

## Installation guide for R and RStudio

### Step 1 – Install R

1. Download the R installer from <https://cran.r-project.org/>



Figure 1. Screenshot of <http://cran.csiro.au/>

2. Run the installer. Default settings are fine. If you do not have admin rights on your laptop, then ask your local IT support. In that case, it is important that you also ask them to give you full permissions to the R directories. Without this, you will not be able to install additional packages later

### Step 2 – Install RStudio

1. Download RStudio: <https://www.rstudio.com/products/rstudio/download/>

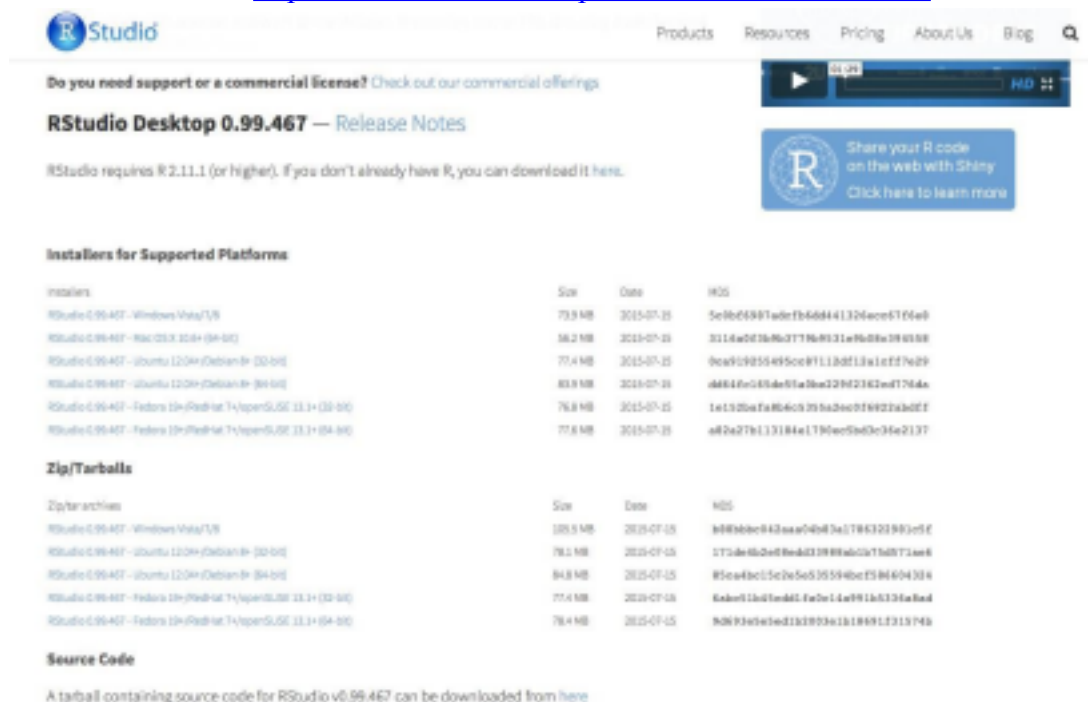


Figure 2. Download RStudio on <https://www.rstudio.com/products/rstudio/download/>

2. Once the installation of R has completed successfully (and not before), run the RStudio installer.
3. If you do not have administrative rights on your laptop, step 2 may fail. Ask your IT Support or download a pre-built zip archive of RStudio which doesn't need installing. The link for this is towards the bottom of the download page, highlighted in Image 2.
  - a. Download the appropriate archive for your system (Windows/Linux only – the Mac version can be installed into your personal “Applications” folder without admin rights).
  - b. Double clicking on the zip archive should automatically unpack it on most Windows machines.

