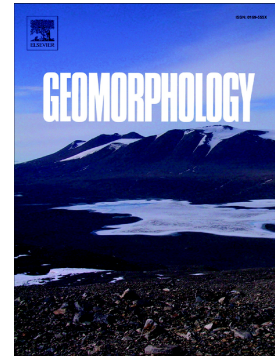


## Accepted Manuscript

Spatial-temporal evolution of the eastern Nanhui mudflat in the Changjiang (Yangtze River) Estuary under intensified human activities

Xiaodong Zhang, Yexin Zhang, Longhai Zhu, Wanqing Chi, Zuosheng Yang, Biying Wang, Kai Lv, Hongmin Wang, Zhiyong Lu



PII: S0169-555X(18)30082-5  
DOI: doi:[10.1016/j.geomorph.2018.02.023](https://doi.org/10.1016/j.geomorph.2018.02.023)  
Reference: GEOMOR 6335  
To appear in: *Geomorphology*  
Received date: 25 September 2017  
Revised date: 20 February 2018  
Accepted date: 22 February 2018

Please cite this article as: Xiaodong Zhang, Yexin Zhang, Longhai Zhu, Wanqing Chi, Zuosheng Yang, Biying Wang, Kai Lv, Hongmin Wang, Zhiyong Lu , Spatial-temporal evolution of the eastern Nanhui mudflat in the Changjiang (Yangtze River) Estuary under intensified human activities. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Geomor(2017), doi:[10.1016/j.geomorph.2018.02.023](https://doi.org/10.1016/j.geomorph.2018.02.023)

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.

# Spatial-temporal evolution of the eastern Nanhui mudflat in the Changjiang (Yangtze River) Estuary under intensified human activities

Xiaodong Zhang<sup>1\*</sup>, Yexin Zhang<sup>1</sup>, Longhai Zhu<sup>1</sup>, Wanqing Chi<sup>2</sup>, Zuosheng Yang<sup>1</sup>, Biying Wang<sup>1</sup>, Kai Lv<sup>1</sup>,  
Hongmin Wang<sup>1</sup>, Zhiyong Lu<sup>1</sup>

1 Key Lab of Submarine Geosciences and Prospecting Techniques, MOE and College of Marine Geosciences,  
Ocean University of China, Qingdao 266100, P.R. China

2 First Institute of Oceanography, State Oceanic Administration, Qingdao 266061, P.R. China

\*Corresponding author: zxd@ouc.edu.cn

## Abstract

The eastern Nanhui mudflat (ENM), located in the southern flank of the Changjiang (Yangtze River) Estuary, plays a key role in storm protection, defense against sea level rise, and land resource provision for Shanghai, China's largest city. Recently, there has been a great deal of concern for its evolutionary fate, since a drastic reduction in the Changjiang sediment discharge rate and an increased number of estuarine enclosures might negatively impact the environmental protection functions that this mudflat provides. In this paper, a novel method, which employed the envelope lines of instantaneous shoreline positions identified in 436 Landsat satellite images from 1975–2016, was used to demonstrate the evolution of the mudflat high and low tide lines in a detailed,

Download English Version:

<https://daneshyari.com/en/article/8908053>

Download Persian Version:

<https://daneshyari.com/article/8908053>

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