Software and Supporting Material

This text assumes the reader has installed the latest version of MATLAB (at least R2025a) and the Statistics and Machine Learning Toolbox, which provides a rich collection of data-science functions. In the various chapters, we also refer to functions contained in additional toolboxes. For example, in the chapter devoted to importing data from the web in real time, extensive use is made of the DataFeed Toolbox, while in the chapter on time series the Econometrics, Financial, and Curve Fitting Toolboxes are used extensively. In the chapter on graphics the *Mapping* Toolbox is used. These additional toolboxes can be installed during the MATLAB installation or afterwards. Whenever you call a function that requires a missing toolbox, MATLAB provides a hyperlink to install it. In the MATLAB Command Window, typing ver displays both your MATLAB version and the installed toolboxes with their versions. We also assume the user has installed the FSDA (Flexible Statistics and Data Analysis) Toolbox, an Add-on developed by Ro.S.A. (Robust Statistics Academy) Interdepartmental Research Center at the University of Parma in collaboration with the European Commission's Joint Research Centre.

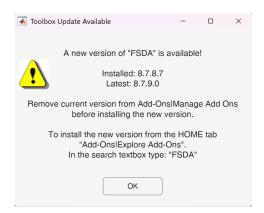
To install FSDA as an Add-on:

- On the "HOME" tab, select "Add-ons" and then "Get Add-ons" (in R2025a onward, "Explore Add-ons").
- In the Add-on Explorer, type "FSDA" into the search box.



- Click the FSDA icon or the link FSDA Flexible Statistics and Data Analysis toolbox, then click "Add". Installation begins automatically.
- When installation completes (after a few seconds), an "Installation Complete" dialogue appears. Close it, and FSDA is ready to use.

Note: it is important at all times to check that the version of FSDA currently installed is the one available on the network. If the user types in the MATLAB Command Window the command tuna() and the latest version of FSDA has been installed, then the version numbers present on the network and the local version will be displayed. Otherwise, the following window will appear, as shown in the figure below, which provides information on the update (of course the numbers will differ from those shown). This is a "modal" window that has to be closed before you can proceed.



All the examples and exercises discussed in this book have been put in a GitHub repository. To download all the material contained in this repo open MATLAB and run:

!git clone https://github.com/UniprJRC/DSwithMATLAB

If this fails on Windows, install the open-source git client from https://git-scm.com. On macOS, install XCode from the App Store. After installation, restart MATLAB before retrying. If you see the error fatal: could not create work tree dir 'DSwithMATLAB': Permission denied, it means you are in a folder without write permission. If, on the other hand, the above command works and for example your current folder is D:\temp\DSwithMATLAB is created containing all chapter files.

Keeping the Project "Alive"

Software has a lifecycle, and without ongoing maintenance and use, interest fades. We therefore encourage readers to report errors and suggest improvements via the book's GitHub page:

https://github.com/UniprJRC/DSwithMATLAB

Please file bug reports or patch proposals in the "Issues" section. We will respond promptly and, if need be, open a direct communication channel with the contributor. We thank the more than 1,000 users who have interacted via Issues in the first two editions of the Italian version of this book.