

Manual de manejo, **EstimationTools**

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Agosto 12, 2019

Introducción

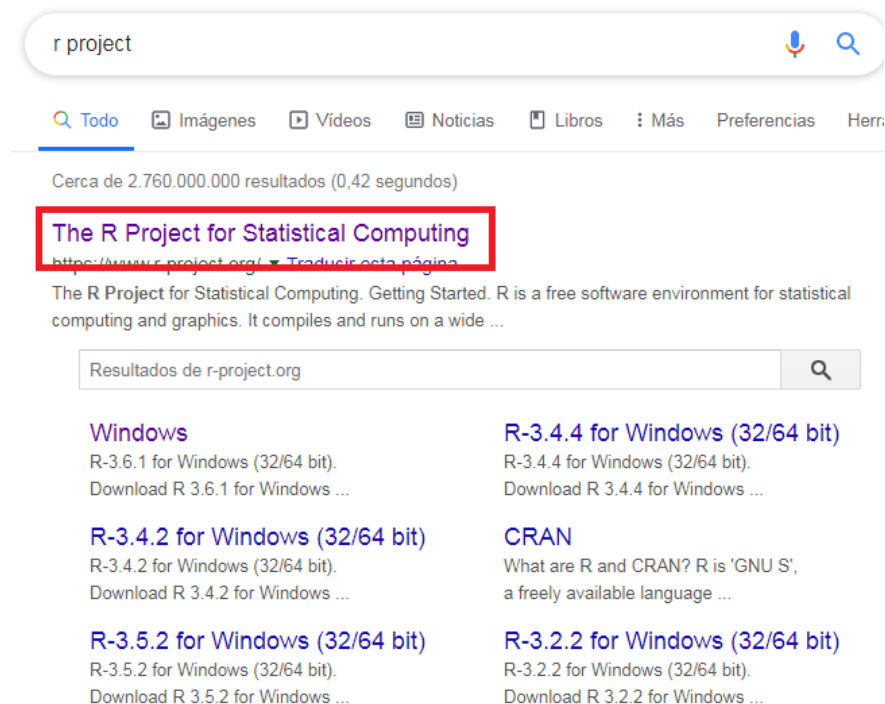
R es un lenguaje de programación y un software libre creado para hacer computación estadística y gráficos. Su carácter de software libre permite desarrollar paquetes, que son extensiones para ampliar su funcionalidad y capacidades. **EstimationTools** es justamente un paquete desarrollado como una extensión para ajustar modelos de regresión de distribuciones utilizadas en el área de confiabilidad.

De acuerdo a lo anterior, es necesario instalar el software R para que **EstimationTools** funcione.

Instalación del software R

Para instalar R en Windows 7/8/10, siga los siguientes pasos:

1. Ingrese al sitio de *R project* (<https://www.r-project.org/>). También puede ingresar haciendo una búsqueda en un motor de búsqueda:



2. Una vez esté ubicado en el sitio principal de *R project*, ingrese al enlace señalado con un recuadro rojo para acceder al sitio web donde podrá realizar la descarga.



[Home]

Download

CRAN

R Project

About R

Logo

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

3. Seleccione un servidor para la descarga. En este instructivo, se seleccionó un servidor de Austria:

CRAN Mirrors	
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	Automatic redirection to servers worldwide, currently sponsored by Rstudio
https://cloud.r-project.org/	Automatic redirection to servers worldwide, currently sponsored by Rstudio
Algeria	
https://cran.usthb.dz/	University of Science and Technology Houari Boumediene
http://cran.usthb.dz/	University of Science and Technology Houari Boumediene
Argentina	
http://mirror.fcaglp.unlp.edu.ar/CRAN/	Universidad Nacional de La Plata
Australia	
https://cran.csiro.au/	CSIRO
http://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 of Technology
Austria	
https://cran.wu.ac.at/	Wirtschaftsuniversität Wien
http://cran.wu.ac.at/	Wirtschaftsuniversität Wien
Belgium	
https://www.freeststatistics.org/cran/	Patrick Wessa
http://www.freeststatistics.org/cran/	Patrick Wessa
https://lib.ugent.be/CRAN/	Ghent University Library
http://lib.ugent.be/CRAN/	Ghent University Library
Brazil	
http://nbcgib.uesc.br/mirrors/cran/	Computational Biology Center at Universidade Estadual de Santa Cruz
https://cran.rcsl.ufpr.br/	Universidade Federal do Paraná
http://cran.rcsl.ufpr.br/	Universidade Federal do Paraná
https://cran.fiocruz.br/	Oswaldo Cruz Foundation, Rio de Janeiro
http://cran.fiocruz.br/	Oswaldo Cruz Foundation, Rio de Janeiro

