CORRELATION OF THE TRIASSIC STRATIGRAPHY BETWEEN SIMAO AND LAMPANG-PHRAE BASINS : IMPLICATIONS FOR THE TECTONOPALEOGEOGRAPHY OF SOUTHEAST ASIA

Chonglakmani, C.

School of Geotechnology, Suranaree University of Technology, 111 University Avenue, Muang District, Nakhon Ratchasima 30000, Thailand

Feng, Q.-L.

Faculty of Earth Sciences, China University of Geosciences, Wuhan 430074, P.R. China

Helmcke, D.

Center of Geosciences, University of Goettingen Goldschmidtstr. 3, D-37077

Goettingen, F.R.Germany

Ingavat – Helmcke, R.

c/o Center of Geosciences, University of Goettingen Goldschmidtstr. 3, D-37077

Goettingen, F.R.Germany

Abstract

The correlation of the tectonopaleogeographic units of northern Thailand with those of western Yunnan (P.R.China) is still little understood mainly because of the paucity of geological data from the Union of Myanmar and the P.R. of Laos. In this contribution, based on our extensive fieldwork in northern Thailand and western Yunnan and detailed stratigraphic and paleontological studies, we propose that the Triassic Simao-Mojiang basin can be correlated with the Triassic Lampang-Phrae basin. The stratigraphic sequence equivalent to the southern Lancangjiang sub-basin has not been identified in the Lampang-Phrae basin of northern Thailand. The Simao-Mojiang and the Lampang-Phrae basins should belong to the same tectonopaleogeographic unit during the Triassic. The orogenic belt east of this paleogeographic unit includes Nan-Uttaradit and Ailaoshan sutures. In northern Thailand, the "Shan-Thai Block" can be divided into the Sukhothai, the Chiang Mai, and the Shan terranes from east to west respectively. According to our tectonopaleogeographic correlation, the Sukhothai terrane which includes the Lampang-Phrae basin should belong to a part of the Cathaysian domain, not to the Gondwana domain. The geosuture corresponding to the Changning-Menglian suture should be located west of the Lampang-Phrae basin.

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