

Analisis Exploratorio de Datos Espaciales

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Data editing and spatial analysis

Lecture 2

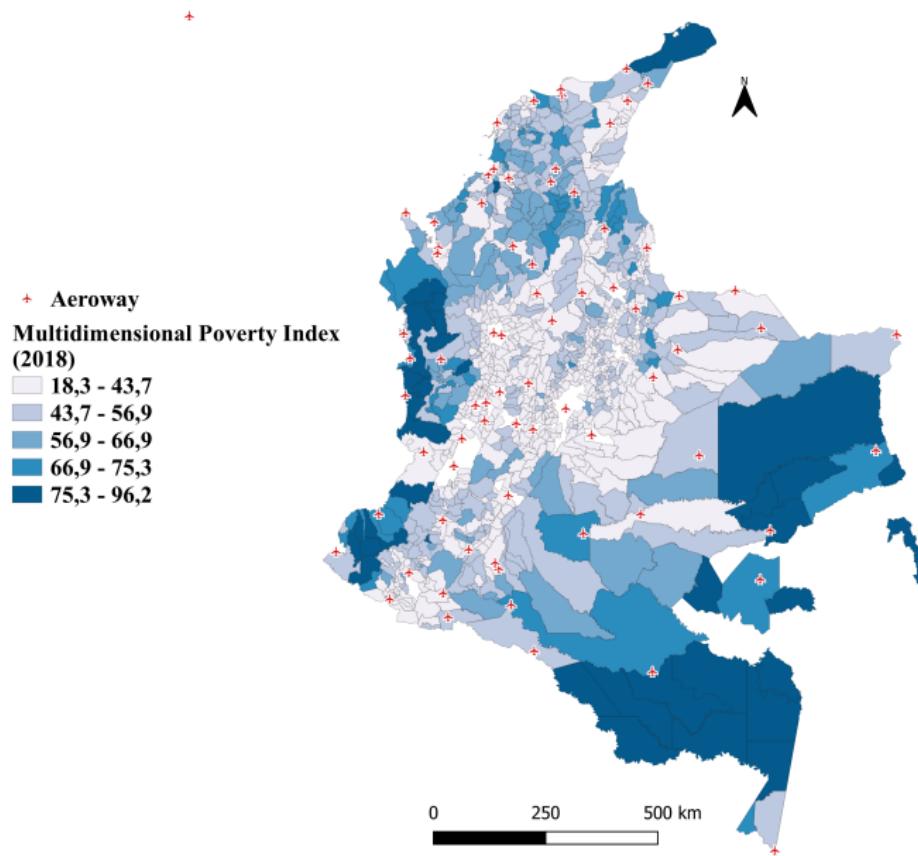
Outline

- Summary Lecture 1
- Attribute tables
- Topology checker
- Legend
- Centroids
- Geoprocessing tools

Summary Lecture 1

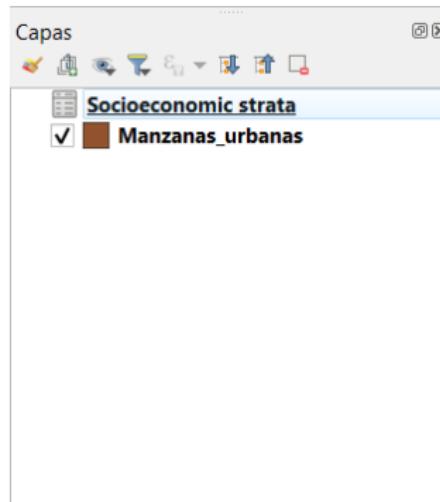
- Introduction
- Motivation
- What is GIS?
 - * **Geographic Information System**
- Loading vector data from files
 - * **Polygon**
 - * **Linestring**
 - * **Point**
- Dealing with coordinate reference systems
 - * **CRS**
- Loading raster files
- Loading data from web services
- Spatial data sources
- Software for spatial analysis
- Creation of thematic maps

Summary Lecture 1



Attribute tables

- * Load vector layer
- * Load attribute table
 - ▶ Attributes are added as delimited text layers
 - ▶ Geometry definition: Attribute table only
- * Verify the loading of the information in the layer area



Attribute tables

- * See attribute table of both layers
- * Capture unique identifiers
- * Ensure that both identifiers are in the same format

The screenshot shows two attribute tables side-by-side in QGIS:

Manzanas_urbanas – Features Total: 3668, Filtered: 3668, Selected: 0

TU_CCDGO	SECU_CCDGO	MANZ_CCDGO	MANZ_CCNCT	MANZ_CAG	Shape_Len
1	01	08	6300110000000000400108	713911	0,0081913...
2	02	06	6300110000000000280206	713960	0,0023103...
3	01	13	6300110000000000240113	714045	0,0020594...
4	01	16	6300110000000000240116	714004	0,0014463...
5	01	19	6300110000000000240119	714007	0,0037459...
6	02	03	6300110000000000400203	713908	0,0029058...
7	02	09	6300110000000000400209	714016	0,0038131...
8	01	10	6300110000000000460110	714111	0,0021503...
9	01	14	6300110000000000460114	713986	0,0018053...
10	01	05	6300110000000000460105	713959	0,0016642...
11	01	09	6300110000000000460109	714037	0,0022728...
12	01	22	6300110000000000280122	715877	0,0130840...
13	01	03	6300110000000000380103	712050	0,0017070...

