

Applied Spatial Statistics for Geographers

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Contents

Preface	5
1 Analyzing and Modeling Spatial Data in Areal Units	7
1.1 Quantifying spatial autocorrelation	9
1.2 Local indicators of spatial autocorrelation (LISA)	9
1.3 Geographic regression	9
1.4 Spatial regression	9
1.5 Problem Set #3: Due February 25	9
1.6 Multivariate spatial models for lattice data with INLA	9

Preface

<https://besjournals.onlinelibrary.wiley.com/doi/pdf/10.1111/1365-2656.13116>
Navigating through the r packages for movement

<https://bookdown.org/yihui/bookdown/introduction.html> <https://ropensci.org/blog/2020/04/07/bookdown-learnings/>

<https://evamaerey.github.io/flipbooks/flipbookr/skeleton#1> <https://docs.ropensci.org/stplanr/index.html>

SOI data: <http://www.bom.gov.au/climate/current/soihtml.shtml>

For QG next Fall: <https://easystats.github.io/performance/index.html>

Chapter 1

Analyzing and Modeling Spatial Data in Areal Units

Placeholder

1.1 Quantifying spatial autocorrelation

1.1.1 Spatial autocorrelation

1.1.2 Quantifying spatial autocorrelation

1.1.3 An example: Columbus, Ohio crime

1.1.4 List of neighbors

1.1.5 Weights matrix

1.1.6 Moran's I

1.1.7 Spatial lag

1.1.8 Statistical significance of spatial autocorrelation

1.1.8.1 About statistical significance

1.1.9 Monte Carlo approach to inference

1.1.10 Spatial autocorrelation in model residuals

1.1.11 Challenge

1.1.12 Percent of whites in Mississippi counties

1.1.13 Bivariate spatial autocorrelation

1.2 Local indicators of spatial autocorrelation (LISA)

1.2.0.1 Population and tornadoes in Iowa

1.2.1 Spatial autocorrelation in model residuals

1.3 Geographic regression

1.3.1 Example: Southern homicides

1.4 Spatial regression

1.4.1 Spatial lag model and spatial error models

1.4.2 Lagrange multiplier test for the type of spatial autocorrelation

1.4.3 Model fitting

1.4.3.1 Interpreting the model coefficients