

Welcome to Geocomputing!

Get ready for a fun adventure into the world of scientific computing. Before getting down to coding on any machine, you might need to install Python and set up proxies. Flip to the back of this book to remind you how.

Getting into your environment

To create a new environment, see **Setting up a new environment** at the back of the book. Or, to get into an existing environment, called **myenv** in this example, open an Anaconda prompt (Windows) or Terminal (Mac and Linux), and type:

```
conda activate myenv
```

Installing new packages

If you find an interesting package (aka library) and want to use it in your programs, you'll have to install it in your environment first. Look in the README or documentation for information about installing the package. Often it will be available via pip or conda. To install **coolpackage** with conda, type:

```
conda install coolpackage
```

If it's only available via pip, you would type:

```
pip install coolpackage
```

or, if you use a proxy (replace the URL with your actual proxy address):

```
pip --proxy https://my-proxy.myco.com:8080 install coolpackage
```

Running Python

There are lots of ways to run Python. You can start a simple interpreter:

```
python
```

Or the enhanced interpreter:

```
ipython
```

To run a Python script, e.g. a **.py** file like this →

```
python myfile.py           # This is a text file.  
                           # It's called myfile.py.  
                           print("Hello world!")
```

To start Jupyter Notebook...

```
jupyter notebook
```

...or Jupyter Lab (the future!):

```
jupyter lab
```