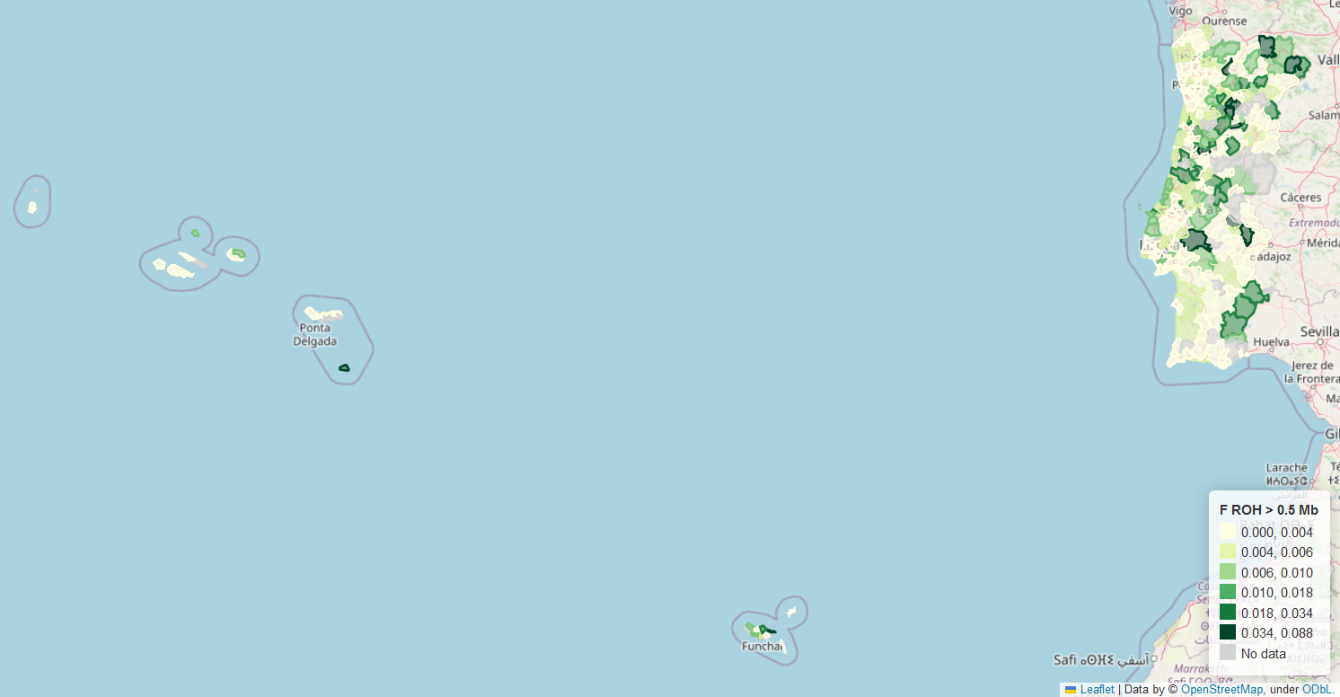
**Interactive Maps**

The interactive maps were created using Python package GeoPandas, a package used to manipulate geospatial data and generate maps. The packages Matplotlib and MapClassify are used internally by GeoPandas for styling and data classification, and Folium is the package used to render the interactive map.

Interactive maps offer an engaging way to visualize data, allowing users to zoom in and out, hover over colored areas representing municipalities, and view a pop-up legend displaying the municipality's name. To access more detailed information about a specific municipality, users can right-click on it. A pop-up legend will appear, displaying the municipality's name, area, population, ratio, and mean FROH per municipality.

Three interactive maps were created, one for each FROH calculated for ROH with size greater than 0.5, 1.5 and 5 Mb. The interactive map corresponding to the FROH > 0.5 Mb geographical distribution is in Figure S3-1.

