facies and depocenter especially in the structurally lower Tarcau nappe (Sandulescu 1984) reflects the propagating deformation front in this interval. Prograding upper age limits of conformable sedimentation and successively younger ages of sediments covering the folded pile of the outer part of the Moldavides nappe complex demon-strate continued advancing of the deformation front from Lower Miocene in the Tarcau Nappe to at least Sarmatian in the deformed foreland. Re-interpretation of the top of the frontal wedge of the Subcarpathian nappe as roof backthrust of a triangle zone (as indicated by folded overlying Sarmatian to Pleistocene strata) indicates con-tinuing deformation to sub-Recent times. Recent earthquakes (Oncescu 1984) below the bend region and results of geodetic surveys (Schmitt et al 1990) document ongoing tectonic activity.

Therefore, the structural evolution of the outer Eastern Carpathians took place between late Cretaceous and Recent times and reflects continuous, but punctuated convergence during this timespan. Deformation rates peaked during Early and Middle Miocene which is a result of possibly accelerated convergence rates in the Early Miocene, and Middle Miocene continental collision following preceding subduction of oceanic or thinned continental crust.

Dating the rotation of the Tisza-Dacia block by paleomagnetic analysis of Tertiary sedimen-tary rocks.

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Clockwise rotation of the Tisza-Dacia block (TDB) by ca. 90° has been demonstrated by a number of studies, but the precise dating of this rotation is still lacking. Published analyses of rotated Late Cretaceous magmatites ('Banatites') from the Apuseni Mts. and the Southern Carpathians constrain the rotation to be post-Cretaceous, and non-rotated Late Miocene magmatites from the Eastern Carpathians yield a lower age bracket. In contrast to previous paleomagnetic determinations of the rotation of the romanian parts of the Tisza-Dacia block which were based on usually poorly dated magmatic rocks, our study will be based mainly on paleomagnetic analyses of well-dated sedimentary rocks.

The Transylvanian Basin is situated in the stable center of the Tisza-Dacia block and paleomagnetic vectors documented in its sedimentary filling will therefore be a good representation for the time-evolution of the block's rotational movement. This study will concentrate on sediments of the western part of the Transylvanian Basin which document almost all the time-span from Late Cretaceous to Late Miocene times and did not undergo any significant deformation since they were deposited. In addition, we will analyse magmatic and sedimentary samples from the Southern Carpathians to constrain the areal extent of the TDB in pre- and syn-rotation times. This part of the project is designed as a test for the hypothesis that the eastern and central parts of the Southern Carpathians are integral parts of the rotated TDB, whereas the western Southern Carpathians consist of partly rotated slices of the TDB which were accreted to the Moesian plate during the block's rotation.

Our project, funded by NATO through its Linkage Grant scheme, is a cooperation between research groups from Tübingen, Cluj-Napoca, and Bucuresti and its participants bring together regional, sedimentologic, biostratigraphic, paleomagnetic, and tectonic expertise. A pilot study has been started this year and we will present preliminary results of it.

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