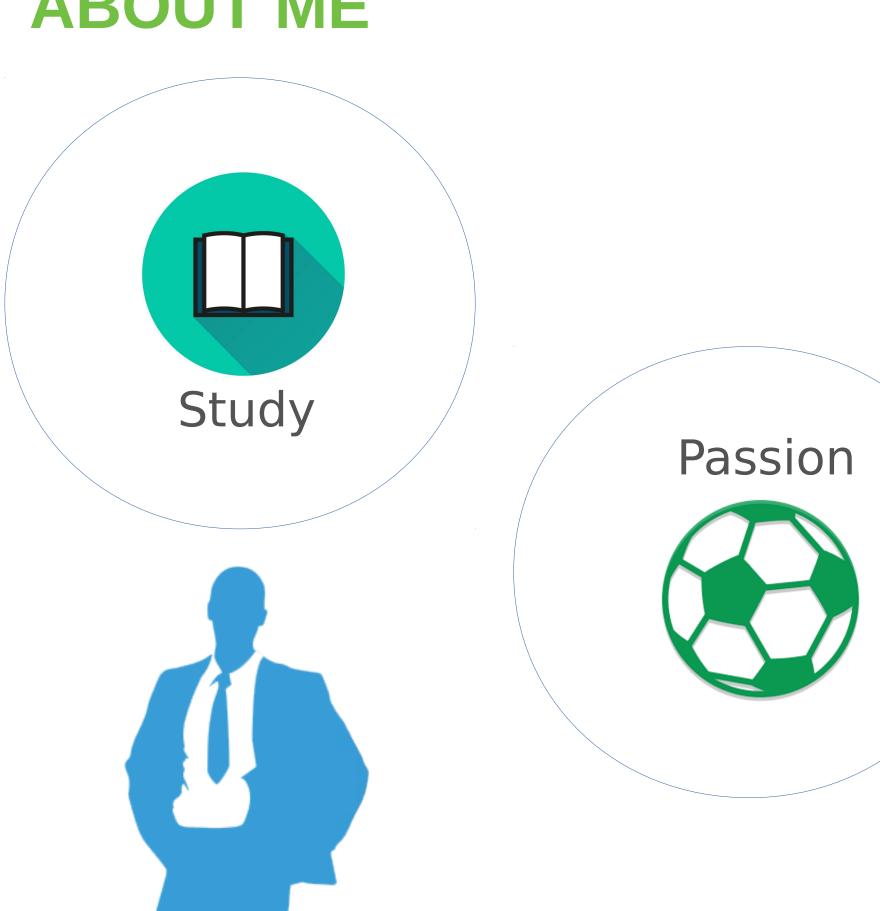
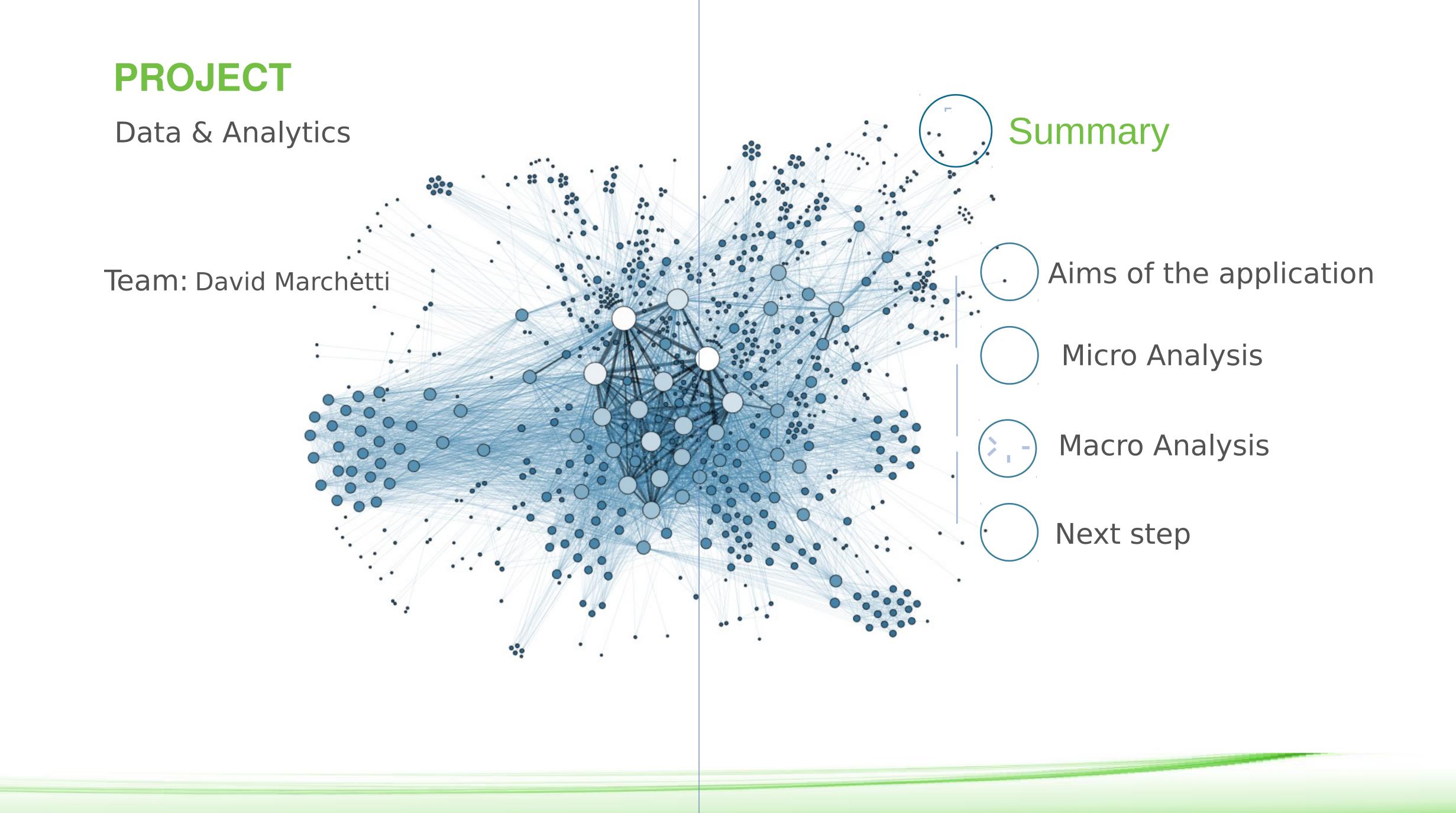


