

Abstract

The Saxonian Granulite Massif (the type granulite locality) is situated in the northwestern part of Bohemian Massif. It is an antiform with dome structure, which came to the surface from below SaxoThuringian Paleozoic units. It consists of high-pressure "Granulite core" with felsic and mafic granulites, which are surrounded by tectonic cover called "Schist mantle" of low-grade upper-crustal rocks. Massif is penetrated by several granite bodies. The Core and Mantle are separated by shear zone with a thickness of about 2 km. Geochronological dating of complex exhumation gives ages of about 340 Ma. The whole complex is affected by system of foliation and lineations. Massif was deeply buried, extremely heated and then exhumed with high exhumation rates during post collision extensional phase of the Variscan Orogeny.