# Report of assignment 4

**1. Global earthquakes**

Data is from usgs_earthquakes.csv, earthquakes were scattered on Robinson map with the color indicating different magnitudes. Stock_img() method plots the background.

Figure looks same as figure in assignment:

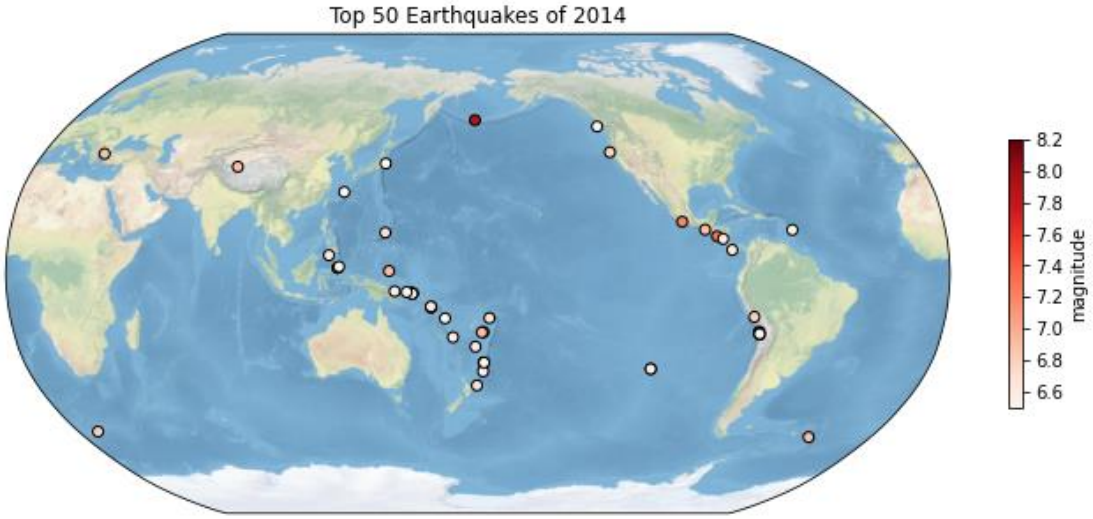


Figure 1. Top 50earthquakes of 2014

## 2. Explore

### 2.1

Data used here is the same as PS3. Datafile name is " FLDAS_NOAH01_CP_GL_M.A201901.001.nc", Here, some modules were imported, which were not imported in 2.2 again, since these two questions are interconnected and the code was run in consequence in jupyter notebook.

At the beginning of code, a function was defined to control the position and size of color bar. This function is also used in 2.2 but not defined repeatedly.

Project is PlateCarree, figure 2.1 is showed below:

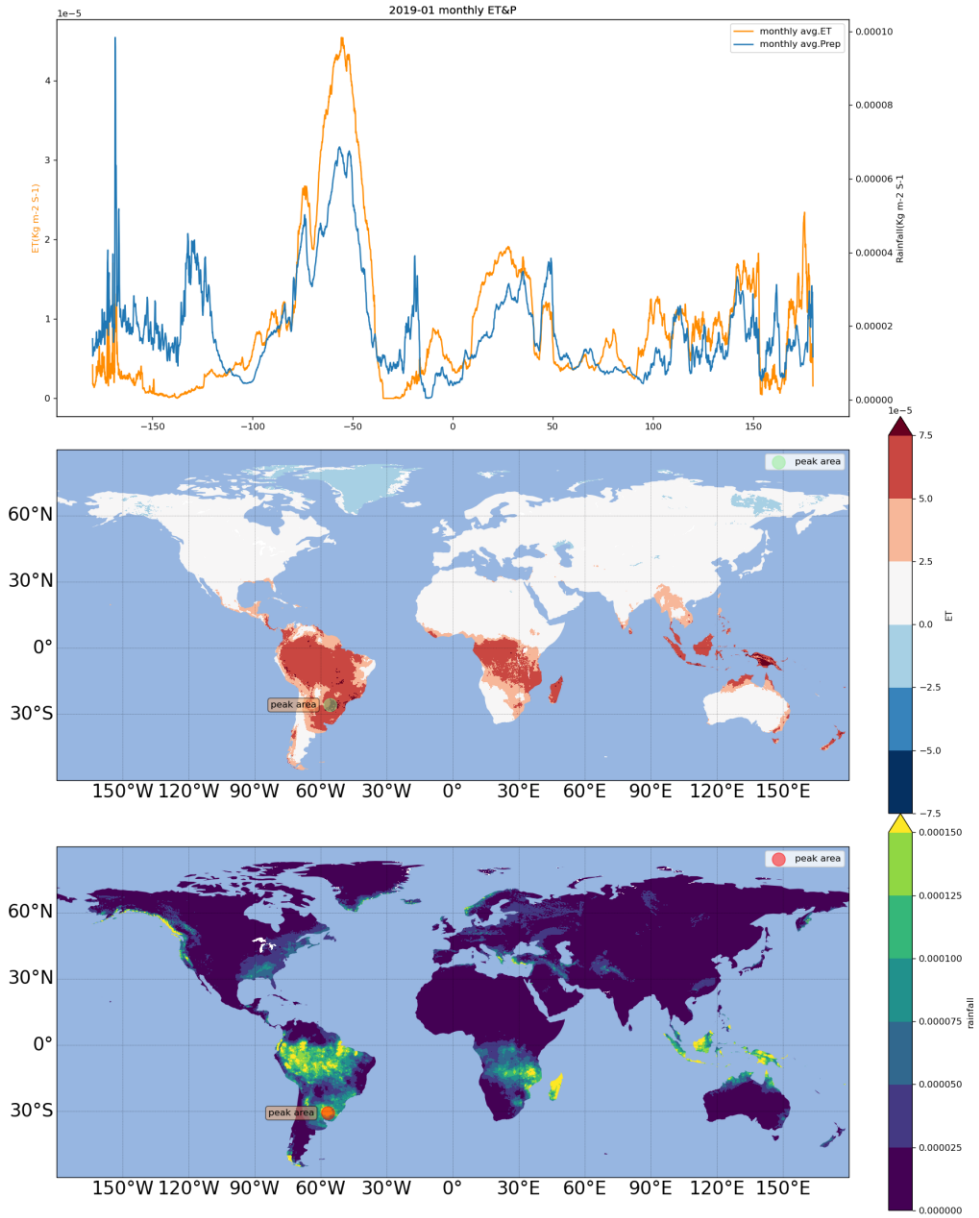


Figure 2.1. Global rainfall and ET condition in 2019-01.

**2.2**

A different project is Mercator, figure 2.2 is showed below:

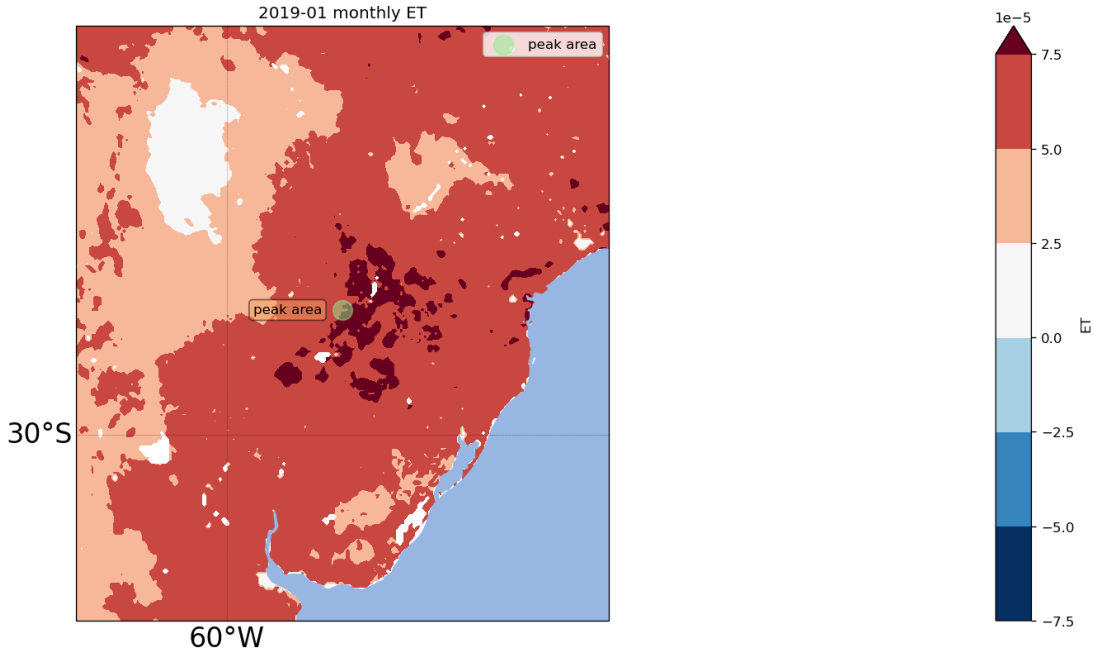


Figure 2.2 local (peak area) ET in 2019-01.

It looks different with the one in jupyter notebook because I changed “pad” (0.2 to 0.02) after saving and using this picture.