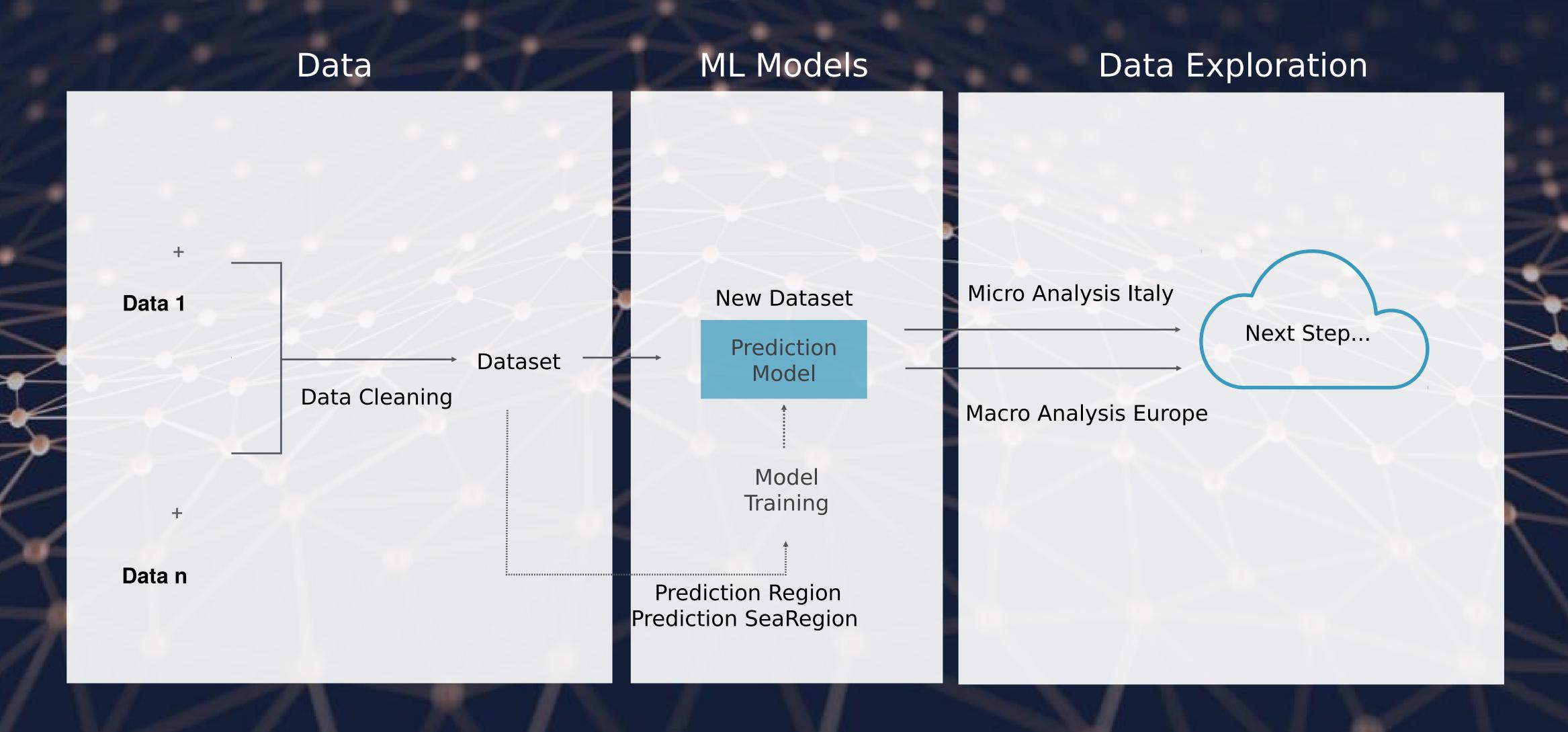
## **ABOUT ME**



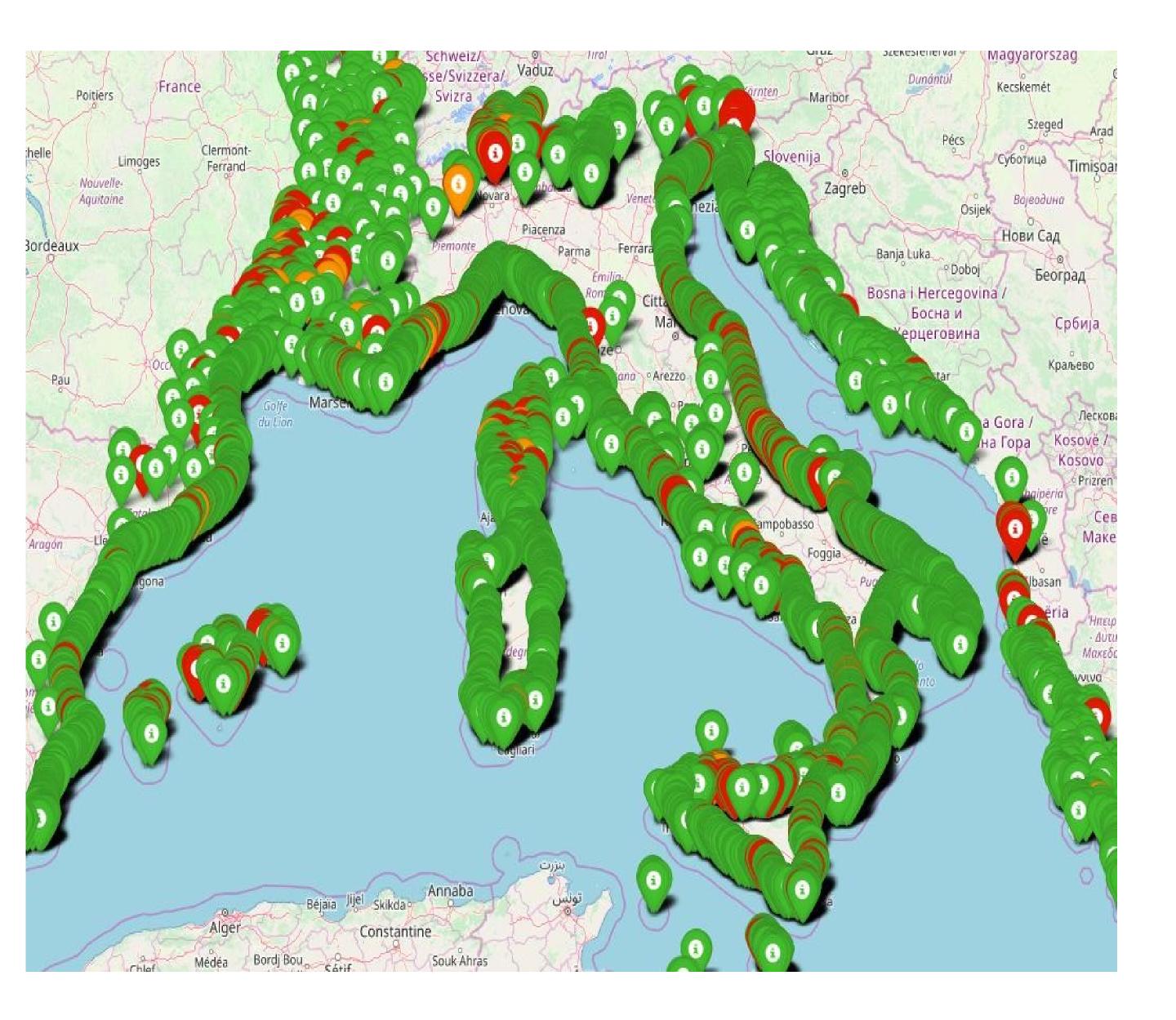




## Goal: Develop a Data