Japan Geoscience Union Meeting 2015

(May 24th - 28th at Makuhari, Chiba, Japan)

©2015. Japan Geoscience Union. All Rights Reserved.



Room:A05



Time:May 27 10:15-10:30

Paleomagnetic study on the ferromanganese crusts recovered from northewest Pacific

NOGUCHI, Atushi1* ; YAMAMOTO, Yuhji2 ; NISHI, Keisuke3 ; USUI, Akira4

¹Graduate School Of Integrated Arts and Sciences, ²Center for Advanced Marine Core Research, Kochi University, ³Kochi University, ⁴Geology Dept., Kochi Univ.

We have conducted paleomagnetic measurements on the ferromanganese crusts recovered from five different locations in the northwest Pacific. The analyses were made on a series of the thin slices (0.5-1.0 mm in thickness) cut perpendicular to the growth layers of the crusts, from surface to the interior. We recognized 2-8 polarity reversals in the crusts, and the most surficial layers were commonly characterized by normal polarities. Assuming that these layers were grown constantly in Brunhes normal polarity chron (0-0.78 Ma), growth rates were estimated as 2.1-5.0 mm/Ma. These rates are consistent with those estimated by the ${}^{10}\text{Be}/{}^{9}\text{Be}$ method except for one location.

Keywords: ferromanganese crust, paleomagnetic polarity, growth rate