

Accepted Manuscript

An extensive anoxic event in the Triassic of the South China Block: A pyrite framboid study from Dajiang and its implications for the cause(s) of oxygen depletion

Wei Liao, David P.G. Bond, Yongbiao Wang, Lei He, Hao Yang, Zeting Weng, Guoshan Li

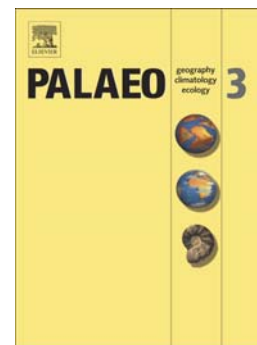
PII: S0031-0182(16)30699-X
DOI: doi: [10.1016/j.palaeo.2016.11.012](https://doi.org/10.1016/j.palaeo.2016.11.012)
Reference: PALAEO 8047

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 8 May 2016
Revised date: 4 November 2016
Accepted date: 6 November 2016

Please cite this article as: Liao, Wei, Bond, David P.G., Wang, Yongbiao, He, Lei, Yang, Hao, Weng, Zeting, Li, Guoshan, An extensive anoxic event in the Triassic of the South China Block: A pyrite framboid study from Dajiang and its implications for the cause(s) of oxygen depletion, *Palaeogeography, Palaeoclimatology, Palaeoecology* (2016), doi: [10.1016/j.palaeo.2016.11.012](https://doi.org/10.1016/j.palaeo.2016.11.012)

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.



An extensive anoxic event in the Triassic of the South China Block: a pyrite framboid study from Dajiang and its implications for the cause(s) of oxygen depletion

Wei Liao ^a, David P.G. Bond ^b, Yongbiao Wang ^{a,*}, Lei He ^c, Hao Yang ^d, Zeting Weng ^e, Guoshan Li ^a

^a *State Key Laboratory of Geological Processes and Mineral Resources, School of Earth Sciences, China University of Geosciences, Wuhan 430074, China*

^b *School of Environmental Sciences, University of Hull, Hull, HU6 7RX, UK*

^c *Qingdao Institute of Marine Geology, Qingdao 266071, China*

^d *State Key Laboratory of Biogeology and Environmental Geology, School of Earth Sciences, China University of Geosciences, Wuhan 430074, China*

^e *Faculty of Engineering, Wuhan University of Engineering Science, Wuhan 430200, China*

*Corresponding author: Tel.: + 86 27 6788 4320; fax: +86 6788 3001; *E-mail address*: wangyb@cug.edu.cn (Y. Wang).

Abstract

Water column oxygen deficiency has been considered as a potent driver of the extinction of marine benthos, and is a main feature of marine environments in the aftermath of the end-Permian mass extinction. The record of Permian-Triassic anoxia is more complex than previously thought, and is seen to vary between different palaeogeographic settings, but a full understanding is hindered by a paucity of evidence. During the Permian-Triassic interval the South China Block was located equatorially with Palaeotethys to the north and western Panthalassa to the south. This specific configuration provides a unique opportunity to compare the extent and duration of oxygen deficiency in Palaeotethys and Panthalassa under broadly similar climatic conditions. Sedimentary facies and pyrite framboid size-frequency distributions suggest that the oxygen-poor conditions became widespread across the

Download English Version:

<https://daneshyari.com/en/article/8868617>

Download Persian Version:

<https://daneshyari.com/article/8868617>

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