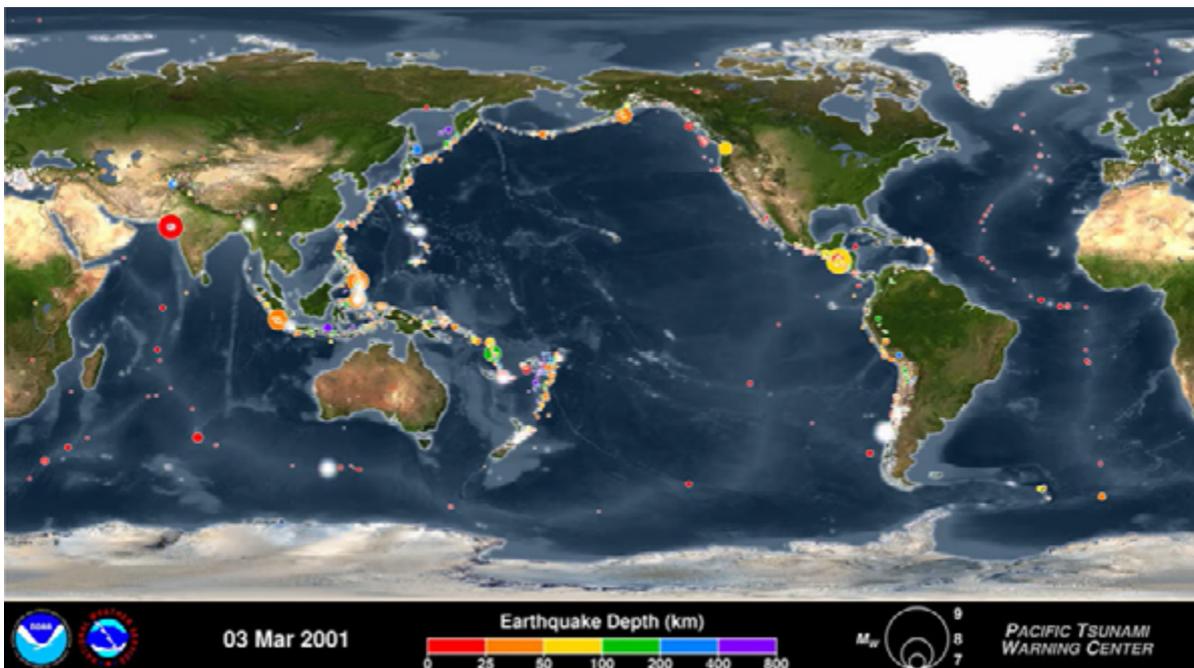


Worldwide Earthquakes

The 21st Century has seen some devastating earthquakes, including the 2004 Indian Ocean earthquake and tsunami, the 2008 Sichuan earthquake in China, the 2010 Haiti earthquake, and the 2011 Tōhoku earthquake and tsunami in Japan. These earthquakes claimed hundreds of thousands of lives, and caused huge property damage and economic loss.

Read below for more information about these major earthquakes from the 21st century.

Watch this clip of worldwide earthquakes 2000-2015 (click the image below):



2004 Indian Ocean earthquake and tsunami

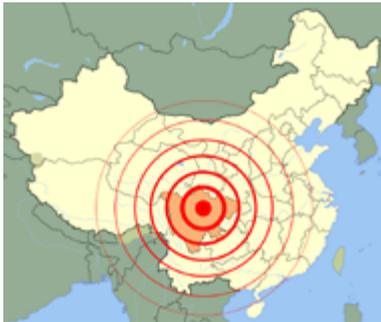
The 2004 Indian Ocean earthquake and tsunami is also known as the Boxing Day Tsunami, as it occurred in the morning on Dec. 26th. It was an undersea megathrust earthquake, with a magnitude of 9.1 (M_w). Rather than the earthquake itself, it was a series of huge tsunami waves which came from the earthquake that devastated surrounding coasts of the Indian Ocean. While travelling inland, the tsunami waves grew up to 30m high, swept the area, and killed more than 200,000 people in 14 countries. It was the largest earthquake in the 21st Century, also one of the deadliest natural disasters in our recorded history.



