

Risk adaptation space of water resources to climate change in China's city agglomeration under construction

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With the advance of urbanization, city agglomerations have emerged on a large scale in China. However, the extension of the scale and the concentration of population and industry result into large input of resources and discharge of pollutants, inserting great pressure to the resource environment of the city agglomeration regions. And the frequent extreme climate brings great uncertainty to the tense environmental carrying capacity. Based on the background, this paper aims to figure out the space of city agglomerations to adapt to water-use risk and the factors in uencing its adaptability. Considering that VAR model based on hierarchical Bayesian can not only gure out the homogeneity risk response of large-scale city urbanization, but also judge the impact of heterogeneity factors on risk adaptability, this paper adopts it to analyze, from the temporal space, the uctuant range of years' rainfall in city agglomeration which can survive the extreme climate and maintain the normal production and living. And the results nd that: the space size of water-use risk adaptation in China city agglomeration has high correlation to spatial location. Western city agglomerations can maintain the normal production and living under greater rainfall uctuation range, followed by middle city urbanizations, and then by eastern ones while the situation in southern city agglomerations is better than that in northern ones. ree factors can explain the results: water resource endowment, river basin location and city agglomeration scale. In the end, this paper has given some suggestions city agglomerations in China about how to adapt to climate change.

Biography

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During this time, he has participated in many projects, such as Jiangsu province' soft science research project, fundamental research funds for the central universities and the national social science project.

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