

# Instalación de R y RStudio

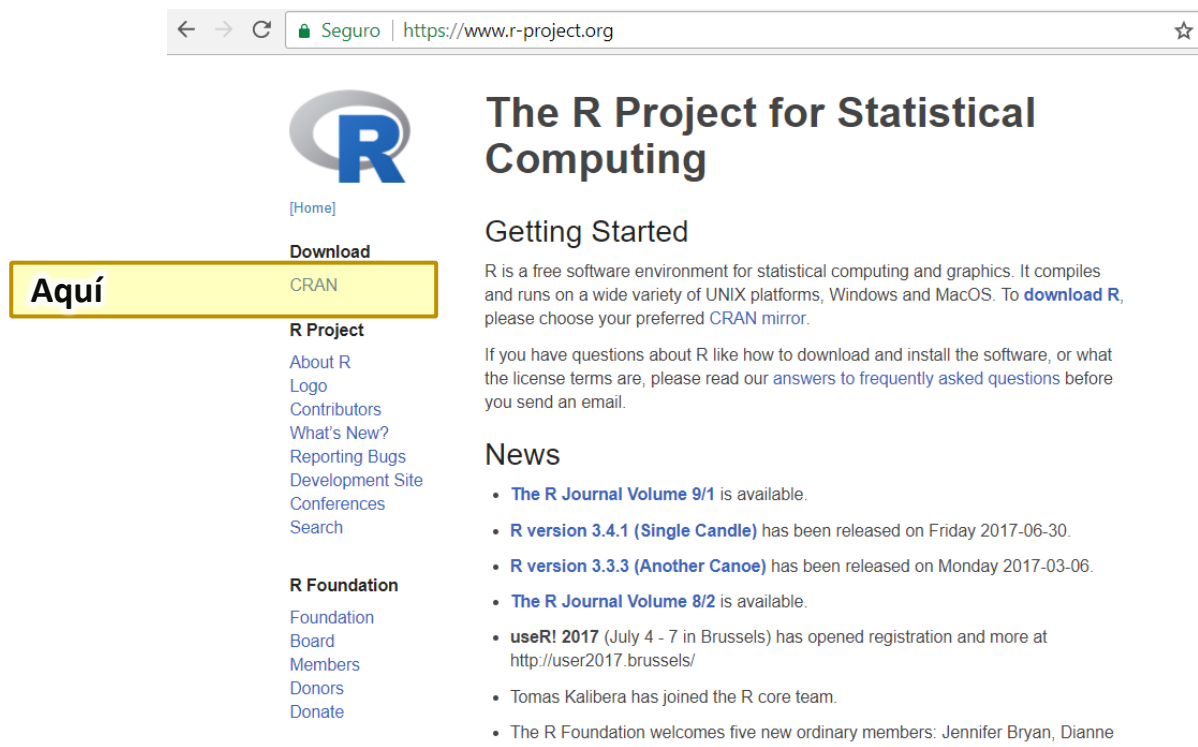


# R y RStudio



# 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 left sidebar, which points to "CRAN".

**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

**Download**

**Aquí** [CRAN](#)

**R Project**

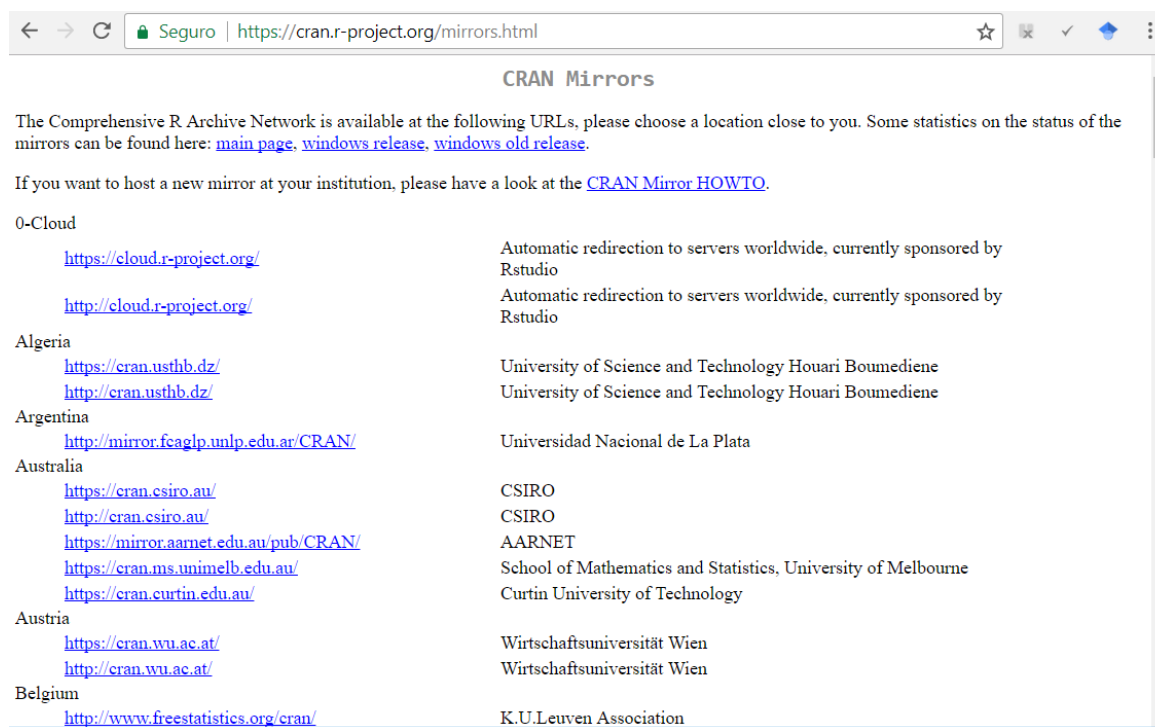
- [About R](#)
- [Logo](#)
- [Contributors](#)
- [What's New?](#)
- [Reporting Bugs](#)
- [Development Site](#)
- [Conferences](#)
- [Search](#)

