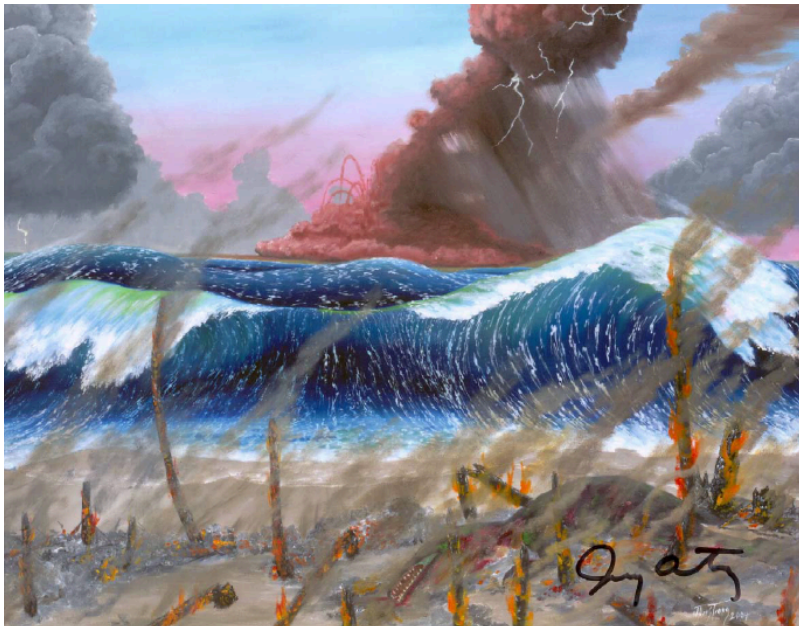
Tsunami



A tsunami (plural: tsunamis or tsunami; from Japanese: □□, lit. "harbour wave"; English pronunciation: /suːˈnɑːmi/ soo-*NAH*-mee or /tsuːˈnɑːmi/ tsoo-*NAH*-mee, also known as a seismic sea wave, is a series of water waves caused by the displacement of a large volume of a body of water, generally an ocean or a large lake. Earthquakes, volcanic eruptions and other underwater explosions (including detonations of underwater nuclear devices), landslides, glacier calvings, meteorite impacts and other disturbances above or below water all have the potential to generate a tsunami.[3]

Tsunami waves do not resemble normal sea waves, because their wavelength is far longer. Rather than appearing as a breaking wave, a tsunami may instead initially resemble a rapidly rising tide, and for this reason they are often referred to as *tidal waves*. Tsunamis generally consist of a series of waves with periods ranging from minutes to hours, arriving in a so-called "wave train". Wave heights of tens of metres can be generated by large events. Although the impact of tsunamis is limited to coastal areas, their destructive power can be enormous and they can affect entire ocean basins; the 2004 Indian Ocean tsunami was among the deadliest natural disasters in human history with at least 290,000 people killed or missing in 14 countries bordering the Indian Ocean.

The Greek historian Thucydides suggested in his late-5th century BC History of the Peloponnesian War, that tsunamis were related to submarine earthquakes,[5][6] but the understanding of a tsunami's nature remained slim until the 20th century and much remains unknown. Major areas of current research include trying to determine why some large earthquakes do not generate tsunamis while other smaller ones do; trying to accurately forecast the passage of tsunamis across the oceans; and also to forecast how tsunami waves would interact with specific shorelines.