Exploration







#### **METRIC**

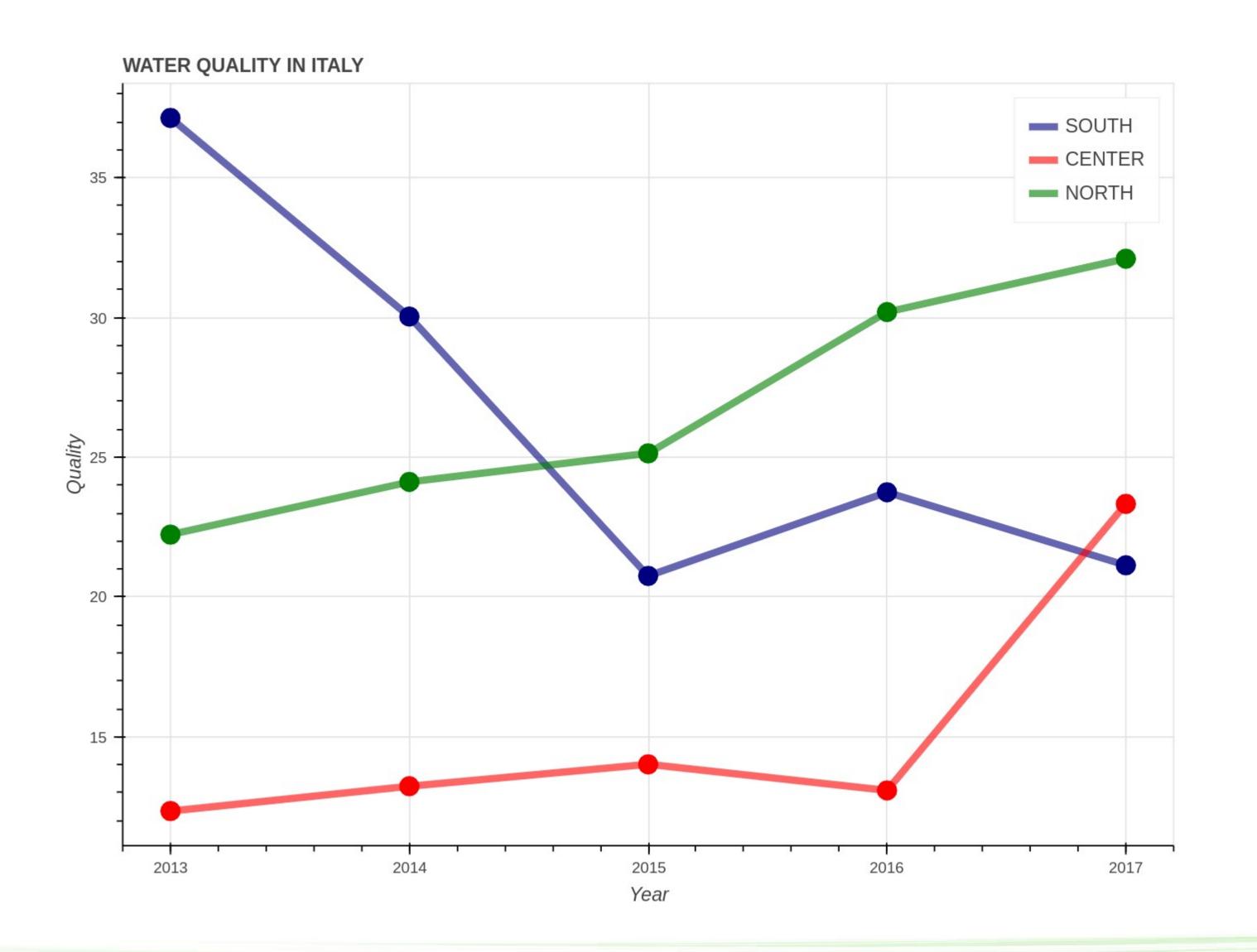
I created a simple numeric Metric for evaluating the quality of the water. It is a simple weighted average where the weights are the ratio beetween 1 and the frequency of water quality.



