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A study on the spatial pattern of the dragon king temple's site selection in the urban agglomeration of the middle Yangtze river, China

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In this paper, 74 sites of Dragon King Temple in the middle reaches of the Yangtze River are firstly extracted as the spatial units from the AMAP (360) and RS and GIS are used as technical support. The DEM data are used to extract the river network and calculation of the study area and then, spatial density measurement of point data is performed by using spatial smoothing technique and Moran'I index of spatial autocorrelation is analyzed. Finally, the coupling degree model was introduced to analyze the spatial fitting relationship between the spatial unit and the urban agglomeration in the middle reaches of the Yangtze River. The results of the calculation of the density of space units in the study area showed that the densest urban agglomeration is the Chang-Zhu-Tan agglomeration, followed by the Wuhan urban agglomeration, the Poyang Lake urban agglomeration is sparse, only a few hot spots around Jiujiang City. The spatial units was positively correlated with the distribution of urban agglomerations in the middle reaches of Yangtze River (Moran'I=0.625) and the Wuhan urban agglomeration and the Chang-Zhu-Tan agglomeration are High-High (H-H) accumulation while the Poyang Lake urban agglomeration is Low-Low (L-L) discrete distribution. Spatial units and the urban agglomeration of the middle reaches of the Yangtze River have strong adaptability in the development of population urbanization, eco-urbanization and spatial urbanization. The result is both the methods and strategic to constructing Chinese City Context, which has realistic significance to the modern transformation and development of the urban agglomeration in the middle reaches of the Yangtze River.

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