

Anisotropy of the magnetic susceptibility of the Kola Peninsula dikes: a total review and significance for tectonic restorations

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In our research, we summarize the results of the anisotropy of the magnetic susceptibility (AMS) measurements, which were made during the last decade on the more than 2000 samples taken from more than 150 dikes of the Precambrian and Devonian age, located on the Kola Peninsula, NE Fennoscandia. We discuss the relationship between AMS and remanent magnetization, rock magnetism and the age of the dikes. Also we use the AMS pattern for understanding the tectonic settings at the time of the dike formation and as a tool for their express “dating”. Additionally, we combine the high- and low-temperature thermochronology and AMS data with the aim to find the relationship between AMS and thermal history of the rocks.

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