

PRINCIPLES TO CONSTRUCT NEOTECTONIC MAP

To visualize important features, not only geomorphological, but also geological and other supporting methods were used. in the construction of this neotectonic map

The concept and the symbols used are described in the explanations. The map also shows Neotectonic dislocation lines that separate areal units - neotectonic structures.

The first order tectonic blocks represented by a) Western Carpathian subsystem of neotectonic structures predominated by elevational units - mountain ranges and subordinate depressional units - intramontane basins and b) Pannonian subsystem of neotectonic structures that includes elevational units - highlands fringing the basins and most important negative units - flatlands and neotectonic depressions, are shown in the map as basic colours.

To show individual elevational and depressional structures, "warm" tints (Nos. 1-10) were used for the Western Carpathian subsystem and "cold" tints (Nos. 11-20) for the Pannonian subsystem. To each of the four groups of elevational or depressional units is assigned one of the 5 colours of different richness to show the intensity and relative movement ranging from a very large to a very small and vice versa. For instance Nos. 16-20 are 5 tints of blue showing negative units of the Pannonian subsystem. Thus, 20 tints supported by numeric indexing express 20 degrees of relative vertical movement along neotectonic lines. The units or structures with the maximum intensity and magnitude of vertical movement, regardless of their strikes, have the deepest tints, while the units with the weakest mobility have the lightest tints.

Besides areal elements the map also contains linear symbols to delineate neotectonic blocks. These may either be projections of observed, or inferred neotectonic lines, but in the depicted part of the Pannonian Basin the fault lines have colours compatible with the stratigraphy indicating the age of the predominant, or of the youngest activity, respectively.

The map also contains specific symbols to show unusual types of neotectonic structures. One such symbol stands for the Gabčíkovo Basin, a recent basinal structure and another for domes.

Features accompanying neotectonic activities, such as fresh water limestones, travertines and calcareous tuffa, and the manifestations of the latest volcanism appear in the map as dot symbols.