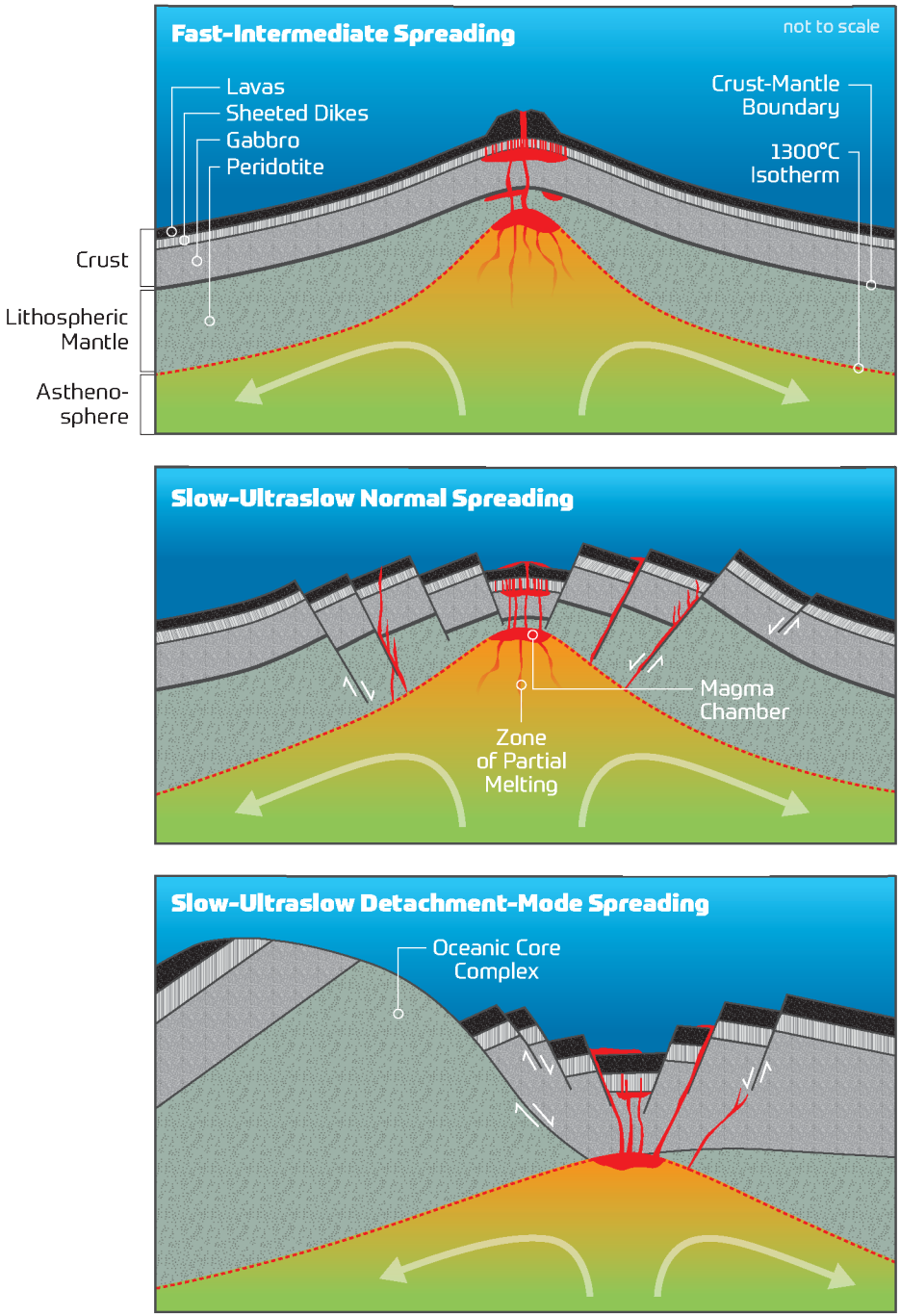

Scientific ocean drilling and associated marine geological and geophysical studies have revealed differences in the structure of oceanic crust formed under fast, slow, and ultraslow spreading regimes. The large white arrows depict asthenospheric upwelling and flow induced by plate spreading. The small white arrows indicate relative fault motion. The base of the lithosphere is conventionally defined as the 1300°C isotherm. *Illustration by Geo Prose, inspired by van Wyk de Vries and van Wyk de Vries (2018), https://doi.org/10.1016/B978-0-12-809749-6.00007-8*