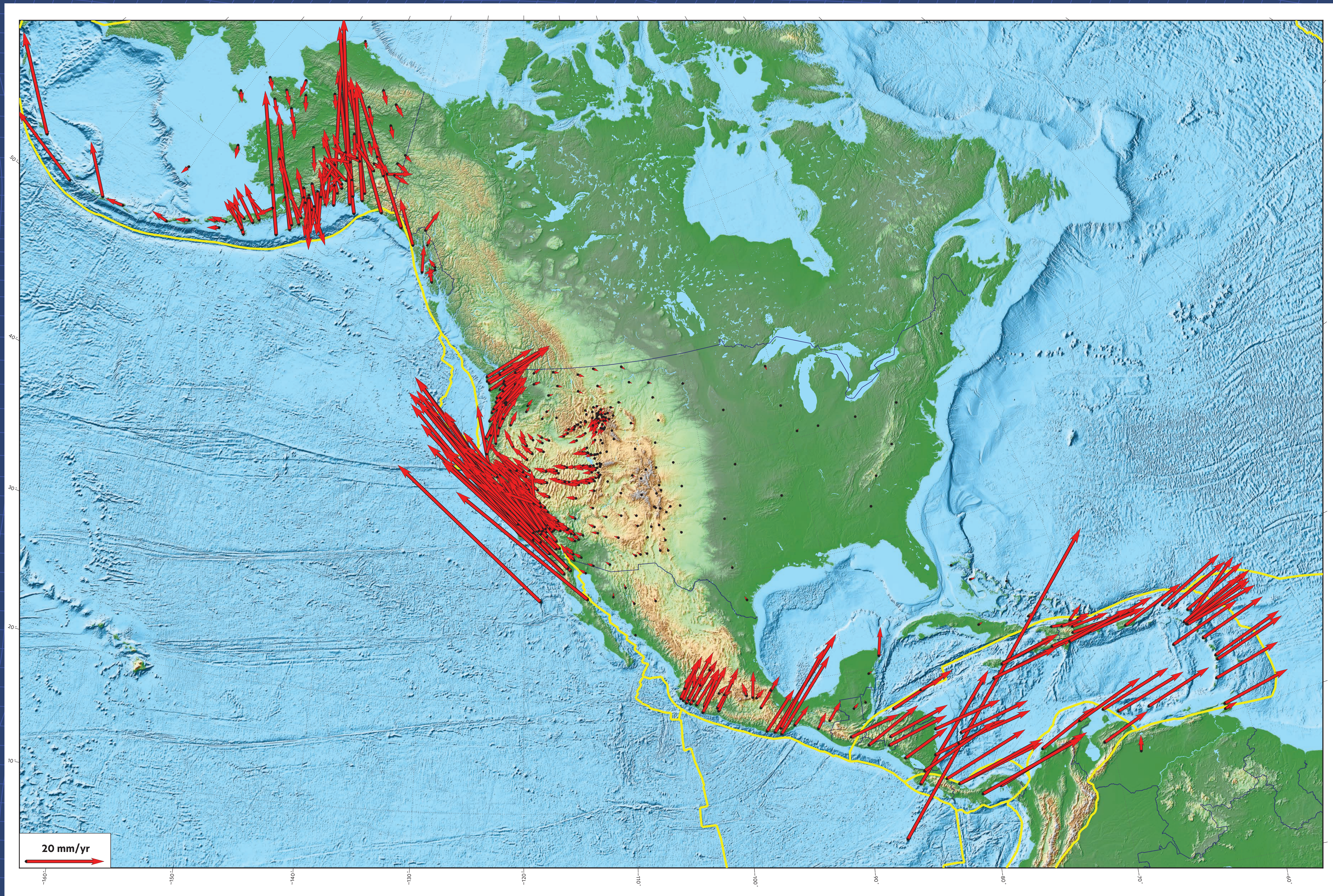


Tectonic Motion Measured By GPS



Pointing Out Plate Motion

Each arrow on the map originates at a GPS station in the Network of the Americas and points in the direction that the station (and the bedrock it is attached to) is moving. Its length is proportional to the station's rate of horizontal movement—the faster the station is moving, the longer the arrow. The scale for the arrows is shown in the bottom-left corner of the map. This movement may seem tiny but even small motions can tell us a lot about the Earth—and these small motions add up over time. Here, they are calculated relative to the tectonically stable interior of the North American plate. This highlights the motion near the boundaries between plates, where tectonic forces can deform the Earth's crust and produce earthquakes.

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