

# Tsunami

Tsunami - a long high sea wave caused by an earthquake, underwater landslide, or other disturbance



watch the Impossible - Netflix

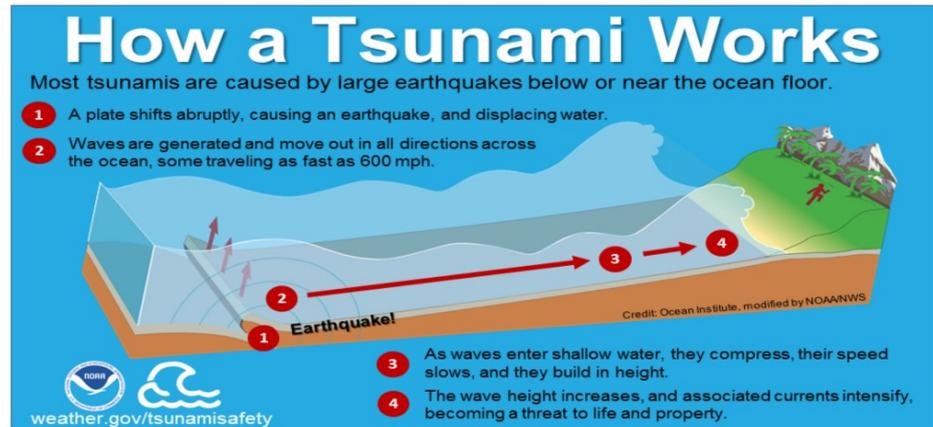
Article

[The Impossible Real Family Now - True Story of Maria Belón Family \(oprahdaily.com\)](#)

[Watch a massive tsunami engulf entire towns in Japan \(2011\) \(youtube.com\)](#)

[What Happened After Japan's \\$200 BILLION Disaster: Stories from the Tsunami \(Documentary\) \(youtube.com\)](#)

[Interview with tsunami survivor Tomas Alvarez Belon | UNDRR](#)

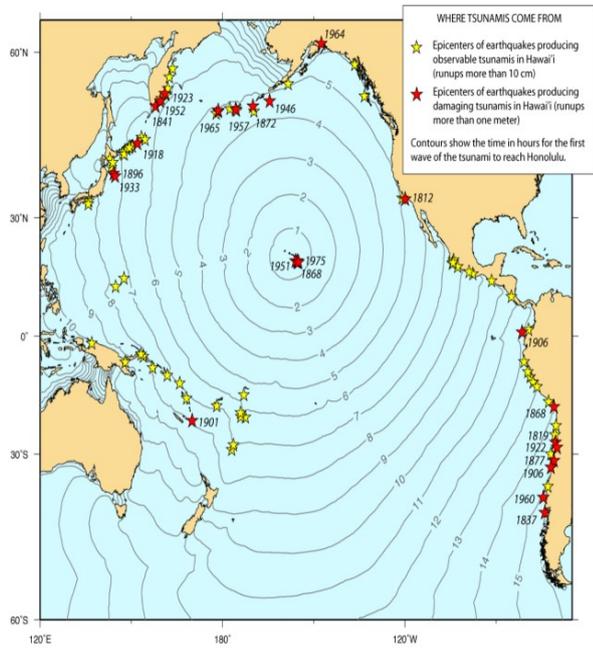


[The Deadliest Tsunamis Of All Time | Mega Disaster | Earth Stories \(youtube.com\)](#)



50 min





Hawaii is the location that experiences the most Tsunamis since it is surrounded by the ring of fire.

[What Causes The World's Deadliest Tsunamis? | Mega Disaster | Spark \(youtube.com\)](#)



What Causes The World's Deadliest Tsunamis? | Mega Disaster | Spark

## Salt Water

Rivers around the world flow down from hills and across the land before finally pouring their water into the ocean basins. Traces of muddy water from the largest rivers, such as the Amazon River in South America, can be detected as far as 1000 km out from the coastline. Ocean water, however, is not the same as river water. If you have ever swam in the sea and accidentally got some water in your mouth, you know the main difference. Ocean water is salty.



