

Keywords

Capacity to cope
Tropical storms
storm surges
Landfall
Storm eye
Magnitude
Seismograph
Epicentre
Focus
Seismic waves
Storm shelters
El Nino
Mitigation
Social impacts
Economic impacts
Environmental impacts

- Tectonic plates
- Plate margins
- Mantle
- Crust
- Convection currents
- Planning
- Protection
- Prediction
- evacuation
- Primary impacts
- Secondary impacts
- Immediate responses
- Long-term responses
- Climate change
- Greenhouse gases

Important information

Image 1 – Conservative plate margin – A At a conservative plate margin, plates move at different speeds, causing friction and pressure buildup. This results in massive earthquakes, which can be destructive near Earth's surface, as there are no volcanoes.

Image 2 – Destructive plate margin – A destructive plate margin occurs when oceanic and continental plates collide, causing earthquakes. Oceanic plates subduction occurs when denser plates sink into the mantle, forming magma that rises through volcanic eruptions. Collisions between continental plates cause land to buckle upwards, forming fold mountains called collision margins, where earthquakes can occur.

Image 3 – Constructive plate margin – A Plate margins cause magma from the mantle to rise, creating shield volcanoes and causing earthquakes when plates move apart from each other.

Image 4 – Mount Merapi

In late October 2010, earthquakes and lava flowed, affecting 19000 people and causing evacuations. Magma rose to 1000m below summit, resulting in 153 deaths and 320,000 homes evacuations.

