

Conodont biostratigraphy of Anisian pelagic deep-sea sedimentary rocks deposited in the pelagic Panthalassa—Integration with radiolarian biozones—

*Shun Muto¹, Satoshi Takahashi¹, Satoshi Yamakita², Katsuhito Soda³, Tetsuji Onoue³

1. Department of Earth and Planetary Science, Graduate School of Science, University of Tokyo, 2. Faculty of Education, University of Miyazaki, 3. Faculty of Advanced Science and Technology

The age of pelagic Panthalassic deep-sea sedimentary rocks such as bedded chert and claystone has been assigned based on radiolarian biozones. However, Middle Triassic radiolarian biozones of pelagic Panthalassic deep-sea strata are not precisely correlated to the standard geological timescale. In order to establish a direct correlation between the pelagic Panthalassic radiolarian biozones and the standard geological timescale, we investigated conodont biostratigraphy in two radiolarian-controlled bedded chert sections of Anisian age: the Ajiro Island section in Oita Prefecture and the Kurusu section in Aichi Prefecture. We recognised six conodont biozones in the studied sections: the upper Olenekian *Novispathodus brevissimus-Icriospathodus collinsoni* and *Triassospathodus homeri* Zones, the lower Anisian *Chiosella timorensis* Zone, the middle Anisian *Paragondolella bulgarica* Zone, the upper Anisian *Paragondolella excelsa* Zone and the uppermost Anisian to lowermost Ladinian *Paragondolella trammeri* Zone. Based on the recognition on these conodont zones, we reassessed the age of the Triassic radiolarian biozones defined by Sugiyama (1997, *Bull. Mizunami Foss. Mus.*, vol. 24, p. 79–193). Sugiyama's radiolarian TR 1 Zone, previously considered to be of Olenekian age, extends to the middle Anisian. The TR 2A Zone, the TR 2B Zone and the lower part of the TR 2C Zone are correlated to the middle Anisian, while the upper part of the TR 2C Zone and the lower part of the TR 3A Zone are correlated to the upper Anisian. The upper part of the TR 3A Zone and the lower part of the TR 3B Zone are probably correlative to the uppermost Anisian, but the possibility that they are correlative to the lowermost Ladinian cannot be ruled out.

Keywords: bedded chert, microbiostratigraphy, Jurassic accretionary complex