

SPATIAL STATISTICS WITH R

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Many spatial statistical tools have been developed recently in the program R [1]. It is a popular area nowadays in statistics including many applications in epidemiology, meteorology, geostatistics, econometrics, real estate problems.

Spatial analysis can perhaps be considered to have arisen with early attempts at cartography and surveying but many fields have contributed to its rise in modern form. Epidemiology contributed with early work on disease mapping. Economics has contributed notably through spatial econometrics.

We will discuss how to define the spatial autocorrelation statistical measures and analyze the dependency among observations. Spatial interpolation and spatial regression will be discussed. We will deal with the several applications from different fields of statistical applications.

REFERENCES

- [1] R.S. Bivand, E.J. Pebesma and V. Gomez-Rubio. *Applied Spatial Data Analysis with R*. Springer, New York, 2008.