



## Reduce inequality within and among countries

# 10 REDUCED INEQUALITIES

## THE GLOBAL GOALS For Sustainable Development

### Target

This goal calls for action to reduce inequalities within and among countries. Inequalities can have a strong geographic component and maps are a powerful tool to understand factors and plan measures to address such issues.

### Indicator

A variation on the measure of income inequality by offering open data, open source software, open standards and open education.

Maps  
should be  
accessible  
for all



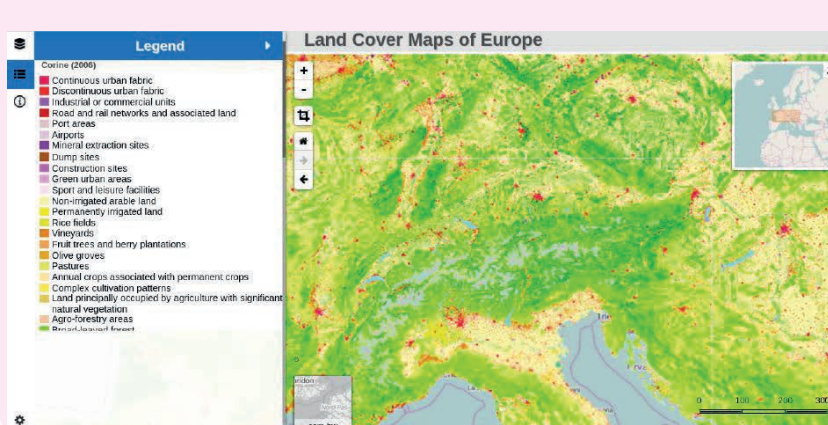
### GEOLab IN ACTION



GEOLab is actively collaborating with the Humanitarian OpenStreetMap Team (HOT) and the Missing Maps project to organize and run humanitarian mapathons, such as the mapathon after Nepal's earthquake in April 2015. A world record mapathon with more than two hundred 10 year old children was held in March 2016.



A Volunteered Geographic Information (VGI) collaborative platform named PoliCrowd has been developed since 2013. Based on NASA World Wind virtual globe, it is a multidimensional and multithematic platform to organize, visualize and collaboratively enrich VGI collected through mobile devices.



GeoLAB is also involved in teaching and research using Open Source platforms, and organizing FOSS4G events.

