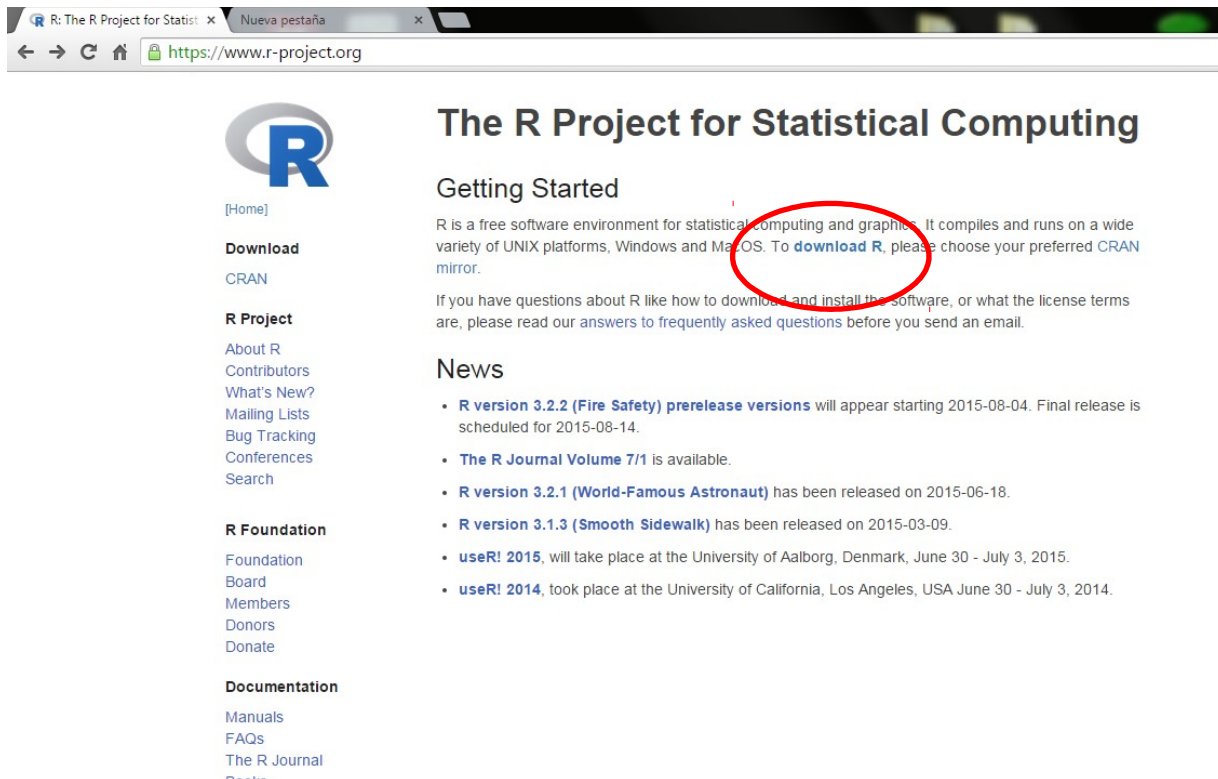


Installation instructions of R, Rstudio and opm on Windows

1. R installation

- Download the package from this link:
<https://www.r-project.org/>



1. R installation

- Choose you preferred CRAN mirror according to your location

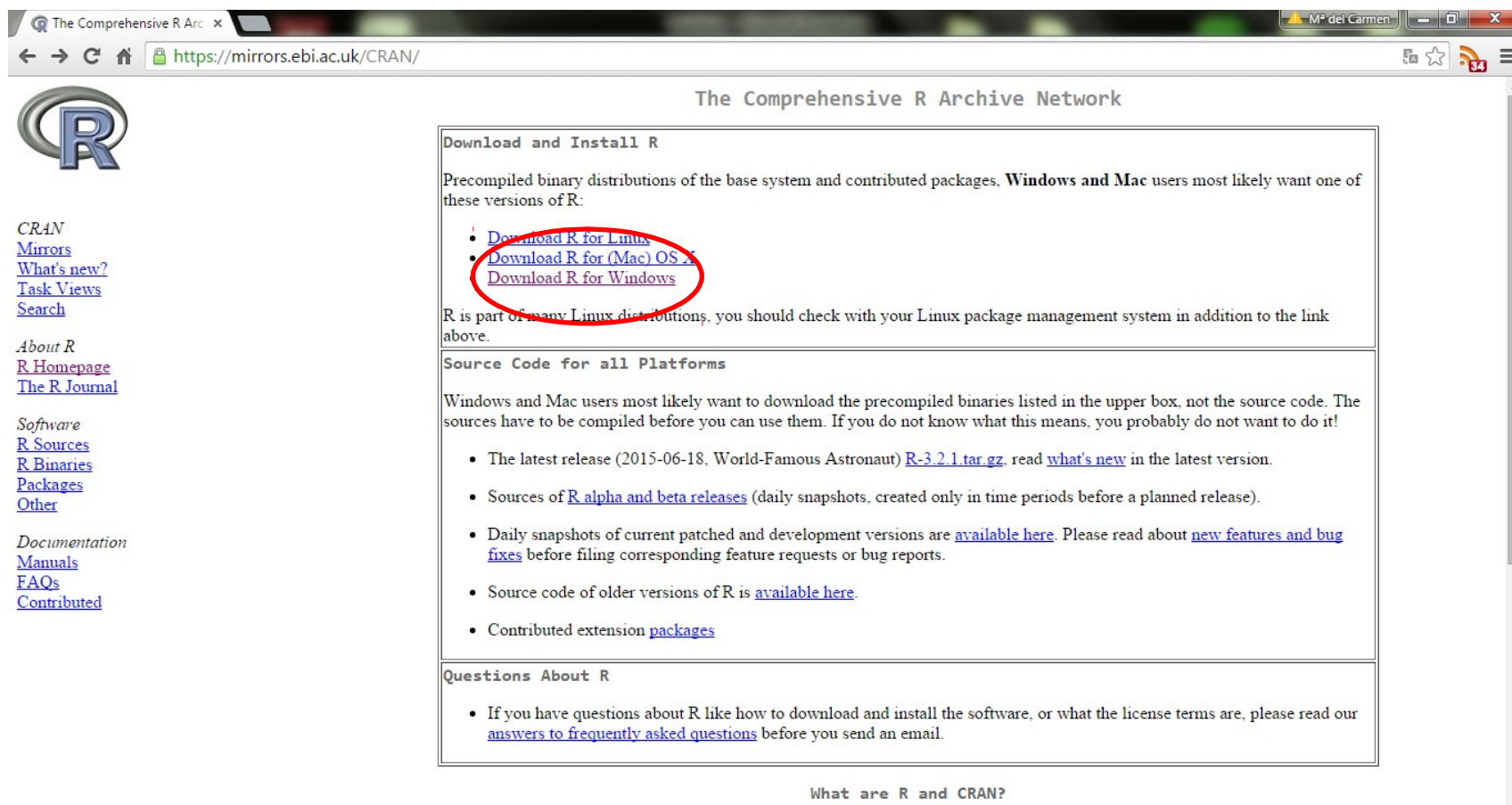


A screenshot of a web browser displaying the CRAN Mirrors page. The browser's address bar shows the URL <https://cran.r-project.org/mirrors.html>. The page content is a list of mirrors organized by country, with each country name in bold and its corresponding mirror URLs and descriptions listed below it.

| | | |
|--------------------|--|---|
| Sweden | http://ftp.cixug.es/CRAN/ http://cran.es.r-project.org/ | Oficina de software libre (CIXUG) Spanish National Research Network, Madrid |
| Switzerland | http://ftp.acc.umu.se/mirror/CRAN/ https://stat.ethz.ch/CRAN/ http://stat.ethz.ch/CRAN/ | Academic Computer Club, Umeå University ETH Zürich ETH Zürich |
| Taiwan | http://ftp.yzu.edu.tw/CRAN/ http://cran.csie.ntu.edu.tw/ | Department of Computer Science and Engineering, Yuan Ze University National Taiwan University, Taipei |
