

1 Instructions for Matplotlib

<http://matplotlib.org/> is the site for this package, and the installation instructions are at <http://matplotlib.org/users/installing.html>.

Please make certain that PyCharm and python are not running before you install.

1.1 Instructions for Linux

You must be logged in as a user with **administrative** authority.

- Linux (Debian/Ubuntu). Install using the package manager:
`sudo apt-get install python3-matplotlib`
- Linux (Fedora/Redhat). Install using the package manager:
`sudo yum install python3-matplotlib`

1.2 Instructions for Mac OSX

You must be logged in as a user with **administrative** authority.

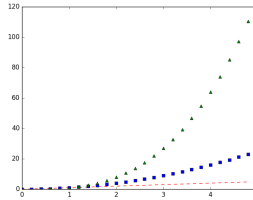
- Mac OS X. Install using `pip`.
 1. Open a terminal shell and type: `which pip3`
If the program is found, continue to step 2. Otherwise install it with these commands:
`curl -O https://bootstrap.pypa.io/get-pip.py`
`python3 get-pip.py`
 2. Install matplotlib using `pip`:
`pip3 install matplotlib`

1.3 Instructions for Windows

You must be logged in as a user with **administrative** authority.

- Windows. Install using `pip`.
 1. Open a command prompt and type: `python`
If python is in your path, skip to the next step and install `pip`. Otherwise, you need to add python to your path. The easiest way is to re-download python from <https://www.python.org/> and run the installer. In the installer, select “Modify – > Next” and check the box for “Add Python to environment variables”. Then click install. When finished, close and re-open the command prompt, and make sure you can run the interpreter using the command above.
 2. Install `pip`:
`python -m pip install -U pip setuptools`

3. Install matplotlib using pip:
`python -m pip install matplotlib`
4. Verify your installation by downloading and running the simple plot.py program which should produce the image below.



2 Links on Matplotlib Tools and Techniques

In no particular order, this section has a fairly long list of links for using various components of the matplotlib infrastructure. Look at the link names to see what is their topic.

- <http://matplotlib.org/examples/index.html>
- <http://www.scipy-lectures.org/intro/matplotlib/matplotlib.html> (v 1.4)
- http://matplotlib.org/users/pyplot_tutorial.html
- http://matplotlib.org/api/pyplot_summary.html
- http://matplotlib.org/api/pyplot_api.html#matplotlib.pyplot.annotate
- http://matplotlib.org/api/pyplot_api.html#matplotlib.pyplot.plot
- http://matplotlib.org/api/pyplot_api.html#matplotlib.pyplot.xlabel
- http://matplotlib.org/api/ticker_api.html#matplotlib.ticker
- <http://stackoverflow.com/questions/15652503/put-a-gap-break-in-a-line-plot>
- http://matplotlib.org/api/dates_api.html
- <https://docs.python.org/3/c-api/datetime.html>
- <https://pymotw.com/3/datetime/>
- http://matplotlib.org/api/pyplot_api.html#matplotlib.pyplot.boxplot
- http://matplotlib.org/examples/pylab_examples/boxplot_demo.html
- http://matplotlib.org/examples/statistics/boxplot_demo.html