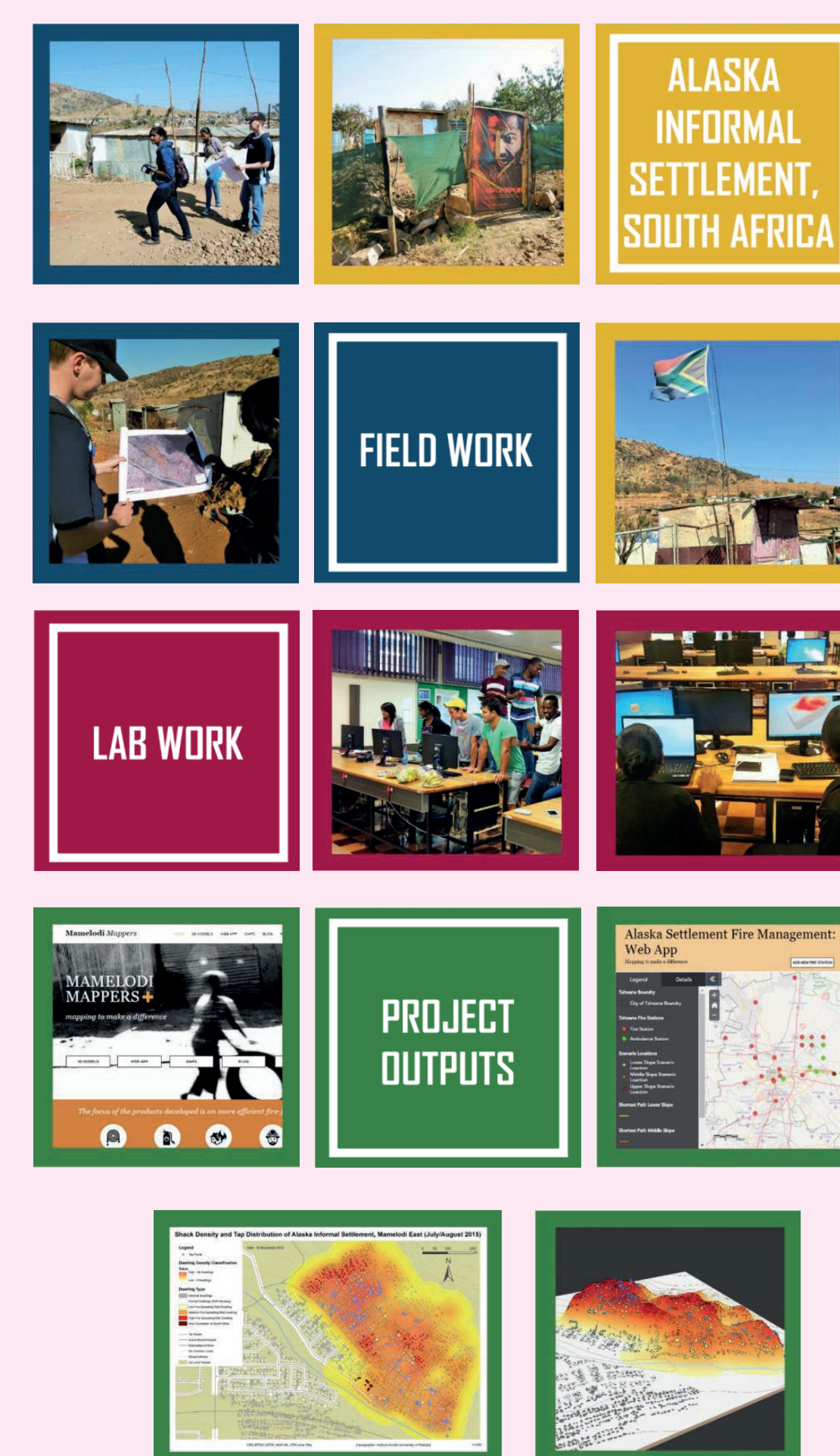
GEOLab - Geomatics and Earth Observation laboratory, Politecnico di Milano, Italy

### VIVA GIS! EMPOWERMENT THROUGH MAPPING

In 2015, the University of Pretoria partnered with the Viva Foundation, in the Alaska informal settlement in the City of Tshwane, to start a project that aimed to ultimately empower the settlement. The project was driven by the final year geoinformatics students in the CGIS.

The first phase was the mapping of the settlement. Data such as dwelling numbers, location of taps and point of interest and footpaths were captured.

Four projects were identified to implement a web GIS solution: Fire safety and Management, Health Care, Service Delivery and Security and Surface Runoff Risk Zones.

