Elvia Julieth Arellano Ortiz

Visualization on a 3D web map of the number of homicides of social leaders in Colombia

1. Context and choice of the subject

After the signing of the Peace Agreement in 2016, Colombia experienced an important period of stability and tranquillity that has enabled the social and economic development of a country that has been submerged in war for more than 30 years. But in a country used to violence, changes occur not only made on paper. After the end of President Juan Manuel Santos' mandate, the far right won the 2017 elections. Today is a difficult period for the fight for the defense of human rights, the number of assassinations of social leaders has increased and the policy of fear returned.

For this reason, the visualization of data related to social issues is a way of making a contribution on the subject and of feeding the historical memory of the post-war period in a country which has a strong tendency to forget.

2. The objective of the mini project

The objective is to compile open source geographic data in order to highlight the information linked to the number of murders by region in Colombia and visualize them in 3D.

The **skills** that will be mobilized are linked to data **recovery**, **manipulation** of geographic data (intersection, buffer, filter, ...), and programming in **Python** and **Javascript**.

3. The data to be used and the method used to acquire it

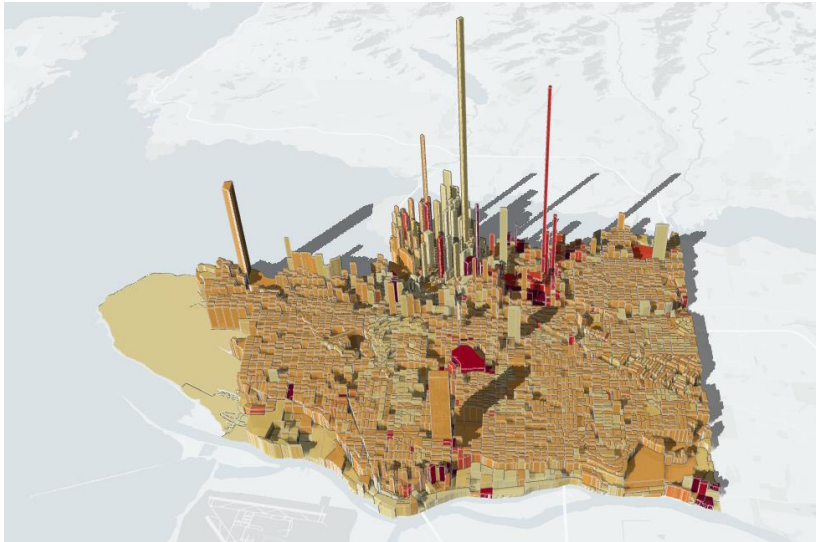| Données	Sources d'acquisition
Collection of csv files from different NGOs and own adaptation	https://somosdefensores.org/
Csv file of the Dead by socio-political violence	Colombia Open data portal (https://www.datos.gov.co/)
Administrative boundaries of the Colombian regions.	https://data.humdata.org/dataset/colombia-administrative-boundaries-levels-0-3

4. The stages of the methodological approach

The process is developed with the teacher's supervision.

Tasks	Jan	Feb	Mar	Apr	May	Jun
Collection of data	▨	▨				
Creation of a **Github** project		▨				
Development of the **Python** script to transform and aggregate data		▨	▨			
Creation of a Geojson file in python			▨			
Creation of a 3D WebMap using the deck.gl library (html-css-js)			▨	▨	▨	

Master 2 TGAE   **Elvia Julieth Arellano Ortiz**

Visualization on a 3D web map of the number of   *February 2020*
homicides of social leaders in Colombia   Mini-Project
                                                                Pierre Bails

example of a resulting
web map

Source : deck.gl

5. The difficulties already faced and those to be expected.

The difficulties already faced	The difficulties to be expected
- Several programming languages to master and use at the same time - Slow personal learning curve	- Time to progress on the mini project in parallel with the final internship

Methodological scheme