



CAROLINA EZEQUIEL

ABOUT ME

I am an Environmental Management student focused on Geoprocessing, Spatial Analysis, and Environmental Data Visualization. I have hands-on experience using QGIS, Blender, and visualization tools to transform geospatial data into analytical maps, 2D/2.5D/3D models, and clear visual materials to support decision-making.

My projects include Digital Elevation Models (DEM), slope analysis, contour lines, NDVI, land use and land cover mapping (MapBiomas), thematic maps, and exploratory dashboards. I have a strong interest in combining environmental analysis with 3D visualization, using Blender to create more intuitive and communicative spatial representations.

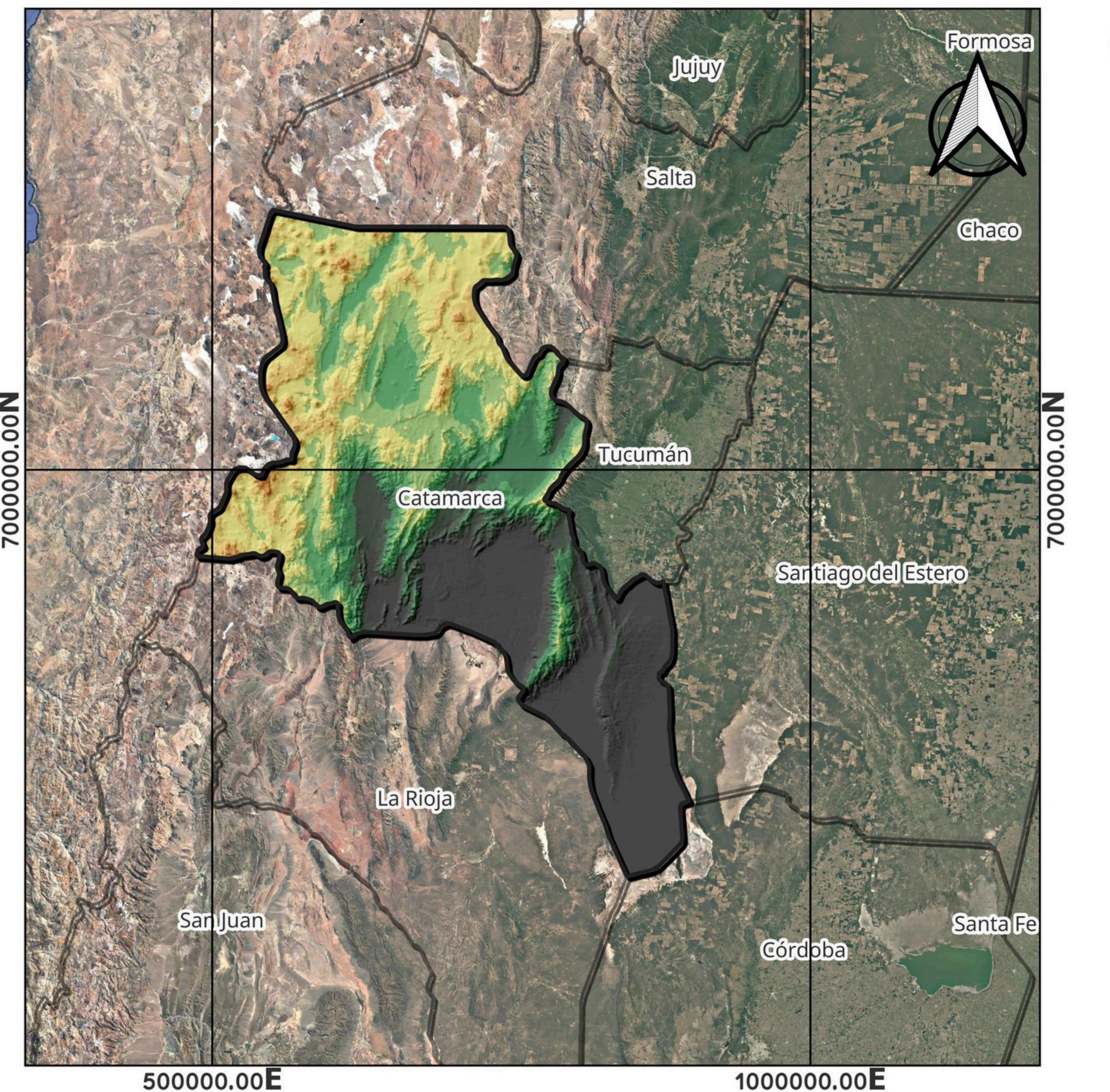
I am currently starting my studies in Python for GIS (PyGIS), focusing on process automation, raster and vector data handling, and improving efficiency in geospatial workflows.

