

Global Strain Rate Map

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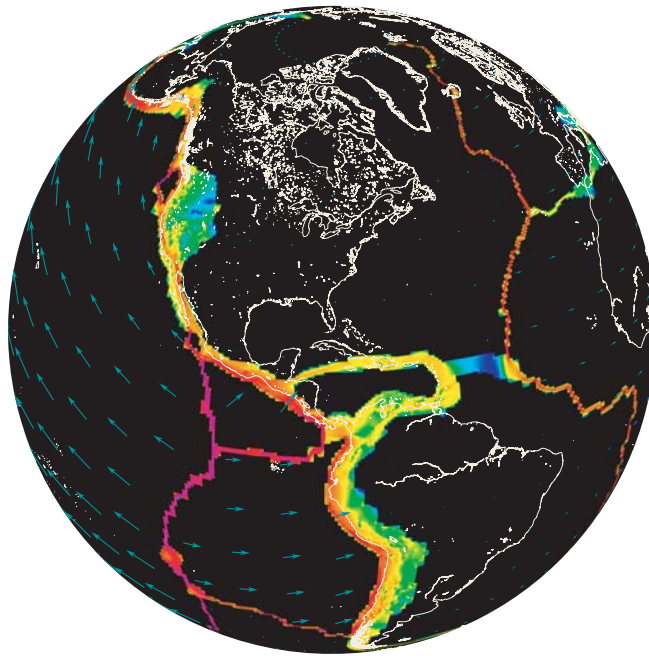


Figure 1. The Global Strain Map, <http://www.world-strain-map.org>.

The Global Strain Rate Map, determined by GPS, Seismological and Neotectonic data, provides large amounts of information that is vital to our understanding of continental dynamics and to quantifying seismic hazards. The map shows motions of rigid plates with respect to North America and deforming plate boundary zones. Tectonic plates form at mid-oceanic spreading centers and ultimately recombine by continental collision or are consumed through subduction.

This model, created by Kreemer and others (2003), includes thousands of observations from nearly 100 studies conducted by investigators from around the world. UNAVCO provides support for many of these studies as well as the Global Strain Rate Map project and maintains a unique interactive JAVA map tool that allows the user to view the latest model results in detail from any point of view on the globe.

References

Kreemer, C., W.E. Holt, and A.J. Haines. An integrated model of present-day plate motions and plate boundary deformation, *Geophys. J. Int.*, 154, 8-34, 2003.

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