



## **Subduction kinematics mirrors global plate tectonics, not local**

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The long-standing quest for a correlation between intrinsic properties of subduction zones and subduction kinematics essentially yields disappointing results. A glance at subduction zones in the global plate tectonic framework reveals that subduction zones are not enough for a stochastic approach, which is what attempts of correlating local dynamic parameters of subduction zones implicitly do. The very existence of mountain belts, regarded as dynamometers, reveals that interplate forces are comparable in magnitude to the driving forces of subduction. In the Pacific system, from where most of the data arises, plate interactions are strong enough to force slabs down into the mantle at rates that dramatically departs from the natural subduction rates. Ultimately, it seems that the African superswell makes the Atlantic spread at the expense of the Pacific, regardless of the local dynamics of subduction zones. Now that we explored the many factors that influence isolated subduction systems, it is now time to consider subduction zones in the global framework of plate tectonics.