I am seeking remote or international opportunities as a Junior GIS / Environmental GIS Analyst, where I can apply my skills, continue learning, and contribute to projects related to sustainability, land-use planning, and environmental analysis.

Languages:

- Portuguese: Native
- English: Intermediate
- Spanish: Basic (working proficiency)

HPYSOMETRIC MAP

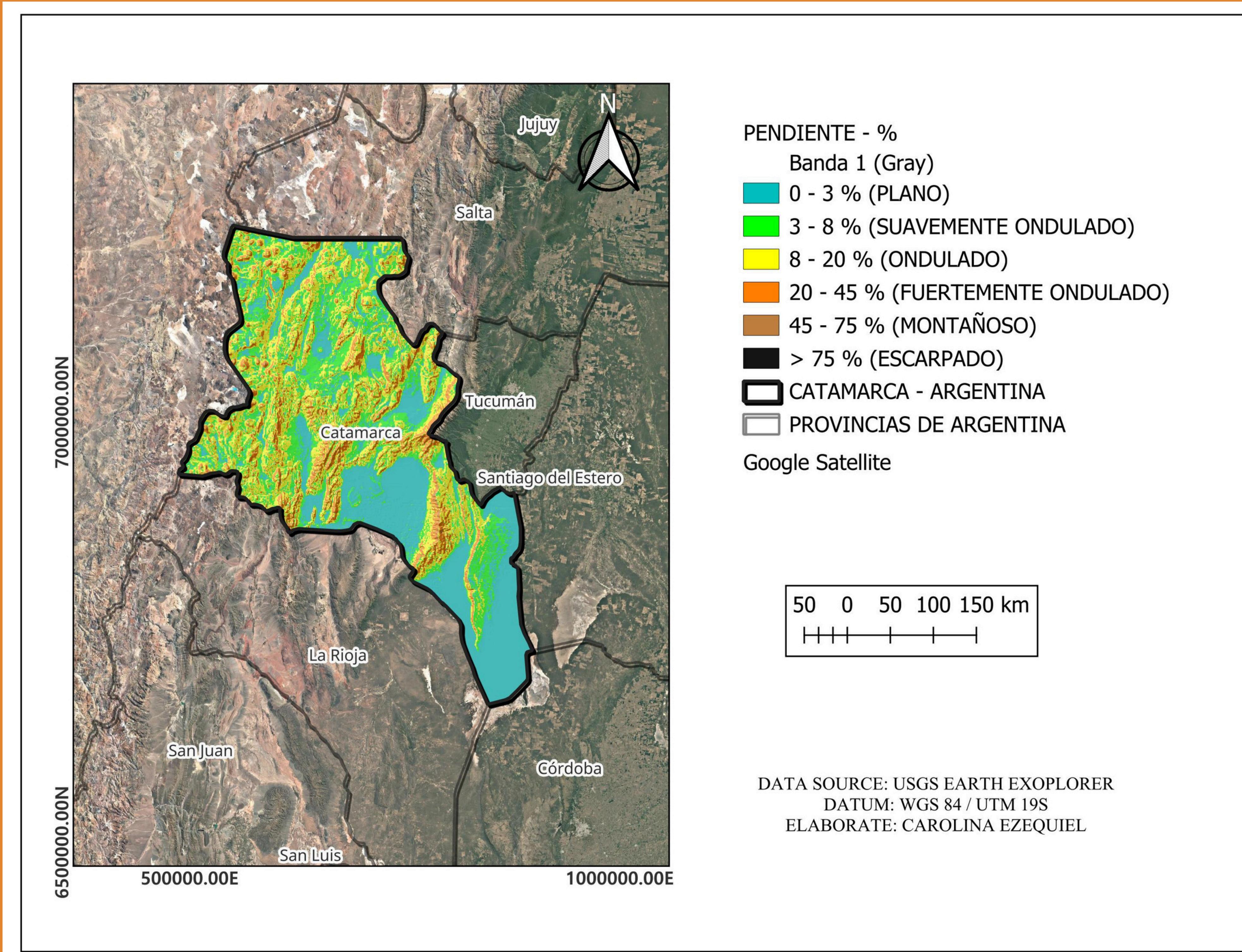


