Number of Crimes & Venues data analysis of France

Introduction

- This article tries to find if there is a relation between venues and crime without considering the population effects in France
- Data collected in 2017
- Data collected by the commune

Data source

- Crimes et délits enregistrés par les services de gendarmerie et de police depuis 2012 https://www.data.gouv.fr/fr/datasets/crimes-et-delits-enregistres-par-les-services-de-gendarmerie-et-de-police-depuis-2012/

- Base officielle des codes postaux https://www.data.gouv.fr/fr/datasets/base-officielle-des-codes-postaux/
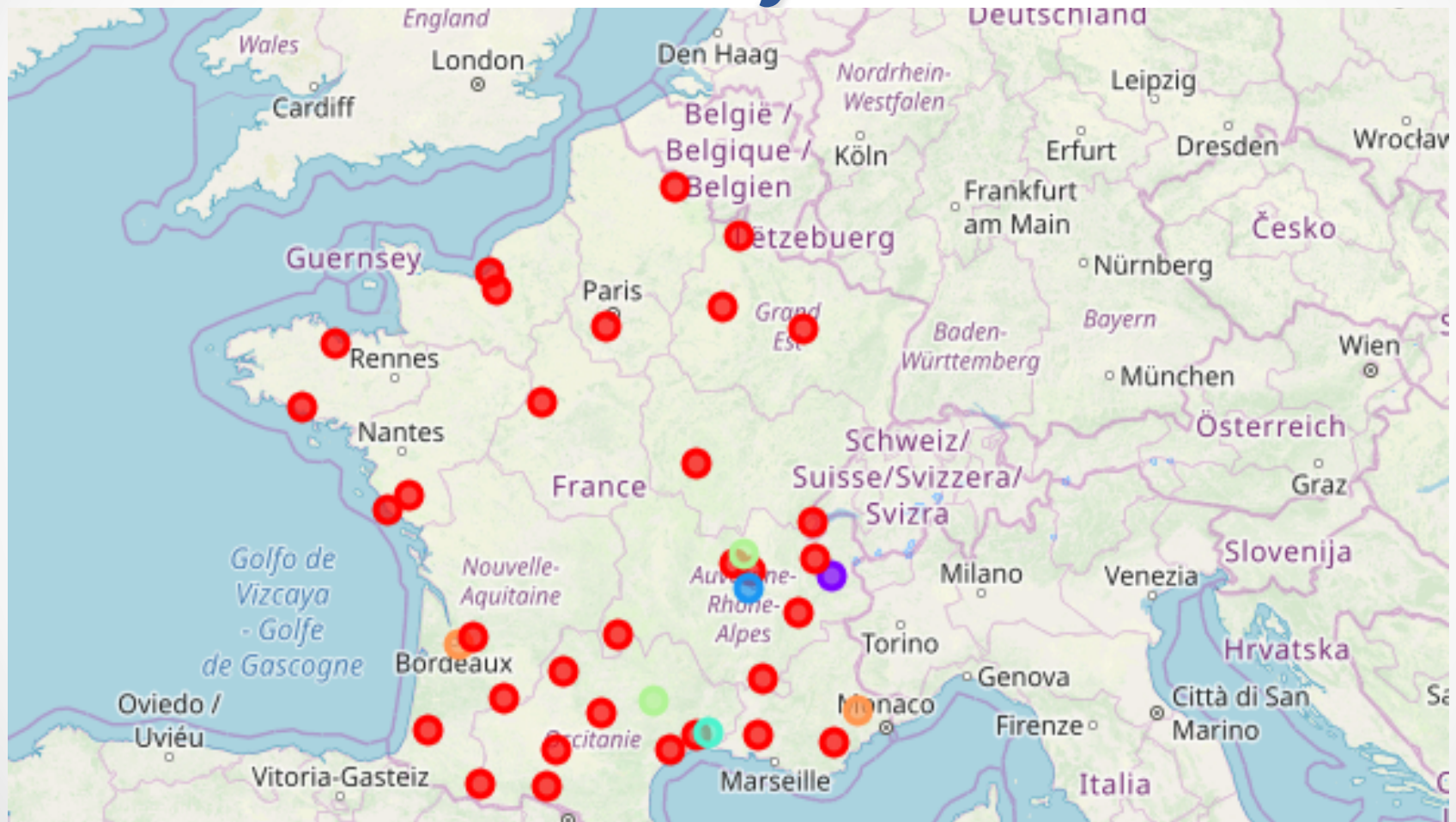
Data preparation

