2. English abstract

This doctoral thesis is focused on analysis of tectonic deformations a geodynamic evolution of Neoproterozoic and Lower Paleozoic rocks of the Teplá−Barrandian Unit along the northwestern margin of the Prague basin (central Bohemian Massif). Using a wide range of modern methods, correlation of finite deformation patterns in different units allowed separation of structures formed during Cadomian and Variscan orogeny and interpretation of tectonic processes and tectonic history of the Cadomian orogenic belt during late Neoproterozoic. The research found direct evidence for and enabled new interpretations of Cadomian tectonic processes in the Bohemian Massif, including a succesion of deformation phases, quantification of finite deformation gradients and mechanisms. The different data sets were finally combined into an overall geotectonic model of Cadomian orogeny and its Variscan tectonothermal overprint in the Bohemian Massif, as well as the data were used for correlation with other Avalonian−Cadomian terranes.