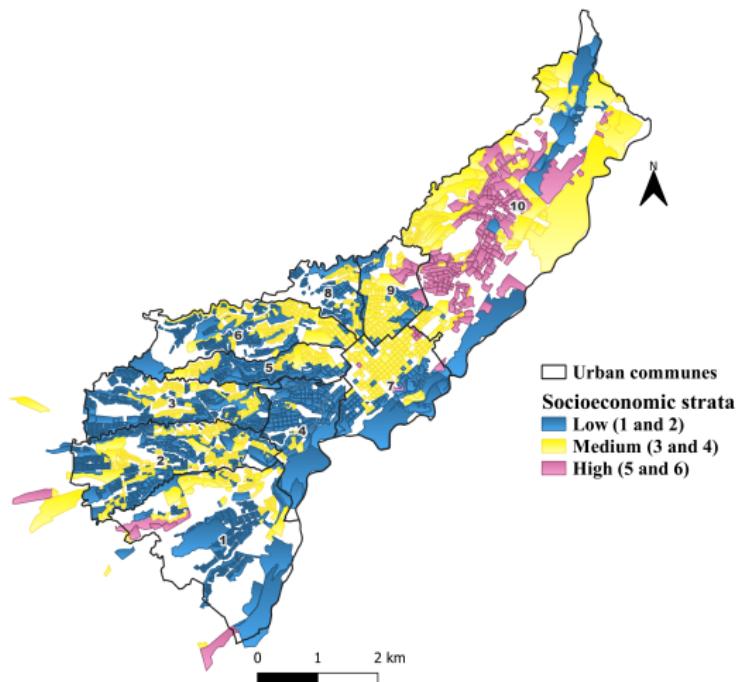
Socioeconomic strata – Features Total: 3210, Filtered: 3210, Selected: 0

mnz	estrato
63001100000000000000000000000000	NULL
6300110000000000000000000000000010113	2
6300110000000000000000000000000010114	2
6300110000000000000000000000000010115	2
6300110000000000000000000000000010116	2
6300110000000000000000000000000010117	2
6300110000000000000000000000000010118	2
6300110000000000000000000000000010119	2
6300110000000000000000000000000010120	2
6300110000000000000000000000000010121	2
6300110000000000000000000000000010122	2
6300110000000000000000000000000010123	3
6300110000000000000000000000000010124	3

