

Monitoring Spatial Patterns around Fixed Points: Comparing Two Distance-Based Approaches

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Abstract

In this study, the weighted distance method, which combines the cumulative sum method and the inverse distance, is devised for monitoring spatial patterns of point events around fixed points. It is found the weighted-distance approach can better reveal the cluster scale and is less subject to observations far away from the monitor site than the distance-based method developed by Rogerson and Sun (1999). It is also found that combining the weighted-distance approach and the distance-based approach achieves better results for monitoring spatial patterns or changes in spatial patterns.
