

Major Fault Lines in Kumamoto

About Active Fault Lines

Eurasian Plate

Tectonic Plates Around Japan

Pacific Plate

The Pacific and Philippine Sea Oceanic Plates and the North American and Eurasian Continental Plates converge in and around Japan. These plates exert complex forces on each other,

What is an earthquake?

Earthquakes are caused by shifts in underground bedrock. This bedrock is under constant pressure. When the pressure grows too great, the bedrock shifts and an earthquake occurs.

of ocean troughs.

Types of Earthquakes

"Inland earthquakes" are earthquakes that occur in

shallow zones within a continental plate. "Trench

earthquakes" occur in and around plate boundaries

The types of earthquakes that cause damage in Kumamoto Prefecture are mainly inland earthquakes that occur in shallow zones of continental plates (such as along the Futagawa and Hinagu fault zones), and trench earthquakes that occur at the plate boundaries in and around the Nankai Trough.









bigger earthquakes

Hyuga-nada Sea

become active

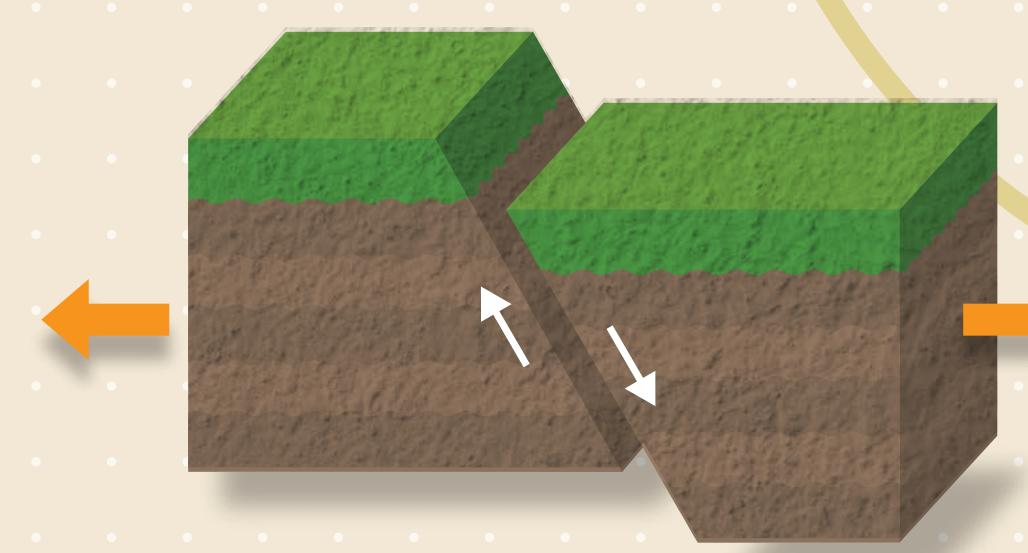
Source: Japan Meteorological Agency website

Fault Structure

A fault is a bedrock fracture caused by forces either pushing together or pulling apart the bedrock. When an earthquake's epicenter is near the surface, these faults can appear on the ground surface. Active faults are faults that have been active in recent geological times

and are likely to be active in the future.

ground mass along a tilted fault plane when this ground mass is pushed up.



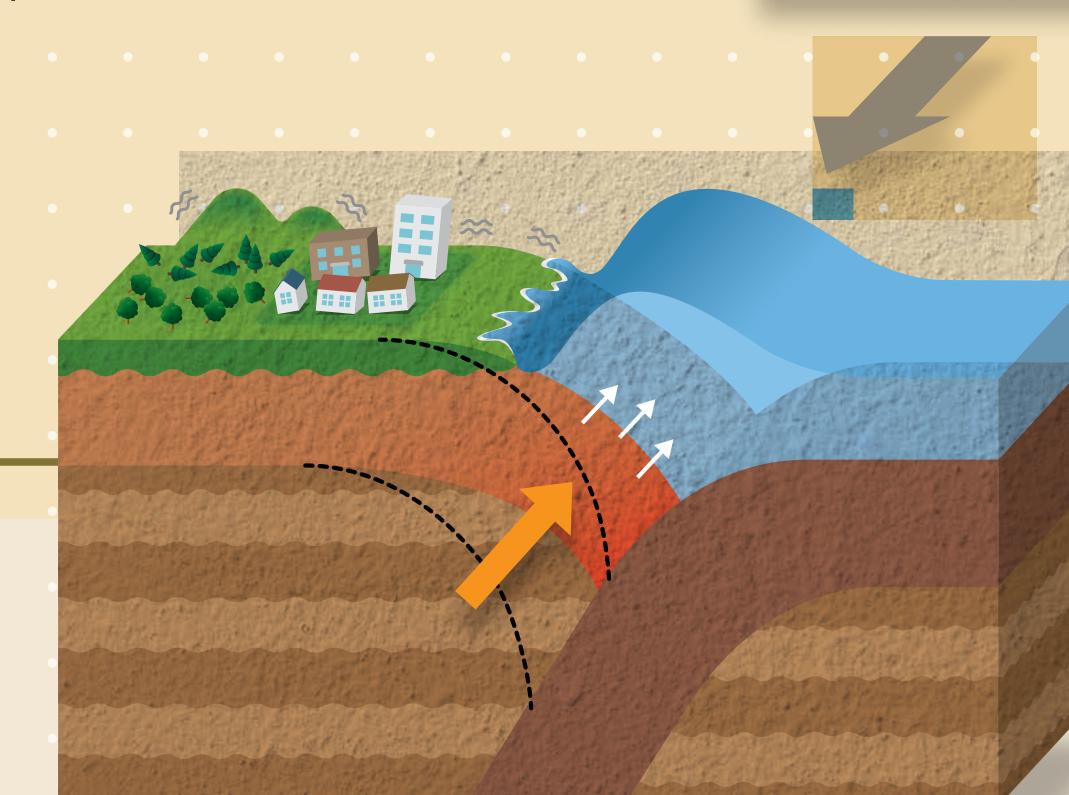
What causes a tsunami?

Inland Earthquake

shifts left, this is called a "left-lateral strike-slip fault." If it

moves right, it is a "right-lateral strike-slip fault."

A large earthquake in the sea causes the seabed to rise or fall. This force is relayed to the water's surface, generating a giant wave that spreads in all directions



Historical Tsunamis in Kumamoto Prefecture

Because it faces the sea, Kumamoto Prefecture has been the victim of tsunamis in the past. Memorials

May 21, 1792