MAPA HIPSOMÉTRICO -
CATAMARCA ARGENTINA

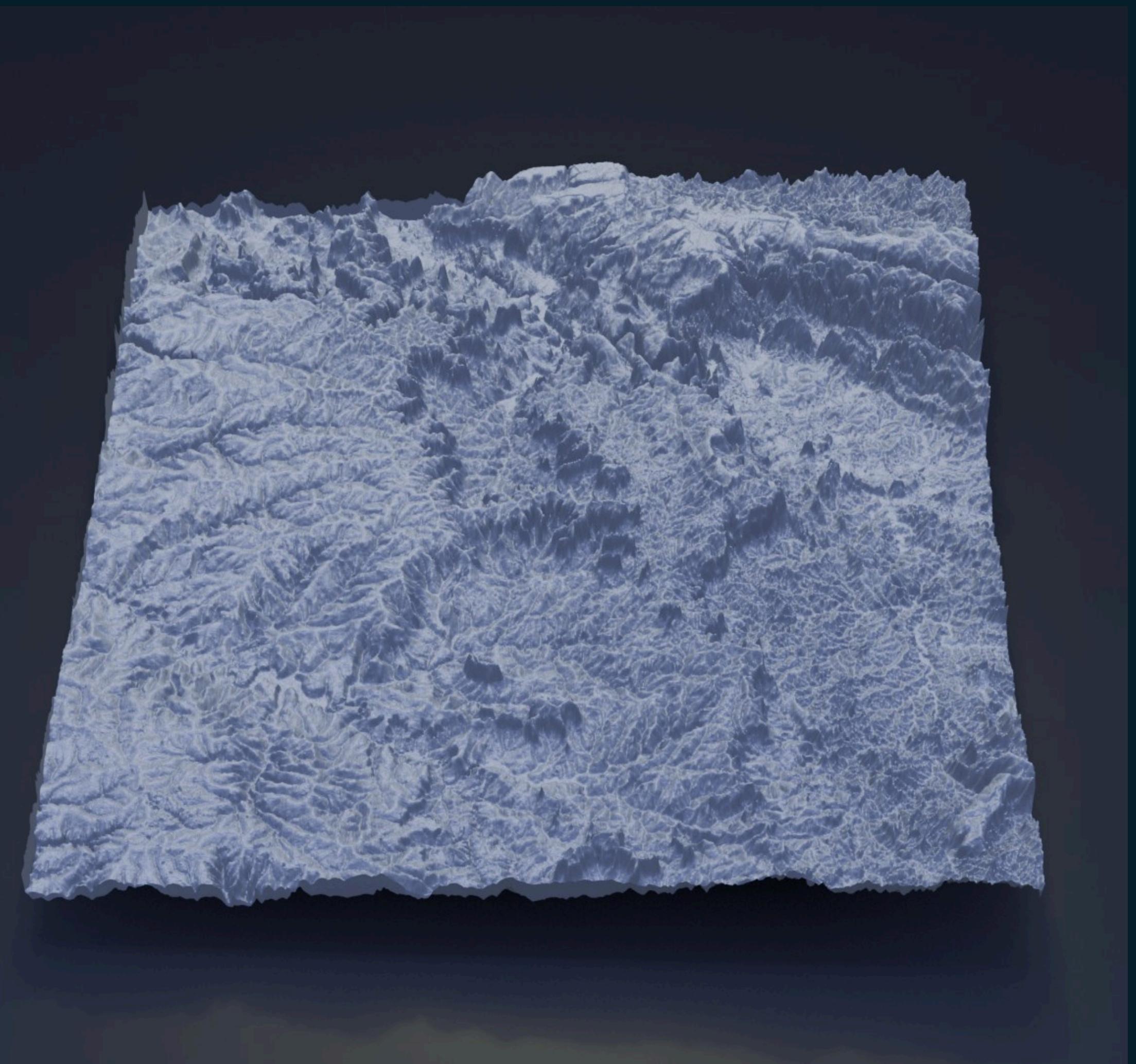
CATAMARCA - ARGENTINA

This hypsometric map represents the elevation variation of Catamarca Province, Argentina, highlighting the strong contrast between high-altitude Andean regions and lower plains. The map emphasizes the complex topography of the area, which plays a key role in climate patterns, land use, and environmental dynamics.

