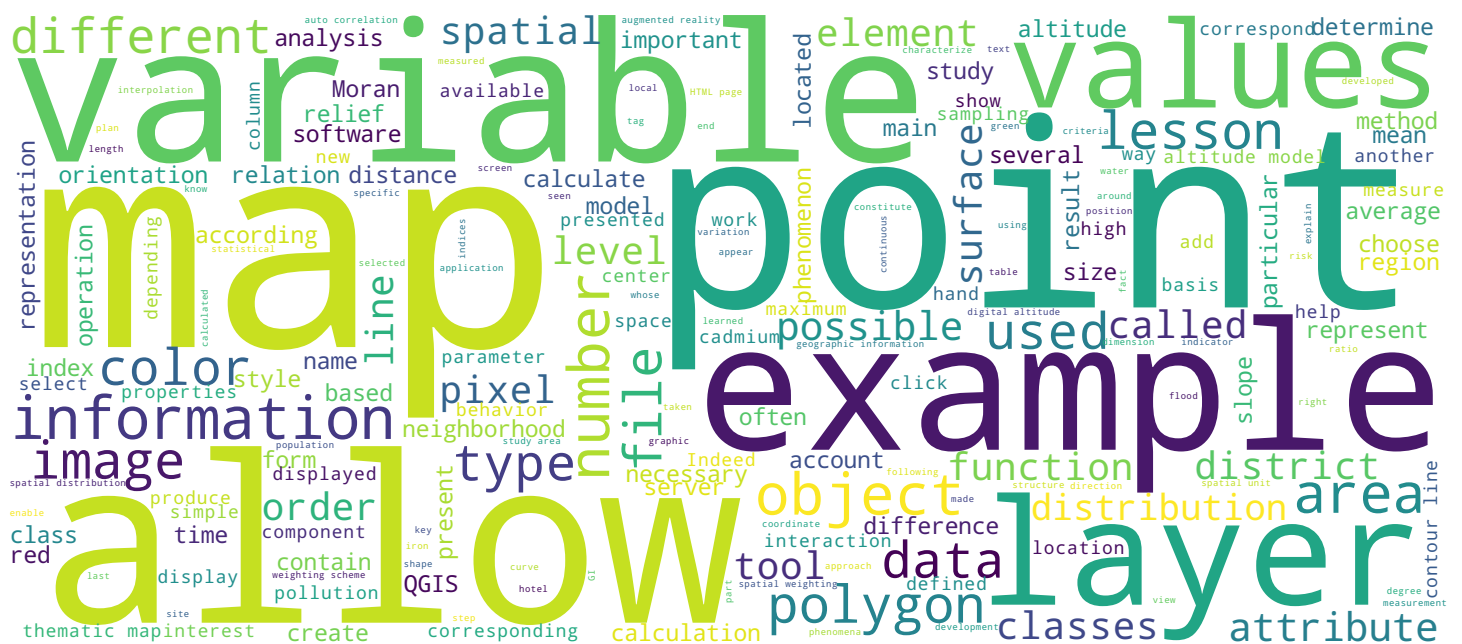


Summary

Global Spatial Autocorrelation

Geographic Information Systems

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Summary

- Setting the neighbourhood
- Fixed or adaptive kernel?

Geographic Information Systems

In this lesson, you have learned to determine the neighborhood of geographic objects using a number of criteria. It is important to ask whether data with which we are working are rather adapted to a fixed core or a variable core. And in the case where we work with polygons, what order of contiguity should be used?

Notes

Summary



0m 04s

Summary



- Setting the neighbourhood
- Fixed or adaptive kernel?
- Order of contiguity?
- Spatial weighting = key step in calculating spatial autocorrelation
- Range of spatial dependence
- Moran's I = regression coefficient β_1 of the observed and weighted value

Geographic Information Systems

The definition of the neighborhood determines the spatial weighting scheme and this determination of the spatial weighting scheme is a key step in the evaluation of spatial auto-correlation. This step allows you to circumscribe the area whose behavior will be compared with that of each geographical object. And it is this comparison that is made by calculating the correlation between the distribution of the variable of interest for each object and the distribution of the mean of this variable in the neighborhood of each object. This is the I of Moran. Finally, to estimate the significance of this index you have learned how to generate random permutations, with the help of the Monte Carlo method.

Notes

Summary



0m 24s