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Geodiversity assessment in urban areas

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Conflict over natural resources figured prominently in the urban areas. On the one hand there is a constant need for space for the construction of new buildings for housing, agriculture and industrial production, and on the other hand the resources need protection because of the threat of degradation or even complete destruction. Considering the fact that urbanization is one of the most serious threats to geodiversity, it is important that this issue is taken into account in spatial development plans and georesource management strategies in urban areas. The geodiversity, as well as natural resource, must be managed in a sustainable manner in which it is very important its protection. The mapping of specific categories of geodiversity (geological, geomorphological, hydrological and soil) on the basis of quantitative assessment with the use of Geographic Information Systems (GIS) can allow spatial planners and managers to take further steps that would reduce threats and protect the natural values. This work presents the application of geodiversity evaluation method by using the geodiversity index (Gd), based on the quantity of abiotic elements and relief roughness within a spatial unit in the case of the City of Belgrade, Serbia. The acquired results are analyzed in the context of sustainable use of georesources and the threats to which geodiversity is exposed due to the development of the city.