ef337fe0c6f5e2894cbcb |
| RStudio 1.0.153 - Ubuntu 12.04-15.10/Debian 8 (32-bit) | 86.2 MB | 2017-07-20 | f8e0ffa7ec62665524f9e2477facd346 |
| RStudio 1.0.153 - Ubuntu 12.04-15.10/Debian 8 (64-bit) | 92.7 MB | 2017-07-20 | 7077-101311d1-2dcfbed42cf0f1f4ef |

Instalar RStudio

- Ejecutar el archivo .exe y dar todo Next > Next (Siguiente > Siguiente)



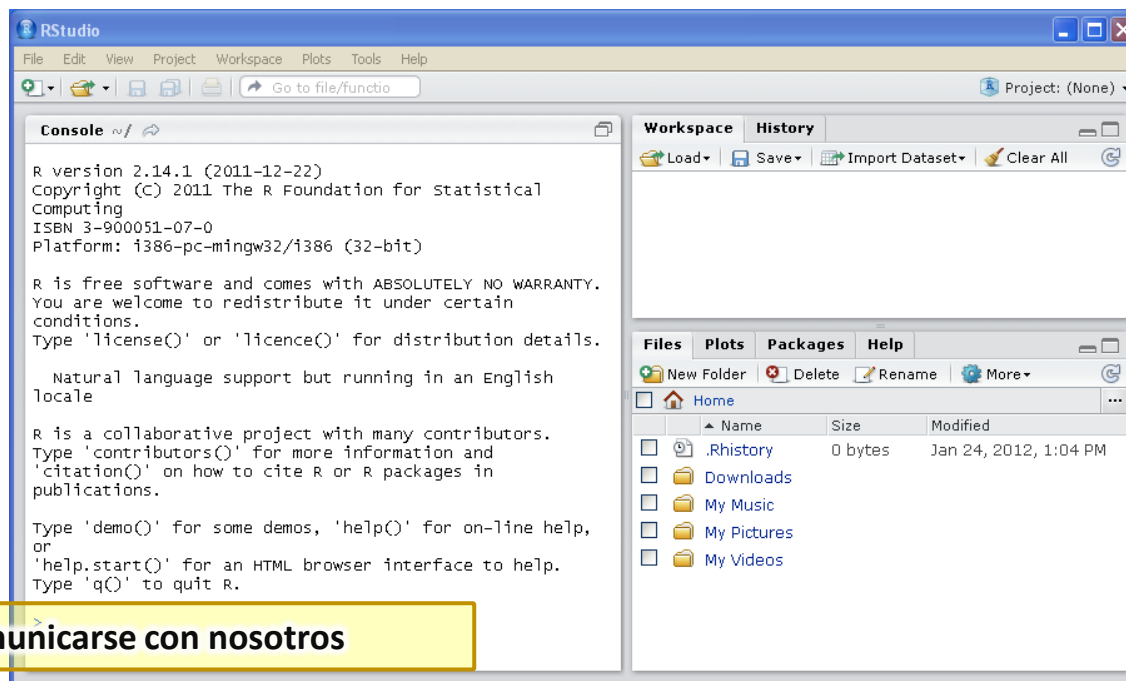


Studio[®]