| Thailand | http://mirrors.psu.ac.th/pub/cran/ | Prince of Songkla University, Hatyai |
| Turkey | http://cran.pau.edu.tr/ | Pamukkale University, Denizli |
| UK | https://www.stats.bris.ac.uk/R/ http://www.stats.bris.ac.uk/R/ https://mirrors.ebi.ac.uk/CRAN/ http://mirrors.ebi.ac.uk/CRAN/ http://mirrors-uk2.go-parts.com/cran/ http://cran.ma.imperial.ac.uk/ http://mirror.mdx.ac.uk/R/ http://star-www.st-andrews.ac.uk/cran/ | University of Bristol University of Bristol EMBL-EBI (European Bioinformatics Institute) EMBL-EBI (European Bioinformatics Institute) Go-Parts Imperial College London Middlesex University London St Andrews University |
| USA | https://cran.cnr.Berkeley.edu/ http://cran.cnr.Berkeley.edu/ http://cran.stat.ucla.edu/ http://cran.mirrorcatalogs.com/ http://mirror.las.iastate.edu/CRAN/ http://ftp.ussg.iu.edu/CRAN/ https://rweb.quant.ku.edu/cran/ | University of California, Berkeley, CA University of California, Berkeley, CA University of California, Los Angeles, CA Qarea Inc. Iowa State University, Ames, IA Indiana University University of Kansas, Lawrence, KS |