**R Foundation**

- [Foundation](#)
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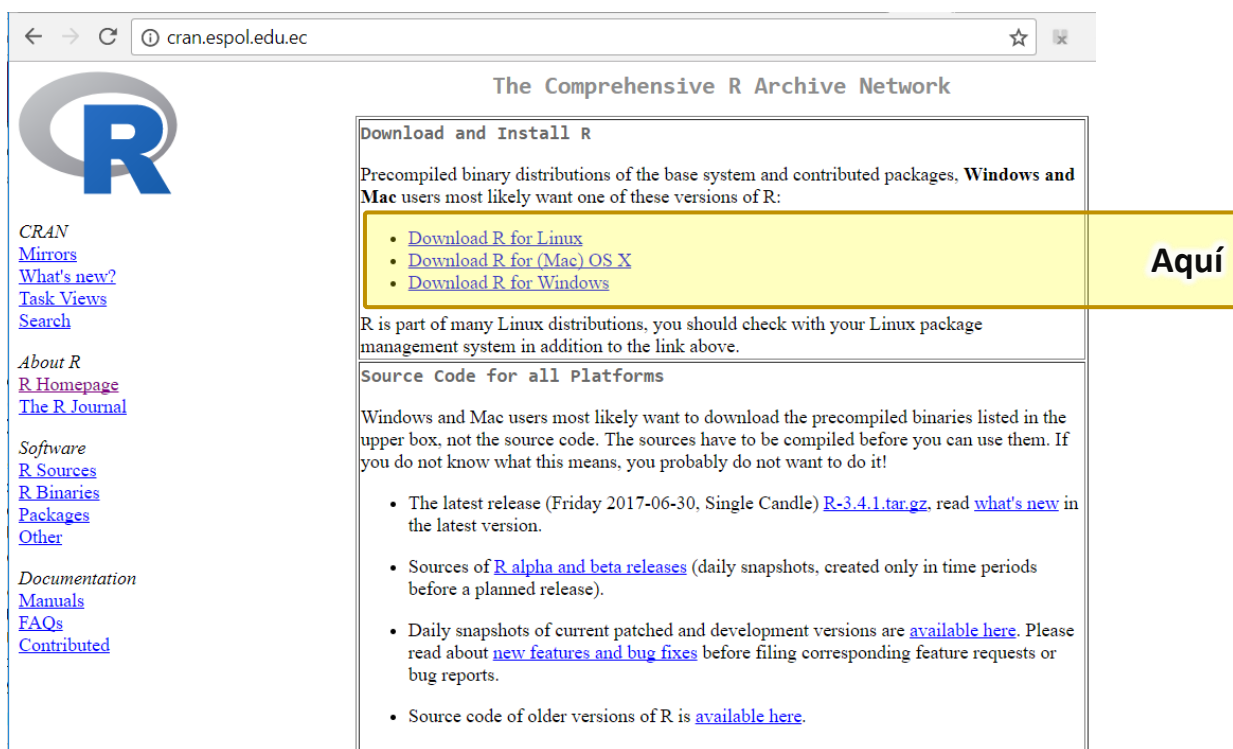
# R y RStudio

