

## Cretaceous Greenhouse World and Ocean Anoxic Environments

# Asahiko Taira[1]

[1] Ocean Research Institute, Univ. of Tokyo

<http://www.ori.u-tokyo.ac.jp/>

The environmental history of the Earth can be viewed as progressive shift from the Earth that was dominated by aquatic surface, mantle plume activity, anoxic ocean and hydrothermal circulation to the Earth with continental crust, plate tectonics, oxic ocean and fluvial material cycle. The early to mid-Cretaceous work mimicked the early history of the Earth in many ways: high mantle plume activity, extensive transgression and anoxic ocean. The prominent change seems to have occurred in the marine ecology. Cyanobacteria that was the dominant organism in the early history of the Earth replaced the primary producer such as diatoms in a strongly stratified and nutrient-poor ocean.

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