We have too many excellent and fews poor and sufficient.

So this metric is corrected on this problem.

### IN ITALY...







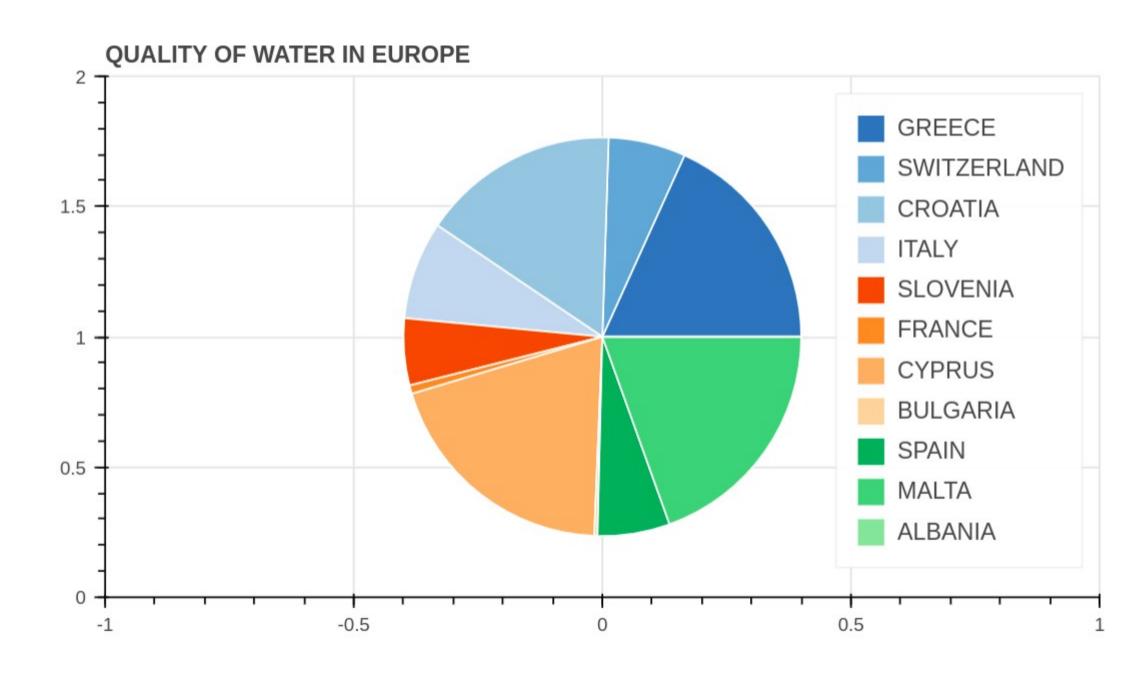
#### IN EUROPE...

