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Sea Mount as Strain Indicator. Szarvaskő Area, N Hungary

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In the Szarvaskő area two tectonic units are resting over the Bükk paraautochthonous. The Szarvaskő tectonic unit is a mid Jurassic (Árva-Sós 1989) complex, composed of MORB-like basic-ultrabasic rocks (Balla and Dobretsov 1984), shales and sandstones. The Monosbél tectonic unit is a complex composed of shales, cherts, radiolarites, oolitic sandstones, forming mostly olistostromes. The age of this complex was determined from radiolarites as upper Jurassic (Csontos 1991).

In spite of that the upper Jurassic Monosbél tectonic unit is younger than the Szarvaskő tectonic unit, field evidences show that the Monosbél tectonic unit has lower position compared with the Szarvaskő tectonic unit. It has been reconstructed the volcanic build-up of the szarvaskő area as well, developing a distorted seamount structure, which rests over Monosbél tectonic unit.

Pinch and swell structures, boudines, suggests that the first, layer-parallel shistosity has been developed by an early burial metamorphism. The second shistosity is related by dynamic metamorphism and has enhanced the asymmetry of the formerly developed structures. Shear sense indicators as asymmetrical boudins, asymmetrical folds, asymmetrical pinch and swell (extended than shortened) structures show tectonic transport direction towards SE. In this way we can consider that the two units have been thrust over the Bükk paraautochthonous from N-NW, in

accordance with Csontos (1999), between the forming of the two shistositities.

Starting from the consideration that the seamount structures are circular features it can be estimated the bidimensional bulk strain as well.

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Permian Granites in the Southern Veporicum Unit (Slovak Ore Mountains)

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A Permian age of some types of granitoid bodies have been recognised according to an intensive research and dating in the Veporic (Kotov et al. 1996) and Gemeric tectonic domains (Kováč et al. 1986, Finger and Broska 1999, Poller et al. 2000).

Two principle granitoid types are present in the Southern Veporicum Unit:

1st: **A specialized two-mica peraluminous granite** and granite-porphyrries of “Klenovec” type emerges northern of “Rimavica complex” of granitoids (Lower Carboniferous). Its composition is close to specialized granitoids of Ss type in the Geme-

ricum. The age is defined according to EMPA monazite dating at **266±16 Ma** (Finger et al. 2003). The granite is enriched on Rb, B, U, Sn, W, Y and F. The Rb/Sr ratio is usually above value 3.5. The typical feature is the presence of Fe rich biotite, as well as turmalinization. Granite is forming stock-like body. Hraško et al. (1997) presumes its generation by dehydrating melting of biotite in the deep crustal horizons, simultaneously probably with contribution of heat from subcrustal source.

2nd: **Leucocratic muscovitic granites and aplites** are partly member of the Lower Carboniferous intrusions.