1. R installation

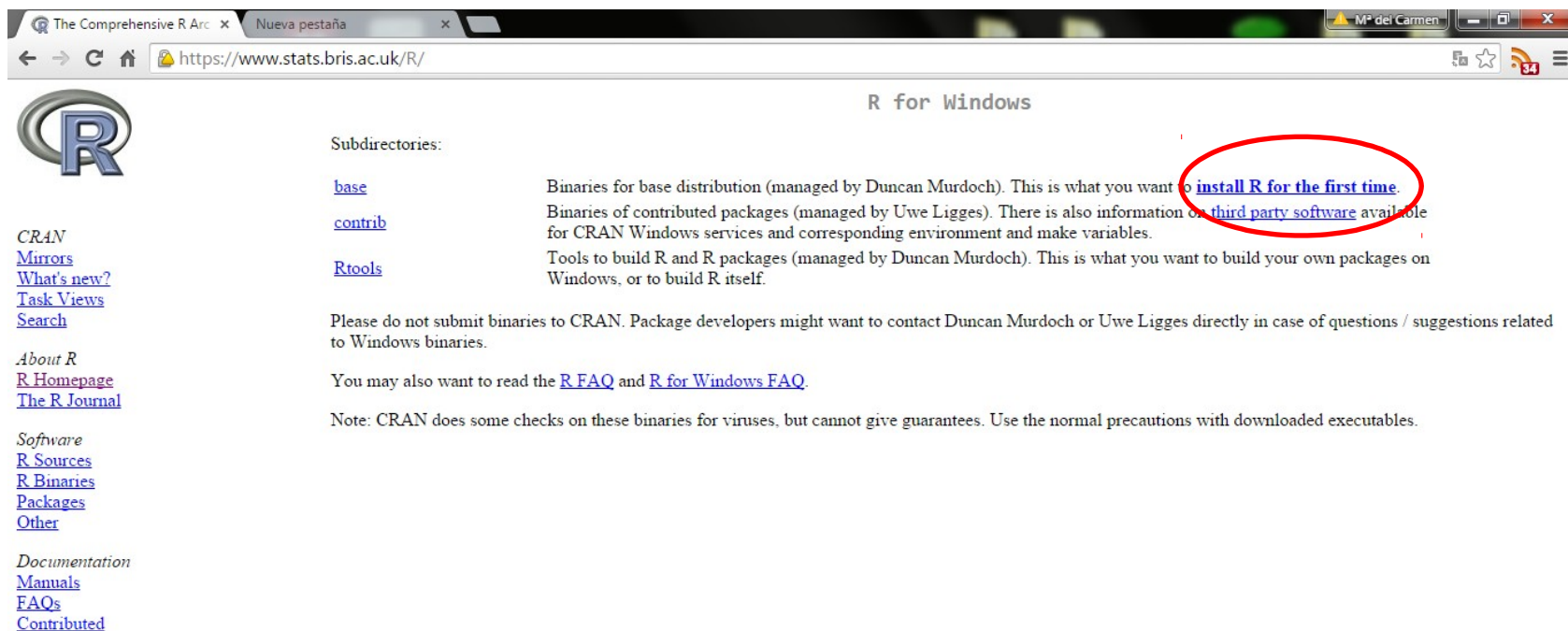
- Download R for Windows



The screenshot shows a web browser window with the address bar displaying <https://mirrors.ebi.ac.uk/CRAN/>. The page title is "The Comprehensive R Archive Network". On the left side, there 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 is titled "Download and Install R" and contains 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 text, there is a list of links: [Download R for Linux](#), [Download R for \(Mac\) OS X](#), and [Download R for Windows](#). The link "Download R for Windows" is circled in red. Below the list, there is a note: "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 titled "Source Code for all Platforms" and contains the text: "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!". Below this text, there is a list of links: [The latest release \(2015-06-18, World-Famous Astronaut\) R-3.2.1.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](#), and [Contributed extension packages](#). The final section is titled "Questions About R" and contains the text: "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." At the bottom of the page, there is a link: [What are R and CRAN?](#)

1. R installation

- Click in **install R for the first time**



The screenshot shows a web browser window with the address bar displaying <https://www.stats.bris.ac.uk/R/>. The page title is "R for Windows". On the left side, 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 three categories: "base", "contrib", and "Rtools". The "base" category is described as "Binaries for base distribution (managed by Duncan Murdoch). This is what you want to **install R for the first time**." The "contrib" category is described as "Binaries of contributed packages (managed by Uwe Ligges). There is also information on **third party software** available for CRAN Windows services and corresponding environment and make variables." The "Rtools" category is described as "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." Below the subdirectories, there is a note: "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." and another note: "You may also want to read the [R FAQ](#) and [R for Windows FAQ](#)." At the bottom, there is a note: "Note: CRAN does some checks on these binaries for viruses, but cannot give guarantees. Use the normal precautions with downloaded executables." The link "install R for the first time" is circled in red.