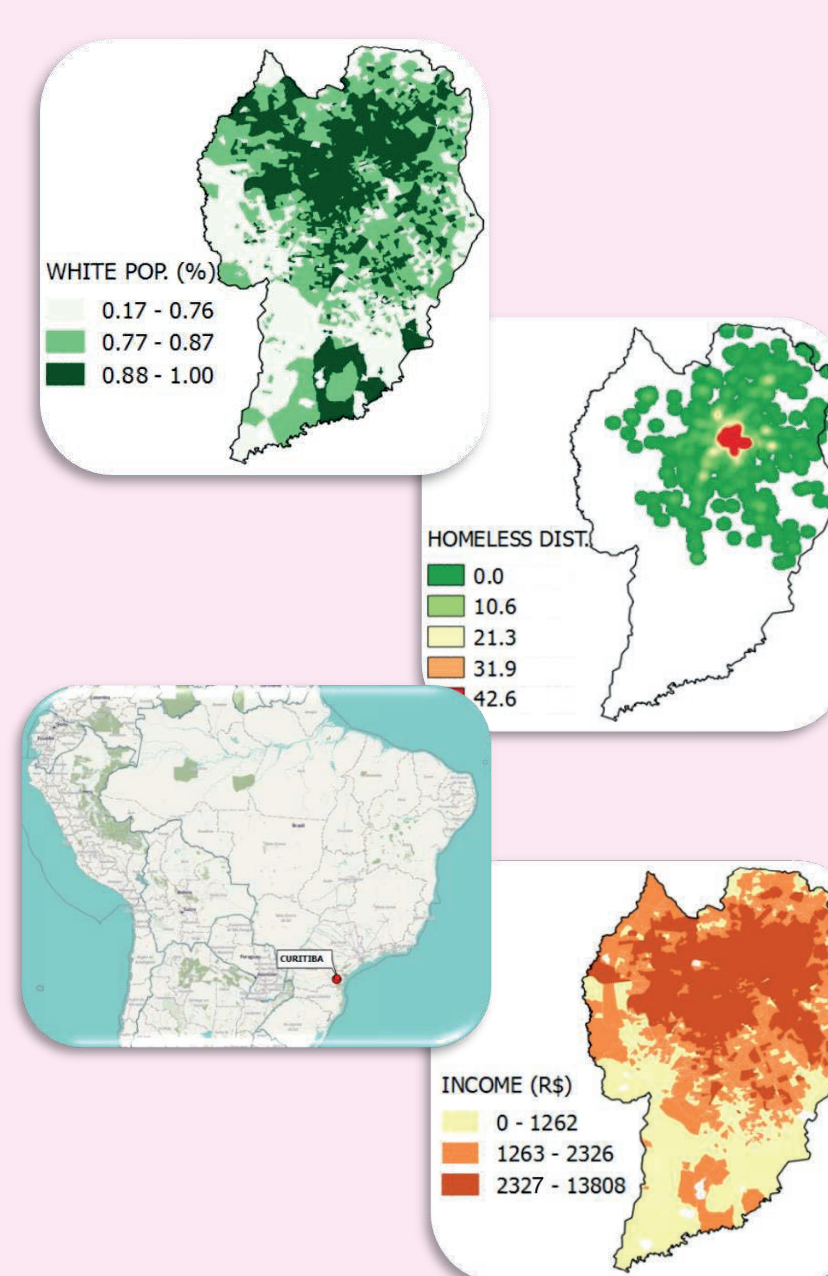


Centre for Geoinformation Science (CGIS), University of Pretoria, South Africa

### LABGEOLIVRE - MAPPING INEQUALITY IN BRAZIL



Source: Bem Paraná e Gazeta do Povo



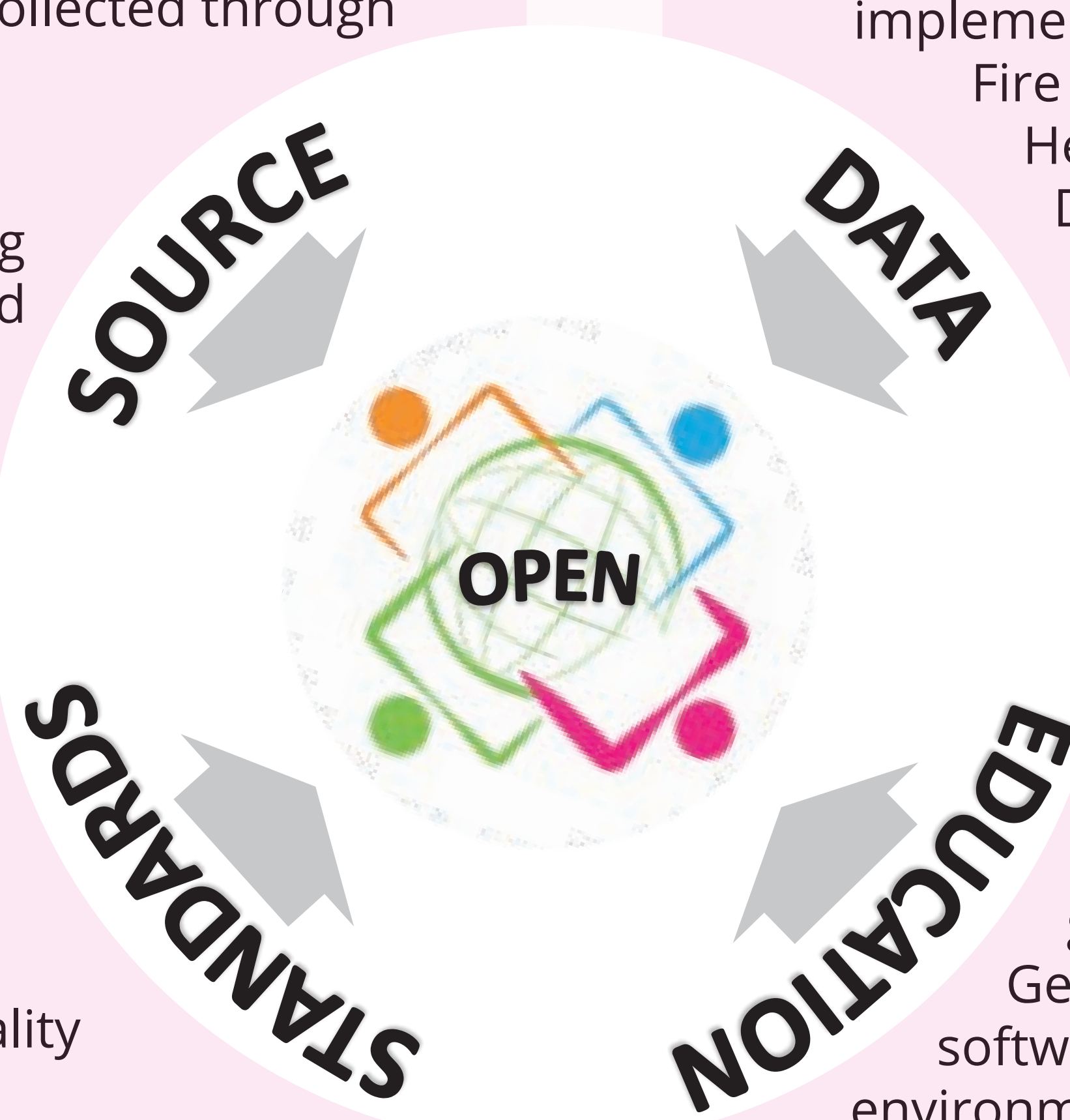
Brazil is one of the countries with the highest economic and social inequality levels.

Labgeolivres has been promoting mapathons to improve the use of VGI to supply data where it is not available. Additionally, the group develops Open Source solutions, conducts research and creates applications such as the study: Mapping Inequality in Curitiba, Brazil.

The maps show the spatial distribution of income, race and homeless population in Curitiba.

This is an example of mapping the SDG indicator:  
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Laboratorio Geoespacial Livre - UFPR, Brazil



