# INSTALLING THE R ENVIRONMENT ON YOUR COMPUTER

With optional instruction to install the Tinn-R editor and the RCMdr menu interface

## INSTALLING BASIC R

- The main website of R is <u>http://www.r-project.org</u>
- To download R go to <u>http://cran.hostingzero.com/bin/windows/base/</u>
- Click R-2.6.1-win32.exe and select <u>R</u>un



• Select <u>R</u>un in this warning box:



• Choose all the defaults. However, if you want to have additional information the select "PDF Reference Manual" in the Setup window.

👘 Setup - R for Windows			
Select Components Which components should be installed?	R		
Select the components you want to install; clear the components install. Click Next when you are ready to continue.	you do not want to		
Custom installation	<u>•</u>		
Source Package Instalation Files     Support Files (or Package Initialized Files)     Docs for Packages gif and survival     Message Translations     Version for East Asian Ingrauges     Latex Help Files     FOF Reference Manual     Source Files for Help Pages	1.2 MB A 5.4 MB 1.5 MB 3.2 MB 2.2 MB 2.6 MB 7.0 MB 1.4 MB		
Current selection requires at least 51.4 MB of disk space.			
< <u>B</u> ack	Next> Cancel		

• Start R by clicking on its desktop icon or selecting it from the start menu



# INSTALLING R PACKAGES

- You may want to install additional packages which are program libraries that extend the functionally of R. First you need to download these packages from a CRAN web server:
- Select <u>P</u>ackages ► Install Packages()...
- You can select any download mirror [Note that the "USA (TX)" download site is not always stable. Should you encounter problems select another site in the USA]:



• The "foreign" package allows you to import rectangular data files from several other software packages such as Dbase, SPSS, SAS or Stata files.



- In order to use a package in a current session you would need to load it. You can do this either at the command prompt by entering and submitting
  - o > library(foreign)
  - o or thru the menu Packages ► Load package ... ► Select one ► foreign

Attention: Commands and variable names in R are case sensitive (i.e., foreign is different from Foreign)

• If you need help or code examples you can go to the html help facility:



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#### BASIC CODE EDITOR IN R

R only comes with a very rudimentary code editor in the file menu
 File ► New Script



This editor allows you to run selected lines of code directly in R.

## INSTALLATION OF A BASIC MENU SYSTEM

- Copy the file Rprofile.site into the directory C:\Program Files\R\R-2.6.1\etc\ (note, it will overwrite the existing profile).
   The next time you start R the menu system will be installed automatically.
   To start the menu system type at the *R*'s command prompt
  - o > library(Rcmdr)

The instructions below explain the manual installation procedure of the Rcmdr.

- Download the package Rcmdr. Remember:
  - o Select menu Packages ► Install Package(s) ...
  - o Pick a download server-site
  - o Select Rcmdr from the download dialog



• When you download the Rcmdr several other packages, such as the foreign package, are downloaded in addition if they are not already installed in a prior session. The Rcmdr uses these packages.

To start the Rcmdr issue at the command prompt either

- > library(Rcmdr)
- Or select the menu Packages  $\blacktriangleright$  Load Packages ... and pick form the list the Rcmdr
- Before the Rcmdr interface opens additional packages may be downloaded automatically. This may take a few minutes.



• This opens the R Commander menu system window

You should not have warning messages in the Messages window.

• To get help on the Rcmdr select its Help menu.

#### INSTALLATION OF AN ADVANCED EDITOR

- A more comfortable editor that can be seamlessly integrated into R is the shareware editor Tinn-R (download at http://www.sciviews.org/Tinn-R/)
- Download and install Tinn-R form the above site.
- To integrate Tinn-R seamlessly with the R environment adjustments are required:

The latest version of Tinn-R does not run in the MDI mode of the R interface. To disable the MDI mode goto Edit ► GUI-preferences ... in the R-menu and select the SDI option

Rgui Configuration Editor				
Single or multiple windows (	O MDI (O SDI)	MDI toolbar	MDI statusbar	
Pager style (	<ul> <li>multiple windows</li> <li>single window</li> </ul>	Language for menus and messages		
Font Courier New	TrueType only	size 10 💌 st	yle normal 💌	
Console rows 39 c	columns 120 Ir	nitial left 0	top 0	
set options(width) on resize?     buffer bytes     65000     lines     8000       Image: buffer console by default?     buffer console by default?     buffer console by default?				
Pager rows 25 c	columns 80			
Graphics windows: initial left 60 top 0				
Console and Pager Colours				
Background	Output text	User input	Titles in pager	
wheat3 wheat4 white	NavajoWhite3 NavajoWhite4 navy	purple3	DarkOrchid3 DarkOrchid4 DarkRed	
Apply	Save Load	ок	Cancel	

Select Save and accepted the suggest filename and location. You can close the Rgui Configuration Editor now. Close and restart R.

• Copy the file Rprofile.site file into the directory C:\Program Files\R\R-2.6.1\etc\ (note, it will overwrite the existing profile). The next time you start R, the editor Tinn-R will be automatically linked with the R environment and opened automatically.

The instructions below explain the manual installation procedure for Tinn-R if you plan not to use the provided file Rprofile.site:

- The packages
  - SvIDE,
  - SvSocket,
  - SvIO and
  - R2HTML

have to be downloaded from one of the R-library servers.

• The profile file profile.site in the R Program Files directory (see C:\Program Files\R\R-2.6.1\etc\) needs to be edited by adding these lines:

```
options(IDE = 'C:/Program files/Tinn-R/bin/Tinn-R.exe')
options(use.DDE = TRUE)
library(svIDE)
library(svSocket)
library(svIO)
library(R2HTML)
guiDDEInstall()
```

Just copy above lines and past them to the end of profile.site file.

• You find more information in the Tinn-R Help menu under the topic "Tinn-R and R Configuration".

# NOTE FOR WINDOWS VISTA USERS:

WINDOWS VISTA is much stricter than WINDOWS XP when it comes to security issues. Since help files of downloaded and/or updated R-libraries want to manipulate *R*'s protected HTML setup, they will not install without turning off first the User Account Control (UAC). In order to do this:

1. Go to Control Panel ► User Accounts ► Turn User Account Control ► Off



You will be asked whether you would like to continue this task. Choose Continue, unselect Use User Account option and click OK in the dialog window below:



- 2. Windows Vista needs to be rebooted for these changes to take effect. Reboot now
- 3. Open **R** and issue at the command prompt the line link.html.help() and hit return. This will update the help system of the download and/or update libraries.
- If you want to enable UAC again, go to
   Control Panel ► User Accounts ► Turn User Account Control ► On to turn UAC on again.
- 5. Re-boot WINDOWS VISTA for the change to take effect