

English abstract

The aim of this thesis is verification of the theory about evolution of the Mongolian orocline in Permo-Triassic by the paleomagnetic analysis of rocks taken from south-west Mongolia and it is the first step to understand the problematics in bigger detail. Basics of magnetism, geomagnetism, paleomagnetism and geology of the studied part of Mongolia are described in first part of this thesis. Second part is dedicated to methodology and my own research with the thermoremanent magnetizations data.

Mongolia is situated between three cratons – Siberia, North China and Tarim and it is part of the Central Asian Orogenic Belt (CAOB), which evolution is not well understood and it is still being studied by a lot of researches. Kröner (2010) says, that the area of Mongolia can be divided to 4 tectonic zones (Lake, Trans-Altai, Gobi-Altai and South Gobi), however Badarch et al. (2002) are dividing the area to 44 terranes, which are separated to two parts – North (Caledonian) and South (Variscan) by the Main Mongolian Lineament.

Studied part of the Mongolian area lies eastward from north boarder of China and the samples were taken from three parts – Altay, Edrene and Khovd. Sampling techniques and the whole procedure of analysing the measured data is also mentioned. There is also a comparison of the results to the previous paleomagnetic study. Our results show main distribution of magnetizations in North-South and Northwest-Eastsouth directions, which proves the rotatiton during the formation of CAOB.