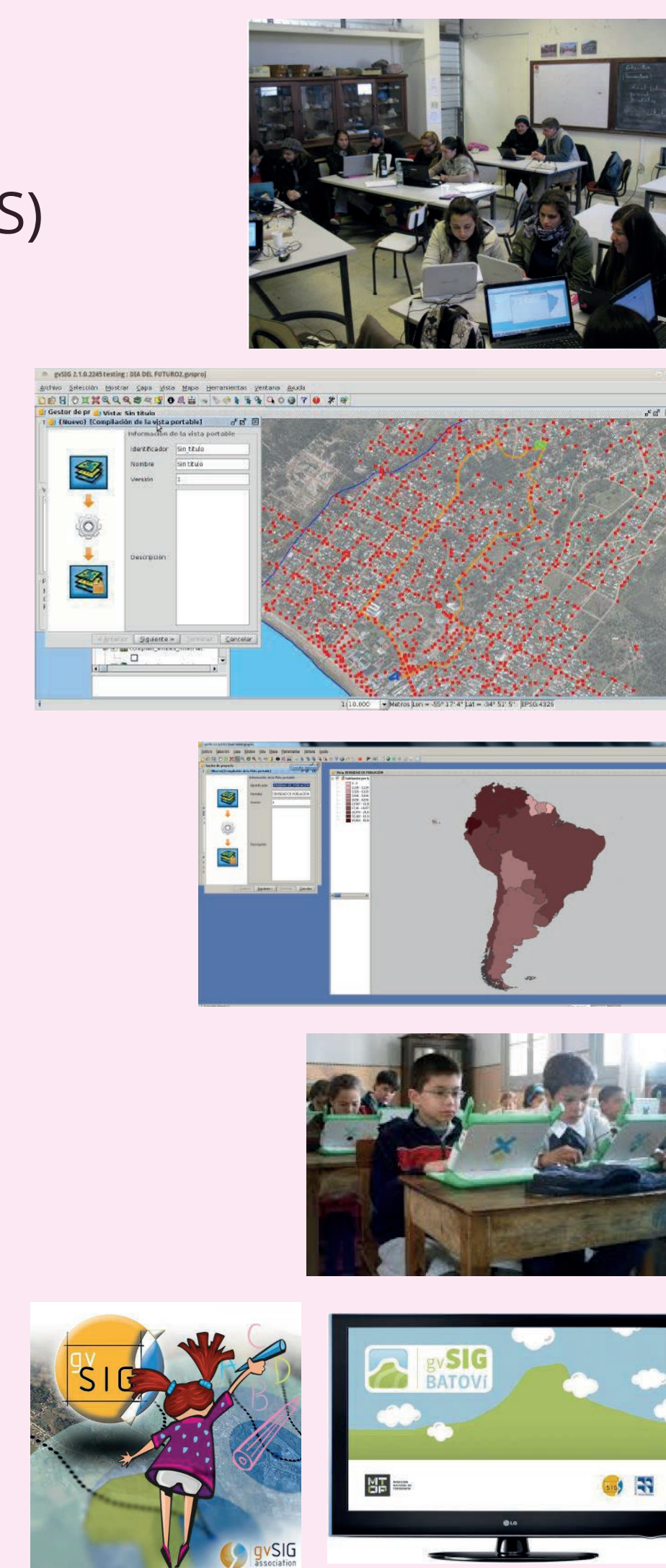
### GVSIG BATOVÍ

gvSIG Batoví is an open Geographic Information System (GIS) software tool applied to educational environments through which Primary and Secondary students can acquire knowledge of geography using laptops through didactic and interactive information. Source: Bem