- Buscar y dar click en el enlace que nos permite descargar R desde su país



# R y RStudio

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



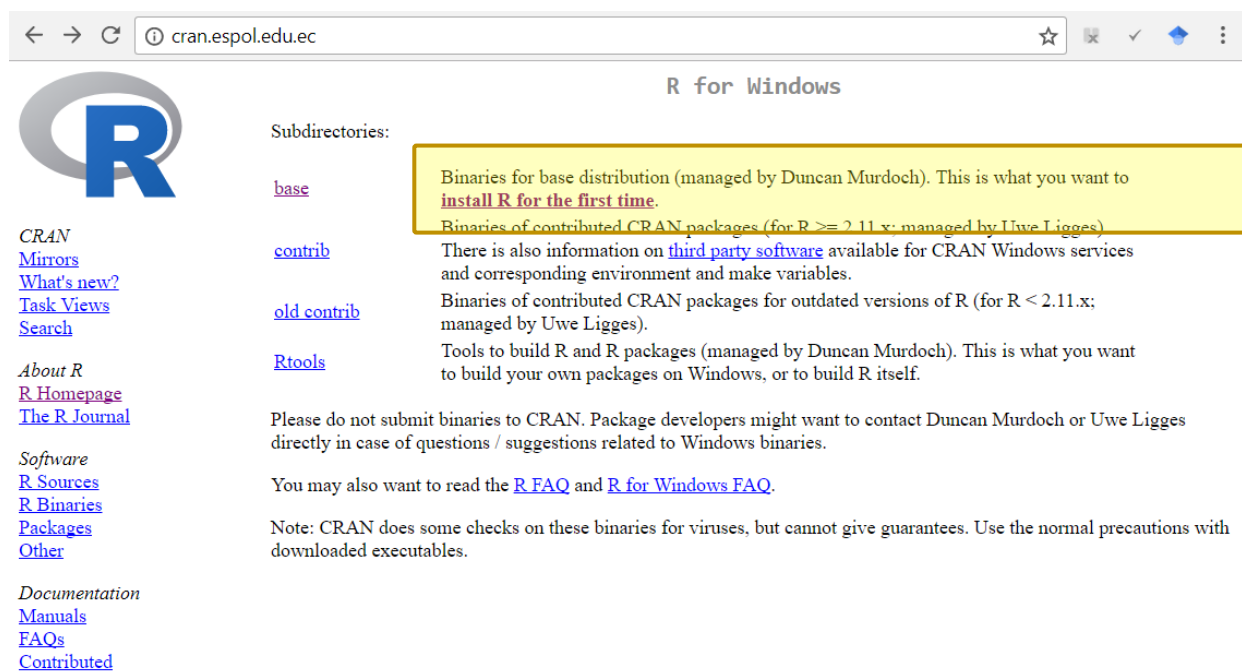
The screenshot shows the CRAN (Comprehensive R Archive Network) website. The browser address bar shows `cran.espol.edu.ec`. The page title is "The Comprehensive R Archive Network". The main heading is "Download and Install R". Below this, it says "Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:". A yellow box highlights the following links:

- [Download R for Linux](#)
- [Download R for \(Mac\) OS X](#)
- [Download R for Windows](#)