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**.
- [contrib](#): Binaries of contributed packages (managed by Uwe Ligges). There is also information on **third party software** available for CRAN Windows services and corresponding environment and make variables.
- [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

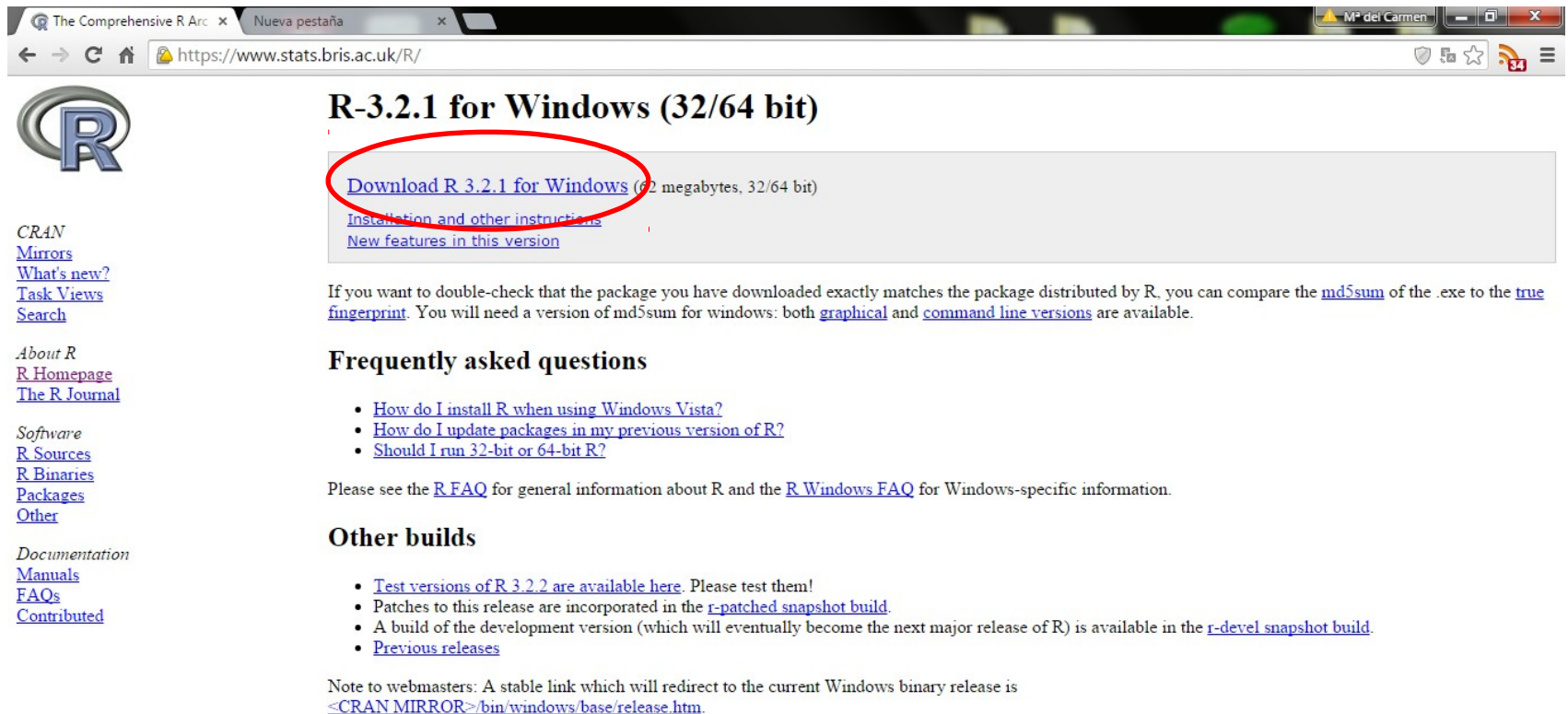
- [R Sources](#)
- [R Binaries](#)
- [Packages](#)
- [Other](#)

Documentation

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

1. R installation

- Download newest version for Windows



The screenshot shows a web browser window with the URL <https://www.stats.bris.ac.uk/R/>. The page features the R logo on the left and a main content area on the right. The main heading is "R-3.2.1 for Windows (32/64 bit)". Below this, a link "Download R 3.2.1 for Windows (62 megabytes, 32/64 bit)" is circled in red. Other links include "Installation and other instructions" and "New features in this version". A paragraph explains how to verify the download using md5sum. Below this is a section for "Frequently asked questions" with three links. A note directs users to the R FAQ and R Windows FAQ. Another section, "Other builds", lists links for test versions, patches, development builds, and previous releases. A note to webmasters provides a stable link to the current Windows binary release.

R-3.2.1 for Windows (32/64 bit)

[Download R 3.2.1 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 exactly matches the package distributed by R, you can compare the [md5sum](#) of the .exe to the [true fingerprint](#). You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available.