Attribute tables

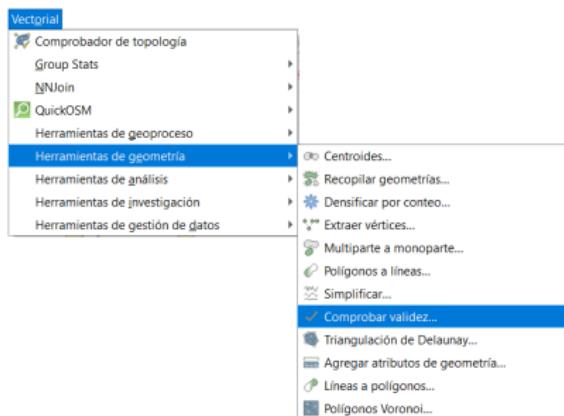


Attribute tables

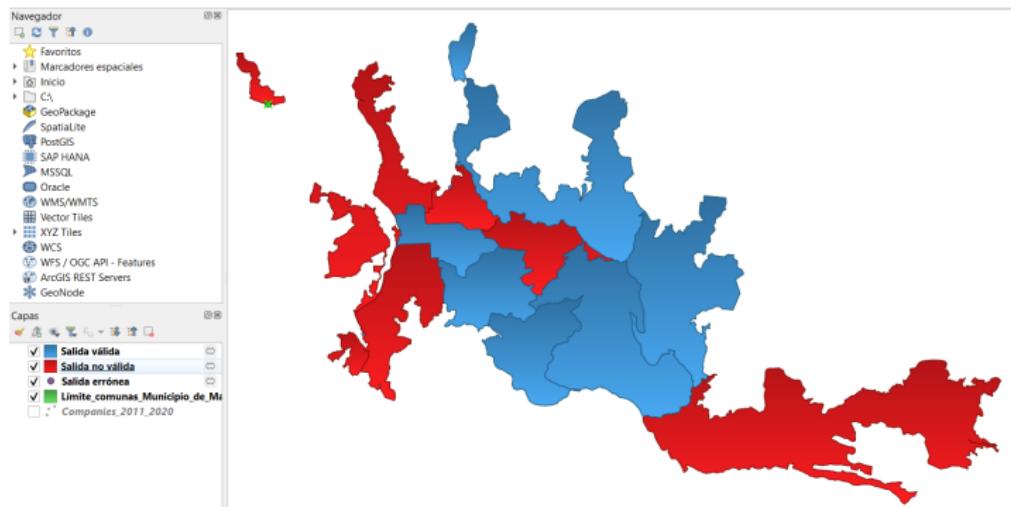


Topology checker

Topology describes the relationships between points, lines and polygons that represent the features of a geographic region. With the **Topology Checker** plugin, you can look over your vector files and check the topology with several topology rules. These rules check with spatial relations whether your features '**Equal**', '**Contain**', '**Cover**', are '**CoveredBy**', '**Cross**', are '**Disjoint**', '**Intersect**', '**Overlap**', '**Touch**' or are '**Within**' each other. It depends on your individual questions which topology rules you apply to your vector data (e.g., normally you won't accept overshoots in line layers, but if they depict dead-end streets you won't remove them from your vector layer).

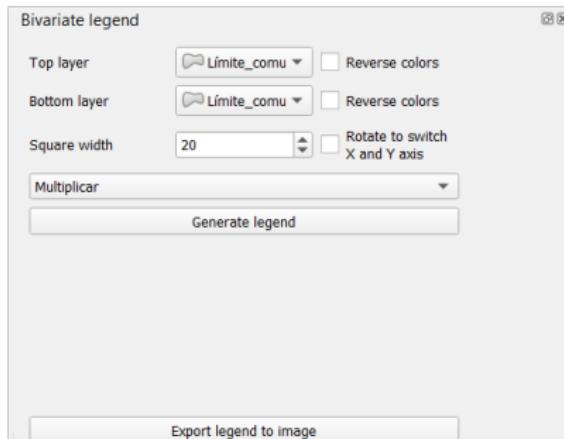


Topology checker

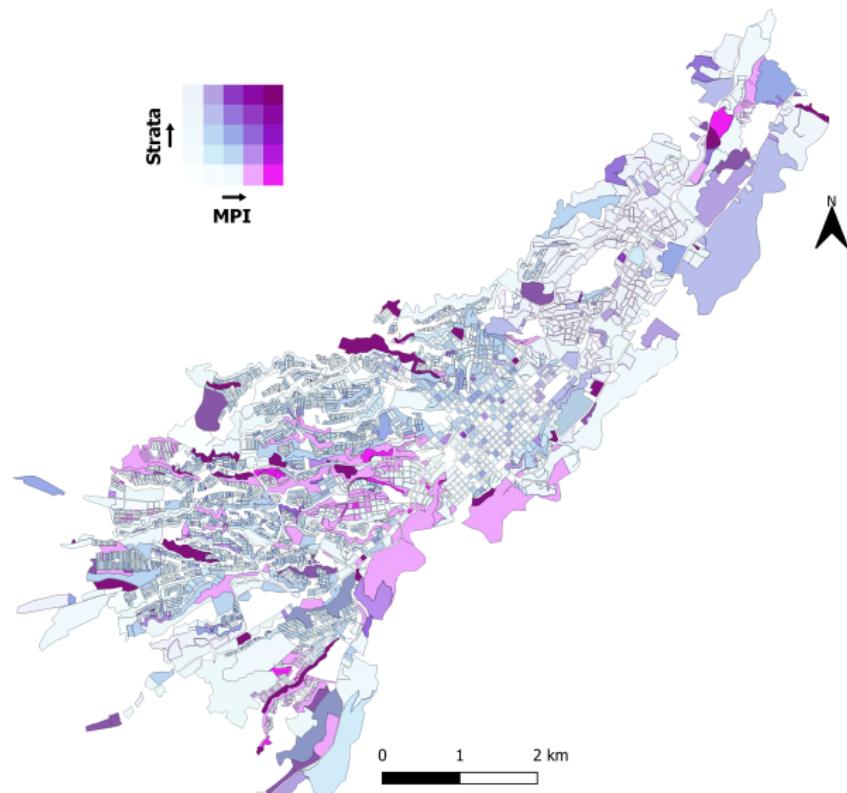


Bivariate legend

- ① **Author:** WebGeoDataVore.
- ② **Maintainer:** thomasg.
- ③ **Tags:** thomasg.
- ④ **Plugin home page:** http://github.com/webgeodatavore/bivariate_legend/.
- ⑤ **Purpose:** This plugin enables generation of legend for bivariate analysis.



Bivariate map



Centroids

