In conclusion, the succession of formations reflects general subsidence in an extensional regime (syn–rift– and post–rift sedimentation) which is superimposed by eustatic sea level changes.

Reference

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ULTRAMAFIC ROCKS IN THE MOLDANUBICUM – BOHEMICUM BORDER AREA (BOHEMIAN MASSIF).

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There are isolated occurences of ultramafic rocks in the area between moldanubicum and bohemicum which might contribute to the knowledge of the upper mantle in this zone. Moldanubicum is a gravimetrically lighter terrain with few magnetometrically positive units. Bohemicum on the other side is heavier with steeper magnetometric gradients. Mantle rocks are known from these units as xenoliths (Jakeš and Vokurka 1987) and from mantle slabs which were emplaced tectonically (Mísař et al. 1971, Machart 1982, Dudek et al. 1990 and others). Some of the ultramafic rocks have been recognized as members of ophiolite complexes (Mísař et al. 1984, Jelínek et al. 1984). Differences in geochemistry implicate mantle heterogenities which have not been fully explained (Jelínek 1991) and suggest gradients.

The zone between moldanubicum and bohemicum consists of the "Jílové zone" and the "Islet zone" of the central Bohemian pluton in the NW and of the Železné hory area in the NE. It is characterized by different stratigraphical and lithological development of the Upper Proterozoic and Lower Palaeozoic sequences compared to the Barrandien block (Kachlík 1992 and Chlupáč 1992). The ultramafic rocks of the "Islet zone" are situated in a Silurian sequence (Urbanův mlýn near Mirovice). These are serpentinites and pyroxenites with low TiO_2 contents (0.2%) suggesting relative primitive geochemical nature with little differentiation. They are very different from the spatially close ultramafics of the Barrandien area which are mostly of Silurian age and have very high TiO_2 levels (picritic intrusions and flows) interpreted as within plate volcanics, eg. Patočka et al. in print. In the Ti:Cr:Ni diagram the rocks from this border zone are closer to the rocks from the border zone between Orlice – Kladsko unit and the moravosilesicum than to the ultramafic rocks of the moldanubicum. The temperature of their equilibration is somewhat higher than the average temperature of moldanubian ultramafics.

Ultramafic rocks in the NE of the border area (Želené hory) are part of the Ransko intrusive massif. This massive is of tholeiitic chemistry, including rocks from ultramafic cumulates to gabbros and quartz diorites. Also in this part of the border zone rocks posses low TiO_2 levels. However, the age of the Ransko massive is uncertain (Cadomian to Variscan).

Geochemistry of the ultramafic rocks from the border zone shows fundamental differencies compared to similar rocks from adjacent units, suggesting different mantle and/or crustal regimes.

CHRONOLOGY OF MOVEMENTS IN CENTRAL EUROPE IN NEOTECTONIC ERA

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Collision continuing between the plate of Africa, has carried to the north, relative to stable Europe, over 200 Ma at a almost steady rate of about 25 mm/year. The Proterozoic continental core of Europe (Fennosarmatia) has hardly changed its position relative to the Earth's rotation axis (contrary to Af–