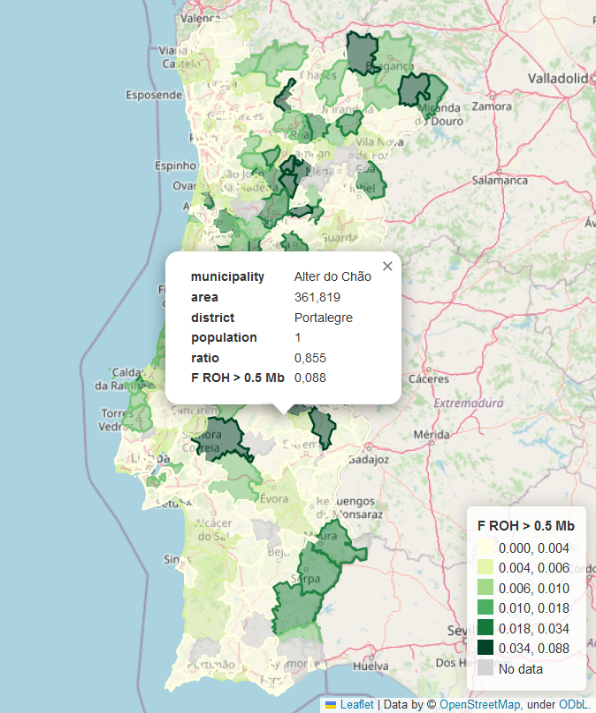
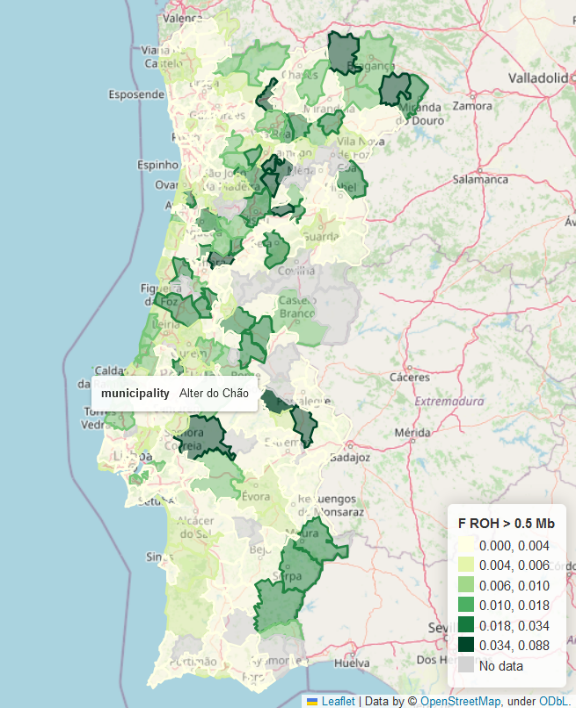


**Figure S3-1.** Interactive map of Portugal with FROH > 0.5 Mb geographical distribution per municipality.

Figure S3-2A is an example of how to use the interactive maps, showing the view when the user passes the cursor over the municipality and Figure S3-2B showing the view when the user clicks on the municipality.