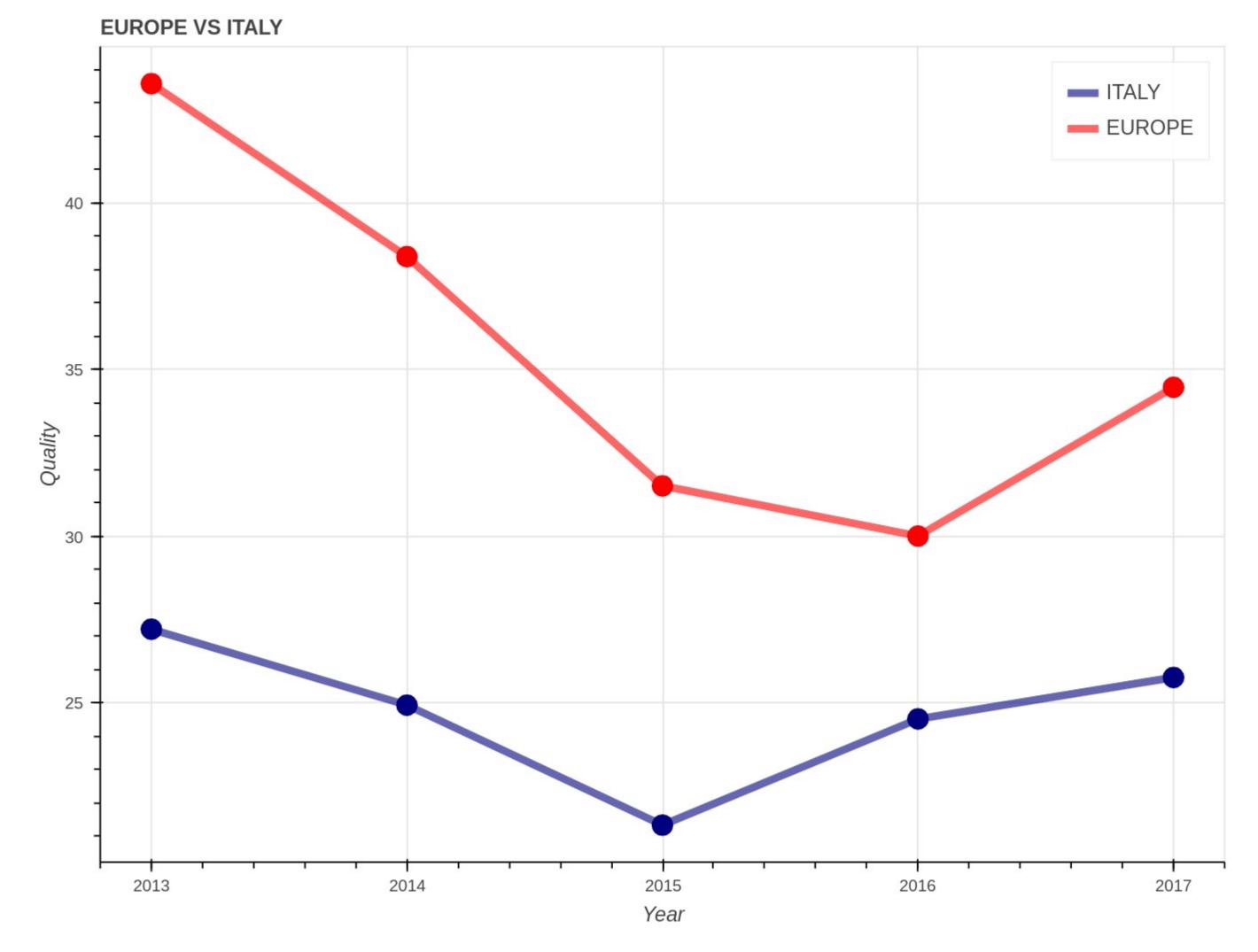
|             | y2013   | y2014    | y2015       | y2016       | y2017      | mean_quality |
|-------------|---------|----------|-------------|-------------|------------|--------------|
| ALBANIA     | NaN     | NaN      | 2.90156e-10 | 0.000158811 | 0.00128314 | 0.000481     |
| BULGARIA    | NaN     | 0.866027 | 0.422446    | 1.3063      | 0.697885   | 0.823165     |
| FRANCE      | 1.78285 | 1.81113  | 2.06754     | 2.21603     | 2.92824    | 2.161159     |
| SLOVENIA    | 46.1965 | 8.1308   | 8.32763     | 1.65191     | 20.0888    | 16.879116    |
| SPAIN       | 16.8857 | 17.2393  | 17.9552     | 19.4993     | 19.8345    | 18.282826    |
| SWITZERLAND | 57.4407 | 6.47788  | 9.90544     | 11.9772     | 11.8631    | 19.532866    |
| ITALY       | 27.2067 | 24.9293  | 21.3329     | 24.474      | 25.764     | 24.741360    |
| CROATIA     | 39.1819 | 42.4981  | 53.3818     | 55.8868     | 59.2033    | 50.030366    |
| GREECE      | 44.767  | 59.9012  | 61.0567     | 59.0865     | 58.9113    | 56.744536    |
| MALTA       | 60.7649 | 61.5552  | 59.9848     | 60.7649     | 60.7649    | 60.766924    |
| CYPRUS      | 61.5552 | 61.5552  | 61.5552     | 61.5552     | 60.9349    | 61.431129    |

