



Heat flow map of the Czech Republic

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We present the preliminary results of the revision and update of the Heat flow map of the Czech Republic. Its previous last version was published more than 20 years ago. Since then, temperature logs have been carried out in several new boreholes throughout the Czech Republic and the thermal properties of dozens of rock samples from the Bohemian massif have been determined. These data were added to the original database. In addition to it, the paleoclimate corrections were applied on the whole dataset. The geothermal data were thoroughly completed with similar information available from the surrounding countries, and the map is presented together with the maps of isotherms at several depths under the surface. These maps are based on the additional information summarizing the results of the laboratory measurements of the radiogenic heat production and heat conductivity of collected rock samples or on estimates of these parameters in the locations where the samples were missing. The maps allowed us to delineate the potential zones for utilization of deep geothermal energy. The influence of topography and the convective heat transfer on subsurface temperature field in the discharge and recharge areas, namely in southern and western Bohemia, is briefly discussed in context of the regional heat flow density pattern.