

Drilling of the Upper Permian in Sichuan province (South China) and study on the Permo-Triassic boundary mass extinction

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The Upper Permian limestone sequence was drilled in Sichuan province, South China, for the Permo-Triassic boundary (ca. 250 Ma) mass extinction study. Over 260m long drilled core sample was recovered from the fresh and fossiliferous Maokoan, Wuchapingian and Chanhsingian limestones. Preliminary analysis indicates that appearance/disappearance patterns of various fossils (fusulinid, ammonoid, brachiopod etc.) and lithologic change are likely synchronized. In particular, the intercalation of volcanic tuff layers in various horizons are intimately related to the last occurrence of fossils. All the core samples are now under geochemical analyses. The "Plume Winter" scenario connecting superplume-induced extraordinary volcanism and mass extinction is examined by these new data coming.