

OES006-02

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## 白亜紀末における巨大小天体衝突に伴う地球環境擾乱と生物大量絶滅

### A large asteroid impact, perturbation of global environment, and linkage to mass extinction at the end of Cretaceous

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The story that collision of a large asteroid on the earth caused an extinction of dinosaurs at the end of Cretaceous (65 million years ago) is well-known in the public. However, the story is not necessary well-accepted because of the over-advertisement of the skepticism on this impact and mass extinction problem. Here, I will give an overview on the research history of the large asteroid impact on the earth at the end of Cretaceous (so-called K/T impact) and its relation to the global environmental change and mass-extinction. Through an intensive research over the last 30 years, the collision of ca. 10km diameter asteroid on the earth at Yukatan Peninsula at the end of Cretaceous is well-established. It is also well-established that many of marine plankton were extinct, marine ecosystem collapsed, and global carbon cycle was disturbed significantly immediately after the impact event. What is not yet well-understood are mechanism(s) that caused mass extinction and the reason(s) perturbed ecosystem and carbon cycle lasted for more than 1 million years.

キーワード:小天体衝突, K/T境界,環境擾乱,生物絶滅

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