### Step 3 – Check that R and RStudio are working

1. Open RStudio. It should open a window that looks similar to image 3 below.
2. In the left hand window, by the '>' sign, type '4+5'(without the quotes) and hit enter. An outputline reading '[1] 9' should appear. This means that R and RStudio are working.
3. If this is not successful, contact us or your local IT support for further advice

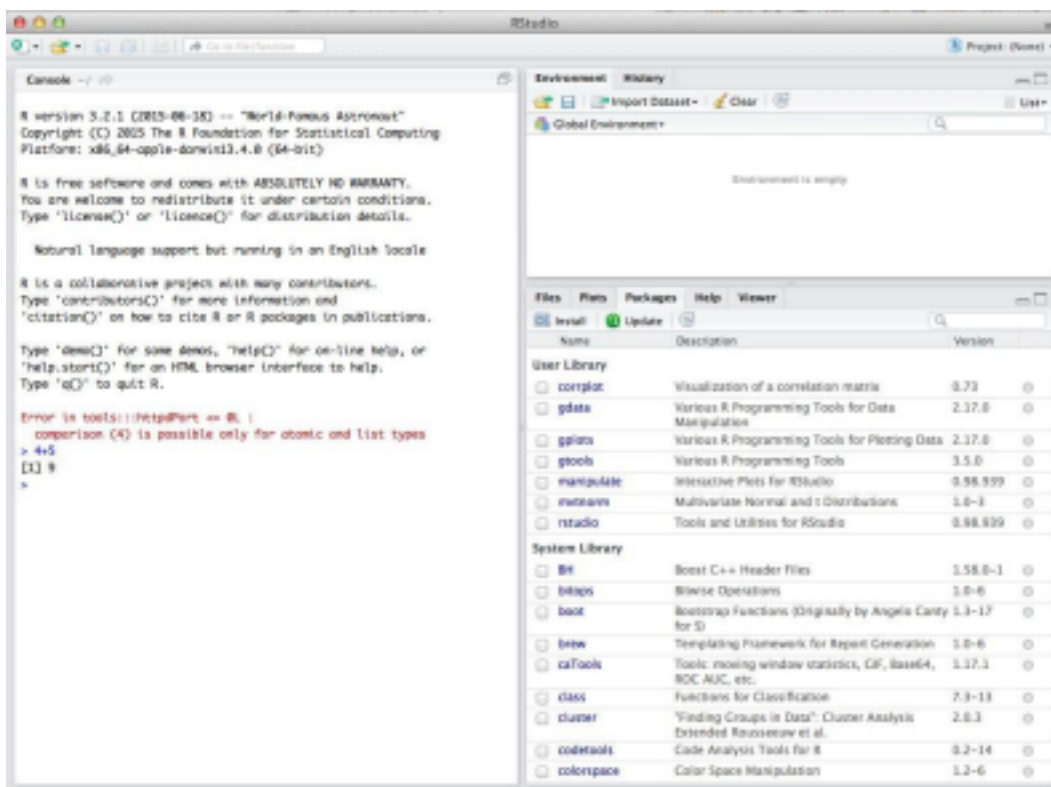


Figure 3. Running R with RStudio

### Step 4 – Install R packages required for the workshop

1. Click on the tab 'Packages' then 'Install' as shown in Image 4. Or Tools --> Install packages.
2. Install the following packages: mixOmics **version 6.1.0**, mvtnorm, RColorBrewer, corrplot, igraph (see Image 4). For apple mac users, if you are unable to install the mixOmics imported library rgl, you will need to install the XQuartz software first

<https://www.xquartz.org/>

3. Check that the packages are installed by typing 'library(mixOmics)' (without the quotes) in the prompt and press enter (see Image 5).
4. Then type 'sessionInfo()' and check that mixOmics version 6.1.0 has been installed (image 6).

