



## **New magnetostratigraphic data on the Maymecha-Kotuy area, the Siberian Large Igneous Province**

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

(1) Moscow State University, Geological, Moscow, Russian Federation (ramzesu@ya.ru), (2) Moscow Institute of Physics of the Earth, Moscow, Russian Federation

The main important goal of our paleomagnetic researches is quantitative estimation of duration and character of Permian-Triassic traps volcanism in the Maymecha-Kotuy area and the Siberian traps in whole. At the same time for understanding of geomagnetic field evolution we should survey some its significant characteristics during the Siberian trap eruptions, such as paleosecular variations, paleointensity, etc.

In this report we present the main results of paleomagnetic researches of the most complete Permian-Triassic volcanic sections of the Maymecha-Kotuy trap area of the Siberian platform, executed for last 2 years and based on flow-by-flow sample collection.

Detailed paleomagnetic collections of all effusive formations, which are exposed along Kotuy and Maymecha river valleys, have been studied: Khardakhsky, Arydzhangsky, Kogotoksky on the Kotuy river, and Pravoboyarsky, Tyvankitsky (Kogotoksky), Delkansky and Maymechinsky on the Maymecha river. The volume of paleomagnetic collections is about 3000 samples in total.

Based on the obtained data the magnetostratigraphic scheme of Maymecha-Kotuy area has been constructed, for each sampled formation paleomagnetic directions and poles have been calculated. Results of our researches are extremely important for estimation of volume and intensity of the Siberian trap volcanism, which will allow estimating the influence of traps eruption on the environment.

Magnetostratigraphic studies of Maymecha-Kotuy trap province of the Siberian platform are performed within the NSF project «The Siberian Traps and end-Permian extinction» and also supported by grant of Russian Foundation for Basic Research "Magmatic pulses and Permian-Triassic crisis (estimation of eruption intensity of the Siberian Traps by paleomagnetic method)" (09-05-01180).