

The use of automated geomorphological clustering for purposes of urban planning (the example of the city of Kazan)

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Abstract

Differentiation of the relief into separate elementary geomorphological sections yields the basis for most adequate determination of the boundaries of urban geosystems. In this paper the results of approbation of relief classification methods based on Artificial Neuron Networks are presented. The developed model of the restored landscapes represents the city territory as a system of geomorphologically homogenous terrains. The results can be used in the analyzing of informal arrangement of a territory, which is necessary for the adjustment of visual properties of a landscape by planning methods. © IDOSI Publications, 2014.

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Keywords

Artificial Neuron Networks, City territory, Functional zoning, Geomorphological clustering, Landscape planning, Relief classification, Urban landscape