

POINT PATTERN ANALYSIS

This is a partial listing of PPA-related publications that appeared between 2000 and 2007.

Note: Other articles on spatial pattern analysis and spatial analysis more generally appear in other documents in this series.

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The publications are grouped by general themes (health; environment/natural resources; social sciences; economics/urban economics; methods). Note that publications can appear multiple times depending on substantive and methodological fit.

Health

Public Health Analysis

Dunn, C. E., Bhopal, R. S., Cockings, S., Walker, D., Rowlingson, B., & Diggle, P. (2007). Advancing insights into methods for studying environment-health relationships: A multidisciplinary approach to understanding Legionnaires' disease. *Health & Place*, 13(3), 677-690.

Sorensen Allacci, M. (2006). *Environmental risk factors for asthma emergency care: A multilevel approach for ecological study (New York)*. Unpublished Dissertation, City U New York, US.

Cockings, S., Dunn, C. E., Bhopal, R. S., & Walker, D. R. (2004). Users' perspectives on epidemiological, GIS and point pattern approaches to analysing environment and health data. *Health & Place*, 10(2), 169-182.

Reader, S. (2000). Using survival analysis to study spatial point patterns in geographical epidemiology. *Social Science & Medicine*, 50(7/8), 985.

New Methods Applied to Health Issues

Dunn, C. E., Kingham, S. P., Rowlingson, B., Bhopal, R. S., Cockings, S., Foy, C. J. W., et al. (2001). Analysing spatially referenced public health data: a comparison of three methodological approaches. *Health & Place*, 7(1), 1-12.

Mental Health

Beasley, C. L., Chana, G., Honavar, M., Landau, S., Everall, I. P., & Cotter, D. (2005). Evidence for altered neuronal organisation within the planum temporale in major psychiatric disorders. *Schizophrenia Research*, 73(1), 69-78.

Brain Research

Wager, C. G., Coull, B. A., & Lange, N. (2004). Modelling spatial intensity for replicated inhomogeneous point patterns in brain imaging. *Journal of the Royal Statistical Society. Series B, Statistical Methodology*, 66(2), 429.

Environment and Land Use

Forestry

Motta, R., & Lingua, E. (2005). Human impact on size, age, and spatial structure in a mixed European larch and Swiss stone pine forest in the Western Italian Alps. *Canadian Journal of Forest Research*, 35(8), 1809.

Grau, H. R. (2002). Scale-dependent relationships between treefalls and species richness in a neotropical montane forest. *Ecology*, 83(9), 2591.

Ecosystem Management

Call, L. J., & Nilsen, E. T. (2003). Analysis of spatial patterns and spatial association between the invasive tree-of-heaven (*Ailanthus altissima*) and the native black locust (*Robinia pseudoacacia*). *The American Midland Naturalist*, 150(1), 1.

Geist, D. R., Jones, J., Murray, C. J., & Dauble, D. D. (2000). Suitability criteria analyzed at the spatial scale of redd clusters improved estimates of fall chinook salmon (*Oncorhynchus tshawytscha*) spawning habitat use in the Hanford Reach, Columbia River. *Canadian Journal of Fisheries and Aquatic Sciences*, 57(8), 1636.

Urban Planning and Community

Transportation

Okabe, A., & Satoh, T. (2006). Uniform network transformation for points pattern analysis on a non-uniform network. *Journal of Geographical Systems*, 8(1), 25.

Water System

James, W. (Ed.). (2007). *Contemporary modeling of urban water systems*. Guelph, Ont.: CHI.

Crime

Lu, Y. M., & Chen, X. W. (2007). On the false alarm of planar K-function when analyzing urban crime distributed along streets. *Social Science Research*, 36(2), 611-632.

Shen, Z. (2003). *Implement a relational geodatabase and point pattern analysis procedure for the probationer location in Albany County, New York*. Unpublished Thesis, The University at Albany.

Spatial Analysis/Statistics Issues

Advances in Spatial Analysis

Bishop, M. A. (2007). Point pattern analysis of eruption points for the Mount Gambier volcanic sub-province: a quantitative geographical approach to the understanding of volcano distribution. *Area*, 39(2), 230-241.

Loosmore, N. B., & Ford, E. D. (2006). Statistical Inference Using the G or K Point Pattern Spatial Statistics. *Ecology*, 87(8), 1925.

Wiegand, T., Kissling, W. D., Cipriotti, P. A., & Aguiar, M. R. (2006). Extending point pattern analysis for objects of finite size and irregular shape. *The Journal of Ecology*, 94(4), 825.

Bell, M. L. (2004). Mixed models for the analysis of replicated spatial point patterns. *Biostatistics*, 5(4), 633.

Brimicombe, A. J., & Tsui, P. H. Y. (2000). A variable resolution, geocomputational approach to the analysis of point patterns. *Hydrological Processes*, 14(11-12), 2143-2155.

Diggle, P. J., Mateu, J., & Clough, H. E. (2000). A comparison between parametric and non-parametric approaches to the analysis of replicated spatial point patterns. *Advances in Applied Probability*, 32(2), 331.

O'Driscoll, R. L., Schneider, D. C., Rose, G. A., & Lilly, G. R. (2000). Potential contact statistics for measuring scale-dependent spatial pattern and association: An example of northern cod (*Gadus morhua*) and capelin (*Mallotus villosus*). *Canadian Journal of Fisheries and Aquatic Sciences*, 57(7), 1355.

Determining Spatial Clusters

Chiu, S. N. (2003). Spatial point pattern analysis by using Voronoi diagrams and Delaunay tessellations - A comparative study. *Biometrical Journal*, 45(3), 367-376.

Lu, Y. M., & Thill, J. C. (2003). Assessing the cluster correspondence between paired point locations. *Geographical Analysis*, 35(4), 290-309.

Marcon, E., & Puech, F. (2003). Evaluating the geographic concentration of industries using distance-based methods. *Journal of Economic Geography*, 3(4), 409-428.