Rock magnetic investigations on the Cretaceous granite and gabbroic dikes of the southernmost Abukuma area

Nobutatsu Mochizuki[1], Hideo Tsunakawa[2]

[1] Earth and Planetary Sci.,Tokyo I.T., [2] Earth and Planet. Sci., TITECH

We have been investigating the rock magnetism and paleomagnetism of the granitic rocks and gabbroic dikes of the southernmost Abukuma area. Their Ar40/Ar39 plateau ages have been reported to be 102-105 Ma. As these ages correspond to the midpoint of the Cretaceous superchron, the studied rocks are possible to yield paleomagnetically important data, especially for the paleointensity. We have applied the Thellier and DHT-Shaw methods to these samples and obtained the experimentally successful results from the granitic samples. However, the origin of their magnetization should carefully be examined. It may have come from TRM, TVRM, CRM, TCRM, and so on. If it is not a TRM-origin, the paleointensity determination method becomes invalid.