Using environmental data from remote sensing in demographic analysis: An introduction

EDSD, 12-15 Dec 2022

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Day 4 / Session 1

Hands-on..

- Reprojecting
- Defining a buffer zone
- Calculating statistics in the buffer zone
- Creating new indicators

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Day 4 / Session 2

- What data is needed to answer a research question?

- Overview of the training

What data is needed to answer a research question?

… it depends on the question… but there is a wealth of data and choices must be made

-Time : at what precise time? The same time as the demographic data or earlier ? One point in time ? More than one to account for annual variations or change ? Will we look at averages or range, extreme values, duration of peak periods?

-Space : at what scale do we define our indicators? Administrative areas or buffers around a geolocation? Do we use the same scale for all or not? Do we look for averages or extreme values? For the presence of a specific feature (e.g. water)? For the distance to a specific feature ? What makes sense, what will bring the best results?

-**Resolution**

Overview : what we have seen

1- Some background on **remote sensing in demographic analysis**

2- Some common **sources of environmental data**

3 - Some ways of **preparing environmental data for demographic analysis**

With a GIS- freeware, Qgis, going over

-Basic commands, for Qgis projects and their layers of Rasters and Vectors
-Changing projection system
-Joining tables and shapefiles
-Map presentation (layout)
-Importing environmental data in Raster format
-Creating buffer zones around geo-locations
-Computing indicators for a given area, admin or buffer
-Creating indicators in attribute tables

And now?

Discussion : What did you enjoy? What are you going to do with this? How can we improve this course?

https://framaforms.org/edsd-course-feedback-1671008075

Thank you for your attention and best wishes!