Mapping Soil Erosion Factors and Potential Erosion Risk for the National Park “Central Balkan”

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Soil erosion is widely recognised environmental problem. The report aims at presenting the main results from assessment and mapping of the factors of sheet water erosion and the potential erosion risk on the territory of National Park "Central Balkan". For this purpose, the Universal Soil Loss Equation (USLE) was used for predicting soil loss from erosion. The influence of topography (LS-factor) and soil erodibility (K-factor) was assessed using small-scale topographic and soil maps. Rainfall erosivity (R-factor) was calculated from data of rainfalls with amounts exceeding 9.5 mm from 14 hydro-meteorological stations. The values of the erosion factors (R, K and LS) were presented for the areas of forest, sub-alpine and alpine zones. Using the methods of GIS, maps were plotted presenting the area distribution among the classes of the soil erosion factors and the potential risk in the respective zones. The results can be used for making accurate decisions for soil conservation and sustainable land management in the park.