CLUSTERING OF FRENCH CITIES

CLUSTERING OF FRENCH CITIES IS VALUABLE FOR GOVERNMENT

- Regional deputees cost a lot of money and their number often sparks debates

- In 2016, a reform divided by 2 the number of regions in France

- Redefining France split and merging regions was not obvious

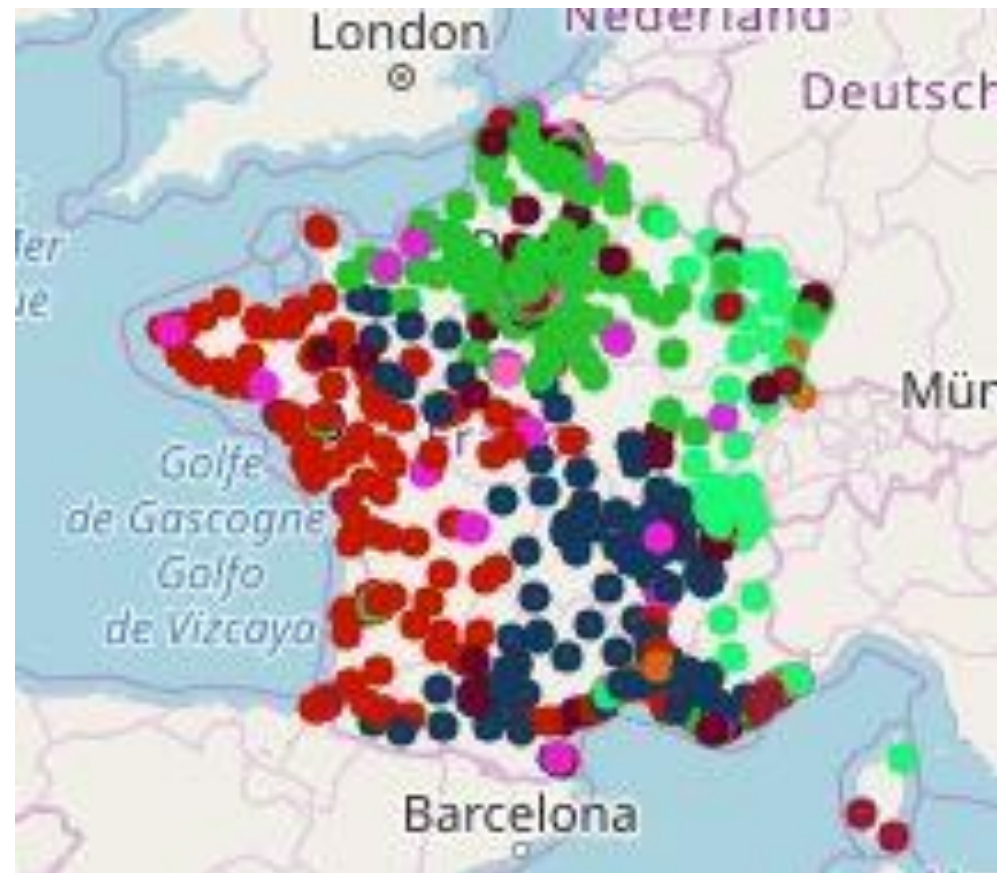- Was this done effectively ?

DATA

- Cities (Coordinates, Altitudes, Population, Density, Area) obtained from https://www.data.gouv.fr/

- Weather (temperature, humidty, wind intensity and direction) data from Openweather API : https://openweathermap.org/api

- Venues (Restaurants, Parks, Train Stations, Airports, Beaches) from Foursquare API : https://developer.foursquare.com/

CLUSTERING

- Defined 13 clusters
- Randomly initialized the centroids
- Used 72 features

RESULTS

DISCUSSION AND CONCLUSION

- Not production level ready for now

- Replace (current) weather data by climate data (i.e. historical weather data)

- Better filtering of cities required

- Fine tune feature selection and feature weighing