servation of MCSM posts. The estimation of probability of that an earthquake will take a place is conducted, taking into account probabilities of possible forecasters for the region of mountains of Vrancha. For each of criteria, offered for a compatible analysis probabilistic indexes settled accounts during throughout the year, a selection is taken in which. An integral criterion which took into account influencing of found out every forecaster settled accounts in future.

It is set that most payment is given by radon and electromagnetic forecasters. However, none of them independently exceeded the value of probability of origin of earthquake for the region of Vrancha (R=0,358). But before an earthquake 12.05.2005 (M=5,1), when all worked criteria are select, probability of origin of earthquake a complex was R=0.77, that in 2,1 times exceeds probability of the simple guessing.

Subsequent development of methods of complex researches and receipt of the unique integral description is on observation posts, will enable yet more to promote reliability and efficiency of prognosis estimations.

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Thermal state of the West Carpathian lithosphere — measured data and modelling results

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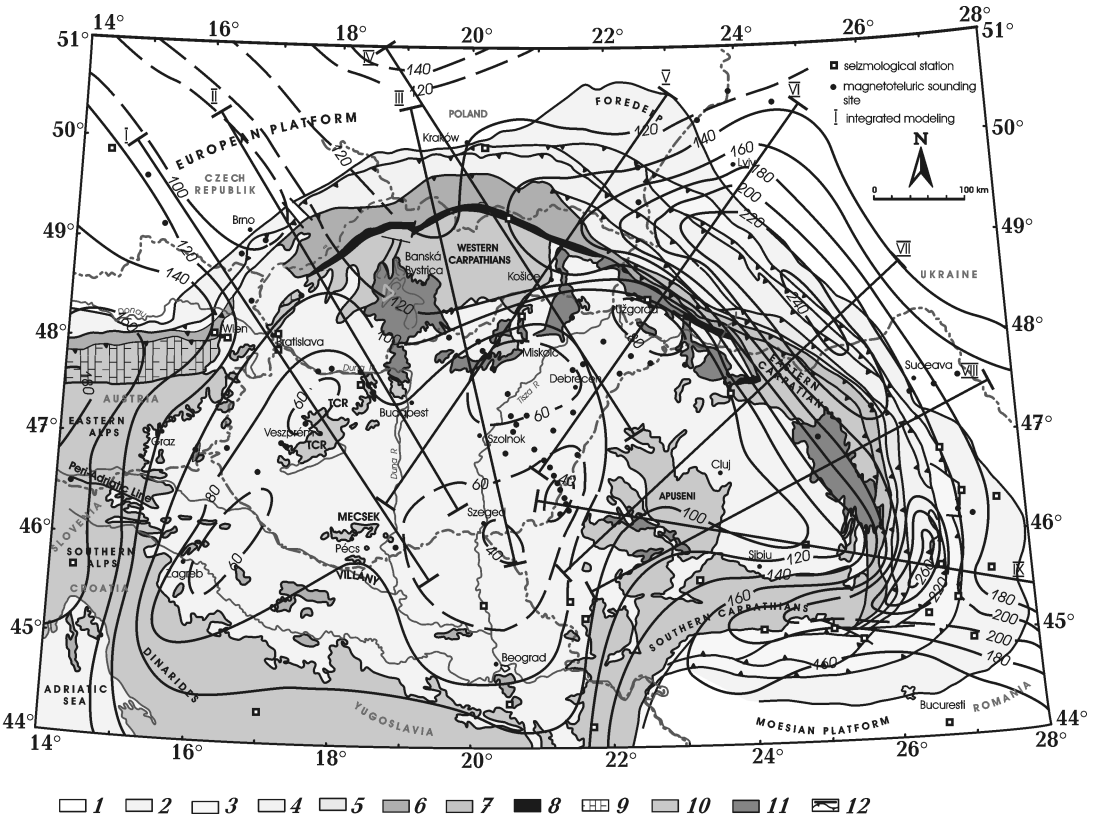
We present the results received by the study of the thermal state of West Carpathian lithosphere both by direct methods and by modelling approaches. The direct methods are repre-sented by tables, graphs and maps of measured data — temperature distributions and heat flow density data collected and published mainly in [Atlas …, 1995]. The maps of thermal characteristics constructed in various depths levels of the upper part of the crust are there supplemented by related geological structures. The measured geothermal data were processed by classical interpolation and extrapolation methods. The modelling approaches are represented by results of stationary methods applied on cross sections along six profiles crossing the Carpathian arc [Majcin, 1993], by transient models [Majcin, Tsvyashchenko, 1994; Majcin et al., 1998] and by special 2D integrated modelling [Zeyen, Bielik, 2000; Zeyen et al., 2002; Dérerová et al., 2005; 2006] that combines interpretation of surface heat flow, gravity, topography and geoid data, which was used for calculation of the lithospheric thickness along nine geotransects passing through the Pannonian-Carpathian basin region. The temperature fields were calculated by the means of the finite difference method and of the finite element method. The density of calculated data allows to construct maps with the temperature distribution and distribution of



Map of lithospheric thickness in the Carpathian/Pannonian basin region: *1* — North European planform and Moesian platform, *2* — Foredeep, *3* — Subcarpathian unit, *4* — Krosno-menilite group and external Moldavides, *5* — Internal Moldavides, *6* — Magura group, *7* — Outer dacides, *8* — Pieninske bradlove pasmo, *9* — Northern calcareous Alps, *10* — Alpine-Carpathian-Pannonian internides, *11* — Neogene volcanides areas, *12* — Main tectonic lines.

the vertical component of the heat flow density on various depth levels, on Moho-discontinuity and also to construct the map of the supposed lithosphere thickness (Figure).

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