

PRE-TRIASSIC SECTIONS AND UNITS IN WEST BULGARIA

I. S. Zagorcev

Geological Institute, 1113 Sofia

The pre-Alpine sections in the allochthonous and parautochthonous tectonic zones and units differ considerably one from the other thus revealing the presence of different pre-Alpine terranes. The following type sections are bound to Hercynian and pre-Hercynian environments: 1) West Balkan type: Hercynian molasse deposits cover directly Early Paleozoic island - arc complexes situated over Upper Paleozoic - Vendian oceanic crust, and intruded by Hercynian intrusive complexes; 2) Kucaj type: Vendian - Cambrian (or Early Paleozoic) island-arc formations are covered by marine sedimentary formations of Ordovician - Early Carboniferous age; 3) Vlahina type: Precambrian amphibolite facies Ograzdenian metamorphics and migmatites are covered by Vendian - Cambrian island-arc formations; Late Cadomian? to Hercynian intrusive complexes; Ordovician - Permian hiatus; 4) Rhodope type: Precambrian amphibolite facies metamorphic complexes intruded by Hercynian granitoids; 5) Vlasina type: amphibolite facies ortho - and parametamorphics are covered by Ordovician metapelites, meta-psammites and marbles; 6) Elešnica type: Early Paleozoic island-arc sediments cover Ograzdenian-type amphibolite facies rocks.

The pre-Alpine tectonic relations may be reconstructed in two different ways due to uncertainties in the initial position of the allochthonous masses. From the north to the south, the following pre-Alpine zones are recognized: West Balkan; Kucaj-Svože-Šipka; Vlahina-Thracian; Mlava-Penkiŋovci-Rizovci; Vlasina-Elešnica; Jablanica-Ograzden. Thus, a crustal segment (Thracian Massif) already existed in Late Riphean - Early Paleozoic time. During the Hercynian continental collision, it underwent progressively crustal thickening with consecutive formation of I-type and S-type granitoid magmas.

