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Title:

Observed Spatial Clustering

Abstract:

Significant spatial clusters are important in many ways. Knowledge of clusters can facilitate understanding, but also support targeted remediation, intervention, safety and security efforts among other benefits. Identification remains challenging, with a wide variety of statistical methods that have been proposed for cluster analysis. Computation and mathematical simplification have often driven the development of legacy approaches, yet can be problematic in a variety of ways, including assumptions of a priori artificial structure, misleading significance, unintended spatial biases and hindering meaningful discovery and interpretation. The reason for this is that geographic information and associated spatial relationships often are particularly influential in the emergence of clusters. A review of clustering analytics is provided along with contemporary developments.