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Total exhumation across the Beichuan fault in the Longmen
Shan (eastern Tibetan plateau, China): constraints from
petrology and thermobarometry

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ABSTRACT

The deep structure and deformation mechanisms of the Longmen Shan thrust belt (Sichuan, China), at the eastern border of the Tibetan plateau, were largely debated after the devastating Mw 7.9 Wenchuan earthquake (2008). Recent geophysical studies and field investigations have been focused on the active motion of the major Beichuan fault, which ruptured during the earthquake. However, the total exhumation across the fault still remains unclear. In the hanging wall of the Beichuan fault, the South China block is exhumed in the Pengguan massif. Close to

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