Finally, the zonation of metamorphic facies and individual pt-paths predicted by the numerical model are compared to field data from the Variscan and Alpine orogens of Central Europe.

Beaumont, C. & Quinlan, G. (1993): A geodynamic framework for interpreting crustal-scale seismic-reflectivity patterns in compressional orogens. Geophys. J. Int., 116, 754–783.

Paleomagnetic data as indicator of folding propagation in Southern Urals

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Main task of our research is the reconstruction of folding history of Southern Urals. This investigation is based on study of well-known secondary Late Paleozoic remanence in Neoproterozoic and Paleozoic rocks from the Southern Urals and uses pre-, syn- and postfolding components.

Determining a degree of folding (dip of layers in per cent) at the time of secondary overprint it is possible to interpret one in terms of temporal and spatial propagation of folding (Stamatakos, Hirt, Lowrie, 1996; Shipunov, 1997). Comparison of the paleomagnetic pole positions of Late Paleozoic secondary magnetizations with a time-averaged reference apparent polar wander path for the East European platform (Khramov 1991, Torsvik et al. 1992, Van der Voo 1993, Pechersky and Didenko 1995, Molostovsky and Khramov 1995, Smethurst *et al.*, 1998) shows that rocks within the southern Urals were remagnetized in the Late Carboniferous–Early Permian. This estimation based on paleomagnetic data is in agreement with time of collision activation of many tectonic events during the Late Paleozoic (orogeny, intensive folding deformation, thrusting, metamorphism, metasomatism, katamorphism, rejuvenation of isotopic data). A number of geological data shows possibility of propagation and decrease in intensities of these processes from the east to the west.

Late Paleozoic component of remanence in Neoproterozoic and Paleozoic rocks from western, south-western and northern areas of Bashkirian anticlinorium and areas of Southern Preuralian acquired as a rule some prefolding time. In contrast, for sites from central and eastern areas of Southern Urals, the Late Paleozoic component acquired syn- and postfolding time. This pattern reflects folding propagation during the Late Carboniferous–Early Permian from the east to the west for southern parts and from the south (central part of Bashkirian anticlinorium) to the north for northern parts of the Southern Urals.

Structural analysis of seismic data in the Baltic Basin: evidences for Silurian–Early Devonian intra-plate compression in the foreland of Caledonian orogen

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The Baltic Basin is a Late Vendian–Phanerozoic poligenetic sedimentary basin, developed at the western margin of the East European Craton. From the west it is bordered by the Tornquist-Teisseyre Zone and North German–Polish Caledonian Deformation Front. During (?Late Ordovician) Silurian the Baltic Basin constituted the foredeep of the North German–Polish Caledonides, which having been thrust over of the western margin of the Baltica plate caused its flexural bending (Poprawa et al. 1999). Simultaneously, the foredeep basin developed in front of Scandinavian Caledonides (Middleton et al. 1996) which also influenced the structural development of the Baltic Basin (Sliaupa 1999).