

ABOUT THE DEVELOPMENT OF MULTILEVEL STRUCTURED ON THE GEODYNAMIC POLYGON IN EXPLOITATION OF SUBSURFACE RESOURCES IN KUZBASS

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The article considers the results of repeated geodetic observations on geodynamic polygons (GDP) on the territory of Kuzbass and states the commonness of performed research and draws the conclusion that in spite of certain success this method did not become wide-spread and dominating on mining enterprises of Kuzbass. It is noted that the basic contradiction of the method development: from one side – significant increase of measurement accuracy, operation and automation, from the other side – lack of development and absence of proper models, taking into account the structure and hierarchy of the Earth's crust. In traditional technologies flat models of the Earth's crust are used. They do not provide such an account. That's why the objective of the research is the development of multilevel geodetic compositions on GDP in exploitation of the Kuzbass subsurface resources. For realization of stated objective the task is formulated, which includes the improvement of the theory of spatial multilevel geodetic compositions on GDP and takes into account both the structure and stress-strain condition of Kuzbass crust. Practical use of this theory provides the creation of a new type GDP, ensuring broadening information about the development of geodynamic and technogenic processes in exploitation of Kuzbass subsurface resources.

Key words: earth's crust block, rate, stressed condition, hierarchy, kinematics, geodynamic polygon, deformation models, geodynamic process.

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