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**Affecting features and fractal characteristic of urbanization in the pan yangtze river delta based on GWR**

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Shanghai, Jiangsu, Zhejiang and Anhui are the cooperation main body of the Pan Yangtze River delta which play an important role to the development of the Sea Silk Road. The study of spatial patterns and driving forces of urbanization provide a certain reference to the city's development and environment analysis. This paper used Prefecture-level city of the pan Yangtze River delta as basic unit combined with earth observation data, social and economic data. Applying the spatial autocorrelation analysis and GWR (Geographically Weighted Regression) model to analyze the urbanization spatial pattern and obtain influence intensity distribution of urbanization. Results show that urban spatial distribution is aggregation and the urbanization distribution is in high space correlation. The accuracy is higher and AICc is lower by GWR model compared with OLS model, and impact strength regularity exists in the space based on the influencing factors' effect. GWR model provided a good estimate in studying spatial variability under the action of influence factors to urbanization.

**Biography**

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