Instalar paquetes necesarios

R y Rstudio: Abrir RStudio

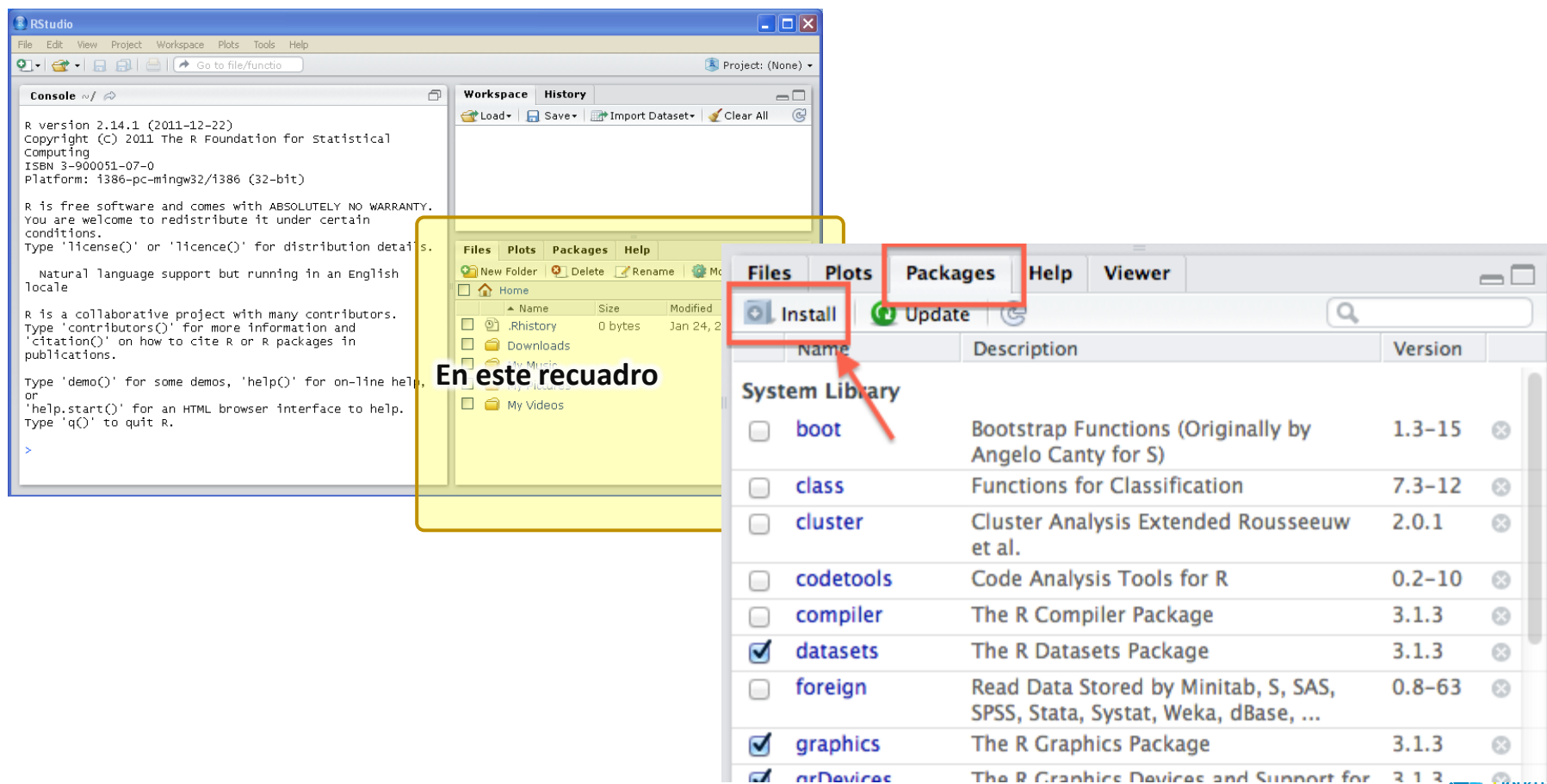
- Abrir RStudio (ojo: es el logo circulo azul con la R en blanco)
- La primer vista es así:



Si no les resulta así, comunicarse con nosotros

R y Rstudio: Instalar un paquete

> Recuadro inferior derecho > Packages > Install



The screenshot shows the RStudio interface. The 'Console' pane on the left displays the R version and platform information. The 'Workspace' pane in the center shows the file explorer. The 'Packages' pane on the right is active, showing a list of installed and available packages. The 'Install' button is highlighted with a red box, and a red arrow points to it. The text 'En este recuadro' is overlaid on the Packages pane.

