Installing a GUI for R (R-commander):

Although we can do anything we want in R from the command line, some people might be easier to have a point and click interface. This isn't necessary for our class, and is actually being phased out. Still, if you want to point and click, here are the instructions for installing R-commander. There are actually several GUI's available, but R-commander is probably the best.

Make sure R is installed before following these instructions!

1) The main site for R-commander is at http://socserv.mcmaster.ca/jfox/Misc/Rcmdr/, and you might want to look through it a bit.

2) We will not download this package. Instead, we'll let R do the work for us. Please follow these instructions carefully.

Step 1 is different based on your operating system, step 2 is the same for all.

Step 1:

Windows:

Go up to the menu and click on "Packages"

Now select "Install package(s)..."

A list of "mirrors" will pop up. This is merely a list asking you to select a location from which to download the packages. As above, select something reasonable (USA (MD) is a good choice).

Select the "Rcmdr" package.

Follow any instructions that pop up, but at this point R should basically install R commander for you.

MacOS:

Unfortunately Apple has made things quite complicated. One problem is that depending on the version of your OS, the instructions are totally different!

The main issue is that for some versions of MacOS you need to install a graphics subsystem before R commander will work correctly.

Important: these instructions assume you installed R version 3.0.0 or higher. If you somehow have an older version of R, you should upgrade or go to:

http://socserv.mcmaster.ca/jfox/Misc/Rcmdr/installation-notes.html

for more advice and installation instructions.

I do not have or use MacOS, so I can't vouch for these instructions; please let your recitation instructor know if you have problems, and we'll try to address them in future.

If you have an older OS (but not 10.4):

Start up R.

Follow the instructions under **Step 1** for either Windows or Linux.

Finally, proceed to step 2.

If you have a more recent OS (10.8 or 10.9):

You need to install the graphics system that R-commander uses (older versions of MacOS come with this installed already):

Go to http://xquartz.macosforge.org/ and download XQuartz-2.7.5.dmg

(the version might have changed a bit)

Install this package.

Start up R, then go to **Step 1** for either Windows or Linux.

Finally, proceed to step 2.

If you have 10.4 (a very old OS):

The bad news is that you will probably not get it to work. Consider upgrading your OS. That's probably not what you want to hear, but getting R-commander to work with MacOS 10.4 is very difficult.

If you really want to try, you may need to spend a lot of time searching/browsing through arcane web pages and following detailed instructions.

Linux:

At the R command prompt type:

install.packages("Rcmdr", dependencies=TRUE)

A box will pop up asking you to select a download location. As before, pick something in the USA, preferably close by (MD is on the list again).

It'll start doing all kinds of things. Just ignore everything. It's downloading R-commander and packages that R-commander needs. This may take a while, particularly if you have a slow internet connection and/or slow computer.

Now go to step 2.

Step 2:

All OS's:

Type **library(Rcmdr)** from the command prompt in R.

> A bunch of warnings may or may not pop up telling you that R commander needs a bunch of other stuff installed. If they do, go ahead and click on the option to install the missing packages.

> If you do need to install the missing packages, a lot of stuff will scroll by. Just ignore it.

> > This part may take particularly long under Linux since the packages are actually compiled before installation - be patient!

Eventually, the R-commander interface should start up.

See below for a quick introduction to R-commander.

If you're successful:

The R-commander interface should pop up. You should now have a point and click interface similar to below (Linux version is shown, but the others are almost identical):

If you run into trouble, here are a couple of things to try:

Remember R is case sensitive - make sure you type things exactly as given.
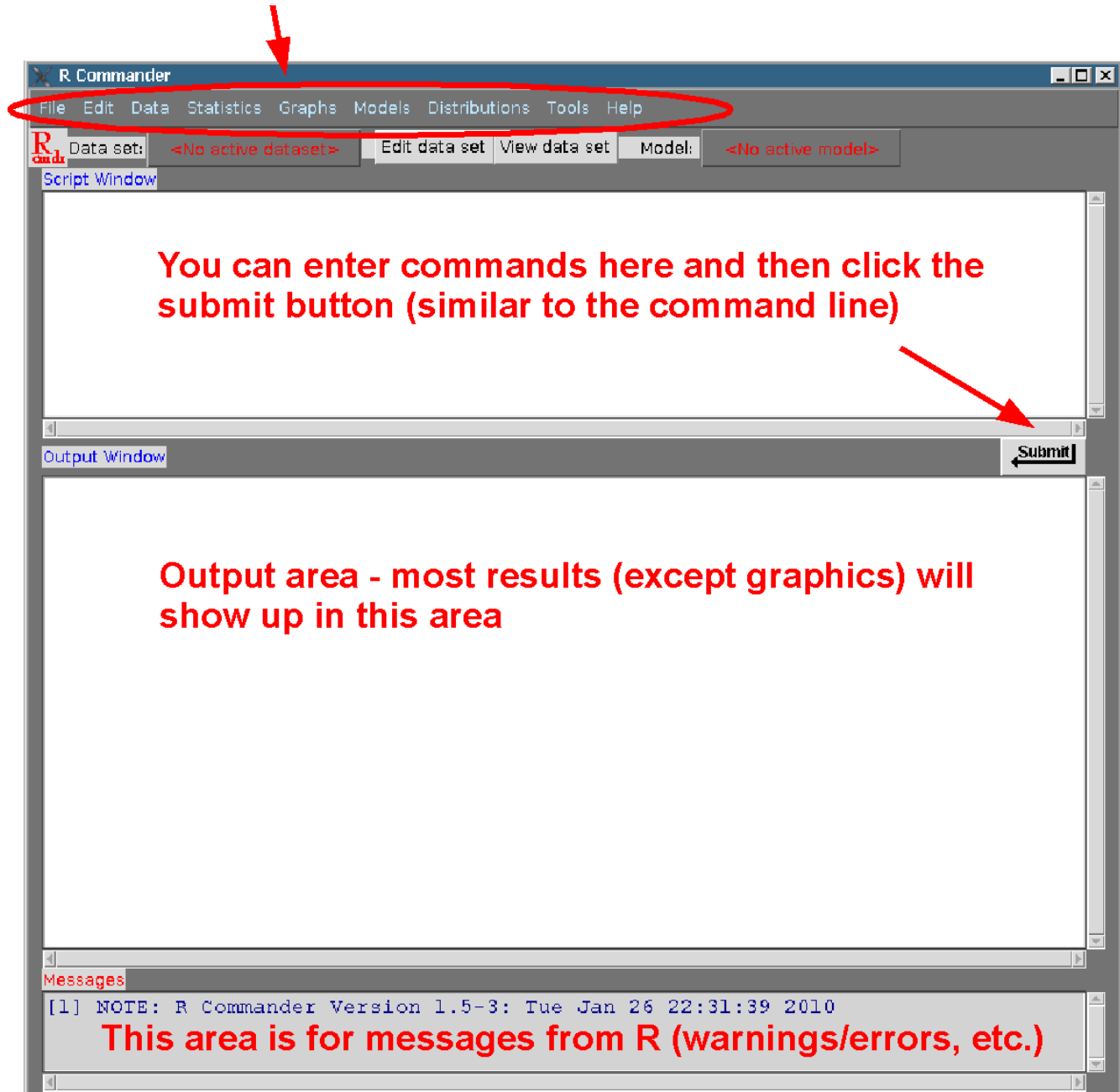
Check your firewall. Depending on the firewall, it might give you a warning and ask to whether or not to install the packages. If you have a particularly aggressive firewall, nothing may happen at this point. You may have to temporarily disable your firewall, but make sure you turn it on again after you're done (and it's best not to do anything else on the web until it's back up)).

Temporarily (**temporarily!!**) disable your anti-virus software. Norton, in particular can be a little obnoxious sometimes about letting you install R-commander. Make sure to turn your anti-virus software back on after installing R-commander.

See "**http://socserv.mcmaster.ca/jfox/Misc/Rcmdr/installation-notes.html**" for more advice about installing R commander, particularly for MacOS.

The R-commander interface:

Let's try some things in R using R-commander:

1) Entering some data:

       Click on **data --> new data set**

Give your data set a name

enter some data (e.g., the same stuff you did before)

to give your variables a better name than "var1" simply click on "var1" and enter a name (for example, "y", or "heights")

simply click on the close box when you're done.

(**Note:** if the R-commander window disappears, just look for it on your task bar)

2) Some simple statistics:

Statistics --> Summaries --> Active data set

You should see a summary of your data.

3) And a graph:

Graphs --> Boxplot (at this point select your variable)

You should see a boxplot.

4) To exit/quit:

Select "exit" from the file menu. Notice that you can exit either from R-commander or from both R-commander and R itself.

R-commander will ask you if you want to save scripts or other stuff. Just keep saying no, until you're out of R-commander.

If you didn't exit from both R-commander and R, then type **q()** at the command line to exit R.

A minor annoyance: if you quit R-commander, but not R, you can not start up R-commander again by typing **library(Rcmdr)** - it won't work. Instead you have to exit R and re-start.