Top: Epicenter of 2004 Indian Ocean earthquake and countries affected
Bottom: Near the coast of Sumatra, a village swept by the tsunami

2008 Sichuan earthquake, China

The 7.9 (Mw) magnitude earthquake occurred in the afternoon on May 12th. The epicenter located 80 km northwest of Chengdu, the provincial capital with a population of more than 10 million. The earthquake occurred along the Longmenshan geologic fault zone, and ruptured the 240km long fault with several meters of surface displacements (cracked or broken roads, bulges in the ground, or ditches etc.). The shock could even be felt in the city of Shanghai, which is 1700km away.



Location of the epicenter in 2008 Sichuan earthquake, China

The earthquake was followed by continuous heavy rains, and a series of geohazards, including bulk landslides and hundreds of 'quake lakes' distributed over a vast area. According to the official report, at least one third of the death toll resulted from the geohazards triggered by the earthquake.



The formation of a 'quake lake' in satellite photos

A 'quake lake' occurs when debris or a landslide from an earthquake blocks a river, damming it, and creating a build up of water

2010 Haiti earthquake

On January 12, 2010, a magnitude 7.0 (Mw) earthquake struck Haiti, a country located on the island of Hispaniola in the Caribbean Sea. The epicenter was about 25km west of Haiti's capital, Port-au-Prince. Poverty and poor housing conditions made the impacts of the earthquake much worse, resulting in a massive death toll.



Location of the epicenter in the 2010 Haiti earthquake



Planes loaded with aid supplies crowd the Port-au-Prince airport

The earthquake prompted a worldwide humanitarian response. Rescue and medical teams were dispatched to provide aid, and funds were raised. Information quickly circulated across the internet and social media also helped to promote the global reaction.



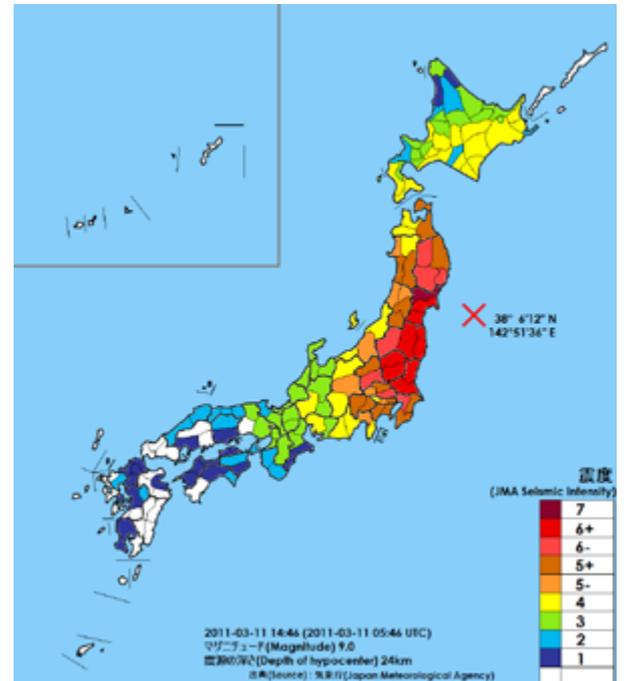
2011 Tōhoku earthquake and tsunami, Japan

The 2011 Tōhoku earthquake and tsunami, also known as the Great East Japan Earthquake, occurred at 14:46 local time on March 11th.

The epicenter was located in the Pacific Ocean, 72km east of the shore of the Tōhoku region. The 9.0 (Mw) magnitude undersea megathrust earthquake lasted approximately 6 minutes and caused a catastrophic tsunami.

It is the most powerful earthquake ever recorded in Japan, and it triggered tsunami waves that reached almost 40m.

Though Japan has a well-developed warning system and disaster prevention measures, people were still powerless and vulnerable to such a massive natural disaster. In the Sendai area, the wave traveled at 700km/h and reached 10km inland. Residents had only eight to ten minutes of warning, and a lot of evacuation sites were damaged by the wave.



Epicenter and tremors registered across Japan in 2011 Tōhoku earthquake



One year after the earthquake, radiation hotspot in Kashiwa, Japan

The Fukushima Daiichi nuclear disaster caused by the tsunami was another big concern.

Cooling and ventilation systems failed due to electricity cut-off causing the nuclear reactors to melt down. The spill of radioactive water and gas led to the evacuation of hundreds of thousands of residents, and has left long-term environmental and social impacts.

The nuclear disaster has caused countries and people around the world to reflect on their use of nuclear energy.