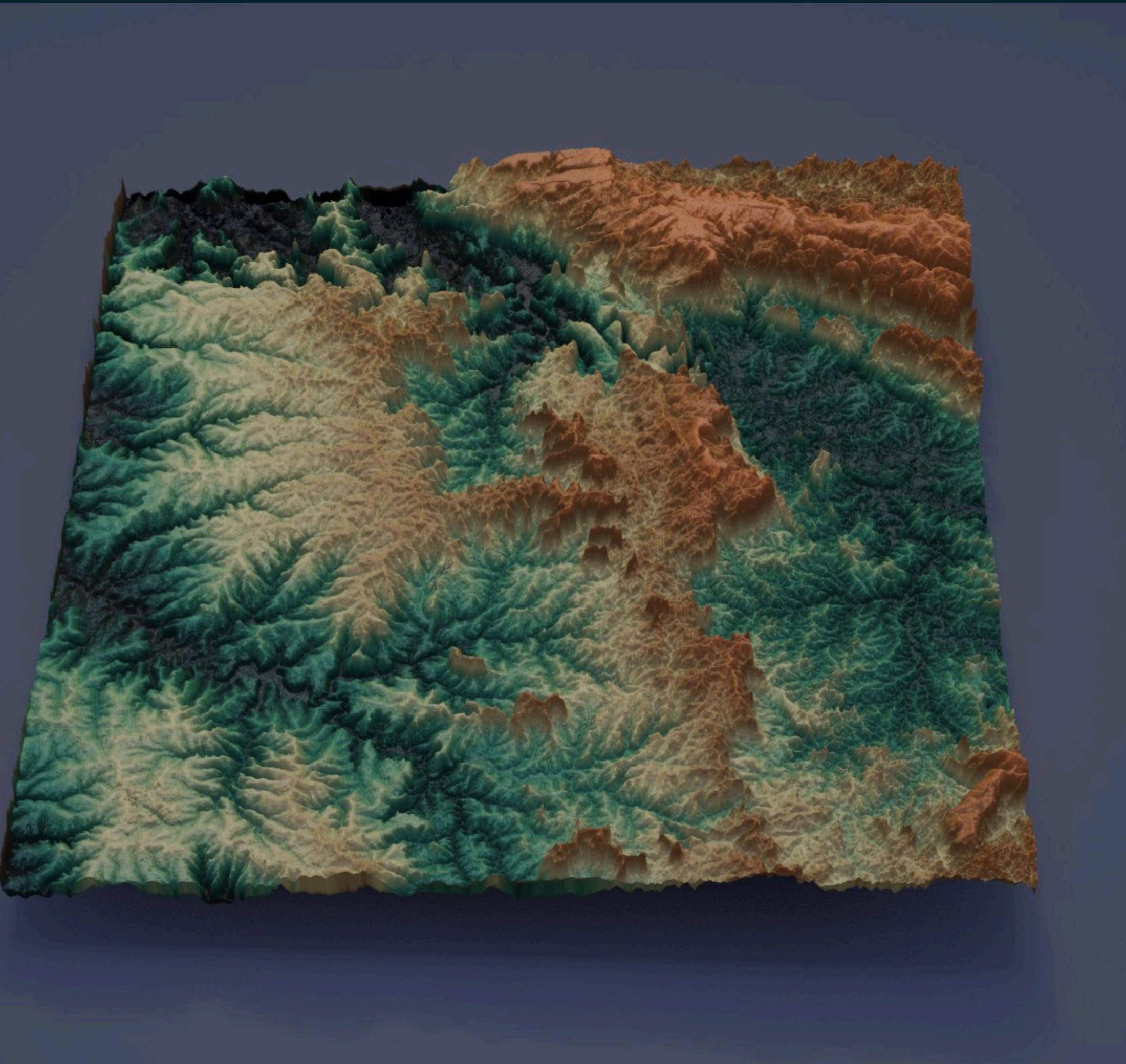
SLOPE MAP



This slope map illustrates the spatial distribution of terrain steepness in Catamarca, Argentina. Steeper slopes are concentrated in the mountainous western sector, while gentler slopes dominate the eastern lowlands, providing important insights for land use planning, environmental analysis, and infrastructure development.



3D VISUALIZATION - FRANCA SP (BRAZIL)



This 3D terrain visualization represents the topography of Franca, São Paulo, Brazil, generated from a Digital Elevation Model (DEM). The model enhances the perception of relief through vertical exaggeration, supporting a clearer understanding of elevation patterns and terrain morphology for visual analysis and geographic communication.



