INFLUENCE OF GEODYNAMIC PARAMETERS DISTRIBUTION ON STRATIGRAPHIC SEQUENCES GEOMETRY AND COMPONENTS

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The most important geodynamic parameters have been established with multidisciplinary analytical methods in the stratigraphic successions from the Quaternary to Paleozoic. Based on actual comparison of characteristics of key structural surfaces, facies and sequence expressions of sedimentary systems tracts within the areas similar to the West Siberian platform, we divided these geodynamic parameters into several groups: gravity - G, pressure - P, temperature - T, composition - C (all initial), and geodynamic relief of key surfaces -r, viscosity - v, permeability - p, time - t (derivative). Qualitative parametric analysis of sequence and facies assemblages demonstrates that its dominant forming factors are directly related to the above-mentioned parameters: G, P, T, C, r, v - for the filling basin, plus p, t parameters for the filled one. On various stages of forming of the sequences certain groups of the parameters are also leading. Each of them exerts a first-order influence on variation of ranging units. Because the sequence stratigraphic methods are applicable to a broad spectrum of scales, locations of the tectonic units have been identified with the help of 3-dimensional systems ranked on components into four types of dimension stepping on the variation of mineral to global. The data on the detailed of regional boundaries demonstrate the ability of identification of the key surfaces between system tracts and including key boundaries between sedimentary basin and basement. It is performed with stratum correlation and minimum altitude of r-parameter distribution method of key surfaces and systems tracts boundaries recognition. The obtained data are used for making the models of mechanisms changing geometry and components of sequences as an geodynamic engine for the fluid flux and tectonic units motion.