

Saturation of Anhyseretic Remanent Magnetization and Diagenesis

Nobuaki Niitsuma[1], Toshiya Kanamatsu[2]

[1] Inst. Geosci., Shizuoka Univ., [2] JAMSTEC

The saturation of the alternating field intensity for anhysteretic remanent magnetization ARM is recognized in the upper part of the sequences of ODP Site 1150 off Kamaishi and Site 1151 off Kessenuma on Fore Arc of the Japan Trench. The saturation is disappeared in the deferent depths, 780m in Site 1150 and 350m in Site 1151. The depth in Site 1150 corresponds to the disappearance depth of the soft component of magnetization after hydrochloric acid treatment. The depths are correlated with the top of the porosity linear decrease zone, and also with the top of the development of fractures and faults. The depths should be relating to the diagenetic changes in the rock mechanic character, accompanied with the decomposition of magnetic minerals.