



# Instrucciones de instalación de R y RStudio

José Luis Texcalac Sangrador

Procesamiento y visualización de datos espaciales en R



Es posible que las versiones disponibles difieran a las que este documento muestra, siempre descargue e instale la versión más actual

Primer paso:

Instale R en su computadora  
según su sistema operativo



# The R Project for Statistical Computing

Visitar la página oficial de R

<https://www.r-project.org>

Clic en "download  
R" para descargar

lists  
ting

## Getting Started

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

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

## News

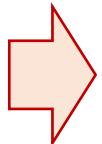
- useR! 2024 will be a hybrid conference, taking place 8-11 July 2024 in Salzburg, Austria.
- **R version 4.3.1 (Beagle Scouts)** has been released on 2023-06-16.
- **R version 4.2.3 (Shortstop Beagle)** has been released on 2023-03-15.
- You can support the R Foundation with a renewable subscription as a [supporter](#).

## News via Mastodon



# Seleccione un repositorio para descarga

Generalmente cualquiera de Estados Unidos funciona a buena velocidad de descarga



The Comprehensive R Archive Network is available at the following URLs, please choose a location close to you. Some statistics on the status of the mirrors can be found here: [main page](#), [windows release](#), [windows old release](#).

If you want to host a new mirror at your institution, please have a look at the [CRAN Mirror HOWTO](#).

## 0-Cloud

<https://cloud.r-project.org/>

Automatic redirection to servers worldwide, currently sponsored by Rstudio

## Argentina

<http://mirror.fcaglp.unlp.edu.ar/CRAN/>

Universidad Nacional de La Plata

## Australia

<https://cran.csiro.au/>

CSIRO

<https://mirror.aarnet.edu.au/pub/CRAN/>

AARNET

<https://cran.ms.unimelb.edu.au/>

School of Mathematics and Statistics, University of Melbourne

<https://cran.curtin.edu.au/>

Curtin University

## Austria

<https://cran.wu.ac.at/>

Wirtschaftsuniversität Wien

## Belgium

<https://www.freestatistics.org/cran/>

Patrick Wessa

<https://ftp.belnet.be/mirror/CRAN/>

Belnet, the Belgian research and education network

## Brazil

<https://cran-r.c3sl.ufpr.br/>

Universidade Federal do Paraná

<https://vps.fmvz.usp.br/CRAN/>

University of São Paulo, São Paulo

<https://brieger.esalq.usp.br/CRAN/>

University of São Paulo, Piracicaba

## Bulgaria

<https://ftp.uni-sofia.bg/CRAN/>

Sofia University

## Canada

<https://mirror.rcg.sfu.ca/mirror/CRAN/>

Simon Fraser University, Burnaby



# Descargue según su sistema operativo



*CRAN*  
[Mirrors](#)  
[What's new?](#)  
[Search](#)  
[CRAN Team](#)

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

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

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



## The Comprehensive R Archive Network

### Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows** and **Mac** users most likely want one of these versions of R:

- [Download R for Linux \(Debian, Fedora/Redhat, Ubuntu\)](#)
- [Download R for macOS](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

### Source Code for all Platforms

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!

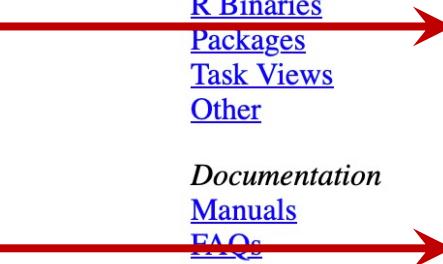
- The latest release (2023-06-16, Beagle Scouts) [R-4.3.1.tar.gz](#), read [what's new](#) in the latest version.
- Sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are [available here](#). Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#)



# Para MAC

Procesador Apple Silicon

Procesador Intel



## R for macOS

This directory contains binaries for the base distribution and of R and packages to run on macOS. R and package binaries for R versions older than 4.0.0 are only available from the [CRAN archive](#) so users of such versions should adjust the CRAN mirror setting (<https://cran-archive.r-project.org>) accordingly.

Note: Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

**R 4.3.1 "Beagle Scouts" released on 2023/06/16**

Please check the integrity of the downloaded package by checking the signature:

`pkgutil --check-signature R-4.3.1.pkg`

in the *Terminal* application. If Apple tools are not available you can check the SHA1 checksum of the downloaded image:

`openssl sha1 R-4.3.1.pkg`

### Latest release:

**R 4.3.1** binary for macOS 11 (**Big Sur**) and higher, signed and notarized packages.

For Apple silicon (M1/M2) Macs:

[R-4.3.1-arm64.pkg](#)  
SHA1-  
hash: 14c018ff54f7f5bb37c1d96b33207343b83e9345

(ca. 90MB, notarized and signed)

Contains R 4.3.1 framework, R.app GUI 1.79, Tcl/Tk 8.6.12 X11 libraries and Texinfo 6.8. The latter two components are optional and can be omitted when choosing "custom install", they are only needed if you want to use the `tcltk` R package or build package documentation from sources.