4. Seleccione la opción de descarga para Windows:



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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](#)
- [Download R for \(Mac\) OS X](#)
- [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 (2019-07-05, Action of the Toes) [R-3.6.1.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](#)

Questions About R

- 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.

5. Haga clic en el enlace encerrado en un recuadro rojo:



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R for Windows

Subdirectories:

[base](#)

[contrib](#)

[old contrib](#)

[Rtools](#)

Binaries for base distribution. This is what you want to **install R for the first time**.

Binaries of contributed CRAN packages (for R \geq 2.13.x; managed by Uwe Ligges). There is also information on [third party software](#) available for CRAN Windows services and corresponding environment and make variables.

Binaries of contributed CRAN packages for outdated versions of R (for R $<$ 2.13.x; managed by Uwe Ligges).

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.

6. Haga clic en el enlace de descarga señalado a continuación:



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R-3.6.1 for Windows (32/64 bit)

[Download R 3.6.1 for Windows](#) (81 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](#)

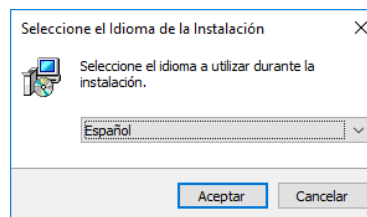
Last change: 2019-07-05

7. Cuando la descarga se complete, haga abra el archivo ejecutable:

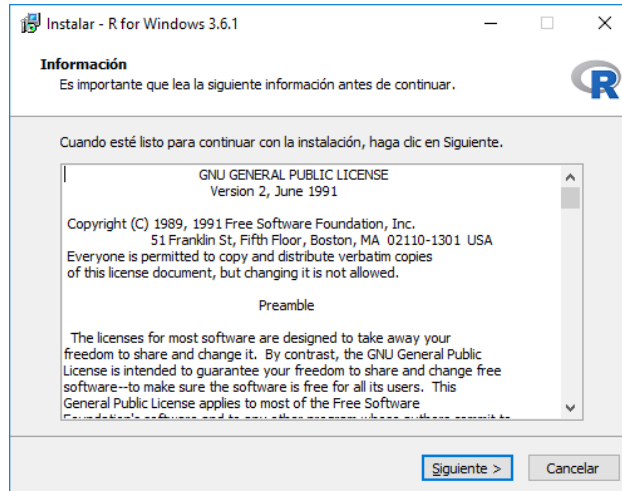


R-3.6.1-win

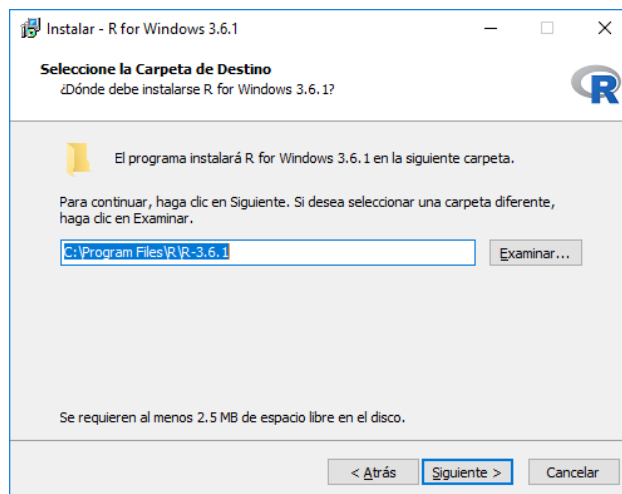
8. Seleccione su idioma de preferencia, y haga clic en *Aceptar*:



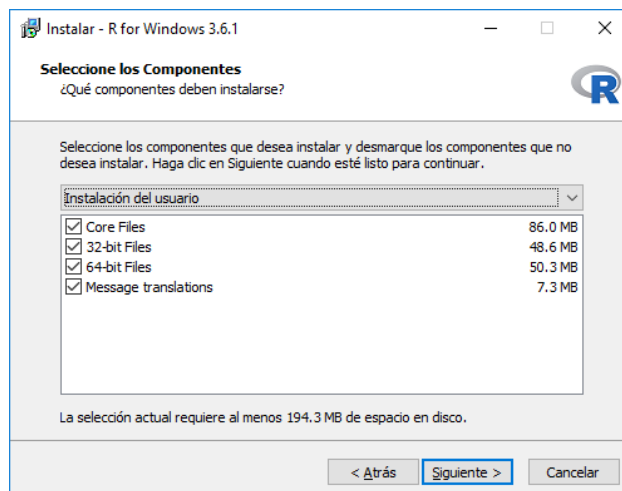
9. Lea la información sobre la GPL 2 (*General Public License, version 2*) y haga clic en *Siguiente*:



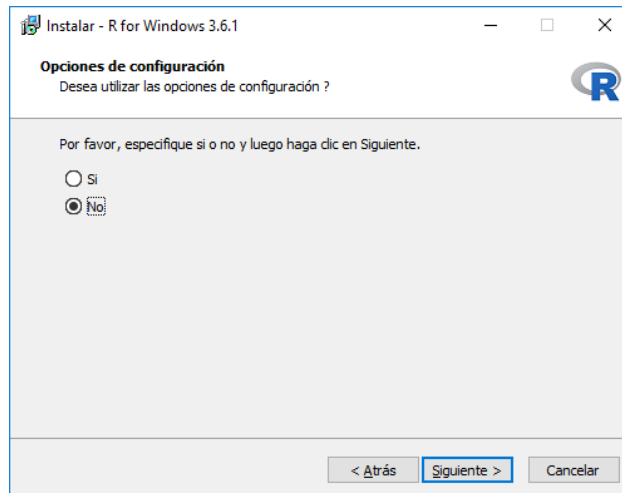
10. Seleccione el directorio donde almacenará la instalación. En este caso, se utilizará el directorio asignado por defecto. Haga clic en *Siguiente*:



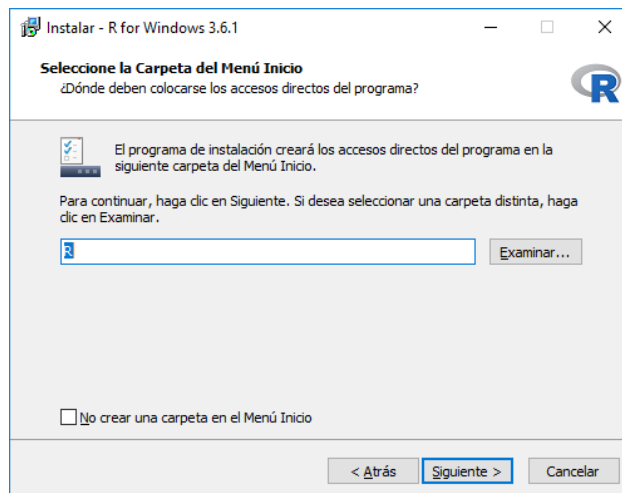
11. El archivo ejecutable instala todos los componentes por defecto. Haga clic en *Siguiente*:



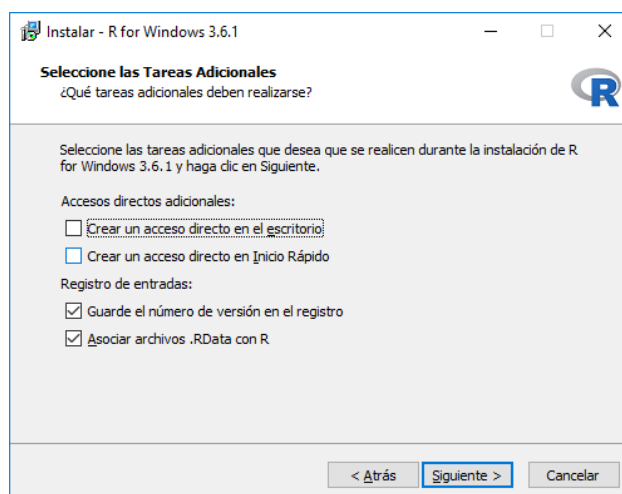
12. Se recomienda especificar la configuración por defecto que realiza el instalador. Para ello, seleccione la opción *No*, y haga clic en *Siguiente*:



