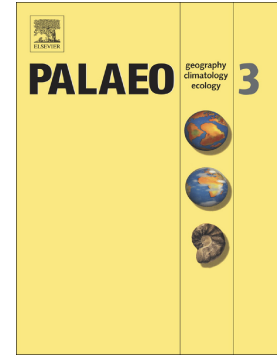


Accepted Manuscript

Mercury anomalies, volcanic pulses, and drowning episodes along the northern Tethyan margin during the latest Hauterivian-earliest Aptian

Guillaume Charbonnier, Alexis Godet, Stéphane Bodin, Thierry Adatte, Karl B. Föllmi



PII: S0031-0182(18)30138-X

DOI: doi:[10.1016/j.palaeo.2018.06.013](https://doi.org/10.1016/j.palaeo.2018.06.013)

Reference: PALAEO 8818

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 15 February 2018

Revised date: 1 June 2018

Accepted date: 8 June 2018

Please cite this article as: Guillaume Charbonnier, Alexis Godet, Stéphane Bodin, Thierry Adatte, Karl B. Föllmi, Mercury anomalies, volcanic pulses, and drowning episodes along the northern Tethyan margin during the latest Hauterivian-earliest Aptian. *Palaeo* (2017), doi:[10.1016/j.palaeo.2018.06.013](https://doi.org/10.1016/j.palaeo.2018.06.013)

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.

Mercury anomalies, volcanic pulses, and drowning episodes along the northern Tethyan margin during the latest Hauterivian-earliest Aptian.

Guillaume Charbonnier^{1*}, Alexis Godet², Stéphane Bodin³, Thierry Adatte¹, Karl B. Föllmi¹

1. Institute of Earth Sciences, Géopolis, University of Lausanne, CH-1015 Lausanne, Switzerland.

2. Department of Geological Sciences, The University of Texas at San Antonio, San Antonio, TX 78249, USA.

3. Department of Geoscience, Aarhus University, Høegh-Guldbergs Gade 2, 8000 Aarhus C, Denmark.

* Corresponding author.

E-mail address: guillaume.charbonnier@unil.ch (G. Charbonnier)

Telephone number: 00 41 (0) 21 692 43 10

Abstract

The latest Hauterivian-earliest Aptian time interval includes three episodes of significant environmental change (Faraoni, late early-Barremian, and Taxy Episodes). This time interval appears to partially overlap with large-scale volcanic activity related to the Tristan da Cunha plume along the Rio Grande Rise, High Arctic large igneous province volcanism, and the early phase in the formation of the greater Ontong Java LIP in the Pacific. The establishment of exact temporal relationships between volcanic activity and environmental change remains, however, a major challenge, due to the scarcity of numerical ages for the Early Cretaceous. We report mercury (Hg) contents in uppermost Hauterivian-lowermost Aptian marl/limestone alternations from seven sections along a N-S transect in the Western Tethys. The Hg contents in marl samples display rather scattered records, which are generally well correlated with the total organic carbon (TOC) records.

Download English Version:

<https://daneshyari.com/en/article/8868165>

Download Persian Version:

<https://daneshyari.com/article/8868165>

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