

Experience and prospects for mathematical program of image recognizing using for the cardinal geological problem resolve

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In the result of author's prolonged prognostic-mineragenic investigations with using of mathematical statistics methods it was established the work efficiency dependence of following conditions maintenance: 1. Geological information about objects being investigated must be: a) equally representative, i.e. it must correspond to the scale of areal geological surveys that were done for the investigated territory; b) exhaustively complete, i.e. it must reflect all features of geological objects revealed by any correct methods of factual material analysis and synthesis. 2. Using of special mathematical programs is necessary for initial quantitative information processing. The aim of this processing is finding of additional geometric and formal-statistic parameters of objects being investigated. 3. Representative quantitative selection of typical (standard) objects of all kind is necessary. Standard objects may be situated either within the territories being investigated or out of them. Complete set of prognostic maps for the gold-, diamonds-, oil-, gas-bearing regions of Russia and Mongolia were compiled using this program. Certified geological-exploring works in some objects were carried out confirming reliability of these prognoses. The carrying out of analogous works in territories of other continents and countries is recommended. Using of different geological objects as standard ones opens the wide possibilities for compilation of special prognostic-geological maps. These maps may play the role of criteria for correction of modern geotectonic concepts and serve as the base for creation of general Earth's theory.