Frequently asked questions

- [How do I install R when using Windows Vista?](#)
- [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

- [Test versions of R 3.2.2 are available here](#). Please test them!
- 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](#).

1. R installation

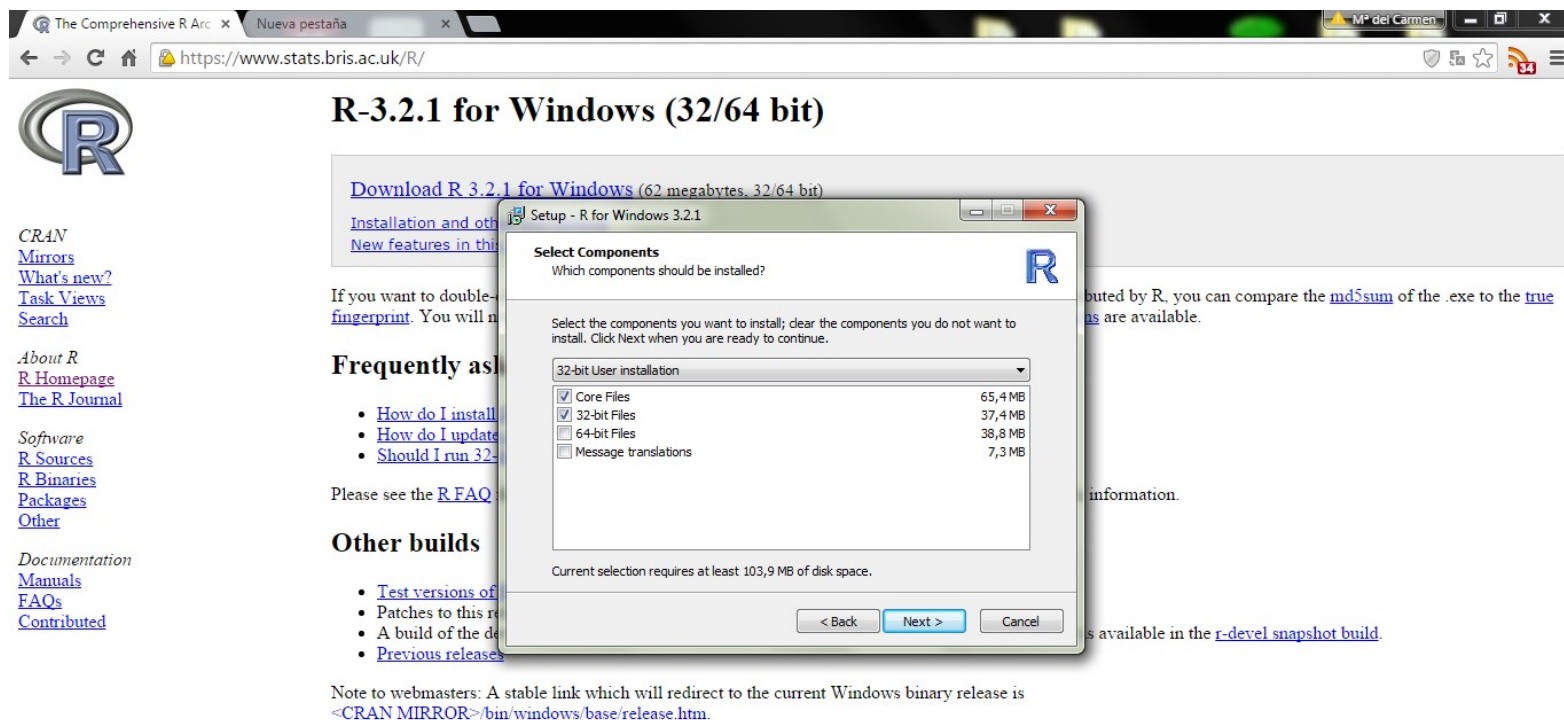
- Follow the instructions to install it.



Please note that you will *either* need administrator privileges *or* have to choose your home directory as location for the installation.

1. R installation

- Use 32-bit version for 32-bit Windows but 64-bit version for 64-bit Windows



The screenshot shows the R-3.2.1 for Windows (32/64 bit) download page. The page 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 features a download link for R 3.2.1 for Windows (62 megabytes, 32/64 bit), installation and other resources, and new features in this release. A frequently asked questions section is also present. The installation window is overlaid on the page, showing the 'Select Components' dialog. The dialog has a title bar 'Setup - R for Windows 3.2.1' and a list of components to be installed. The components are: Core Files (65,4 MB), 32-bit Files (37,4 MB), 64-bit Files (38,8 MB), and Message translations (7,3 MB). The '32-bit User installation' is selected. The 'Current selection requires at least 103,9 MB of disk space.' message is displayed at the bottom of the dialog. The 'Next >' button is highlighted.