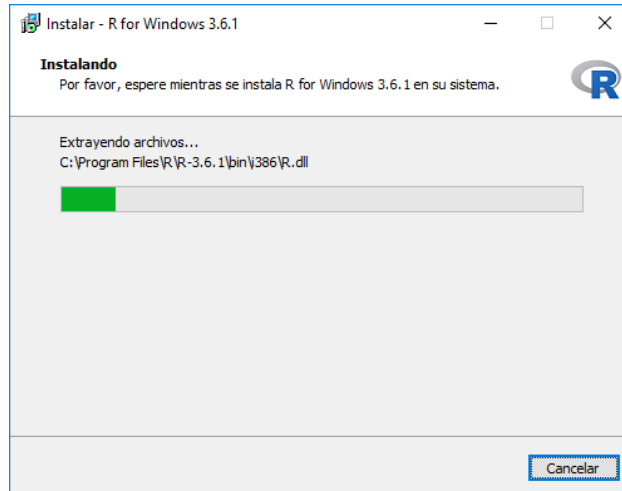
13. Utilice la ubicación que el instalador trae por defecto para crear los accesos directos en el *Menú Inicio*:



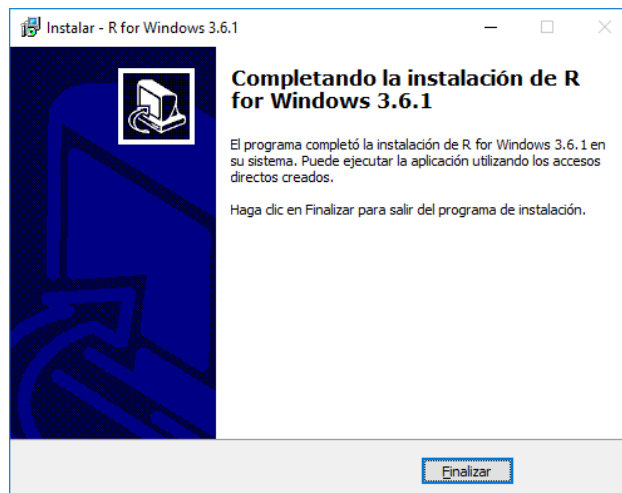
14. Haga clic en los recuadros pequeños si desea crear unos accesos directos adicionales. En este caso, no se crearán. En la opción *Registro de entradas*, asegúrese de tener seleccionadas ambas opciones, como se muestra en la imagen a continuación:



15. Espere que el software se instale:



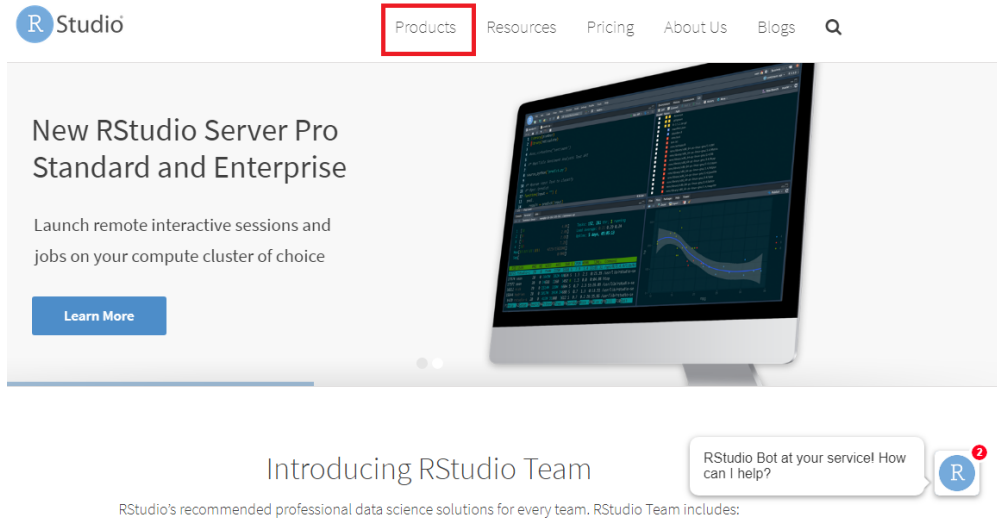
16. Haga clic en *Finalizar*:



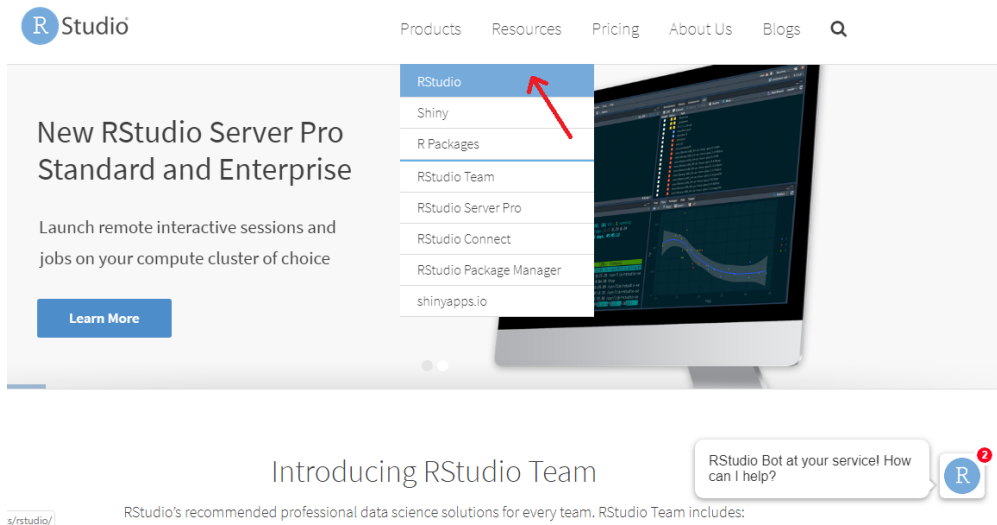
Instalación de RStudio

RStudio es un IDE (*Integrated Development Environment*) libre de código abierto para R. Este ambiente de desarrollo es ideal y se incita a los usuarios a instalarlo para usar **EstimationTools**. Para instalarlo, siga los siguientes pasos:

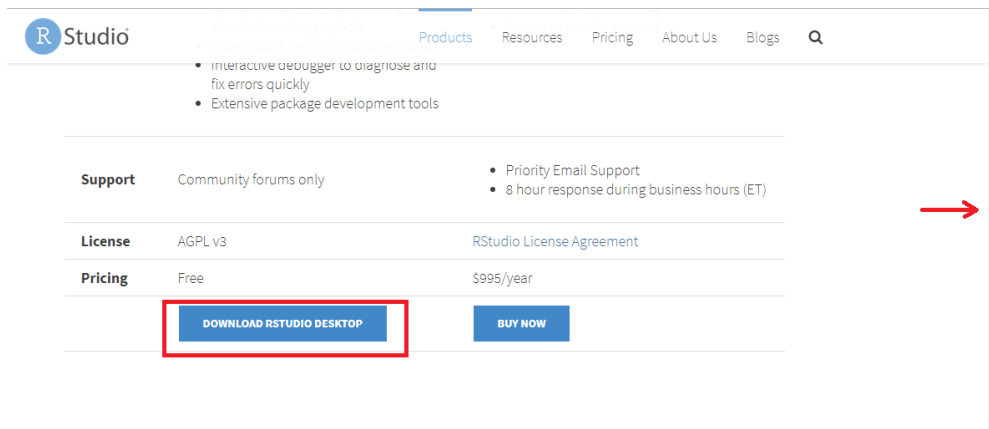
1. Ingrese al sitio web de RStudio (<https://www.rstudio.com/>), y haga clic en la pestaña *Products*, señalada con un recuadro rojo:



Luego seleccione la opción *RStudio* dentro del menú, como se muestra a continuación:



2. Use la barra de desplazamiento del lado izquierdo para moverse hacia abajo en el sitio web, hasta encontrar la opción *Download RStudio Desktop*:



3. Posteriormente, seleccione la versión gratuita:

The screenshot shows the RStudio website's product page. At the top, there's a navigation bar with links to Products, Resources, Pricing, About Us, and Blogs. Below this, a section titled 'RStudio' describes it as 'Integrated tools designed to help you be more productive, efficient, and confident in your R workflow'. A table below lists four product options:

RStudio Desktop Open Source License	RStudio Desktop Commercial License	RStudio Server Open Source License	RStudio Server Pro Commercial License
FREE	\$995 per year	FREE	\$4,975 per year (5 Named Users)
DOWNLOAD	BUY	DOWNLOAD	BUY
Learn More	Learn More	Learn More	Evaluation Learn More

Below the table, there are three rows of features with green dots indicating availability: 'Integrated Tools for R', 'Priority Support', and 'Access via Web Browser'. A chat bubble on the right says 'RStudio Bot at your service! How can I help?'.

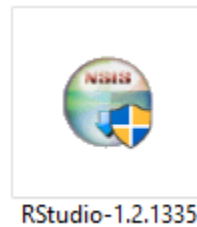
4. Haga clic en la descarga para Windows:

The screenshot shows the RStudio website's product page. At the top, there's a navigation bar with links to Products, Resources, Pricing, About Us, and Blogs. Below this, a section titled 'RStudio' describes it as 'Integrated tools designed to help you be more productive, efficient, and confident in your R workflow'. A table below lists four product options:

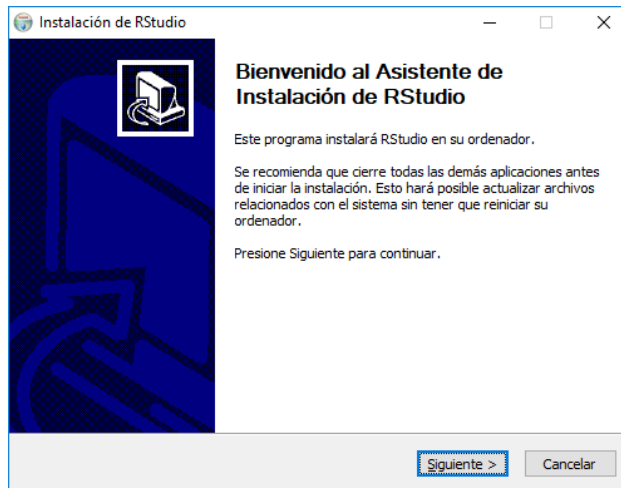
RStudio Desktop Open Source License	RStudio Desktop Commercial License	RStudio Server Open Source License	RStudio Server Pro Commercial License
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DOWNLOAD	BUY	DOWNLOAD	BUY
Learn More	Learn More	Learn More	Evaluation Learn More

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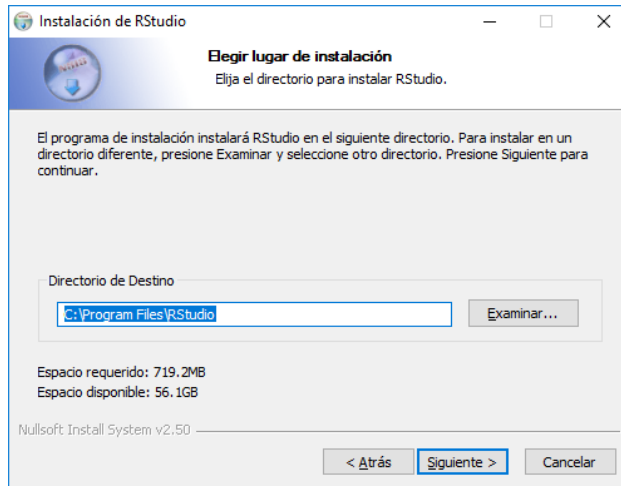
5. Cuando la descarga se complete, haga abra el archivo ejecutable:



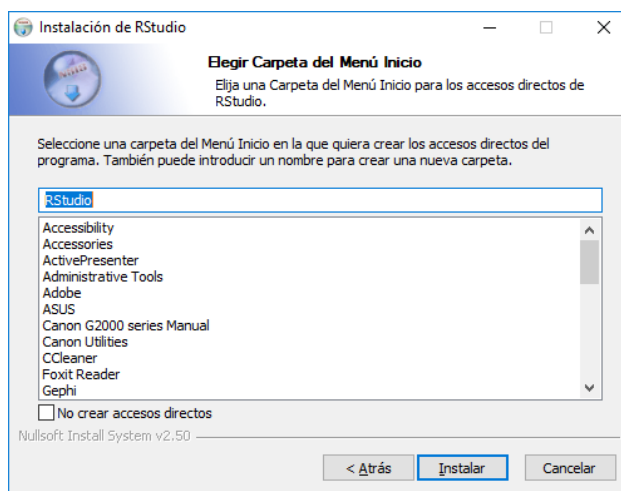
6. Lea la recomendación de la ventana de diálogo, y haga clic en *Siguiente*:



7. Elija el directorio donde se almacenará RStudio. Se recomienda utilizar la ubicación por defecto:

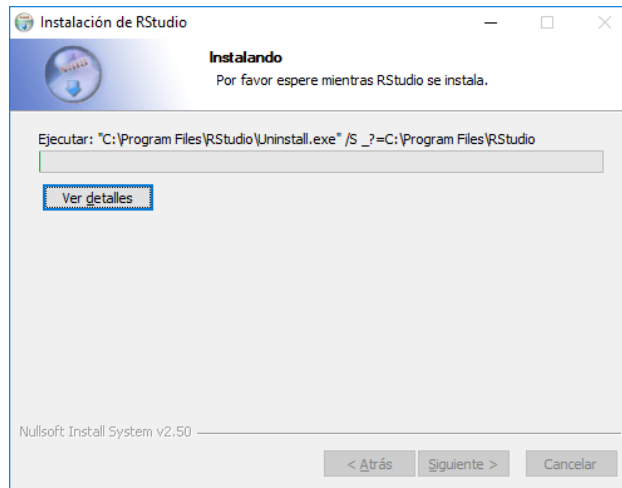


8. Luego, aparecerá esta ventana de diálogo:

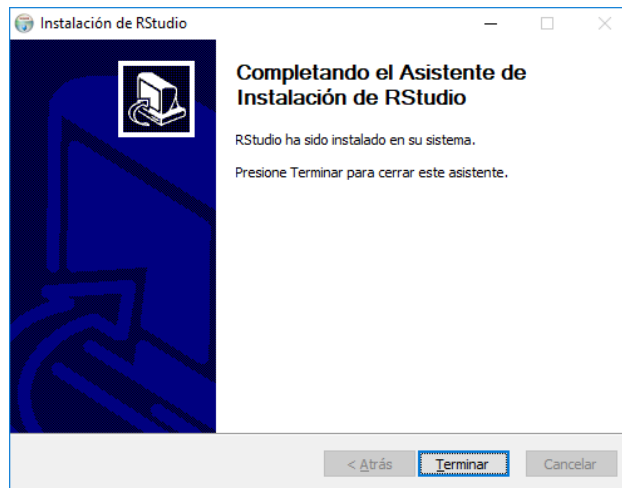


Haga clic en *Instalar*. De esta forma, utilizará la ubicación por defecto para el acceso directo del *Menú Inicio*.

9. Espere que el software se instale:



10. Haga clic en *Terminar*



Instalación de EstimationTools

Para instalar **EstimationTools** usted debe instalar el paquete **devtools** primero. Para instalar ambos paquetes. copie y pegue en la consola de RStudio el siguiente texto:

```
if (!require('devtools')) install.packages('devtools')
devtools::install_github('Jaimemosg/EstimationTools', force = TRUE)
library(EstimationTools)
```

La consola se lucirá de la siguiente manera luego de copiar y pegar el texto:

```
Console Terminal x R Markdown x Jobs x
~/R/EstimationTools/ ↗
R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> if (!require('devtools')) install.packages('devtools')
devtools::install_github('Jaimemosg/EstimationTools', force = TRUE)
library(EstimationTools)
```

Luego, presione enter. El paquete está instalado, y listo para utilizarse. Cada vez que abra RStudio, usted deberá escribir la siguiente línea de comando para usar **EstimationTools**:

```
library(EstimationTools)
```

Usted puede visitar el sitio web del paquete (<https://jaimemosg.github.io/EstimationTools/>) **EstimationTools** para explorar la documentación de las funciones disponibles y su modo de uso.