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

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

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

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

For older Intel Macs:

[R-4.3.1-x86\\_64.pkg](#)  
SHA1-  
hash: 1af8f055a601d5de5dfefdb3956ecc8f745c2401

(ca. 92MB, notarized and signed)



# Para Windows



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

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

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

Clic para descargar

Subdirectories:

[base](#)

Binaries for base distribution. This is what you want to [install R for the first time](#).

[contrib](#)

Binaries of contributed CRAN packages (for R >= 3.4.x).

[old contrib](#)

Binaries of contributed CRAN packages for outdated versions of R (for R < 3.4.x).

[Rtools](#)

Tools to build R and R packages. 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 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.



Descargue está  
versión si su sistema  
es de 64 bits



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

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

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

### R-4.3.1 for Windows

[Download R-4.3.1 for Windows](#) (79 megabytes, 64 bit)

[README on the Windows binary distribution](#)

[New features in this version](#)

This build requires UCRT, which is part of Windows since Windows 10 and Windows Server 2016. On older systems, UCRT has to be installed manually from [here](#).

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.

#### Frequently asked questions

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

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

Segundo paso:

Instale RStudio en su computadora  
según su sistema operativo

# RStudio Desktop

Used by millions of people weekly, the RStudio integrated development environment (IDE) is a set of tools built to help you be more productive with R and Python.

If you're a professional data scientist looking to download RStudio and also need common enterprise features, don't hesitate to [book a call with us](#).

## 1: Install R

RStudio requires R 3.3.0+. Choose a version of R that matches your computer's operating system.

[DOWNLOAD AND INSTALL R](#)

## 2: Install RStudio

[DOWNLOAD RSTUDIO DESKTOP FOR MACOS 11+](#)

This version of RStudio is only supported on macOS 11 and higher. For earlier macOS environments, please [download a previous version](#).

Size: 380.82 MB | [SHA-256: 184804EA](#) | Version:  
2023.06.1+524 | Released: 2023-07-07

# Descargue e instale RStudio

<https://posit.co/download/rstudio-desktop/>





# Sólo usuarios Windows

Instale Rtools en su  
computadora



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

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

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

Subdirectories:

[base](#)

[contrib](#)

[old contrib](#)

[Rtools](#)

## R for Windows

Binaries for base distribution. This is what you want to [install R for the first time](#).

Binaries of contributed CRAN packages (for R >= 3.4.x).

Binaries of contributed CRAN packages for outdated versions of R (for R < 3.4.x).

Tools to build R and R packages. 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 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.



# Seleccione la versión de RTools según su versión de R instalada



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

**RTools: Toolchains for building R and R packages from source on Windows**

Choose your version of Rtools:

[RTools 4.3](#) for R versions from 4.3.0 (R-release and R-devel)

[RTools 4.2](#) for R versions 4.2.x (R-oldrelease)

[RTools 4.0](#) for R from version 4.0.0 to 4.1.3

[old versions of RTools](#) for R versions prior to 4.0.0



# Una vez instalado RTools abra R y ejecute las siguientes líneas

- > `install.packages("Rcpp")` oprima tecla enter
- > `library("Rcpp")` oprima tecla enter
- > `evalCpp("1 + 1")` oprima tecla enter

Puede apoyarse en el siguiente video

<https://youtu.be/hBTObNFFkhs>



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

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

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

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

## Rtools43 for Windows

Rtools is a toolchain bundle used for building R packages from source (those that need compilation of C/C++ or Fortran code) and for build R itself. Rtools43 is used for R 4.3.x and for R-devel, the development version of R.

Rtools43 consists of Msyis2 build tools, GCC 12/MinGW-w64 compiler toolchain, libraries built using the toolchain, and QPDF. Rtools43 supports 64-bit Windows and UCRT as the C runtime.

Compared to Rtools42, Rtools43 has newer versions of three core components: GCC, MinGW-w64, and binutils. It is therefore recommended to re-compile all code with the new toolchain to avoid problems. The code compiled by even earlier versions of Rtools is incompatible due to use of MSVCRT and has to be recompiled with Rtools43 for use in R packages.

