中国南西部昌寧一孟連帯三畳系牡音河層の堆積場の再検討

Reconsideration of sedimentary place of the Triassic Muyinhe Formation in the Changning-Menglian belt of Southwest China

- *伊藤 剛1、銭 鑫2、馮 慶来2
- *Tsuyoshi Ito¹, Xin Qian², Qinglai Feng²
- 1.中国科学院南京地質古生物研究所、2.中国地質大学武漢
- 1.Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, 2.China University of Geosciences, Wuhan

Siliceous rocks of the Triassic Muyinhe Formation in the Changning-Menglian belt in southwestern Yunnan Province in Southwest China had been considered to be pelagic deposits. We observed them and analyzed their geochemistry, and recosidered the sedimentary place.

The observation revealed that the siliceous rocks are characterized by inclusion of abundant radiolarian test (e.g., Triassocampe Dumitrica, Kozur, and Mostler, Pseudostylosphaera Kozur and Mostler, Eptingium Dumitrica, and Paroertlispongus) and the lack of rhythmical bedding. The geochemical results are as follows: the samples have high concentrations of SiO_2 ; most of the samples were plotted in the non-hydrothermal field on the Al-Fe-Mn diagram; most of the samples were plotted in the continental margin field on the $Fe_2O_3/TiO_2-Al_2O_3/(Al_2O_3+Fe_2O_3)$ and $(La/Ce)N-Al_2O_3/(Al_2O_3+Fe_2O_3)$ diagrams. In addition, the samples show a flat rare earth element pattern normalized to North America shale composite.

These observational and geochemical results strongly suggest that the siliceous rocks are unlikely to represent pelagic deposits, indicating that the extent of the pelagic ocean basins in the Paleotethys during the Triassic is probably less than previously believed. These non-pelagic deposits may represent the closure stage of the Paleotethys.

キーワード:地球化学、三畳紀、珪質岩、放散虫、パレオテチス、昌寧一孟連帯

Keywords: Geochemistry, Triassic, siliceous rock, radiolaria, Paleotethys, Changning-Menglian belt