R-3.2.1 for Windows (32/64 bit)

[Download R 3.2.1 for Windows](#) (62 megabytes, 32/64 bit)

[Installation and other resources](#)

[New features in this release](#)

If you want to double-check the integrity of the files distributed by R, you can compare the [md5sum](#) of the .exe to the [true](#) [md5sums](#) available.

Frequently asked questions

- [How do I install R?](#)
- [How do I update R?](#)
- [Should I run 32-bit or 64-bit R?](#)

Please see the [R FAQ](#) for more information.

Other builds

- [Test versions of R](#)
- [Patches to this release](#)
- [A build of the development version of R](#)
- [Previous releases](#)

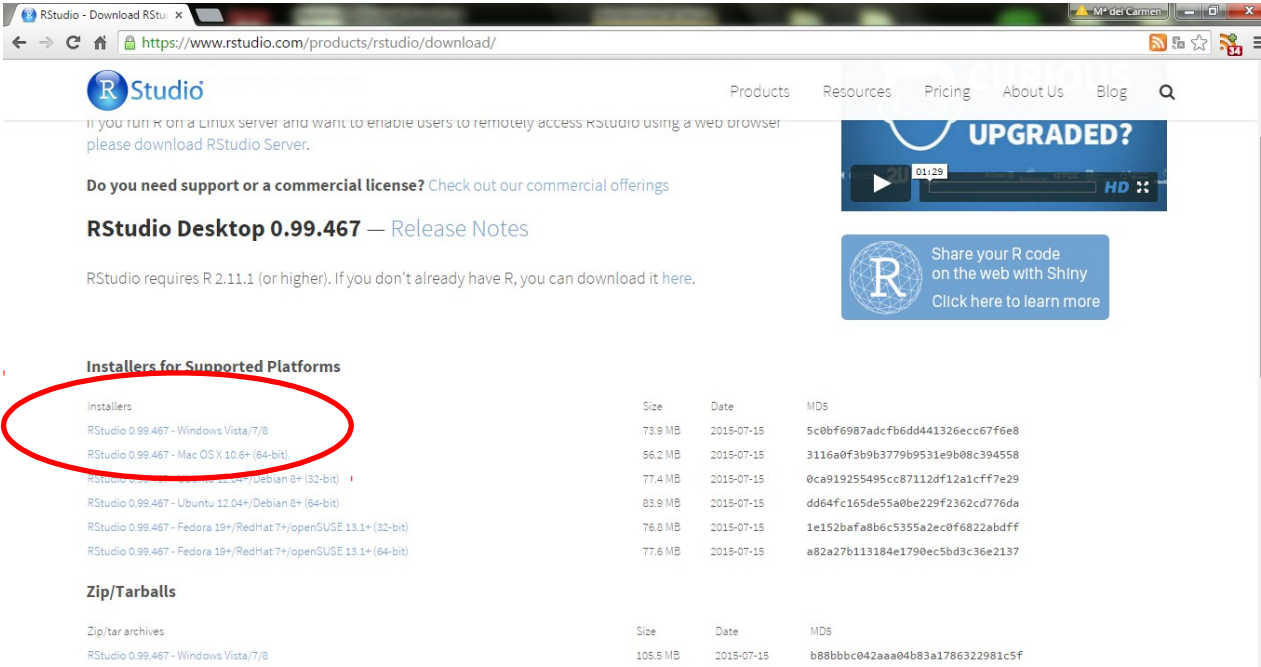
Note to webmasters: A stable link which will redirect to the current Windows binary release is [<CRAN MIRROR>/bin/windows/base/release.htm](#).

Last change: 2015-06-18, by Duncan Murdoch

2. RStudio installation

- Download the package from this link and follow the instructions:

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



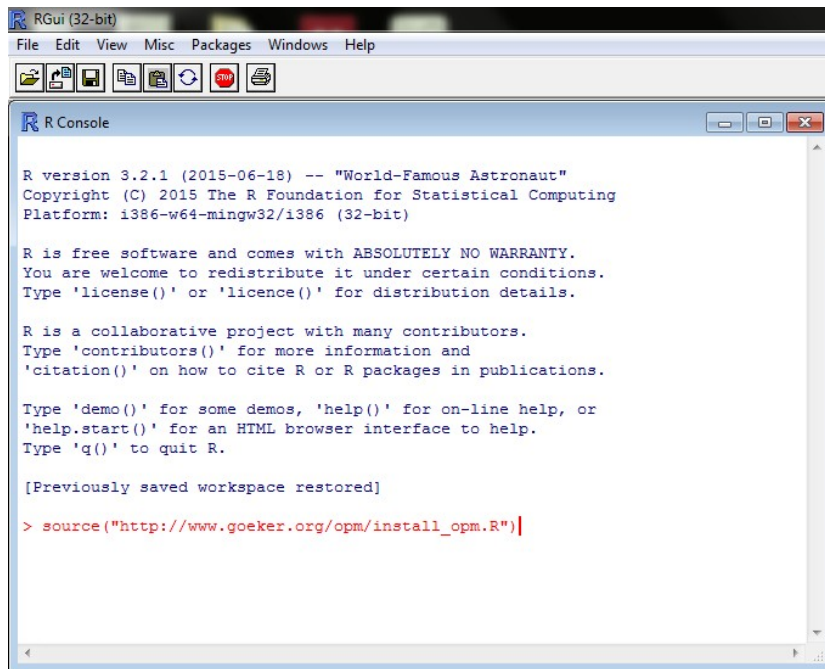
The screenshot shows the RStudio website's download page. The browser address bar displays `https://www.rstudio.com/products/rstudio/download/`. The page features a navigation bar with links to Products, Resources, Pricing, About Us, and Blog. A prominent "UPGRADED?" banner is visible. Below the navigation, there is a section for "RStudio Desktop 0.99.467 — Release Notes" and a link to "Check out our commercial offerings". A sidebar on the right contains a video player and a "Share your R code on the web with Shiny" button. The main content area is titled "Installers for Supported Platforms" and contains a table of download links. The first two rows of the table, "RStudio 0.99.467 - Windows Vista/7/8" and "RStudio 0.99.467 - Mac OS X 10.6+ (64-bit)", are circled in red. Below the table, there is a section for "Zip/Tarballs" with a single row for "RStudio 0.99.467 - Windows Vista/7/8".

| Installers | Size | Date | MD5 |
|---|---------|------------|----------------------------------|
| RStudio 0.99.467 - Windows Vista/7/8 | 73.9 MB | 2015-07-15 | 5c0bf6987adcfb6dd441326ecc67f6e8 |
| RStudio 0.99.467 - Mac OS X 10.6+ (64-bit) | 56.2 MB | 2015-07-15 | 3116a0f3b9b3779b9531e9b08c394558 |
| RStudio 0.99.467 - Ubuntu 12.04+/Debian 8+ (32-bit) | 77.4 MB | 2015-07-15 | 0ca919255495cc87112df12a1c7f7e29 |
| RStudio 0.99.467 - Ubuntu 12.04+/Debian 8+ (64-bit) | 83.9 MB | 2015-07-15 | dd64fc165de55a0be229f2362cd776da |
| RStudio 0.99.467 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (32-bit) | 76.6 MB | 2015-07-15 | 1e152bafa8b6c5355a2ec0f6822abddf |
| RStudio 0.99.467 - Fedora 19+/RedHat 7+/openSUSE 13.1+ (64-bit) | 77.6 MB | 2015-07-15 | a82a27b113184e1790ec5bd3c36e2137 |

| Zip/Tarballs | Size | Date | MD5 |
|--------------------------------------|----------|------------|----------------------------------|
| RStudio 0.99.467 - Windows Vista/7/8 | 105.5 MB | 2015-07-15 | b88bbbc042aaa04b83a1786322981c5f |

3. opm installation

- Open R or RStudio and enter at the prompt:
`source("http://www.goeker.org/opm/install_opm.R")`
- Then press return.



```
RGui (32-bit)
File Edit View Misc Packages Windows Help

R Console

R version 3.2.1 (2015-06-18) -- "World-Famous Astronaut"
Copyright (C) 2015 The R Foundation for Statistical Computing
Platform: i386-w64-mingw32/i386 (32-bit)

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.

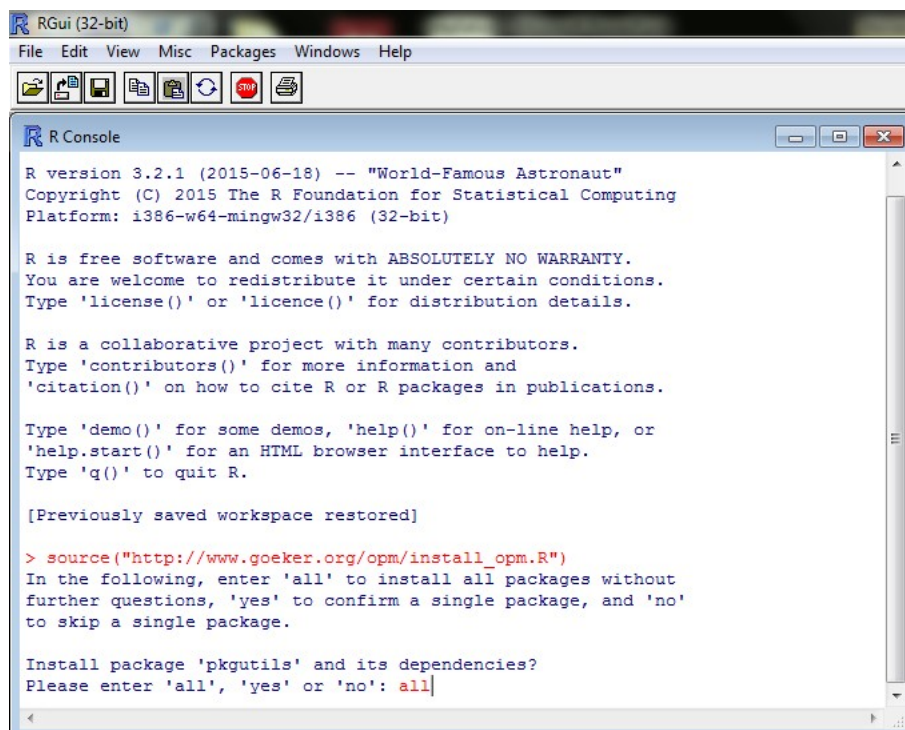
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> source("http://www.goeker.org/opm/install_opm.R")
```