PROMPT ON GITHUB: <https://github.com/carolezeq-Analist>

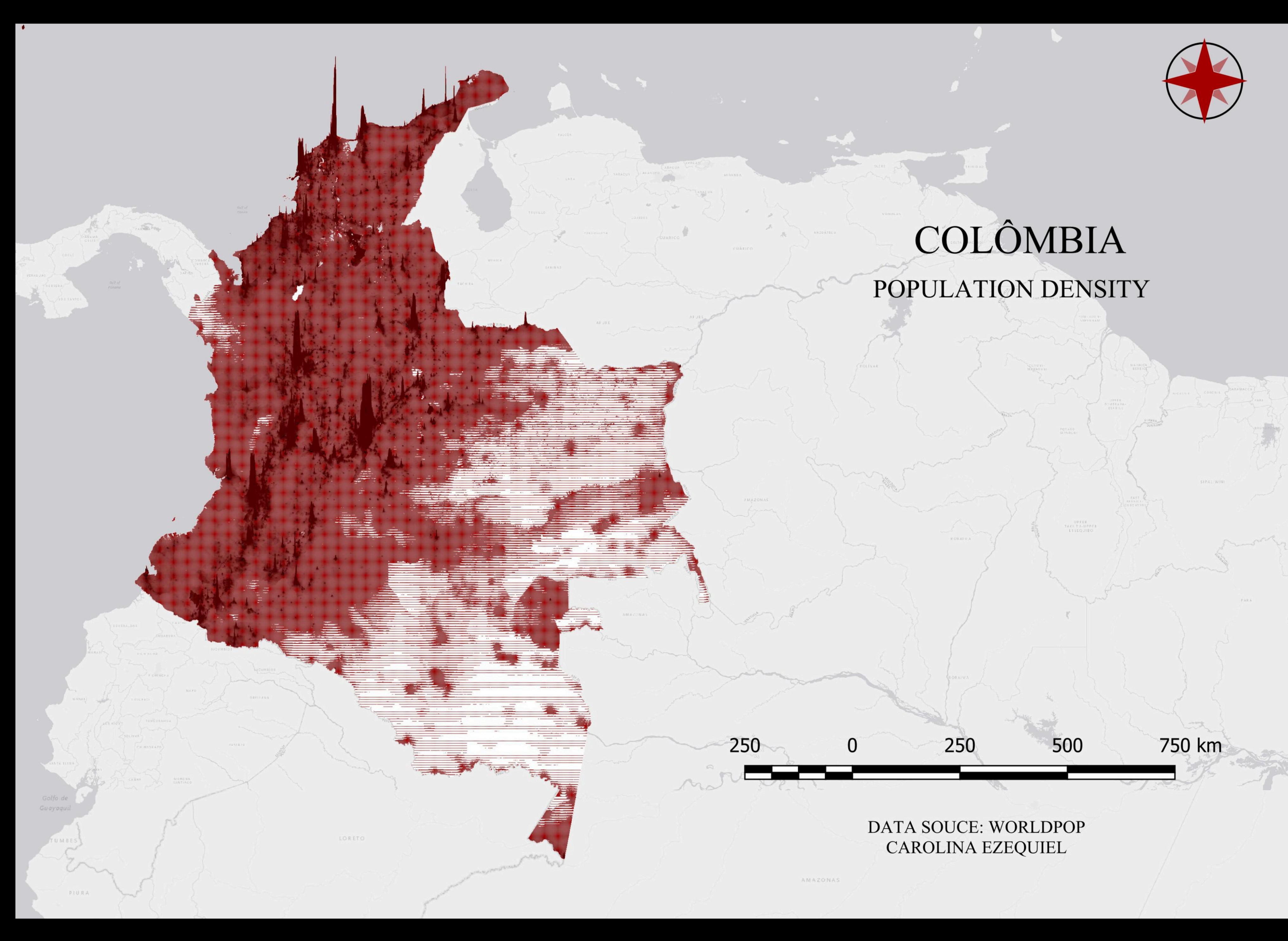
HOKKAIDO - JAPAN

In this project, I used the Python language to create a generative art piece based on real geographic data from the island of Hokkaido, Japan. The goal was to transform topographic coordinates into a minimalist and elegant visual representation, known as a Ridge Map. To arrive at the final result, the workflow involved: I used the `ridge_map` library to retrieve elevation data from NASA (SRTM) using a specific bounding box for the Hokkaido region.

