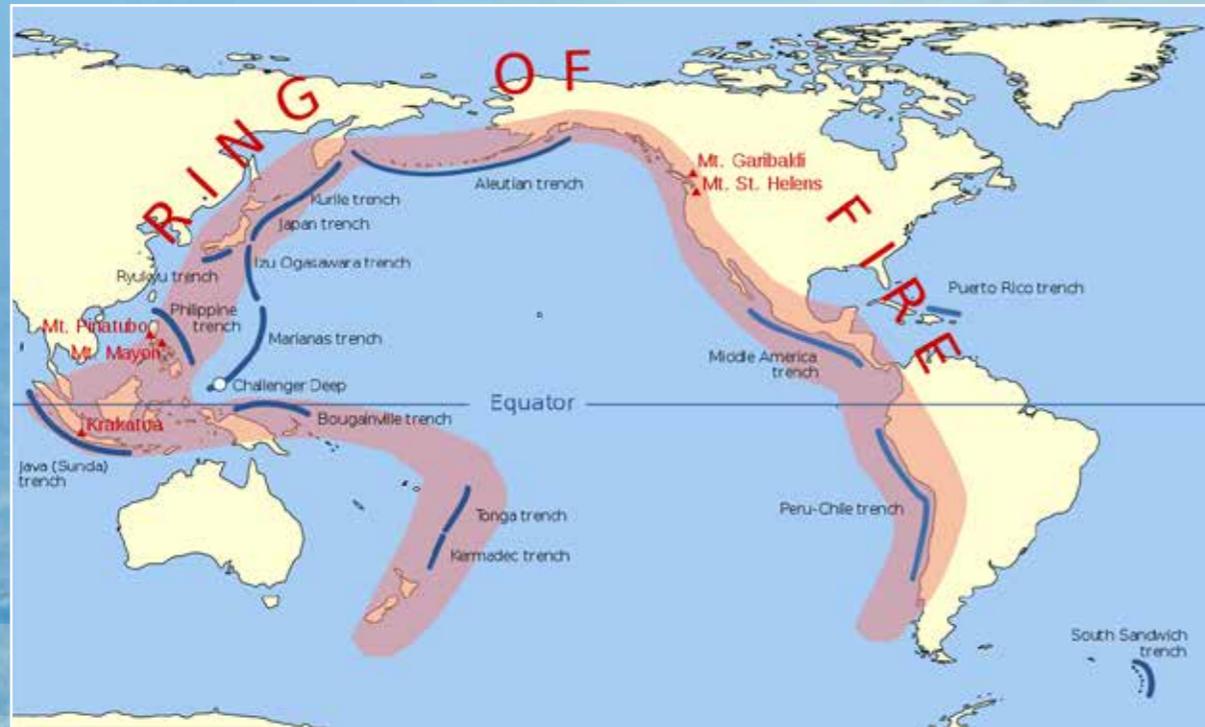


## The Ring of Fire

New Zealand lies at the south-west end of a vast horseshoe-shaped zone of intense volcanism and earthquakes. This zone extends, essentially unbroken, around the margins of the Pacific Ocean - the so-called Pacific Ring of Fire.



New Zealand sits astride the colliding edges of the Pacific and Australian plates. The occurrence of earthquakes, jagged mountain ranges and volcanoes through New Zealand, and the contrasting geology and landscapes of the North and South islands, can all be explained by the different ways in which the edges of the two colliding plates are interacting along the length of the country.

The Ring of Fire is a 25,000 mile (40,000 km) horseshoe-shaped area of intense volcanic and seismic (earthquake) activity that follows the edges of the Pacific Ocean. Receiving its fiery name from the 452 dormant and active volcanoes that lie within it, the Ring of Fire includes 75% of the world's active volcanoes and is also responsible for 90% of the world's earthquakes.

### Where Is the Ring of Fire?

The Ring of Fire is an arc of mountains, volcanoes, and oceanic trenches that stretch from New Zealand northward along the eastern edge of Asia, then east across the Aleutian Islands of Alaska, and then south along the western coasts of North and South America.

### What Created the Ring of Fire?

The Ring of Fire was created by plate tectonics. Tectonic plates are like giant rafts on the Earth's surface that often slide next to, collide with, and are forced underneath each other. The Pacific Plate is quite large and thus it borders (and interacts) with a number of large and small plates.

The interactions between the Pacific Plate and its surrounding tectonic plates creates a tremendous amount of energy, which, in turn, easily melts rocks into magma. This magma then rises to the surface as lava and forms volcanoes.