



Delineation of uplifting and subsiding zones in the Western Pannonian Basin using sinosity analysis

Judit Gál (1), Gábor Kovács (2), András Zámolyi (3), Lénárd Pál (4), and Balázs Székely (5)

(1) Eötvös Loránd University, Institute of Geography and Earth Sciences, Department of Geophysics and Space Sciences, Hungary (grease1027@freemail.hu), (2) Dept. of Geophysics and Space Science, Eötvös University, Budapest, Hungary, Dept. of Cartography and Geoinformatics, Eötvös University, Budapest, Hungary, (3) Dept. of Geophysics and Space Science, Eötvös University, Budapest, Hungary, Dept. of Geodynamics and Sedimentology, University of Vienna, Austria,, (4) Institute of Geography and Earth Sciences, Eötvös University, Budapest, Hungary , (5) Dept. of Geophysics and Space Science, Eötvös University, Budapest, Hungary, Institute of Photogrammetry and Remote Sensing, Vienna University of Technology, Austria

The recent tectonic setting of the Pannonian-basin is partly characterised by different uplift and subsident pattern. Our study area the western part of the Bakony-Hill is currently uplifting while the neighbouring Little Hungarian Plane subsides. The contact zone of this two domain can be outline only from seismic profiles and borehole data. This normal faulting represented displacement int he seismic profile, however cannot be traced up to the surface. The depth conditions can only be partly reconstruced because we use TWT data, but there is evidence that early pannonian strata are faulted. In order to trace the faulted we analysed several seismic profile.

We anticipate, that there motions inply surface this placement. Slope angles are therefore are disturbed, the valley slopes are modified and the river courses are sensitive to that change and accomodate to the new setting, restoring the original channel slope. Analysing the sinosity of these river course. We can inply to the differential uplift pattern.

Historic maps were used for river course velineation, The Second Military Survey of the Habsburg Empire (1806-1869) perfect possibility for that. This mapsheets record the pre-regulation conditions of the hidrological system, this situation is the closest to the natural unmodified state.