HOKKAIDO - JAPAN 3D



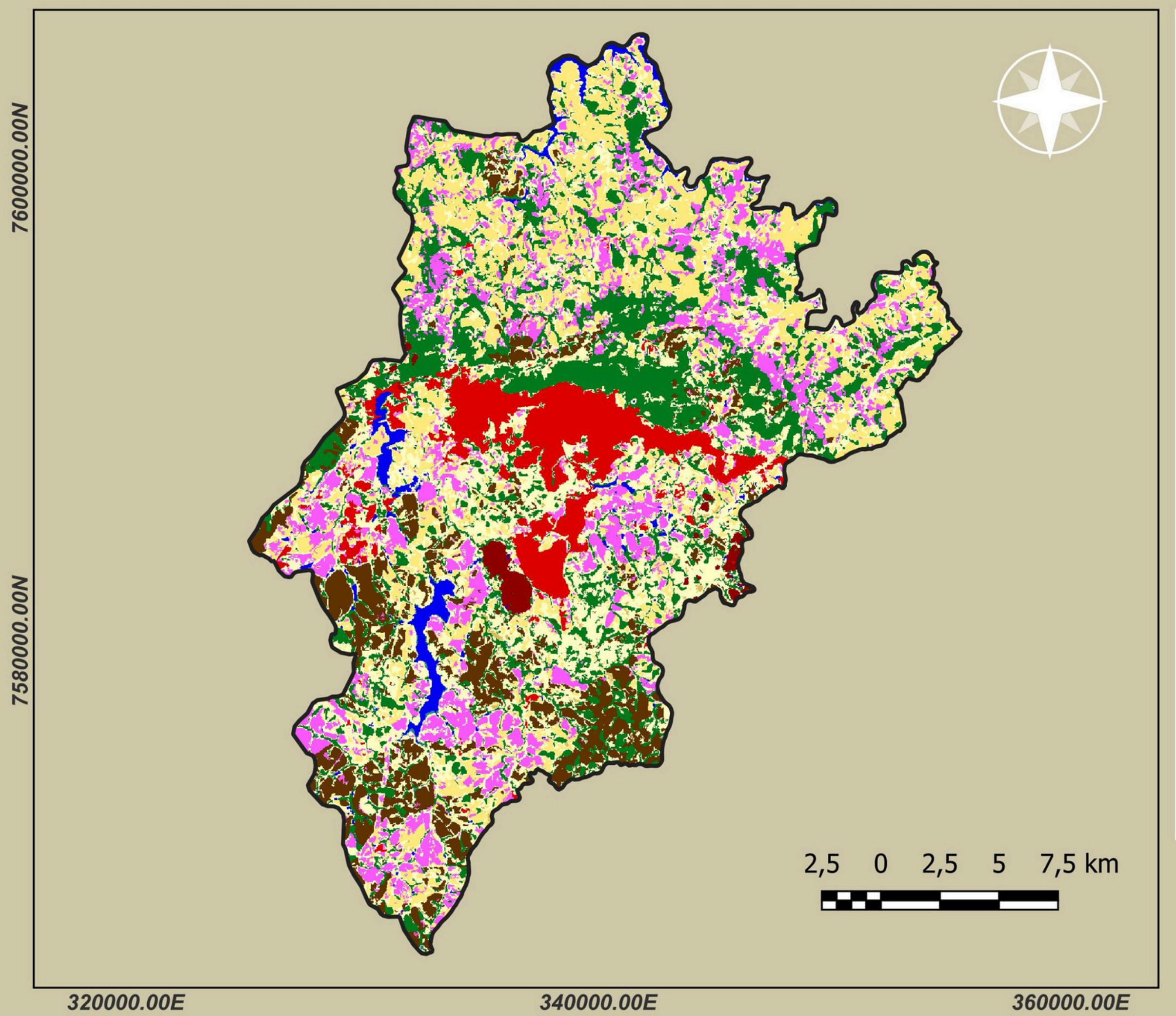
This project presents a 3D terrain visualization of Hokkaido, Japan, developed using DEM data from the USGS. The elevation model was clipped to the Hokkaido boundary, exported as a PNG, and rendered in Blender to enhance terrain depth and spatial perception for visual analysis.