En este recuadro

| Name | Description | Version |
|---|--|---------|
| System Library | | |
| <input type="checkbox"/> boot | Bootstrap Functions (Originally by Angelo Canty for S) | 1.3-15 |
| <input type="checkbox"/> class | Functions for Classification | 7.3-12 |
| <input type="checkbox"/> cluster | Cluster Analysis Extended Rousseeuw et al. | 2.0.1 |
| <input type="checkbox"/> codetools | Code Analysis Tools for R | 0.2-10 |
| <input type="checkbox"/> compiler | The R Compiler Package | 3.1.3 |
| <input checked="" type="checkbox"/> datasets | The R Datasets Package | 3.1.3 |
| <input type="checkbox"/> foreign | Read Data Stored by Minitab, S, SAS, SPSS, Stata, Systat, Weka, dBase, ... | 0.8-63 |
| <input checked="" type="checkbox"/> graphics | The R Graphics Package | 3.1.3 |
| <input checked="" type="checkbox"/> graphicsDevices | The R Graphics Devices and Support for ... | 3.1.3 |

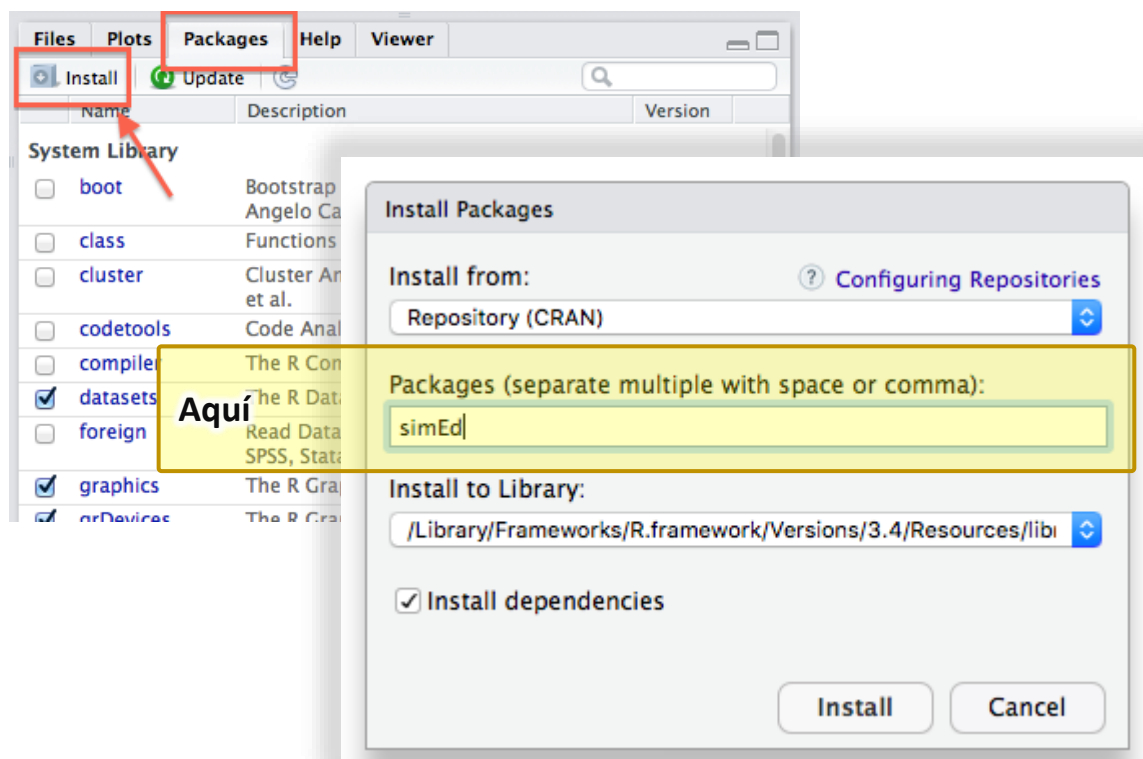
R y Rstudio: Instalar un paquete

> Recuadro inferior derecho > Packages > Install > En el pop up escribir los paquetes a instalar (para la primer clase los que están en negrilla, y de preferencia uno a uno para ver mensajes de error)