### Installing Rtools43

Rtools43 is only needed for installation of R packages from source or building R from source. R can be installed from the R binary installer and by default will install binary versions of CRAN packages, which does not require Rtools43.

Moreover, online build services are available to check and build R packages for Windows, for which again one does not need to install Rtools43 locally. The [Winbuilder](#) check service uses identical setup as the CRAN incoming packages checks and has already all CRAN and Bioconductor packages pre-installed.

Rtools43 may be installed from the [Rtools43 installer](#). It is recommended to use the defaults, including the default installation location of `C:\rtools43`.

When using R installed by the installer, no further setup is necessary after installing Rtools43 to build R packages from source. When using the default installation location, R and Rtools43 may be installed in any order and Rtools43 may be installed when R is already running.

Si usted requiere instalar una versión anterior de RTools se le recomienda buscar en Youtube, ahí usted puede encontrar de forma visual todo el proceso para instalarlo.

<https://www.youtube.com/watch?v=k0oCZdJPsDU>

Sólo usuarios MAC

Instale [Xcode](#) y [XQuartz](#) en su computadora



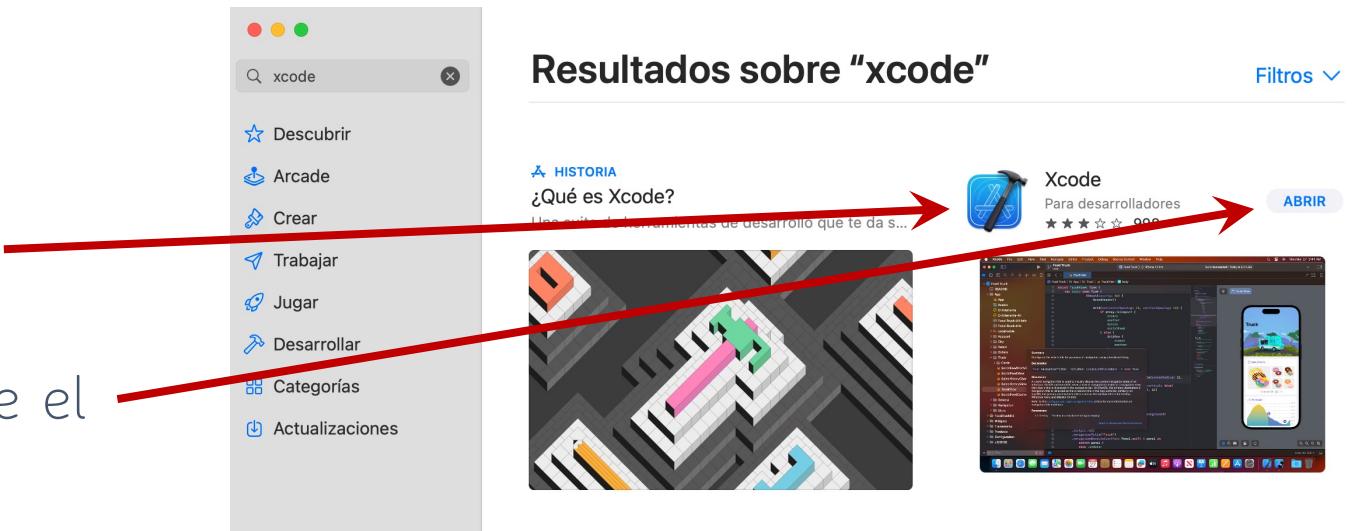
- Visitar la [AppStore](#)



- Busque, descargue e instale [Xcode](#)

- Terminada la instalación abra y cierre el

programa





Descargue e instale la  
última versión de XQuartz

<https://www.xquartz.org>

Clic para descargar

**Home**  
**Releases**  
**Support**  
**Contributing**  
**Bug reporting**  
**GitHub**



The XQuartz project is an open-source effort to develop a version of the [X.Org X Window System](#) that runs on macOS. Together with supporting libraries and applications, it forms the X11.app that Apple shipped with OS X versions 10.5 through 10.7.

## Quick Download

Download	Version	Released	Info
<a href="#"> XQuartz-2.8.5.pkg</a>	2.8.5	2023-01-26	For macOS 10.9 or later

## License Info

An XQuartz installation consists of many individual pieces of software which have various licenses. The X.Org software components' licenses are discussed on the [X.Org Foundation Licenses page](#). The [quartz-wm](#) window manager included with the XQuartz distribution uses the [Apple Public Source License Version 2](#).



# Configure las preferencias de RStudio

Despues de seguir las indicaciones pasadas abra RStudio y verifique que tenga usted la misma configuración que se muestra en la imagen.

Mac y Windows

Tools > Global Options...

