

Causes and effects of earthquakes

[Literature](#), [Russian Literature](#)



From doctrinal mythology that rendered them acts of punishments from the Highest just a century ago to modern science, the human race has come full circle to diagnose exactly how it happens as well as its very causes. By definition, an Earthquake is but a tremor/vibration of the Earth's crust as a result of the frictional movement of the lithospheric plates underneath the earth's surface.

As alluded to in the definition, the immediate cause of earthquakes is the sudden release of huge amounts of pent-up energy as a result of cracks in the earth's crust due to a collision of huge masses of rocks against one another. Other causes of earthquakes include falling huge rocks, volcanic eruptions, landslides, and explosions. The extent of such is, however, limited to certain geographic localities. With favorable geologic conditions, powerful earthquakes spread shock waves hundreds of miles away from the originating points, in effect releasing pulses of energy, that most often inflict immeasurable destructive effects. Such is the sort of disaster that befell Japan on March 11, 2011, when an enormous earthquake, estimated by the Meteorological authorities on the Richter scale to be 9.0 in magnitude struck, spreading 81 miles along the nation's northeastern coast. The rare and complex double quake that lasted about 3 minutes moved Japan a few meters east, with the local coastline also sinking half a meter. The forces of the tremor, one among the most disastrous over the last century, sparked off a giant wave, the tsunami, that caused even much more damage than the quake itself; inundating roughly 560 sq. km with property estimated to be well over \$300 billion, and in particular, causing a meltdown at the

Fukushima Daiichi nuclear plant, resulting in radioactive leaks that claimed more of the nearly 20, 000 lives.