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Early Wuchiapingian (Lopingian, Late Permian) drowning event in the South China Block suggests a late eruptive phase of Emeishan Large Igneous Province

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## Abstract

Although the precise age and magnitude of the end-Guadalupian biodiversity crisis is still debated, this “mass” extinction has been customarily linked with the onset of massive volcanism in the Emeishan Large Igneous Province (ELIP) in south China. The onset of ELIP eruptive activity at least partly coincides in time with episodes of regional subsidence interrupting the predominant regime of carbonate platforms during Capitanian times.

Here, we present a strikingly similar but younger (early Wuchiapingian) subsidence episode from the Pingtang syncline in southern Guizhou, termed the Mapojiao Event. Shallow-marine, light-grey, thick-bedded bioclastic limestone of the Wuchiaping Formation (Unit A) are overlain by deep-marine radiolarian-sponge spicule, thin-bedded black limestone (Unit B). The latter is followed by volcanoclastic distal turbidites (Unit C). The base of the next overlying unit consists of cherty, nodular limestone (Unit D) rich in radiolarians and sponge spicules, whose respective abundances decline up-ward within a few meters. Concomitant replacement by a shallow marine benthic fauna documents the uplift that terminates the event. A total of five index species of *Clarkina* conodonts indicating an early Wuchiapingian

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