

Geomagnetic field in the Matuyama and the Gauss Chron at IODP Site U1314 in the North Atlantic

Fumiki Komatsu[1]; Fumi Murakami[2]; Masao Ohno[3]; Yohan Guyodo[4]; Toshiya Kanamatsu[5]; Gary Acton[6]; Helen Evans[7]; Ohno Masao IODP Expedition 306 Shipboard Scientific Party[8]

[1] SCS, Kyushu Univ; [2] SCS,kyushu Univ; [3] Dept. Earth Science, Kyushu Univ.; [4] Laboratoire des Sciences du Climat et de l'Environnement, France; [5] JAMSTEC; [6] Dept. Geol., Univ. California, Davis; [7] U.Florida, USA; [8] -

Recently, paleomagnetic studies on marine sediment cores developed rapidly. The relative paleointensity variations during the last 800 kyrs (Sint-800) were established in the Brunhes Chron. Analysis of the Matuyama Chron and the Gauss Chron is expected. In this study, a high-resolution paleomagnetic record in ca. 1.8-2.6 Ma is reported for IODP Site U1314 (300m long), drilled on the southern Gardar Drift in a water depth of 2800m, off Iceland in the North Atlantic. Based on the onboard magnetostratigraphy and biostratigraphy, the sedimentation rate is estimated to be 8-11 cm/kyr. Stepwise AF demagnetizing experiments were made for NRM and ARM of the U-channel samples. Based on the result, VGP paths of the geomagnetic reversals and the excursions in this period are discussed. The estimated variation in the relative paleointensity shows several low values accompanied by large directional changes. We will perform spectral analysis of the record of relative paleointensity.