



## USING OF PALEOMAGNETIC DATA FOR CORRELATION OF THE PLIOCENE-QUATERNARY SEQUENCES OF ARABIAN-CAUCASUS REGION

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Paleomagnetic study is one of the main sources for dating and correlation of Quaternary sedimentary sequences. It is especially important for correlation of intercontinental sedimentary sections of large intermountain basins of the Arabian-Caucasus region, which lack fauna finds as well as material for isotopic dating.

Best results were obtained by combination of paleomagnetic, faunal, pollen and isotopic data for sections in intermountain basins of the Armenian Volcanic Highland. 25 sedimentary sections of Quaternary deposits were examined, and in most cases paleomagnetic data was correlated with isotopic and faunal data. For example, for Karakhach sedimentary unit, where U-Pb zircon dating was used, we were able to clarify the date, based on the paleomagnetic Olduvai episode (1.87-1.67 ka), which is clearly traced in the Karakhach outcrop.

Intermountain depressions of the Eastern Anatolian Highland have much smaller amount of volcanic material suitable for isotopic dating. As a result, the role of paleomagnetic data in combination with faunal, palynological and archaeological data significantly increases here. We have described 21 sections of sediments of Quaternary river terraces, and two distinctly traced paleomagnetic episodes were identified. This allows us to interpret them, as Olduvai and Jaramillo, respectively, and thereby chronologically dismember the strata.

An example of using of solely paleomagnetic data for correlation and age interpretation of Quaternary sections is presented in our works on the Iranian Highlands (the southwestern slope and foothills of Zagros), and also at the territory adjacent to the Mesopotamian foredeep basin. Boundary of the lower fine-grained and upper course molasses consequently rejuvenates from external to internal zone.

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