A yellow callout box with the word "Aquí" points to this section. Below the highlighted links, it says "R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above." The next section is "Source Code for all Platforms", which states "Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!". It then lists several links for source code, including the latest release (Friday 2017-06-30, Single Candle) [R-3.4.1.tar.gz](#), [what's new](#) in the latest version, sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release), daily snapshots of current patched and development versions are [available here](#), and source code of older versions of R is [available here](#).

# 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](#)

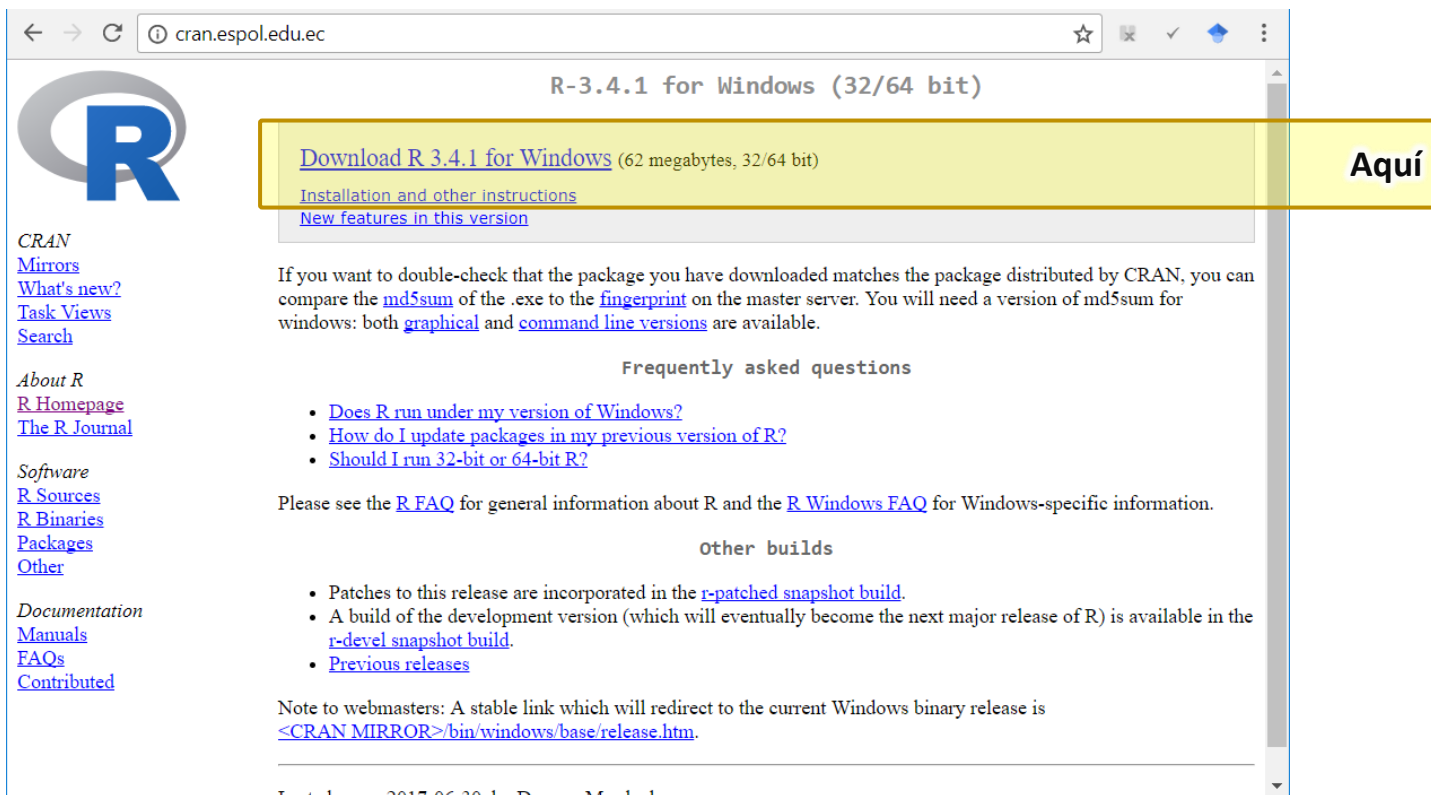
**About R**  
[R Homepage](#)  
[The R Journal](#)