3. pkgutils/opm installation

- R will ask you if you want to install all the dependencies. Please enter **all**.



```
RGui (32-bit)
File Edit View Misc Packages Windows Help

R Console
R version 3.2.1 (2015-06-18) -- "World-Famous Astronaut"
Copyright (C) 2015 The R Foundation for Statistical Computing
Platform: i386-w64-mingw32/i386 (32-bit)

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.

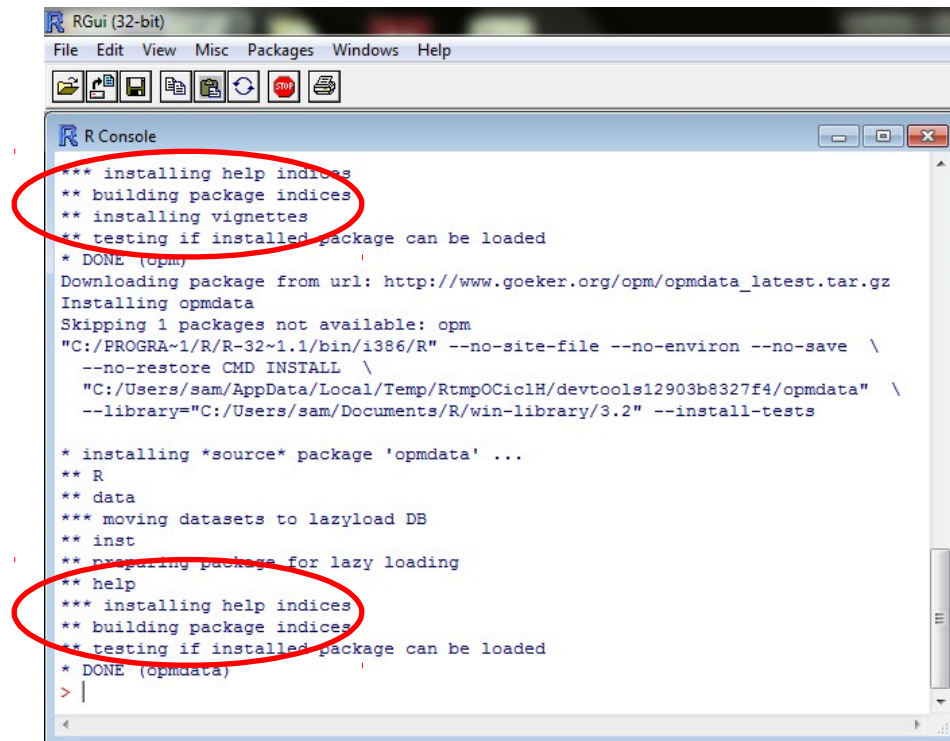
[Previously saved workspace restored]

> source("http://www.goeker.org/opm/install_opm.R")
In the following, enter 'all' to install all packages without
further questions, 'yes' to confirm a single package, and 'no'
to skip a single package.

Install package 'pkgutils' and its dependencies?
Please enter 'all', 'yes' or 'no': all
```

3. pkgutils/opm installation

- The installation might take a while. Please be patient.



```
RGui (32-bit)
File Edit View Misc Packages Windows Help

R Console

*** installing help indices
** building package indices
** installing vignettes
** testing if installed package can be loaded
* DONE (opm)
Downloading package from url: http://www.goeker.org/opm/opmdata_latest.tar.gz
Installing opmdata
Skipping 1 packages not available: opm
"C:/PROGRA~1/R/R-32~1.1/bin/i386/R" --no-site-file --no-environ --no-save \
--no-restore CMD INSTALL \
"C:/Users/sam/AppData/Local/Temp/RtmpOCic1H/devtools12903b8327f4/opmdata" \
--library="C:/Users/sam/Documents/R/win-library/3.2" --install-tests

* installing *source* package 'opmdata' ...
** R
** data
*** moving datasets to lazyload DB
** inst
** preparing package for lazy loading
** help
*** installing help indices
** building package indices
** testing if installed package can be loaded
* DONE (opmdata)
> |
```