There are some cases where Switzerland and Slovenia to decrease year after year.

We can see than in Europe there are three different class:

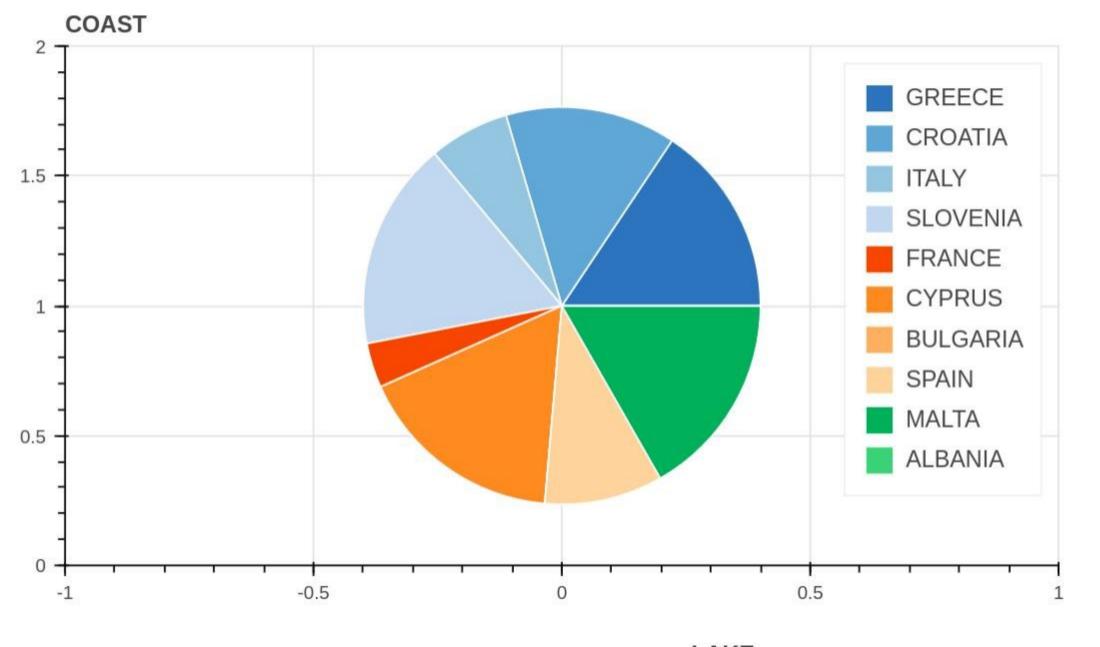
- -ALBANIA, BULGARIA and FRANCE
- -SLOVENIA, SPAIN, SWIZERLAND and ITALY
- -CROATIA, GREECE, MALTA and CYPRUS

