QUANTITATIVE ASSESSMENT OF OVERTHRUST SHEET DISLOCATIONS IN PRECARPATHIAN FOREDEEP

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Quantitative assessment of geological objects & processes is very important for elaboration of complex computer programs, which will further to the objective research of evolutionary development of the earth's crust for now. We pay a lot of attention to studying of quantitative parameters of local structures. The quantity of proportion of the amplitude of structure (h) to its area (S) is very important for the assessment of tectonic folding movements. This value is named as a coefficient of the intensity of structure (i). Thus, i = h/S. The coefficient of intensity of structure characterizes the finite result of tectonic folding movements activity in quantitative form & can be one of the major criteria of technique of quantitative assessment of intensity of tectonic movements, which have been occurred in the geological past of some kind of areas. The results of first researches of this problem are testifying that quantitative parameters of local structures & their morphology are different in borders of Internal & External zones of Precarpathian foredeep. Mathematical & statistical analysis of the results of studying of local structure's intensity coefficient in the Internal zone of Precarpathian foredeep has showed, that for the north-western part of the zone the range of values of structure's intensity coefficient is in interval 20-80. Such values of the coefficient are characteristic for Boryslavskiy oil & gas bearing district. In central part of the Internal zone of Precarpathian foredeep there are structures with intensity in the interval 20-50. These structures belong to the Dolynskiy oil & gas bearing district. Structures with the highest coefficients of intensity are belonging to the south-eastern part of the Internal zone of Precarpathian foredeep. Here the coefficient of intensity is fluctuating from 97,56-173,9. Folds in this part of zone are very high with vertical & sloping to the northeast axial planes.(Gvizdetska, Pnivska, Bytkivska, Pivdenno-Gvizdetska, Mykulychynska structures, etc.).

Thus, basing on the values of structure's intensity coefficients we can make a conclusion that in south-western part of Precarpathian foredeep during the forming of folded zones the intensity of folding processes in alpine phase of tectogenesis was higher than in central & north-eastern parts. Folding processes were passing here with the higher intensity, which has led to the forming of folds with the greater values of coefficient of intensity & to the forming of overthrust sheeted thrusts with amplitudes till 30 km to platform deposits.