Chemostratigraphy of the Middle Triassic bedded chert sequence in the Mino Belt, central Japan

SODA, Katsuhito$^1$; ONOUE, Tetsuji$^1$

$^1$Kumamoto Univ.

Previous studies have proposed that the alterations of chert and shale beds in the bedded chert sequence of the Japanese Jurassic accretionary complex are paced by precession and eccentricity cycles, especially chert bed thickness variation is interpreted as productivity fluctuations. However, the cyclostratigraphic interpretations and the continuity of sequence between sections await further verification (Ogg, 2014). In this study, we focus on shale beds as geochemical proxies for stratigraphic correlation and paleoclimatological interpretation. Then we conducted geologic survey at Section M, CH2L, L, and B (Anisian and Ladinian based on detailed radiolarian biostratigraphy by Sugiyama, 1997), reconstructed the composite column using stratigraphic correlation of lithological associations between sections, and collected shale bed samples with bed by bed resolution for geochemical analysis (more than 500 samples). The reconstructed lithostratigraphy of the Middle Triassic bedded chert sequence consists of lower gray bedded chert, lower red bedded chert, upper gray bedded chert, and upper red bedded chert in ascending order (Ikeda et al., 2010). The elemental compositions in shale beds are determined by XRF analysis. In presentation, we will discuss about the geochemical characteristics of shale beds, the chemostratigraphy of the Middle Triassic bedded chert sequence, and their implications.