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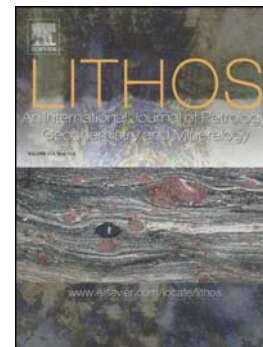
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The role of changing geodynamics in the progressive contamination of Late Cretaceous to Late Miocene arc magmas in the southern Central Andes

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Abstract

The tectonic and geodynamic setting of the southern Central Andean convergent margin changed significantly between the Late Cretaceous and the Late Miocene, influencing magmatic activity and its geochemical composition. Here we investigate how these changes, which include changing slab-dip angle and convergence angles and rates, have influenced the contamination of the arc magmas with crustal material. Whole rock geochemical data for a suite of Late Cretaceous to Late Miocene arc rocks from the Pampean flat-slab segment (29 – 31 °S) of the southern Central Andes is presented alongside petrographic observations and high resolution age dating. *In-situ* U-Pb dating of magmatic zircon,

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