

molasses sedimentation (compare with the intra-Namurian hiatus – e.g. Dopita et al. 1997) and continued up to the Westphalian B and/or later. This conclusion is supported by the fact, that the deformation are affecting likewise the Saddle and

Suchá Members (Westphalian B) of the Karviná Formation, as postulated above.

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## The Brno Massif: A Section through an Active Continental Margin

Pavel HANŽL<sup>1</sup> and Rostislav MELICHAR<sup>2</sup>

<sup>1</sup> Czech Geological Survey, Leitnerova 22, 658 69 Brno, Czech Republic

<sup>2</sup> Rostislav Melichar, Faculty of Sciences, Masaryk University, Kotlářská 2, 611 37 Brno, Czech Republic

The Brno Massif is a body composed of the Cadomian East and West granodiorite areas which are tectonically separated by the Metabasite Zone of the Lower Palaeozoic ?/Upper Proterozoic? age. Both the granodiorite areas are formed by calc-alkaline metaluminous rocks but they slightly differ in their composition and orientation of small scale structures. The East area is composed of granodiorites and tonalites representing plutonic rocks of a primitive volcanic arc. The West area is formed by granites, granodiorites and tonalites representing more evolved rocks of a volcanic arc or an active continental margin. Many relics of wall rocks are preserved here. Metasediments prevail in the NW-SE oriented narrow belts farther to the west. Calc-alkaline mafic and ultramafic rocks form a relatively independent N-S oriented "diorite belt" along the eastern margin of the area. The Metabasite Zone consists of a bimodal volcanic association metamorphosed in the greenschist facies conditions. The prevailing basalts have the composition similar to that of MORB.

Both the granodiorite areas were brought together along the Metabasite Zone during the older east vergent thrusting that was strongly reworked by sinistral strike slips later. The age of these events is supposed to be Variscan because of the incorporation of the Lower Devonian clastic sediments ("Old Red") and the Givetian limestones of the Babí lom Zone into the structure of the Metabasite Zone.

The Brno massif could represent a profile through the Cadomian active continental margin with the maturity increasing from the east to the west and it is possible to interpret the Metabasite Zone as a relic of a back arc basin. All these parts as the separate terranes were brought together during the Variscan orogeny.

### References

HANŽL P. and MELICHAR R. 1997. The Brno Massif: a section through the active continental margin or a composed terrane? *Krystalinikum*, 23, 33-58.

	LITHOLOGY			
	granite, granodiorite, diorite, paragneiss, migmatite, calc - silicate rock	diorite, ultramafite	basalt, rhyolite	granodiorite
<b>Zapletal</b> (1928, 1929a,b)	WESTERN AREA	CENTRAL BASIC BELT		EASTERN AREA
	SOUTHERN AREA	iorite elt	dia ase elt	
<b>Weiss</b> in Svoboda et al. (1964)	WESTERN AREA	CENTRAL BASIC BELT		EASTERN AREA
			metabasite zone	
<b>Weiss</b> in Štelcl, Weiss (1986)	WESTERN GRANODIORITE ZONE	meta iorite subzone	metadiabase subzone	EASTERN GRANODIORITE ZONE
<b>Mitrenga, Rejl</b> (1993)	BOBRAVA AREA	METABASITE ZONE AREA		SVITAVA AREA
<b>Hanžl, Melichar</b> (1997)	WEST GRANODIORITE AREA		METABASITE ZONE	EAST GRANODIORITE AREA
		diorite belt		

Tab. 1. Review of terminology and classification of the individual parts of the Brno Massif. According to Hanžl and Melichar (1997).