Paquetes :

- **tidyverse**
- **openxlsx**
- knitr

tener cuidado con las minúsculas y mayúsculas



R y Rstudio: Instalar un paquete

¿Cómo ver si un paquete fue bien instalado o no?

```
trying URL 'https://cran.rstudio.com/src/contrib/UsingR_2.0-6.tar.gz'
Content type 'application/x-gzip' length 1559258 bytes (1.5 MB)
=====
downloaded 1.5 MB

* installing *source* package 'UsingR' ...
** package 'UsingR' successfully unpacked and MD5 sums checked
** R
** data
*** moving datasets to lazyload DB
** inst
** preparing package for lazy loading
Error in loadNamespace(j<-i[[1L]], c(lib.loc, .libPaths()), versionCh
= vI[[j]]) :
  there is no package called 'htmlTable'
Error : package 'Hmisc' could not be loaded
ERROR: lazy loading failed for package 'UsingR'

* removing '/Users/Ronja/Library/R/3.3/Library/UsingR'
Warning in install.packages :
  installation of package 'UsingR' had non-zero exit status

The downloaded source packages are in

'/private/var/folders/zd/rzx5x8wn14q5d0mnljh989z40000gn/T/Rtmp0IQinc/down
loaded_packages'
> library("UsingR")
Error in library("UsingR") : there is no package called 'UsingR'
> |
```