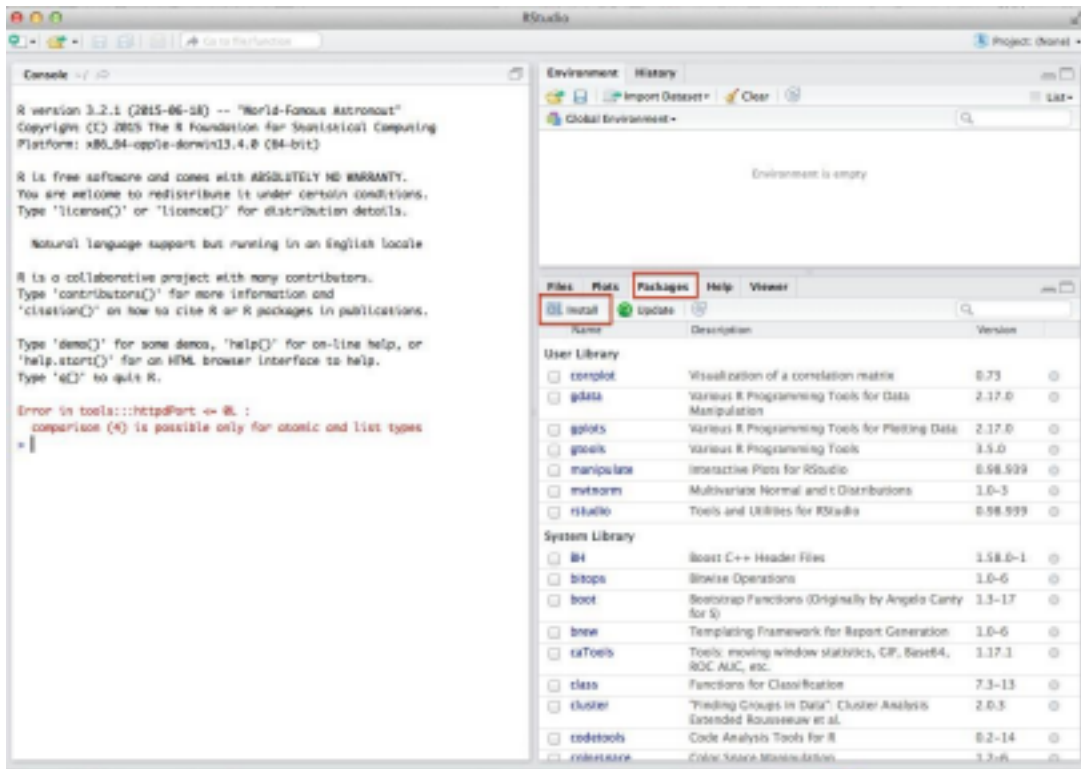


Figure 4. Click on Install to install R packages.

