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The cause and source of melting for the most recent volcanism in Tibet: a combined geochemical and geophysical perspective

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Abstract

We investigate the youngest volcanic activity on the Tibetan Plateau by combining observations from petrologic, geochemical and seismic tomography studies. Recent (from 2.80 Ma to present) post-collisional potassium-rich lavas from the Ashikule Volcanic Basin (AVB) in northwestern Tibet are characterised by remarkably enriched light rare earth elements (LREE) relative to heavy rare earth elements (HREE), and enriched large ion lithophile element (LILE) relative to high field strength elements (HFSE). Strontium and

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