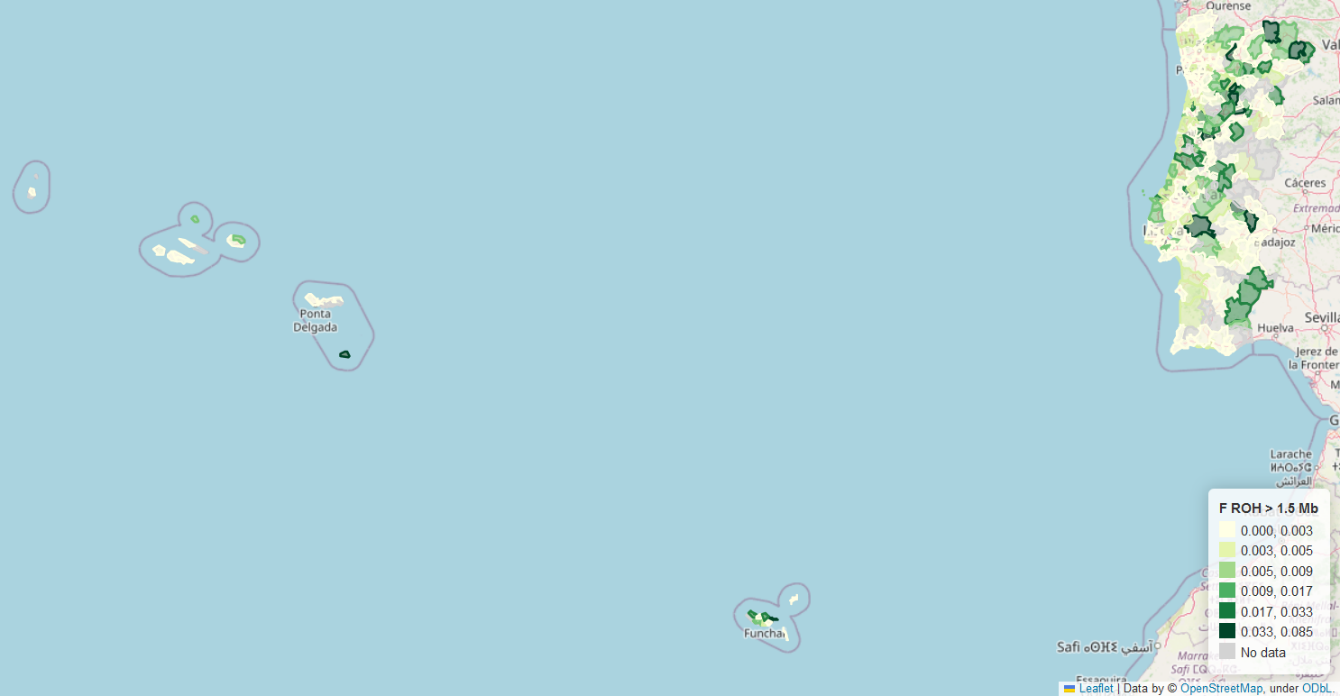
B

A



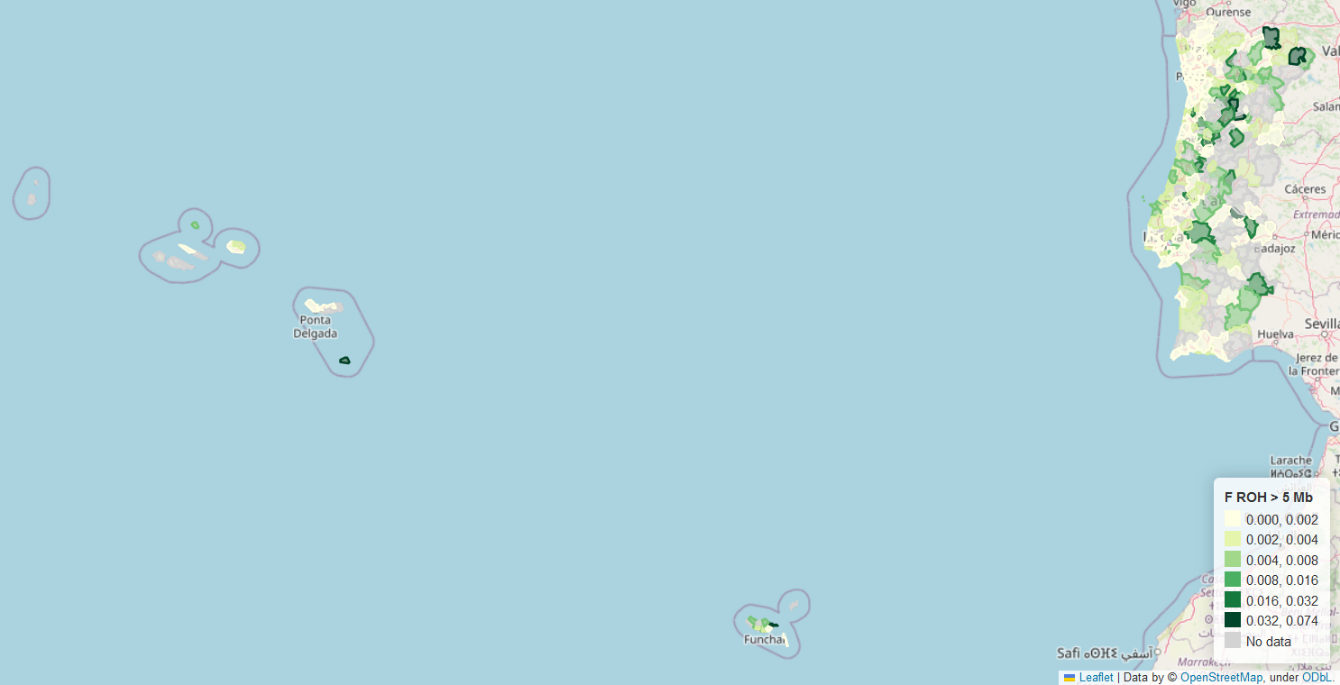
**Figure S3-2.** A-Example of Alter do Chão municipality general legend and B specific legend with municipality’s name, respective area, population, ratio and population density.

The interactive map corresponding to the FROH > 1.5 Mb geographical distribution is presented in Figure S3-3.



**Figure S3-3.** Interactive map of Portugal with FROH > 1.5 Mb geographical distribution per municipality.

The interactive map corresponding to the FROH > 5 Mb geographical distribution is presented in Figure S3-4.

**

**Figure S3-4.** Interactive map of Portugal with FROH > 5 Mb geographical distribution per municipality*.*