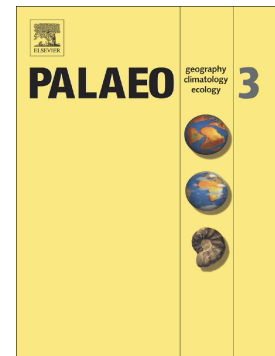


## Accepted Manuscript

Holocene vegetation dynamics in response to climate change and human activities derived from pollen and charcoal records from southeastern China

Lin Zhao, Chunmei Ma, Christian Leipe, Tengwen Long, Kam-biu Liu, Huayu Lu, Lingyu Tang, Yu Zhang, Mayke Wagner, Pavel E. Tarasov



PII: S0031-0182(17)30419-4  
DOI: doi: [10.1016/j.palaeo.2017.06.035](https://doi.org/10.1016/j.palaeo.2017.06.035)  
Reference: PALAEO 8372

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 22 April 2017  
Revised date: 16 June 2017  
Accepted date: 16 June 2017

Please cite this article as: Lin Zhao, Chunmei Ma, Christian Leipe, Tengwen Long, Kam-biu Liu, Huayu Lu, Lingyu Tang, Yu Zhang, Mayke Wagner, Pavel E. Tarasov, Holocene vegetation dynamics in response to climate change and human activities derived from pollen and charcoal records from southeastern China, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2017), doi: [10.1016/j.palaeo.2017.06.035](https://doi.org/10.1016/j.palaeo.2017.06.035)

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.

**Holocene vegetation dynamics in response to climate change and human activities derived from pollen and charcoal records from southeastern China**

Lin Zhao<sup>1,2</sup>, Chunmei Ma<sup>1,3\*</sup>, Christian Leipe<sup>2</sup>, Tengwen Long<sup>2,4</sup>, Kam-biu Liu<sup>5</sup>,  
Huayu Lu<sup>1</sup>, Lingyu Tang<sup>6</sup>, Yu Zhang<sup>1</sup>, Mayke Wagner<sup>4</sup>, Pavel E. Tarasov<sup>2\*</sup>

<sup>1</sup>School of Geographic and Oceanographic Sciences, Nanjing University, Nanjing 210023, China

<sup>2</sup>Institute of Geological Sciences, Paleontology Section, Free University Berlin, Malteserstr.  
74-100, Haus D, 12249 Berlin, Germany

<sup>3</sup>Jiangsu Collaborative Innovation Center for Climate Change, Nanjing 210023, China

<sup>4</sup>German Archaeological Institute, Eurasia Department and Beijing Branch Office, Im Dol 2-6,  
Haus 2, 14195 Berlin, Germany

<sup>5</sup>Department of Oceanography and Coastal Sciences, School of the Coast and Environment,  
Louisiana State University, Baton Rouge, LA 70803, USA

<sup>6</sup>Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, Nanjing 210083,  
China

\* Corresponding authors.

Pavel E. Tarasov (ptarasov@zedat.fu-berlin.de) and Chunmei Ma  
(chunmeima@nju.edu.cn)

**Abstract:**

Our knowledge about the Holocene evolution of the East Asian summer monsoon (EASM) and its relation to human activities remains incomplete. A detailed palynological investigation of two sediment sections from the Daiyun Mountain Nature Reserve (ca. 25°38'–25°44'N, 118°05'–118°21'E, Fujian Province) suggests EASM-controlled subtropical climate conditions that were wetter and warmer than present over the early and middle Holocene. After 5700 cal. yr BP, steadily increasing non-arboreal pollen and fern spore percentages imply an attenuation of the EASM. The general climate trend is interrupted by several century-scale changes in

Download English Version:

<https://daneshyari.com/en/article/8868702>

Download Persian Version:

<https://daneshyari.com/article/8868702>

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