Raster-Vector Integration

Site: <u>TMT Bangladesh</u>

Course: Introduction to Scientific Programming

Book: Raster-Vector Integration

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Description

In previous chapters, you learned about the functionalities that GDAL/OGR provides to work with raster or vector data. However, there are situations in which the input data for the spatial analysis includes both raster and vector data. In this situation, you should be able to convert your data into a homogenized space in which you can perform your calculation and analysis.

In this session, you learn about the functionalities that GDAL/OGR provides to convert raster to vector and vector to raster. You will see an example of an analytical procedure in which we use NumPy to work with the converted raster and vector data.

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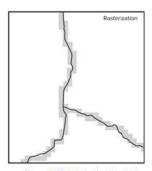
- 1. Integrating Raster and Vector data
- 2. Presentation & Exercise

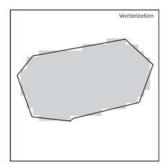
1. Integrating Raster and Vector data

Spatial Data Analysis on Raster and Vector data

Simple solutions:

- Rasterization: Convert vector data to raster
- Vectorization: Convert raster data to vector





Chang (2019), Introduction to Geographic Information Systems

Advance analysis may require several transformations from raster to vector and vector to raster spaces

2. Presentation & Exercise

Recorded Lecture

• Raster Vector Integration

Presentations

• Slides: <u>SL ISC 12 raster vector integration</u>

Exercises

- Exercise ISC P12 Raster Vector
- Exercise ISC P12 Raster Vector Data