

Komatiitic Lavas in Manxin, Western Yunnan (S.W. China), Ancient Oceanic Plateau and Eastern Paleotethys' Evolution During Permo-Carboniferous

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Located at the south end of the Changning-Menglian orogenic belt, Manxin is an area in which many Devonian to Triassic oceanic records are displayed. The ultramafic- and mafic- lavas including komatiitic rock have been found over there and inferred to be a key part of ancient oceanic plateau.

The komatiitic lava and its analogues are chemically characterized by high-Mg (MgO wt% ranges from 26 to 30) and lithologically by effusion structure or texture (pillow structure, spinifex texture, porphyro-aphanitic texture, etc.). On the basis of recognizing six radiolarian zones, specifically *Albaillella paradox*, *Al. deflandrei*, *Al. indensis*, *Al. cartala*, *Pseudoalbaillella annulata* and *Ps. scalprata*, hosted by intercalated cherts of the lavas, we can establish a roughly continuous volcano-sedimentary sequence ranging temporally from mid-Dournaisian to early Permian. The volcanic episodes emerging with frequency during Permo-Carboniferous were probably associated with mantle plume and constructed an archipelago configuration in the region under study. Surprisingly these intraplate igneous activities lasted about 100Ma which is much longer than the record of Cenozoic LIP.

According to the available data, the intraplate ultramafic and mafic rocks are not restricted within the Manxin area but largely spread in all Changning-Menglian belt, which represents an ancient trunk water separating the Gondwanaland from the Laurasia. Their age is between late Devonian and middle Permian, particularly early Carboniferous. It is at that epoch that the different

types of oceanic plateau explosively formed and eastern Paleotethys stepped into the archipelago stage.