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The basement of northeastern Patagonia is characterized by Early Paleozoic igneous and metamorphic rocks that do not crop out in the central, western and Andean sectors of the North Patagonian Massif. A review of U-Pb geochronology, geochemistry, and the Nd, Sr, Hf and O isotope signature of the early Cambrian and early Ordovician magmatic rocks supports the hypothesis that the continental crust of northeastern Patagonia was essentially continuous with that of the Eastern Sierras Pampeanas in early Cambrian times. Mesoproterozoic lower crust is also inferred for this sector. New zircon Hf and O analyses of early Cambrian (Pampean) granites in the Sierras Pampeanas are indistinguishable from those of Cambrian granites in NE Patagonia, indicating an important crustal component in the source. The detrital zircon age patterns of the inferred basement are also similar in the two regions, strongly suggesting a southern Kalahari provenance. A modified hypothesis to explain the continuity of NE Patagonia with the Pampean belt of the Sierras Pampeanas during early Cambrian times, as well as their SW Gondwana geological affinity, is to consider this entire belt as an outboard sector of the mid-Cambrian rifting observed along the South America–South Africa–Weddell Sea margin. The detached sector would then have become juxtaposed against the Río de la Plata craton across the right-lateral Córdoba fault in late Cambrian times.