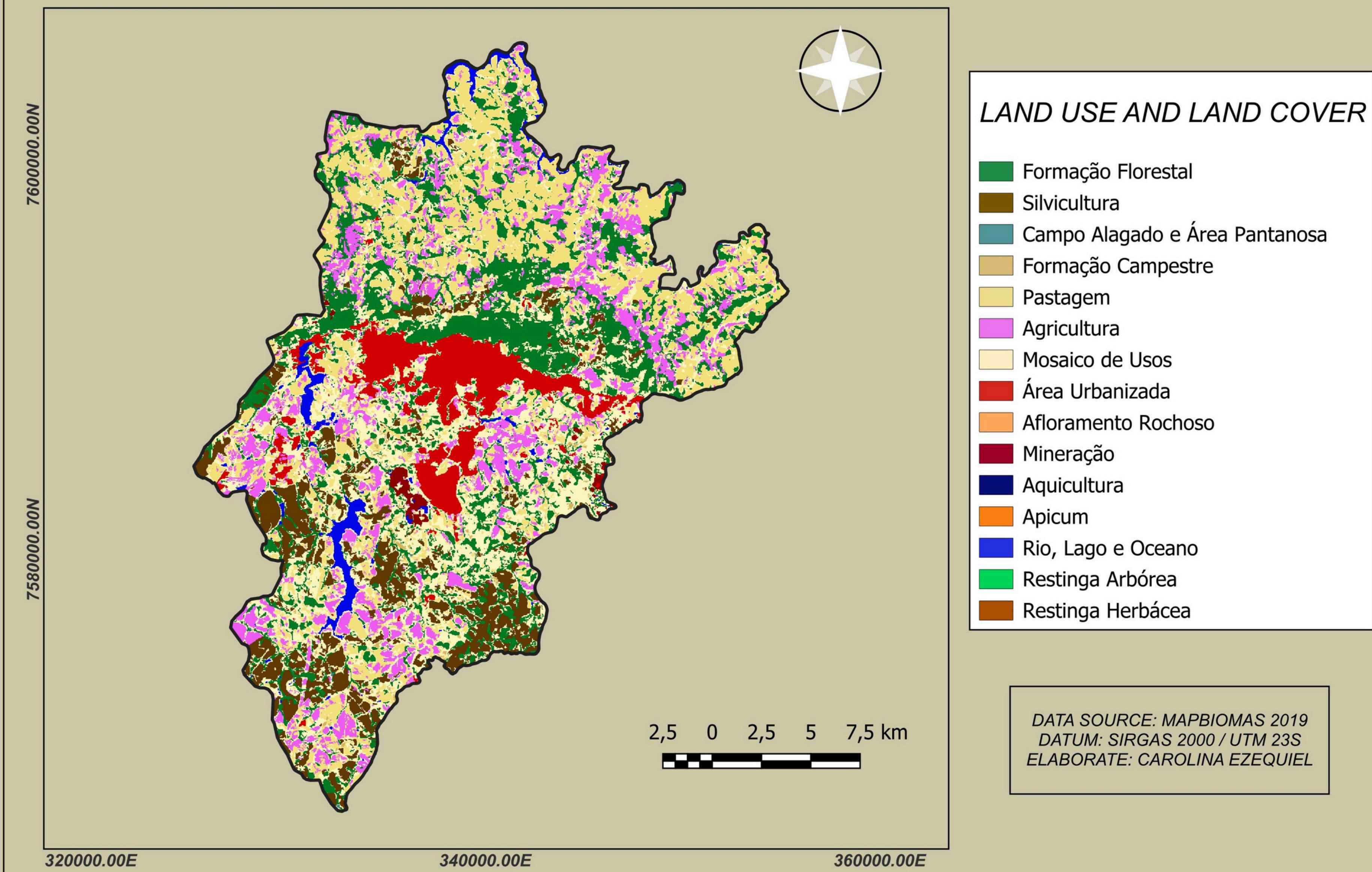
COLOMBIA - DENSITY POPULATION

This 2.5D map presents a spatial visualization of Colombia combining thematic data with terrain representation. By integrating elevation-based relief with cartographic layers, the map enhances spatial perception while preserving analytical clarity, supporting the interpretation of geographic patterns across the country.

