

Modeling some atmospheric flows in Georgia in terms of wind energy

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Historically, wind energy has been used in sailing, windmills and wind pumps, and today mankind mainly uses wind to generate electricity, the production of which as a renewable energy is constantly increasing. The use of wind energy in Georgia is in the initial stage of development. For the possible development of wind power plants in Western Georgia, we have studied the transformation of air flows in the territory of Georgia under the conditions of non-stationary large-scale background processes on the basis of a three-dimensional hydrostatic mesoscale model. The regime of strong winds in the Rion river valley is also investigated through some of their statistical characteristics.