

# mvPot: Estimating the Spatial Dependence of Extreme Temperature over the Red Sea

- Mandatory:

1. R packages: `sp`, `ggplot2`, `evd`, `mvPot`. These all can be downloaded from CRAN.

- Recommended:

1. Suggested R packages: `ggmap`. To install the last version use:

```
devtools::install_github("dkahle/ggmap")
```

To download background maps and use `ggmap`, you will need a google API key. To obtain one, you can find instructions here:

<https://developers.google.com/maps/documentation/geocoding/get-api-key>

Once you get an API key, copy/paste it in the file `google_api_key.txt`.

2. For easier presentation, the workshop is given with Jupyter Notebook. To get Jupyter, you can simply install Anaconda; instructions for linux can be found here:

<http://docs.anaconda.com/anaconda/install/linux/>

You can also find instructions for MacOS and Windows on the same website. By default, Jupyter Notebook is set up for **Python**. To add the **R** kernel, follow the instructions here:

<https://docs.anaconda.com/anaconda/navigator/tutorials/r-lang/>

Once this is done, you can start Jupyter by just typing 'jupyter notebook' in a console (preferentially from the folder containing the notebook). This will open a page on your web browser with Jupyter interface.