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

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

# R y RStudio

- Escoger Download R 3.4.1 for Windows, descargar e instalar.
- *La version puede que sea diferente*



cran.espol.edu.ec

## 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](#)

**Aquí**

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](#)

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.

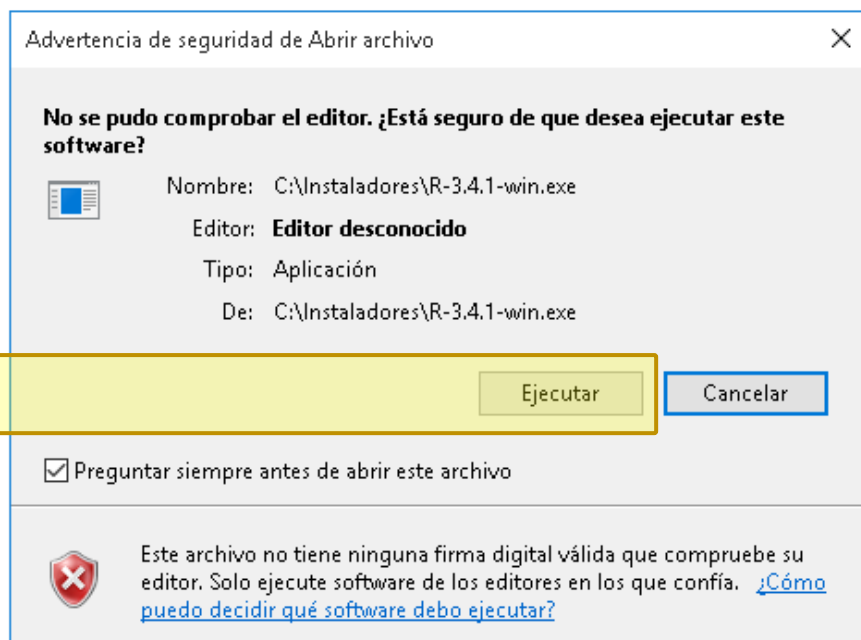
### Other builds

- 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](#)

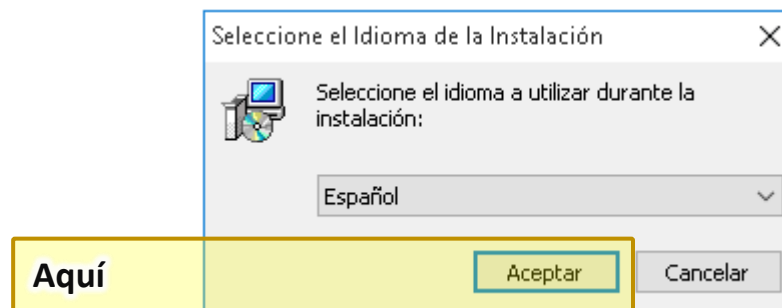
Note to webmasters: A stable link which will redirect to the current Windows binary release is [<CRAN MIRROR>/bin/windows/base/release.htm](#).