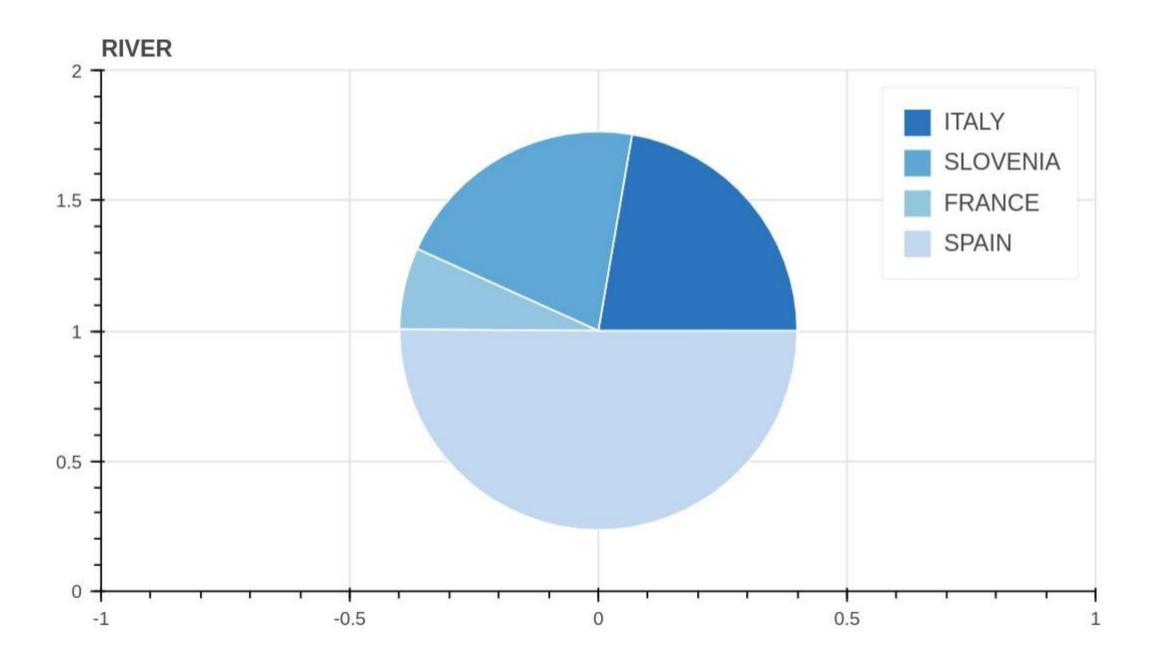


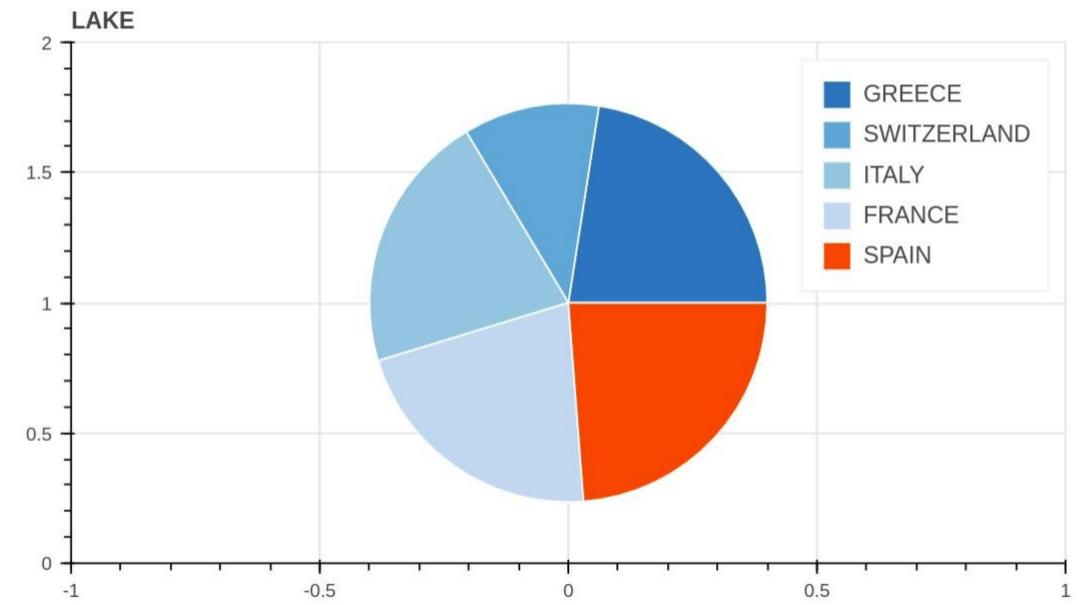


#### IN EUROPE...

- INCREASE IN QUALITY YEAR AFTER YEAR
- WE ARE CONSIDERING ANY SOURCE OF WATER:
  - RIVER
  - LAKE
  - COAST
- SO...









# THANK YOU!