eter in 2% HNO_3 with a within-run precision better than 1 ‰ and long-term reproducibility better than 2.1 ‰.

The Li isotopic composition of Recent foraminiferal tests corresponds to the composition of modern ocean water (−32 ‰ δ^6Li). The composition of fossil tests and their host sediments from ODP 926A varies from ca −30 to −15 ‰ and from 0 to +5 ‰, respectively. Our data suggest no significant isotopic equilibration of Li between the foraminiferal carbonate and the sediments over the period of the past 14 m.y. The variations in Li isotopic composition in planktonic foraminifers during the past 14 m.y., and especially the shift from −20 ‰ to −32 ‰ δ^6Li in the last 4 m.y., are interpreted as resulting from a progressive change in the mechanism of continental weathering.

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New Progress in Deciphering Structural and Metamorphic Evolution of the Vepor Basement in West Carpathians

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The Vepor basement represents the inner Variscan zone of Central West Carpathians. It is mainly composed of micaschists, orthogneisses and heterogeneous para- and ortho-derived migmatites intruded by porphyritic to medium-grained peraluminous granites. The emplacement ages of granites and cooling ages of basement rocks are mostly Variscan (370–300 Ma, U/Pb and 346–377 Ma, Ar/Ar Amp–amphibolites, respectively). The basement rocks exhibit high-grade fabrics represented by compositional layering and stromatitic banding in migmatites.

The Variscan fabrics are affected by two main Alpine tectonic events. The older extensional phase results in the development of subhorizontal mylonitic foliation generally dipping to the ESE, bearing eastward-dipping stretching lineation. The extensional mylonitic foliation exhibits metamorphic and deformational gradient marked by temperature increase from east to west and from top to bottom, whilst the intensity of deformation increases in opposite direction. These phenomena are marked by the development of anastomose network of small-scale shear zones in deeper parts of the massif passing to homogeneous mylonitic reworking in a large-scale normal shear zone in the uppermost part. The temperature gradient was determined mainly by microstructural criteria, i.e., recrystallization mechanisms of individual phases and products of plagioclase destabilization.

The subsequent compressional event is documented by the development of new cleavage planes steeply dipping to the south and north with lineations and fold hinges slightly plunging to the northeast. This deformation heterogeneously affected the Vepor basement and is developed predominantly in two major zones: the Pohorelá shear zone in the north and the Korimovo shear zone in the south. Both zones are developed in zones of weakness marked by the presence of micaschists and paragneisses.

The structural, microstructural, compositional and EBSD textural data are presented to distinguish the Variscan amphibolite-facies fabrics from the Alpine upper-greenschist ones. In addition, optically measured biotite textures from microstructural–metamorphic zones are used to determine the orientation tensor to examine biotite CPO contribution to the AMS fabric pattern.

Variscan Foreland Fold-Thrust Belt of Wielkopolska (W Poland): New Structural and Sedimentological Data

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Variscan externides of Wielkopolska comprise an entirely concealed succession, at least c. 2500 m thick, of Carboniferous clastic sediments folded and thrust before the Permian. Their subcrop zone extends over a considerable area of central western Poland and is the eastern continuation of the Rhenohercynian Zone of Germany. The Carboniferous succession of Wielkopolska consists of fairly monotonous series of turbidites consistently interpreted as flysch. It was deposited during