**non-zero exit status es
un mensaje de error**

**Aquí el paquete se descargó e instaló
bien (ausencia de mensaje de error)**

```
> install.packages("ggExtra")
Installing package into 'D:/nmontano/Mis documentos/R/win-library/3.5'
(as 'lib' is unspecified)
also installing the dependencies 'colourpicker', 'miniUI', 'shinyjs'

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.5/colourpicker_1.0.
zip'
Content type 'application/zip' length 1954606 bytes (1.9 MB)
downloaded 1.9 MB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.5/miniUI_0.1.1.1.zip'
Content type 'application/zip' length 36226 bytes (35 KB)
downloaded 35 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.5/shinyjs_1.1.zip'
Content type 'application/zip' length 1039795 bytes (1015 KB)
downloaded 1015 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.5/ggExtra_0.9.zip'
Content type 'application/zip' length 380204 bytes (371 KB)
downloaded 371 KB

package 'colourpicker' successfully unpacked and MD5 sums checked
package 'miniUI' successfully unpacked and MD5 sums checked
package 'shinyjs' successfully unpacked and MD5 sums checked
package 'ggExtra' successfully unpacked and MD5 sums checked

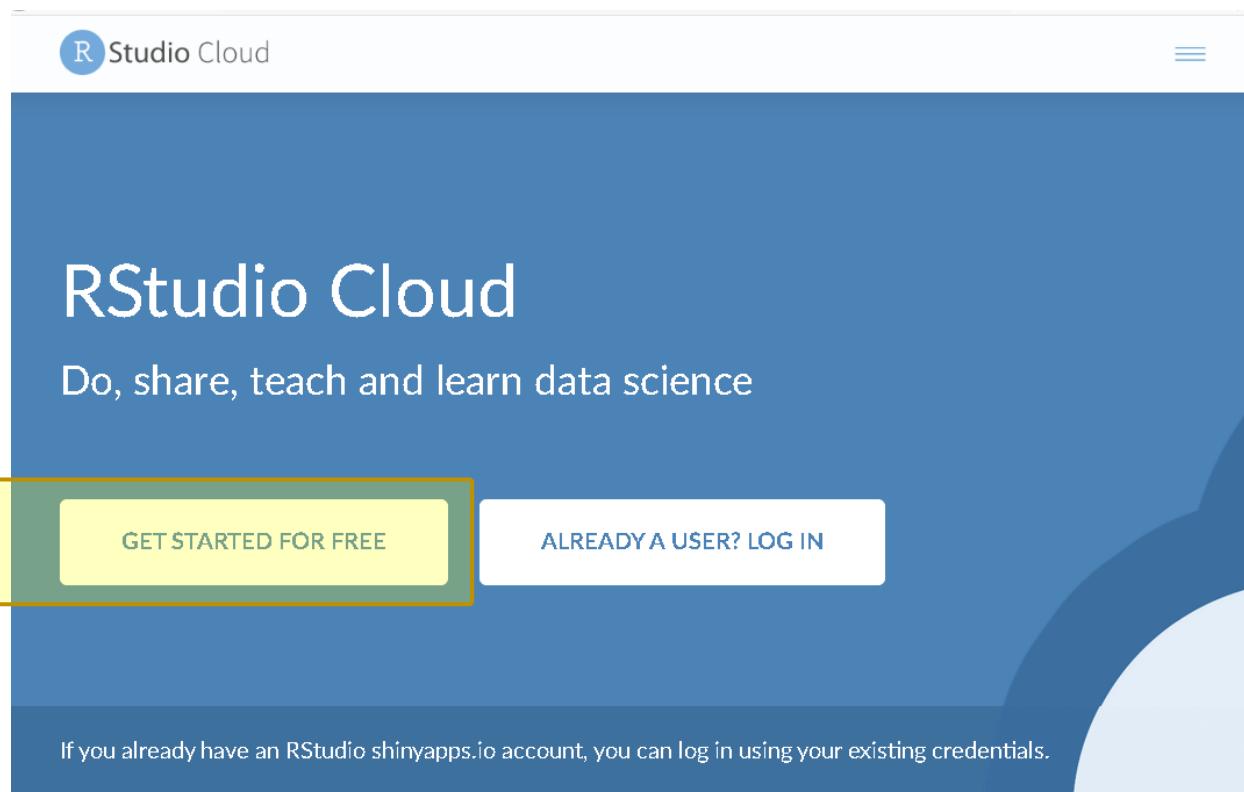
The downloaded binary packages are in
C:\Users\nmontano\AppData\Local\Temp\RtmpiiJhu9\downloaded_packages
> |
```



Crear un usuario en RStudio Cloud

RStudio Cloud

Ir a <https://rstudio.cloud/>




Escoger Get Started

GET STARTED FOR FREE

ALREADY A USER? LOG IN

If you already have an RStudio shinyapps.io account, you can log in using your existing credentials.

RStudio Cloud



Available Plans

Escoger Free

Free

Premium

Instructor

Organization

Cloud Free

If you make limited, occasional use of RStudio Cloud, or have your usage covered by your school/organization or an instructor, our free plan is all you need.

- ✓ Up to 15 projects total i
- ✓ 1 shared space (5 members and 10 projects max) i
- ✓ 15 project hours per month i
- ✓ Up to 1 GB RAM per project i
- ✓ Up to 1 CPU per project i

Sign Up

Sign Up

RStudio Cloud

R Studio

Escoger la forma de crear usuario que dese

Email Address


Password


First Name

Last Name

Sign up

— or —

 Sign up with Google

 Sign up with GitHub

Log In

Listo, ahora podrá participar del RWeekend



No olvides seguarnos en nuestras redes sociales
para que participes de más eventos así:

www.facebook.com/socequest/

[www.twitter.com/see estadistica](http://www.twitter.com/see_estadistica)

www.linkedin.com/company/sociedad-ecuatoriana-de-estadistica/

[www.instagram.com/see estadistica/](http://www.instagram.com/see_estadistica/)