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**Paleomagnetic results from lower Triassic red sandstones from the autochthonous cover of the Central Western Carpathians: constraints on large-scale rotations of the Alcapa microplate.**

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The Carpathian orogen formed as a result of collision of the Alcapa and Tisza-Dacia microplates with the European Platform. With the objective of better constraining the regional palaeogeographic evolution, we carried out paleomagnetic studies within the Central Western Carpathians, which constitutes a fragment of the Alcapa microplate. This study is a continuation of our earlier works performed in the Tatra Mts where we studied lower Triassic red sandstones from the autochthonous cover of the crystalline basement. This time we investigated rocks of matching age, lithology and tectonic position, from the area of two nearby mountain massifs: Low Tatra and Velka Fatra.

Petromagnetic analyses provided similar results for all the studied sites. Red sandstones are rich in hematite and contain only small amounts of low coercivity ferromagnetic minerals. Hematite carrier records one characteristic component characterized by maximum unblocking temperatures of 680°C. This component displays dominantly normal polarity with shallow to moderate inclinations and north directed declinations (after the tectonic correction).

The results obtained in this study are incompatible with previous paleomagnetic studies pointing to large-scale counterclockwise rotations of the Alcapa. On the other hand, our new findings are in good agreement with our previous results from the Tatra Mts. Observed inclinations are similar to that expected from reference paleomagnetic data from the European Platform, whereas declination values indicate only moderate counterclockwise rotations of about 20°.

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