On average 1000 g of seawater contain 35 g of dissolved salts. This is usually expressed as 35 parts per thousand (ppt). By far the most common material in this solution is sodium chloride. This is the same chemical substance as the table salt you use to season food. The next most plentiful salts are composed of sulfates, magnesium, calcium, and potassium. **The measure of the amount of salts dissolved in a liquid is known as salinity.**

Salinity- The measure of the amount of salts dissolved in a liquid.

[A journey through the Atmosphere \(youtube.com\)](#)

## Atmosphere

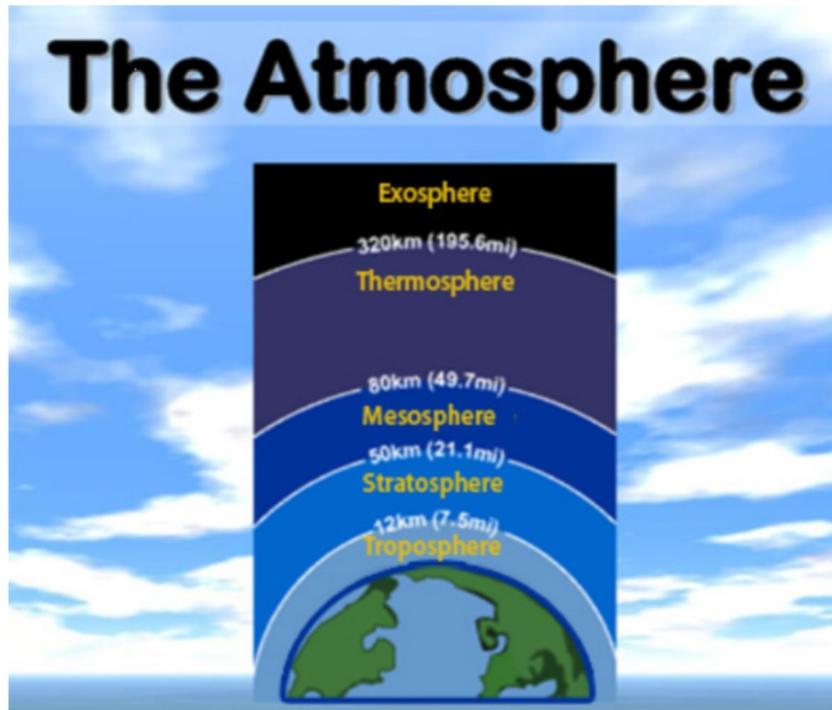
7 min

Atmos means “air.” The atmosphere includes all the gases surrounding the Earth. We often call the atmosphere “air.” All planets have an atmosphere, but Earth is the only planet with the correct combination of gases to support life.

The atmosphere consists of five layers and is responsible for Earth’s weather. Even though it seems like air is made of nothing, it consists of particles too small to be seen. All these particles have weight that push down on Earth. The weight of air above us is called air pressure.



## Atmosphere on Earth



[How Do Spacecraft Return To Earth? \(youtube.com\)](https://www.youtube.com/watch?v=...)

The earth is surrounded by the atmosphere, which protects us from radiation from the sun, falling meteors and toxic gases. It consists of 5 layers:

- 1) Troposphere- starts at the Earth's surface and extends 12 kilometers high. It is the most dense. Almost all weather is in this region and our oxygen that is needed to breathe is found here.
- 2) Stratosphere - starts just above the troposphere and extends to 50 kilometers high. The ozone layer, which absorbs and scatters the solar ultraviolet radiation, is in this layer. Ozone layer is getting thinner due to pollution. Airplanes fly in this layer to avoid turbulence.
- 3) Mesosphere -starts just above the stratosphere and extends to 80 kilometers high. Meteors burn up in this layer. Coldest layer.
- 4) Thermosphere- starts just above the mesosphere and extends to 320 kilometers high. Northern lights and satellites occur in this layer. Warmest layer
- 5) Exosphere- upper limit of our atmosphere. It extends from the top of the thermosphere up to 10,000 km. Hydrogen and helium found there and the air is very thin.

## Atmospheric Flow

- is how air moves around on our planet.

The flow of the atmosphere generally moves in a west to east direction. This however can often become interrupted, creating a more north to south or south to north flow.

