

MAGNETIC FABRIC ANALYSIS AT THE DANUBE FAULT,  
WESTERN PART OF BOHEMIAN MASSIF IN AUSTRIA.

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Studies of anisotropy of magnetic susceptibility (AMS) have been carried out at the Hercynian (NW-SE) striking Danube Fault in Oberösterreich. The area investigated belongs to the Western part of Bohemian Massif in Austria.

Rocks of varying degree of deformation - protomylonites of (high grade metamorphic - anatectic) Perlgneiss with rare intercalations of fine-grained paragneiss - as well as mesoscopically undeformed granites have been sampled in two sections. Profile A containing the metamorphic rocks runs parallel to the Danube Fault, whereas the granite-sites build up a normal section B.

The exclusively prolate AMS-ellipsoids of the gneisses (A) show an excellent correlation with the mesoscopic fabric observed in the outcrops, magnetic foliation lying parallel to cleavage planes and maximum-axes of AMS-ellipsoids corresponding to stretching lineation.

The same shape and orientation of AMS-ellipsoids has been found for the granites in the normal section (B) in spite of the sites' distance from the Danube Fault being up to several kilometers.

This yields as a result that AMS-analysis can be

considered as a helpful instrument in detecting the range of influence of a fault zone.