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Geophysical information system for studying physical properties of rocks

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The project guesses studying, analysis and generalization of research outcomes of physical properties of rocks of an Earth crystalline crust on a base of direct measurements on depth samples and samples - analogs, selected from a surface. The Geologic institute KSC of the Russian Academy of Science carries this scientist works with using an acoustopolariscopy method within the framework of a direction of basic researches in the studying field of physical properties of rocks. The period with 1985 until today is continuo used practically continuous researches. We obtained the unique experimental material containing data on an inner pattern of anisotropic mediums to which rocks is concerned. Data interpretation generated great volumes of the information of the second and third levels. Databanks of all levels contain the information on more than 4500 data on each of 10000 investigated samples. All database is stored on personal computers of group employees, badly systematized, subjectively structured and is not rigorous is documentary. The separate information on separate carriers does not allow applying the modern software (DSS, OLAP, etc.) that the penetrating analysis and a solution of essentially new problems of fundamental character. For project realization, we suggest to develop the specialized application by the way geophysical information system (GFIS) - an envelopment oriented on natural-science field that offer to work with large massive character information and not requiring special knowledge from users.

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