



Paleomagnetism and magnetostratigraphy of the traps from Maymecha-Kotuy area, the Siberian large igneous province (Khardakhsky, Arydzhangsky and Kogotoksky formations, the Kotuy river valley)

Anna Fetisova (1), Vladimir Pavlov (2), Roman Veselovskiy (1), and Anton Latyshev (1)

(1) Moscow State University, Geological, Moscow, Russian Federation (anna-fetis@yandex.ru), (2) Moscow Institute of Physics of the Earth, Moscow, Russian Federation

The duration and, especially, the rate of the formation of a thick sequence of the Siberian traps still remains a subject of debate. Resolving of this question is very important to determine the relationship between the great end-Permian extinction and the Siberian trap magmatism. The absence of stratigraphic correlation of trap cross-sections of Norilsk and Maymecha-Kotuy areas does not allow to estimate the volume of volcanic eruptions, which directly correlate with the impact of these eruptions on the ecosystems. In 2008-2009 we have carried out a detailed paleomagnetic sampling of the reference sections of the traps Maymecha-Kotuy area (the north of the Siberian platform). In this report we present the results of the paleomagnetic studies of the lower part of the traps sections, which are exposed along the Kotuy river valley and includes Khardakhsky, Arydzhangsky and Kogotoksky formations.

In total about 1000 paleomagnetic samples were measured. The report includes the results of magnetomineralogical and petrographic studies. The detailed magnetostratigraphic scale of the traps of the Kotuy river valley is offered. For each of studied formations paleomagnetic directions and paleomagnetic poles were calculated. Also we present arguments in favor of the primary origin of the magnetization of the investigated rocks.

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