

MIS007-P07

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## Lithology and ages of Cretaceous shallow-water carbonates from the Ogasawara Plateau

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There are many submerged seamounts and guyots capped with Cretaceous shallow-water carbonates in the northwestern Pacific Ocean. The shallow-water carbonates were recovered by ocean drilling during the Ocean Drilling Program (ODP) Legs 143 and 144 and by dredging many during scientific cruises (e.g. the Aries V Expedition) to reconstruct paleoclimatic and paleoceanographic conditions of Cretaceous shallow tropical seas and to delineate evolution in ecosystems of Cretaceous carbonate platforms. However, these scientific issues have not been well elucidated due to technical and logistical difficulties in collecting well-consolidated carbonates at high recovery.

Previous studies show that seamounts on the Ogasawara Plateau are capped with >1,000-m-thick Cretaceous shallow-water carbonates. Sr isotope stratigraphy indicate that the ages of the carbonates from the seafloor of this plateau fall in two discrete ranges, the Mid- (Aptian) and Late (Coniacian to Campanian) Cretaceous. Therefore the Ogasawara Plateau is one of the excellent ocean drilling targets to obtain continuous records of Cretaceous shallow-water carbonates. It is expected, by investigating these carbonates, for us to delineate paleoenvironments in Cretaceous tropical shallow seas and paleoecology and evolution of platform biotas in the greenhouse Earth.

From HT; I joined the "IODP New Ventures in Exploring Scientific Targets (INVEST)", which was held in September 23-25 2009 in Bremen, Germany, and made a poster presentation to propose scientific drilling into shallow-water carbonates on the Ogasawara Plateau. It was a nice meeting to understand the history, achievements, and roles of the Integrated Ocean Drilling Program (IODP) and to learn scientific goals of a new ocean drilling program, which will start in 2013.

Keywords: Ogasawara Plateau, Shallow-water carbonate, Sr isotope stratigraphy, Cretaceous