Last changed: 2017-06-30 by Duncan Murdoch

# Instalar R



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





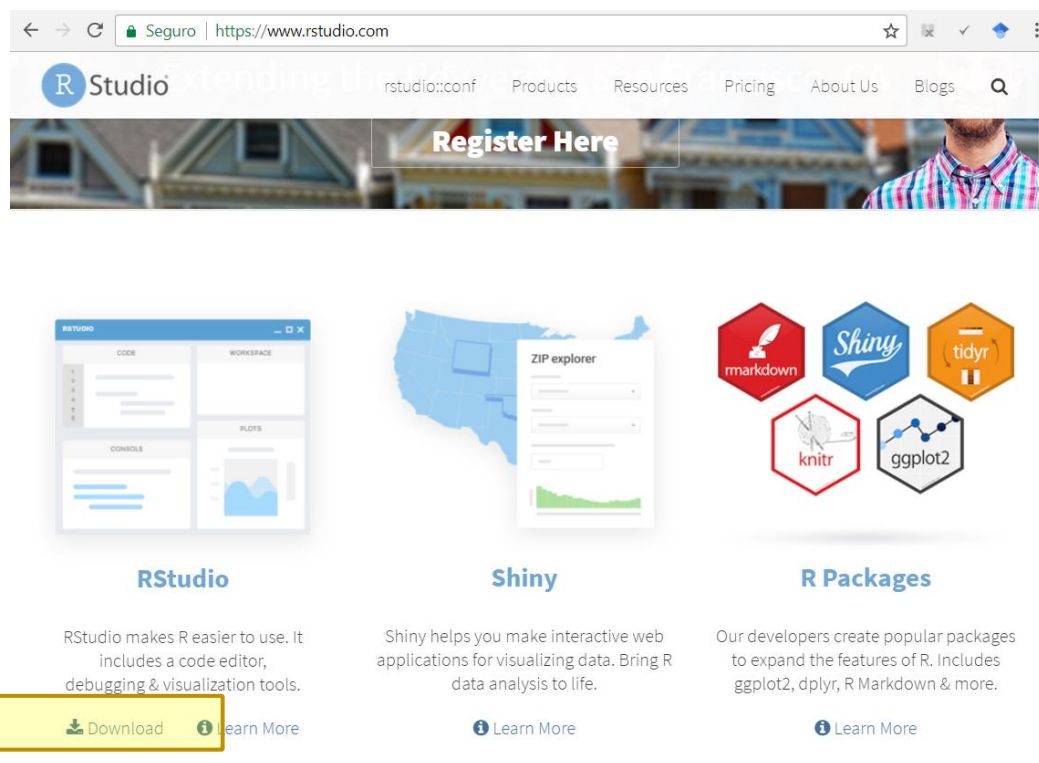
# Instalar R

- 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
Pricing	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. The page includes navigation links, release notes, and a table of installers for various operating systems.

**RStudio Desktop 1.0.153 — Release Notes**

RStudio requires R 2.11.1+. If you don't already have R, download it [here](#).

**Installers for Supported Platforms**

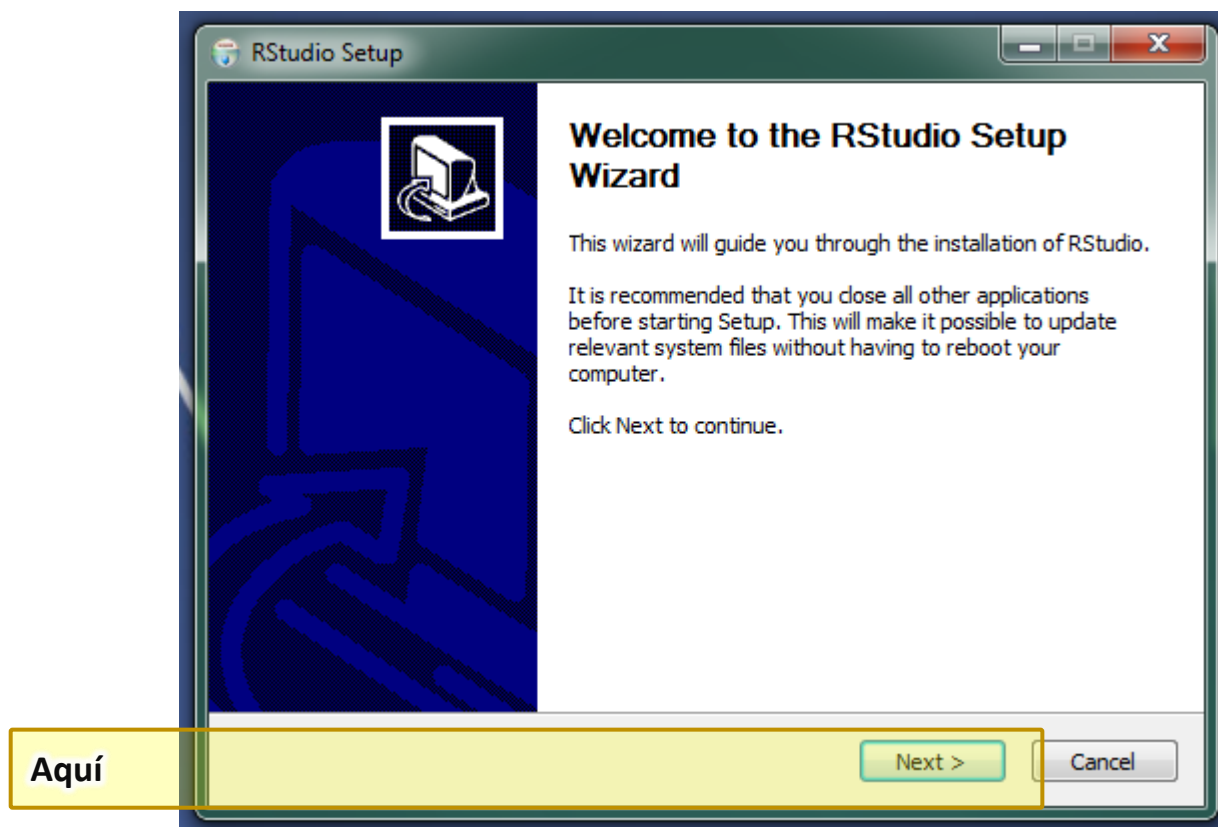
Installers	Size	Date	MD5
RStudio 1.0.153 - Windows Vista/7/8/10	81.9 MB	2017-07-20	b3b4bbc82865ab105c21cb70b17271b3
RStudio 1.0.153 - Mac OS X 10.6+ (64-bit)	71.2 MB	2017-07-20	8773610566b74ec3e1a88b2fdb10c8b5
RStudio 1.0.153 - Ubuntu 12.04-15.10/Debian 8 (32-bit)	85.5 MB	2017-07-20	981be44f91fc07e5f69f52330da32659
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/Tarballs**

