

北海道中央部芦別地域に分布する空知層群-蝦夷層群の古地磁気学的研究

Paleomagnetism of the Sorachi and Yezo Group in the Ashibetsu area, central Hokkaido, Japan.

*北川 雄貴¹、高嶋 礼詩²、伊藤 康人¹

*Yuki Kitagawa¹, Reishi Takashima², Yasuto Itoh¹

1.大阪府立大学大学院理学系研究科物理科学専攻、2.東北大学総合博物館

1.Department of Physical Science, Graduate School of Science, Osaka Prefecture University, 2.Tohoku University Museum, Tohoku University

Paleomagnetic study was performed on Upper Jurassic~Lower Cretaceous Sorachi Group and Yezo Group in Ashibetsu area, central Hokkaido aiming at quantitative estimation of tectonic movements in reference to the northeastern Eurasia. Characteristic remanent magnetization (ChRM), which is carried by various ferromagnetic minerals, was isolated for five sites. To determine their origin, we executed isothermal remanent magnetization (IRM) experiments, and origin of ChRM is categorized into two groups. One of them is positive in reversal test, and enhanced precision parameter after tilt correction implied pre-folding origin. Untilted formation mean direction ($D=-12.0^\circ$, $I=47.7^\circ$, $\alpha_{95}=12.3^\circ$) is characterized by significantly shallower inclination than the expected value for coeval mother continent, and northward movement since the Cretaceous is determined to be 2100 km (± 1500 km). In comparison with previous paleomagnetic studies and tectonic models, central Hokkaido could consist of at least two components and have experienced rapid northward movement driven by plate motion.

キーワード：古地磁気学、北海道、白亜紀

Keywords: Paleomagnetism, Hokkaido, Cretaceous