

Structural Profile through the Southern Part of the Svratka Dome (Moravicum)

Pavel HANŽL¹, Helena GILÍKOVÁ¹, Jaromír LEICHMAN² and Kristýna BURIÁNKOVÁ¹

¹ Czech Geological Survey, Leitnerova 22, 658 69 Brno, Czech Republic

² Department of Geology and Paleontology, Faculty of Science, MU, Kottlářská 2, 61137 Brno, Czech Republic

The documentation of excavations for a pipeline brought new petrographical and structural data along a SE - NW oriented profile through the S part of the Svratka Dome (Moravicum). The pipeline cut the body of the Bíteš gneiss between the Boskovice Furrow and the Moldanubicum. The Bíteš gneiss is fine- to medium-grained muscovite to biotite muscovite orthogneiss with porphyroclasts of feldspars. Fine-grained orthogneiss without porphyroclasts probably represents deformed veins of aplite. Dynamically recrystallised polycrystalline quartz bands and feldspar porphyroclasts of different generations with mantle - core structure are dominant features of the Bíteš gneiss. Amphibolites and paragneisses in abundant intercalations are strongly weathered. Alternations of garnet mica schist and orthogneiss belonging to the Svratka Crystalline Complex were exposed NW of the village of Pucov.

The orientation of foliations documents the dome structure of the Moravicum. The axis of the anticline is situated here between the villages of Rapotice and Vysoké Popovice and it slightly plunges to the south. Stretching lineations plunging to the SW are more common than the older ones oriented N-S and E-W. It is possible to distinguish at least two deformation stages according to the preferred quartz *c*-axis orientation. The crossed girdles type I along the NNW-SSE oriented lineation indicate medium grade metamorphic conditions. The small circles along the SW-NE oriented lineation could be correlated with younger thrusting to the NE under low grade conditions. The pattern of quartz *c*-axes along the older E-W oriented lineation is overprinted by a younger recrystallization.

Two dominant senses of shearing were documented on the base of kinematic indicators (asymmetric *s* porphyroclast, S-C and S-C' structures). Thrusting towards N to NE represents the common tectonical movements in the Moravicum. The sense of shearing indicating thrusting to the east is probably older. Local normal faults could be related to stages of the orogeny collapse.

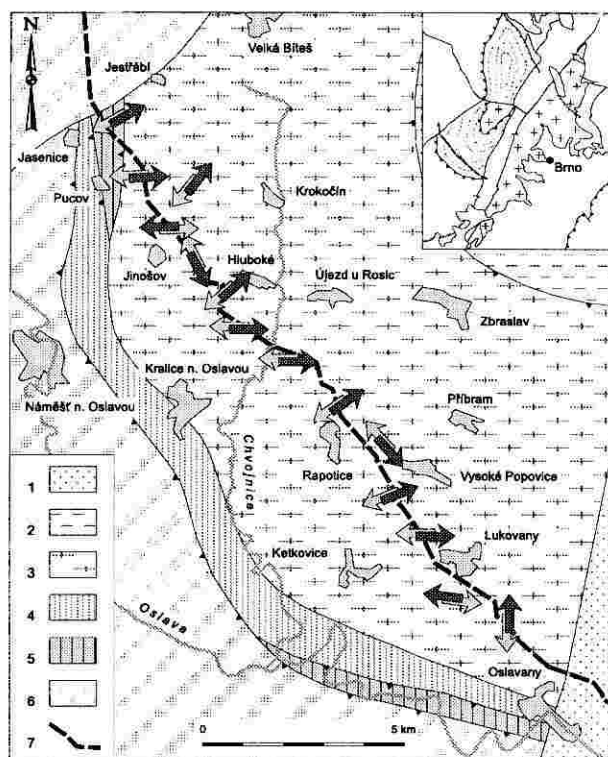


Fig. 1. Simplified geological map and relative sense of shearing along the pipeline. Explanations: 1 - Boskovice Furrow, 2 - Bílý Potok group, 3 - Bíteš gneiss, 4 - Vranov - Olešnice group, 5 - Svratka crystalline complex, 6 - Moldanubicum, 7 - pipeline.

Post-Variscan Deformation in Some Sedimentary Units on the Eastern Margin of the Bohemian Massif

Josef HAVÍŘ

Ústav fyziky Země PíF MU, Ječná 29a, Brno, Czech Republic

The Bohemian Massif which is situated in the Alpine foreland was strongly affected by the Alpine tectonic events. The eastern margin of the Bohemian Massif is situated directly in the contact area with the Outer Western Carpathian Belt. On the eastern margin of the Bohemian Massif deformation events connected with the Alpine Orogeny are displayed in the sedimentary record and at a number of sites we can see examples of these deformations.

Evidence of the post-Autunian compression is well visible in the Permian sediments of the Boskovice furrow. Overturned plane of the eastern marginal fault of the Boskovice furrow and the reversed brittle structures in the western part of the furrow show the influence of the compression. An almost subhorizontal thrust with the movement in the W-E direction was found in the Jurassic limestone at Stránská skála Hill in Brno. Influence of the post-Variscan compression is also visib-