- Top 25 best/last in the list of number of crimes by commune
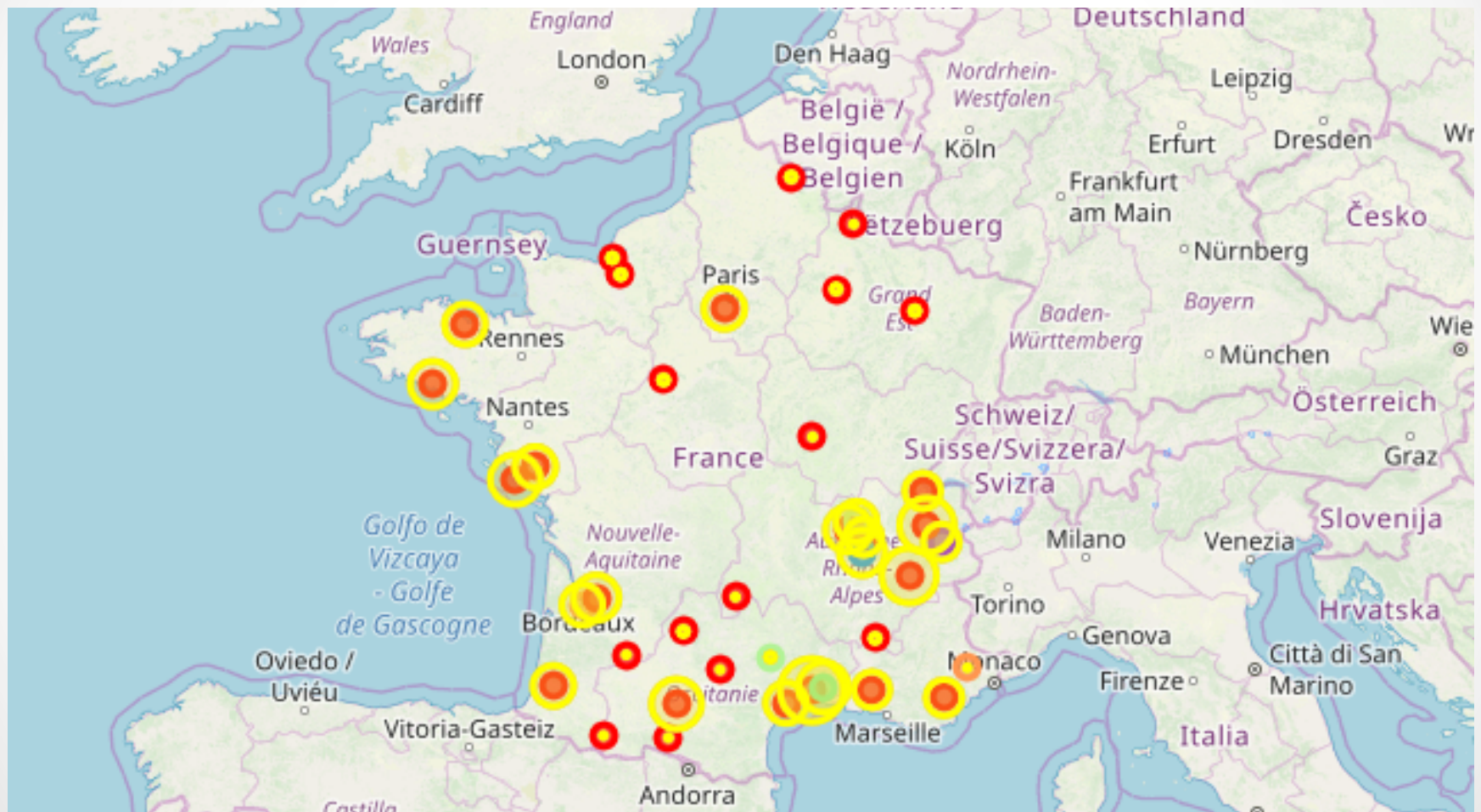- Drop several communes thinly populated

Methodology

- 1.K-means
- To cluster venues by category (with foursquare API)

- 2.Correlation coefficient
- To analyze the relation between the number of crimes and the number of venues nearb

Results
Cluster by venues

Number of Venues &Number of crimes

Correlation coefficient

	Avenu	Cluster_Lables	Total_Crime
Avenu	1.000000	-0.342901	-0.327720
Cluster_Lables	-0.342901	1.000000	0.041644
Total_Crime	-0.327720	0.041644	1.000000

Conclusion

- Non significant relation between the number of crimes et venues (number of venues and venues cluster)