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)



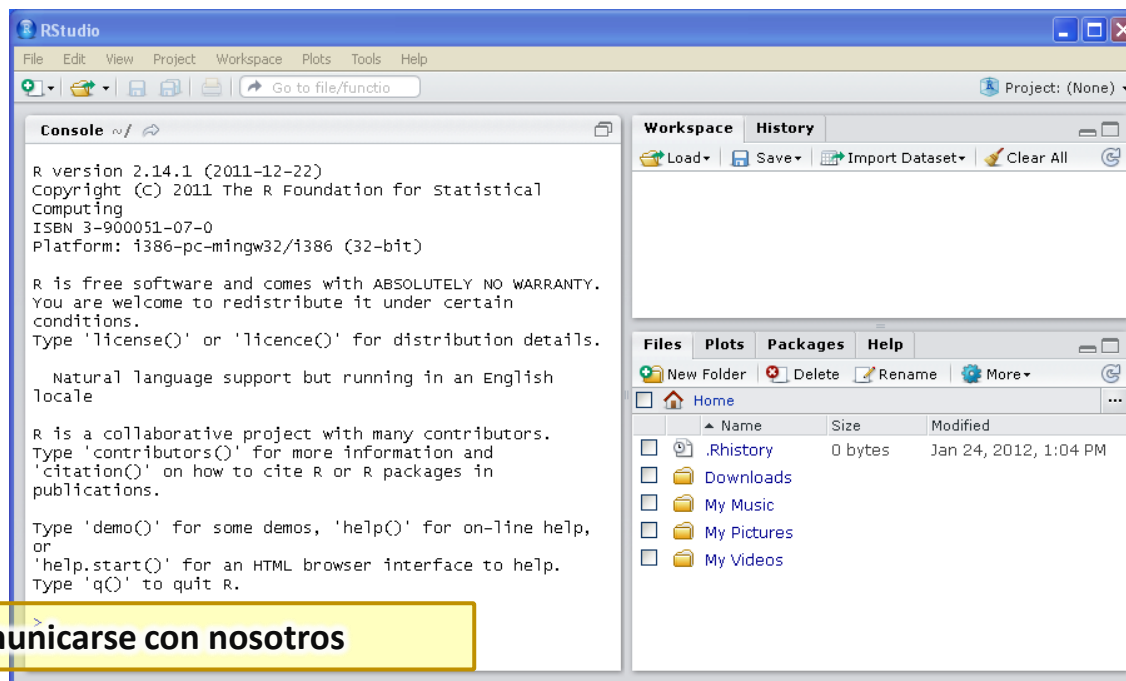


Studio®

# Instalar paquetes necesarios

# R y Rstudio: Abrir RStudio

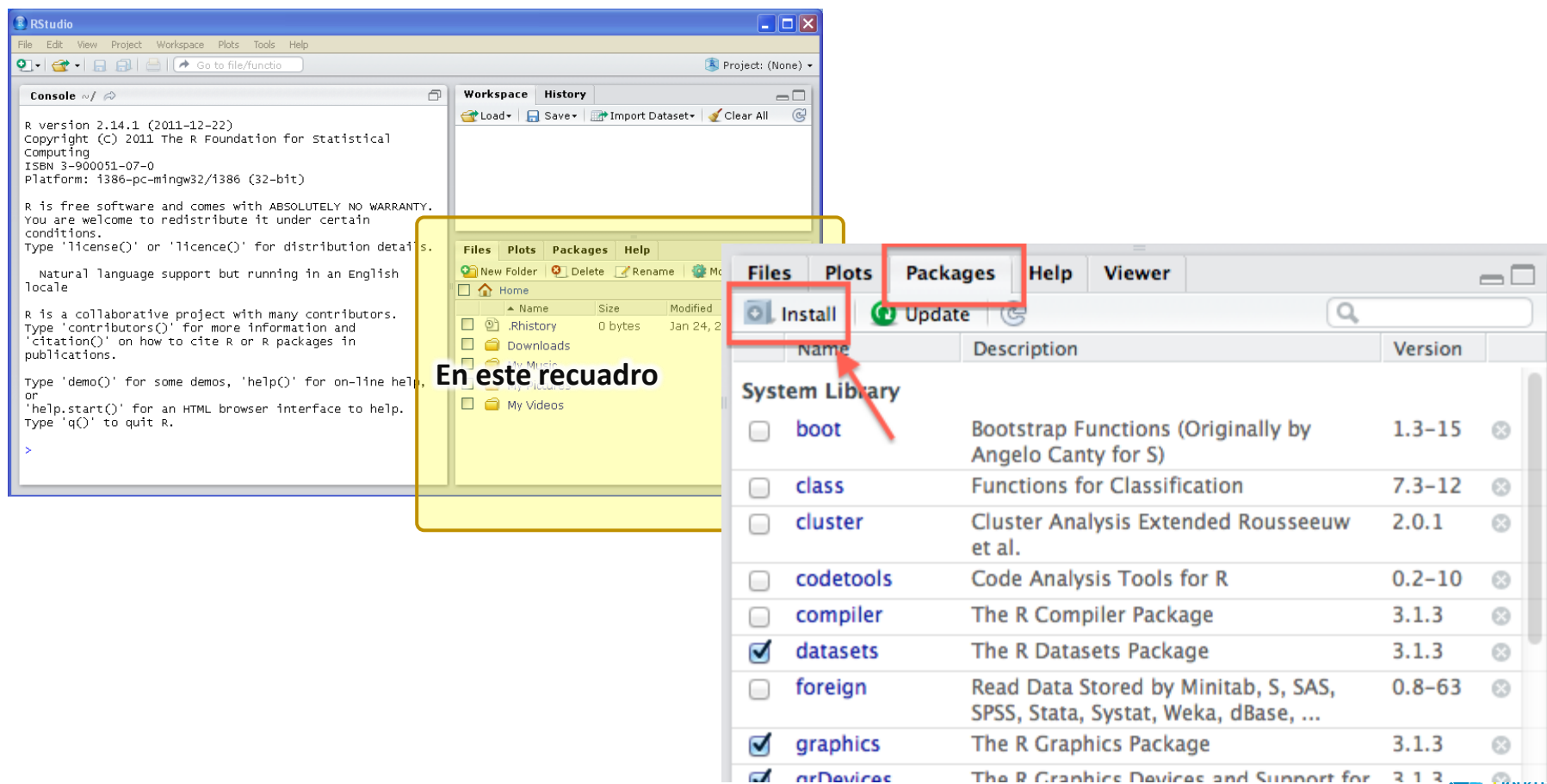
- Abrir RStudio (ojo: es el logo circulo azul con la R en blanco)
- La primer vista es así:



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.