Primary and Secondary students can make their own thematic maps

Knowledge of geography in an attractive, motivating and interactive environment

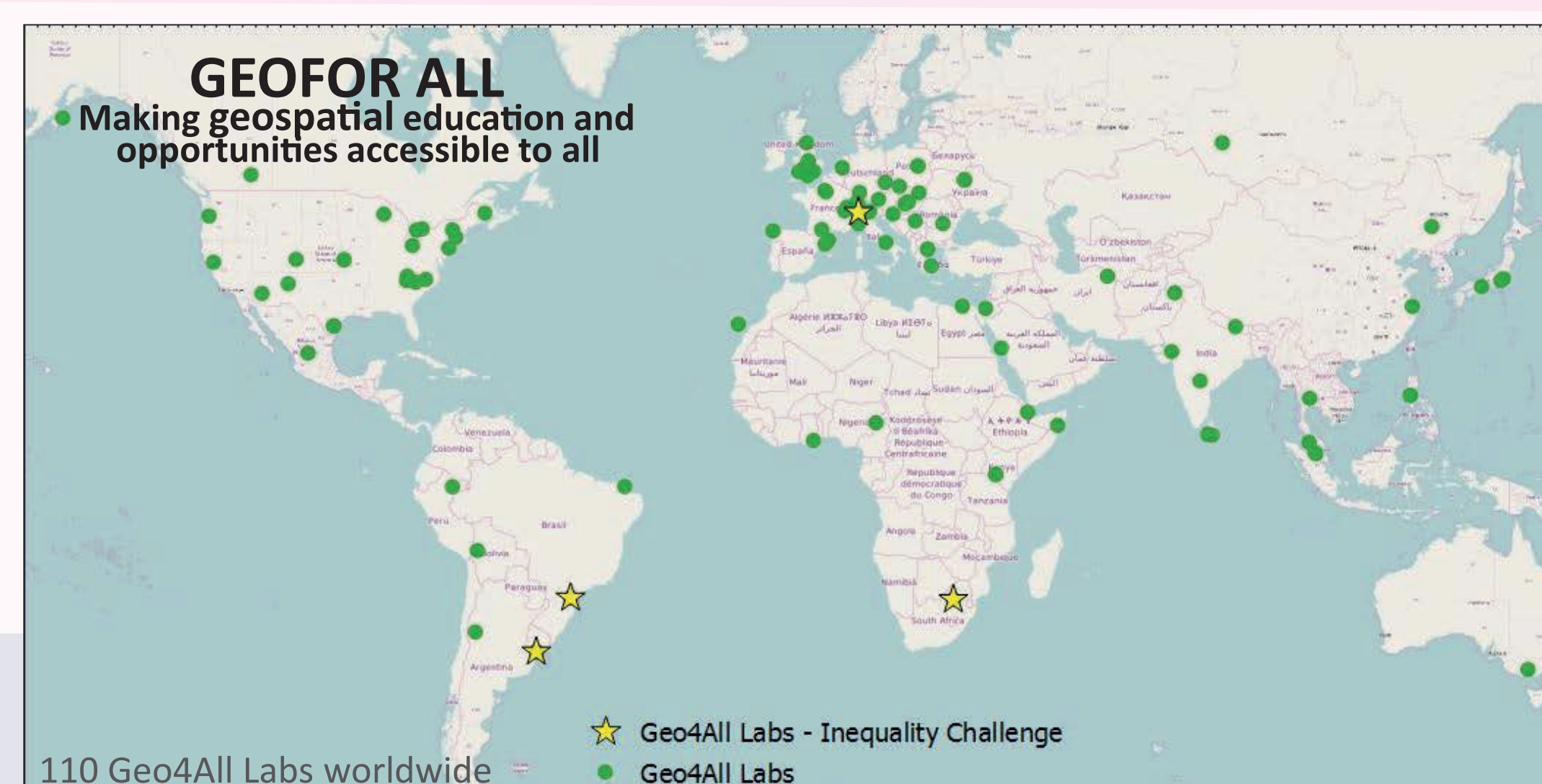
The tool, after its launch, became the first Uruguayan distribution that gives rise to gvSIG Educa, which aims to be a tool for educators to provide students a better analysis and understanding of the territory, as well as collaborate with the assimilation of special concepts using visual tools.



Dirección Nacional de Topografía - MTOP, Uruguay

- Open data contribute to transparency by making available to the public relevant data to analyse current situation and propose new public policies.
- Open source software is a vital tool to democratize access to mapping platforms, making these technologies available for organizations such as NGOs and developing countries institutions.
- Open standards are key to integrate organizations, including local and international levels, and allow the coordination of efforts from several groups.
- Finally, Open Education enables the users to use these tools and include the diversity of each reality on the map.

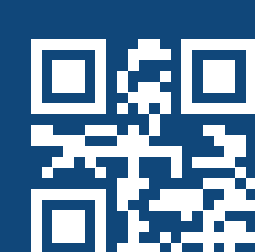
The main goal of the ICA Commission on **Open Source Geospatial Technologies** aims to promote multi-national holistic research in free and open source geospatial technologies in order to make accessible the latest developments in open source tools to the wider cartographic community



Data and Information Source:  
See also: <http://www.geoforall.org>

Boundaries on maps may seem definitive, but there are often different perspectives on their status and position. This poster series is compiled from many sources by cartographers from different countries. The ICA tries to be neutral in such matters and boundaries shown reflect those found on the ground, in existing maps, or recognized by the United Nations. The ICA acknowledges that there may be different opinions and interpretations.

ICACI



Commission on Open Source Geospatial Technologies

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WE MAPS  
INTERNATIONAL MAP YEAR 2015-2016

International Cartographic Association  
Association Cartographique Internationale