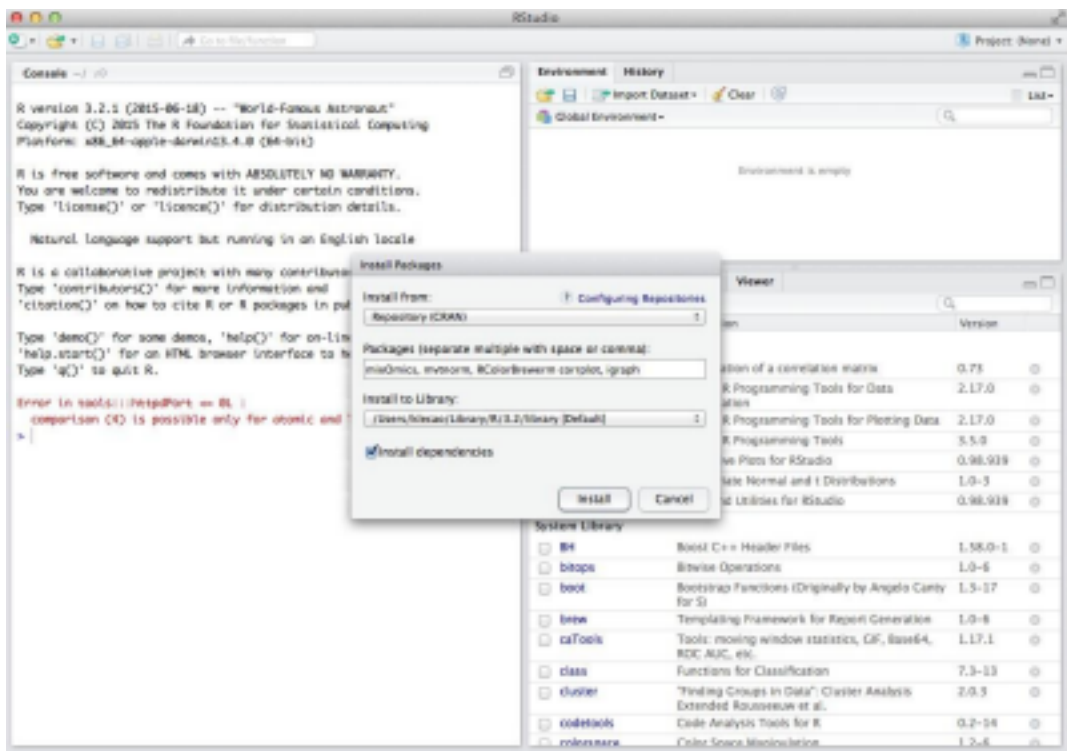


Figure 5. Specify the list of packages to be installed

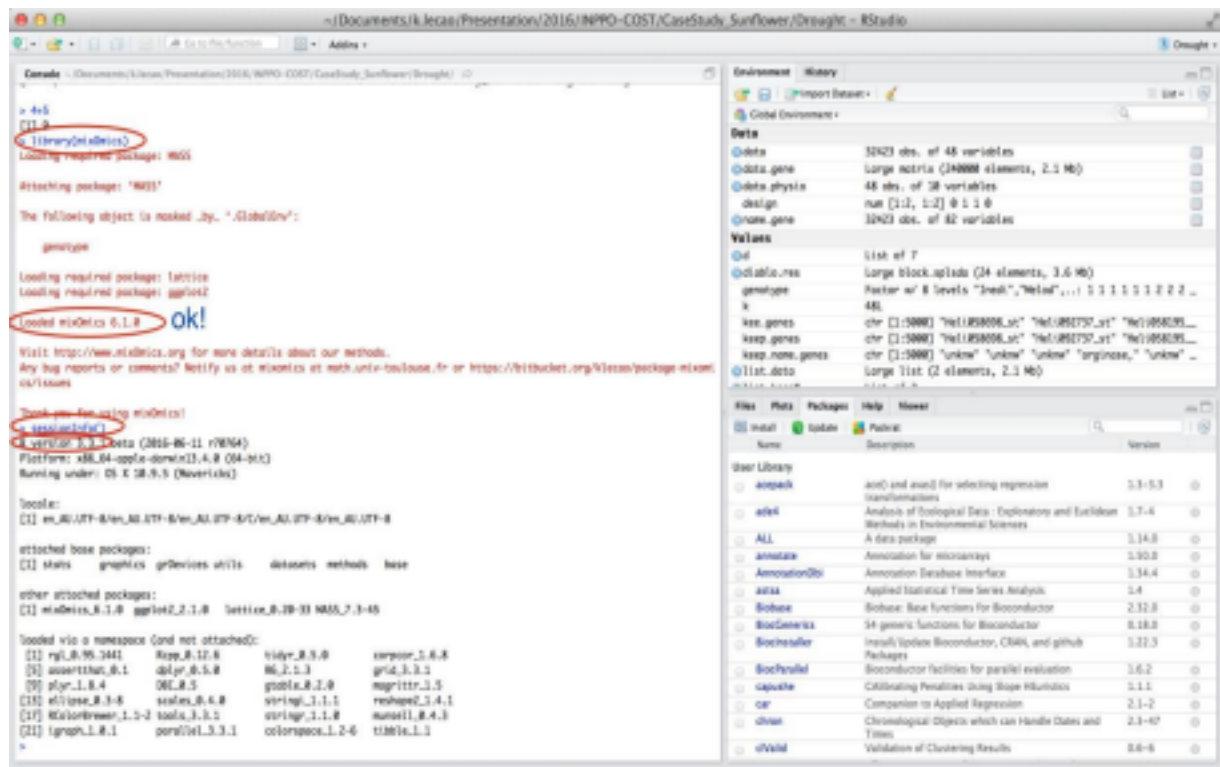


Figure 6. Check that the package `mixOmics` is installed and has the version 6.1.0.

## RESULT:

Thus the implementation of Installation guide for R and RStudio is executed successfully