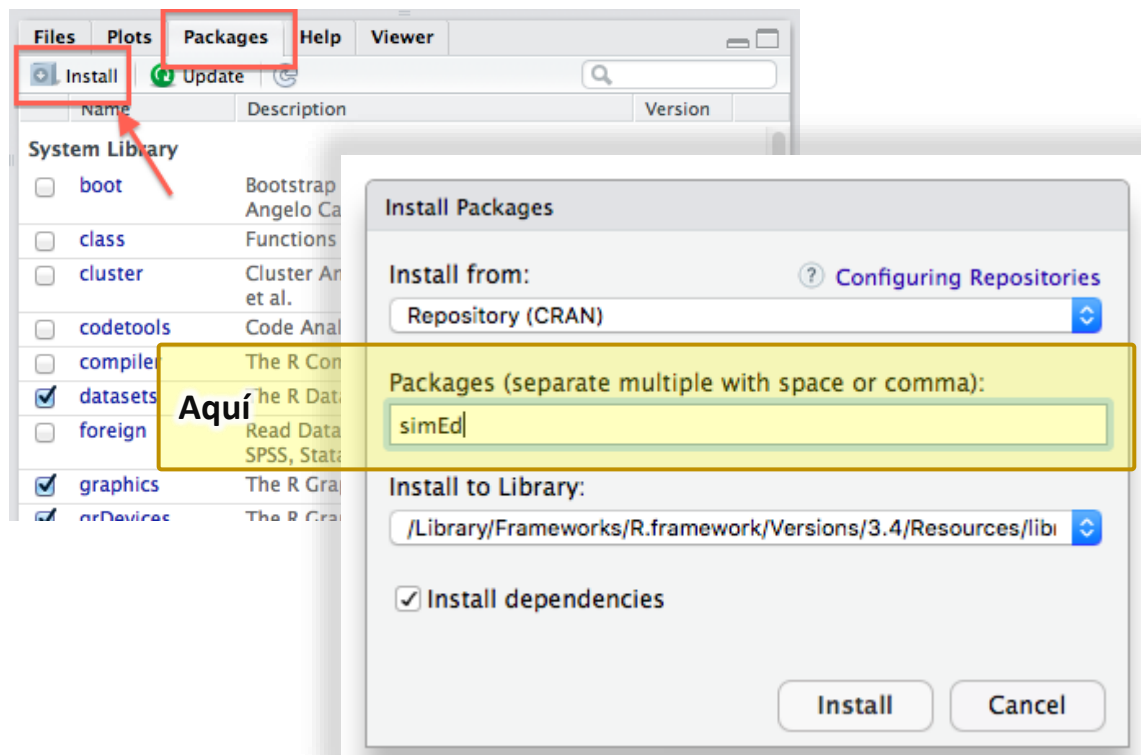
**En este recuadro**

Name	Description	Version
<b>System Library</b>		
<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 (*Taller data.table*)

> Recuadro inferior derecho > Packages > Install > En el pop up escribir los paquetes a instalar (de preferencia uno a uno para ver mensajes)



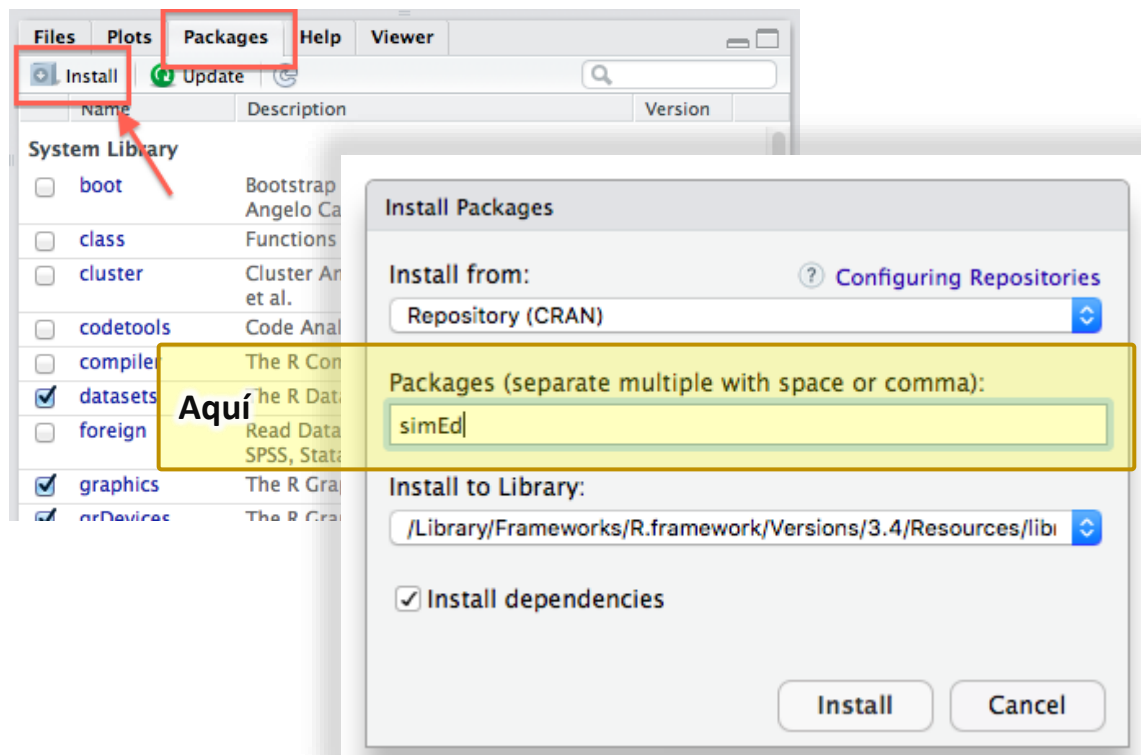
Paquete:

- data.table
- nycflights13

***tener cuidado con las minúsculas y mayúsculas***

## R y Rstudio: Instalar un paquete (*Recomendados*)

> Recuadro inferior derecho > Packages > Install > En el pop up escribir los paquetes a instalar (de preferencia uno a uno para ver mensajes)



Paquetes :

- tidyverse
- openxlsx
- reshape2
- GGally
- modeest
- fdth
- prettyR

***tener cuidado con las minúsculas y mayúsculas***

# Instalación de R y RStudio

Ahora ya tienes R y RStudio instalados y listos para usar, esto necesitas para el curso.

Pero si deseas poder exportar archivos de Excel, te recomendamos seguir la guía de instalación de Rtools para Windows.