

Stochastic Parameters of Geodynamical Processes Formation (on the example of Kakheti Region)

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The formation and permanent reactivation of geodynamical processes depend on basic and stochastic data. Basic data consists of determinant factors, specifically: geological structure, land, modern tectonic movements and climate. These is a stationary calculated data. And the stochastic parameters are not stationary and they are based on randomness. These include: meteorological elements (quantitative average annual deviations), river water regime variations, underground water levels, earthquakes and human industrial works. It is also notable that the determinant factors provide the homeostatic balance of the geological environment, and the stochastic factors destroy it. The basic data is slowly changing throughout time, hence the scale of geodynamical processes, their intensity, stimulation and reactivation is determined by the stochastic parameters.

Considering the damage caused by geodynamical processes, Kakheti is the most significant region every year with its scale of activity. So, evaluating the stochastic parameters based on the example of this region's geodynamical processes is rather important for the regional and nation-wide economic an social growth.