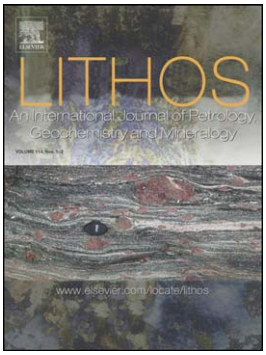

Petrogenesis and origin of modern Ethiopian rift basalts: Constraints from isotope and trace element geochemistry

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Petrogenesis and origin of modern Ethiopian rift basalts: constraints from isotope and trace element geochemistry

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Abstract

The source of continental rift-related basalts and their relation to rifting processes is a continuous matter of debate. We present major and trace element and Sr, Nd, Hf and Pb isotope data for axial rift basalts from eight volcanic centres (Ayelu, Hertali, Dofan, Fantale, Kone, Bosetti and Gedemsa, from NE to SW) in Afar and Main Ethiopian Rift (MER) to assess their source regions and their genetic relationships. These lavas have geochemical