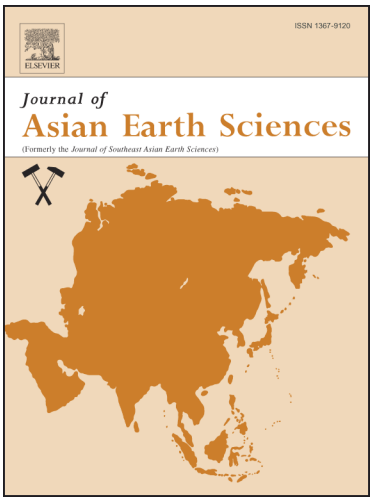

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PII: S1367-9120(17)30681-8
DOI: https://doi.org/10.1016/j.jseaes.2017.12.006
Reference: JAES 3338

To appear in: *Journal of Asian Earth Sciences*

Received Date: 5 June 2017
Revised Date: 6 December 2017
Accepted Date: 6 December 2017

Please cite this article as: Wu, X., Xing, L., Zhang, T., Xiang, R., Mid–late Holocene changes in sedimentary organic matter on the inner shelf of the East China Sea, *Journal of Asian Earth Sciences* (2017), doi: https://doi.org/10.1016/j.jseaes.2017.12.006

Mid–late Holocene changes in sedimentary organic matter on the inner shelf of the East China Sea

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Abstract

Marginal seas are important transitional zones for the delivery of terrestrial organic matter (TOM) from land to the open sea, and they play an important role in the carbon cycle. Tracing the source of sedimentary organic matter (SOM) deposited in marginal seas is fundamental to our understanding of the dispersal, degradation, migration, and conversion of organic matter. This paper presents high-resolution records of bulk organic matter and biomarker proxies from Core T08 that was recovered from the inner shelf of the East China Sea (ECS), and aims to identify the contributions of marine and terrestrial organic matter over the past 3725 yrs. Total organic carbon (TOC) values were low (0.50%) and showed no significant change between 3725 and 1800 yr BP (Period I), and increased continuously from 0.40% to 0.86% after 1800 yr BP (Period Ⅱ: 1800–750 yr BP; Period Ⅲ: 750 yr BP–present). The TMBR′

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