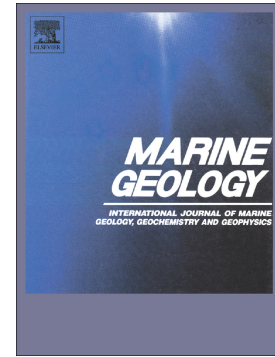


## Accepted Manuscript

Magnetostratigraphy of ODP Site 1143 in the South China Sea since the Early Pliocene

Huaichun Wu, Meinan Shi, Xixi Zhao, Bingyue Huang, Shihong Zhang, Haiyan Li, Tianshui Yang, Changsong Lin



PII: S0025-3227(17)30380-8  
DOI: doi: [10.1016/j.margeo.2017.08.010](https://doi.org/10.1016/j.margeo.2017.08.010)  
Reference: MARGO 5671

To appear in: *Marine Geology*

Received date: 7 November 2016  
Revised date: 5 August 2017  
Accepted date: 9 August 2017

Please cite this article as: Huaichun Wu, Meinan Shi, Xixi Zhao, Bingyue Huang, Shihong Zhang, Haiyan Li, Tianshui Yang, Changsong Lin, Magnetostratigraphy of ODP Site 1143 in the South China Sea since the Early Pliocene, *Marine Geology* (2017), doi: [10.1016/j.margeo.2017.08.010](https://doi.org/10.1016/j.margeo.2017.08.010)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Magnetostratigraphy of ODP Site 1143 in the South China Sea since the Early Pliocene

Huaichun Wu<sup>a,b,\*</sup>, Meinan Shi<sup>a,b</sup>, Xixi Zhao<sup>c,d</sup>, Bingyue Huang<sup>a,b</sup>, Shihong Zhang<sup>a</sup>, Haiyan Li<sup>a</sup>,  
Tianshui Yang<sup>a</sup>, Changsong Lin<sup>b</sup>

<sup>a</sup> State Key Laboratory of Biogeology and Environmental Geology, China University of Geosciences,  
Beijing 100083, China

<sup>b</sup> School of Ocean Science, China University of Geosciences, Beijing 100083, China

<sup>c</sup> State Key Laboratory of Marine Geology, Tongji University, Shanghai 200092, China

<sup>d</sup> Department of Earth and Planetary Sciences, University of California, Santa Cruz, CA 95064, USA

\*Corresponding author: Huaichun Wu (whcgeo@cugb.edu.cn)

### Abstract

Ocean Drilling Program Site 1143 of Leg 184 in the southern South China Sea (SCS) recovered a continuous sedimentary sequence since the Late Miocene (~10 Ma), which provides a unique record for better understanding the tectonic, environmental, and climatic evolution in the southern part of the SCS. In this study, we conducted a detailed rock magnetism and paleomagnetism study on 637 discrete samples taken from 512.1 m cores of Hole 1143C. Rock magnetic measurements indicate that the main magnetic mineral is single domain magnetite for samples from the upper 200 mcd (meter composite depth). All samples were subjected to stepwise alternating field demagnetization. The demagnetization behaviors of the samples below 200 mcd were erratic and unstable, owing to very weak remanent magnetization. A total of 15 reliable magnetic reversal events were identified in the upper 190 mcd cores of Hole 1143C based on the declination variations of the characteristic remanent magnetization, which can be correlated very well with the Geomagnetic Polarity Time Scale 2012 in combination with biostratigraphic data and

Download English Version:

<https://daneshyari.com/en/article/8912076>

Download Persian Version:

<https://daneshyari.com/article/8912076>

[Daneshyari.com](https://daneshyari.com)