

Continental lithospheric mantle is enriched in Pb and depleted in B: A case study of Deccan Trap basalts

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Based on Pb-Nd-Sr isotope signatures, Deccan Trap basalts are classified into three groups: least contaminated group; group with contamination of continental crust; group with contamination of continental lithospheric mantle. We report boron (B) and lead (Pb) contents of the Deccan Trap basalts. The N-MORB-normalized pattern (spiderdiagram pattern) for the group with contamination of continental crust shows Pb-enrichment. This spiderdiagram pattern is the same with that of continental crust. The spiderdiagram pattern for the group with contamination of continental lithospheric mantle shows Pb-enrichment and B-depletion, suggesting the continental lithospheric mantle is also enriched in Pb and depleted in B.