TERRAIN ANALYSIS 2024 - POÇOS DE CALDAS (MINAS GERAIS, BRAZIL)



TERRAIN ANALYSIS 2019 - POÇOS DE CALDAS (MINAS GERAIS, BRAZIL)

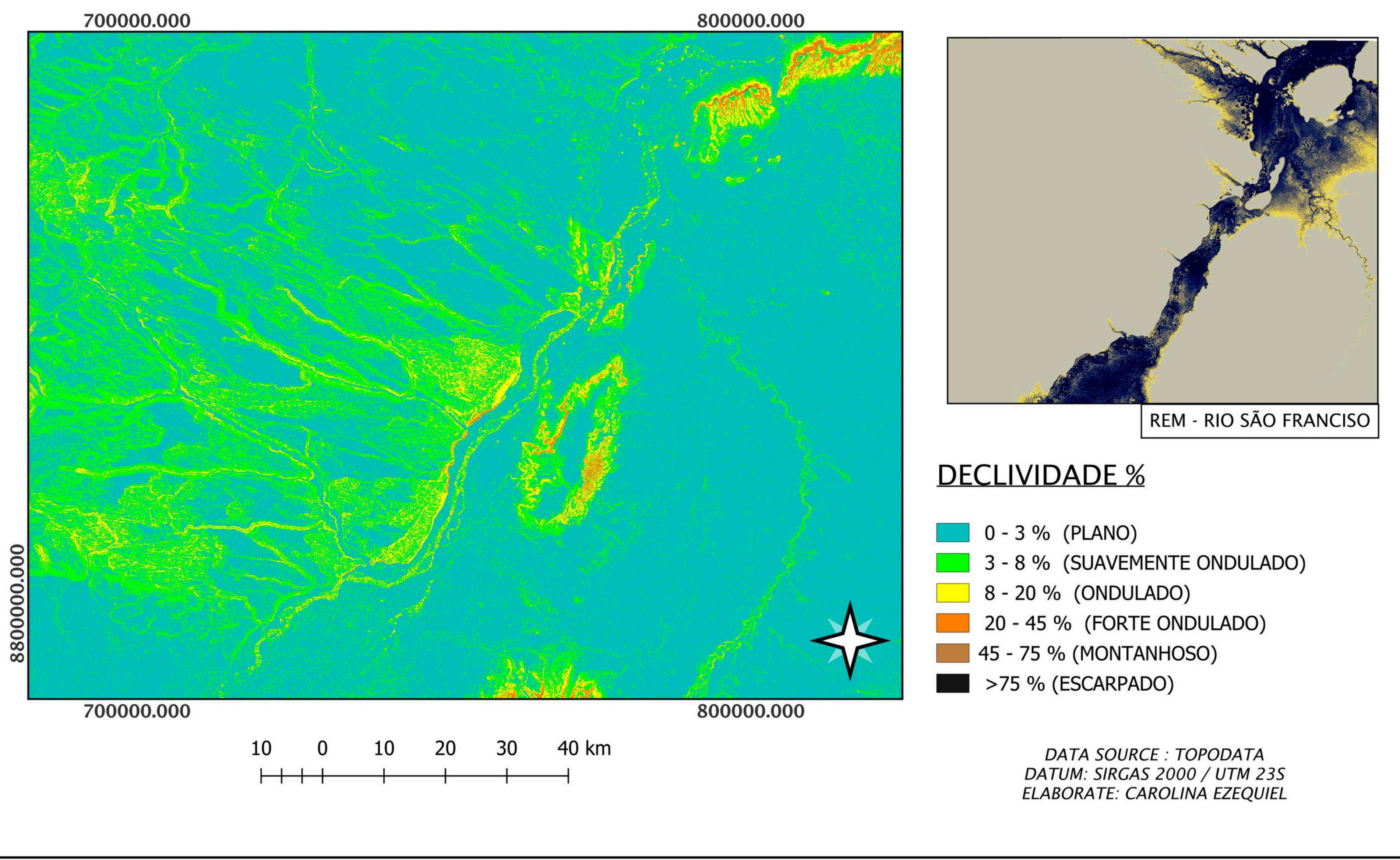


Land use and land cover change analysis in Poços de Caldas (2019–2024) based on MapBiomass data.

**Demonstrative 3D visualization of a
building extruded from 2D data and
positioned over a Digital Elevation Model
(DEM) of Varginha.**



DECLIVIDADE - XIQUE XIQUE (BA) | RIO SÃO FRANCISCO



XIQUE XIQUE BAHIA (BRAZIL).

Slope Analysis – Xique-Xique, Bahia (Brazil)

Slope map of the Xique-Xique region (Bahia, Brazil), generated from a Digital Elevation Model (DEM) and enhanced with a Relief Elevation Model (REM) to improve terrain visualization. The map highlights variations in terrain inclination, supporting environmental analysis, land-use planning, and geomorphological interpretation in a predominantly low-relief and gently undulating landscape.

WORK WITH ME

 GITHUB: <https://github.com/carolezeq-Analist>

