

# BBC NEWS The tsunami disaster

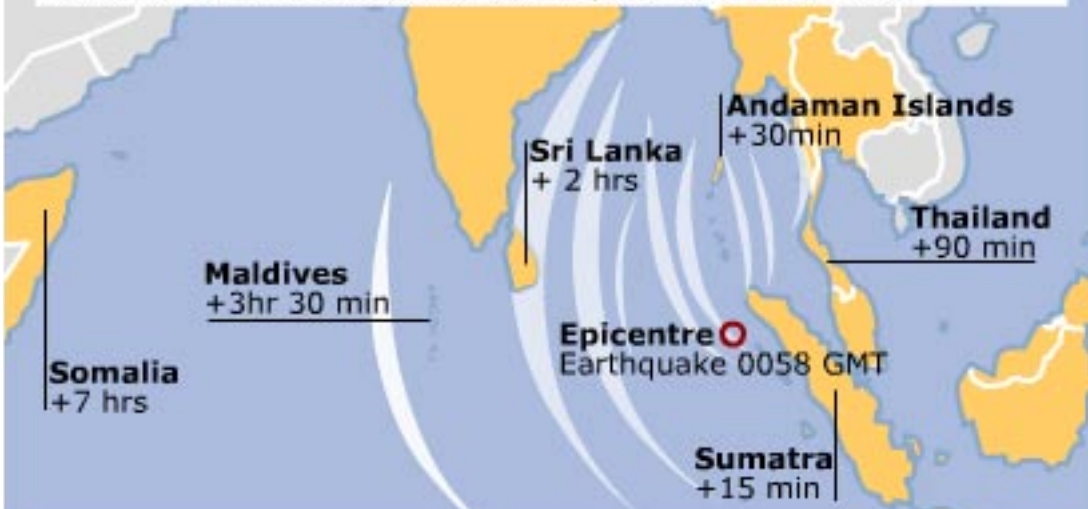
Earthquakes happen when the plates that make up the Earth's surface suddenly move against each other.



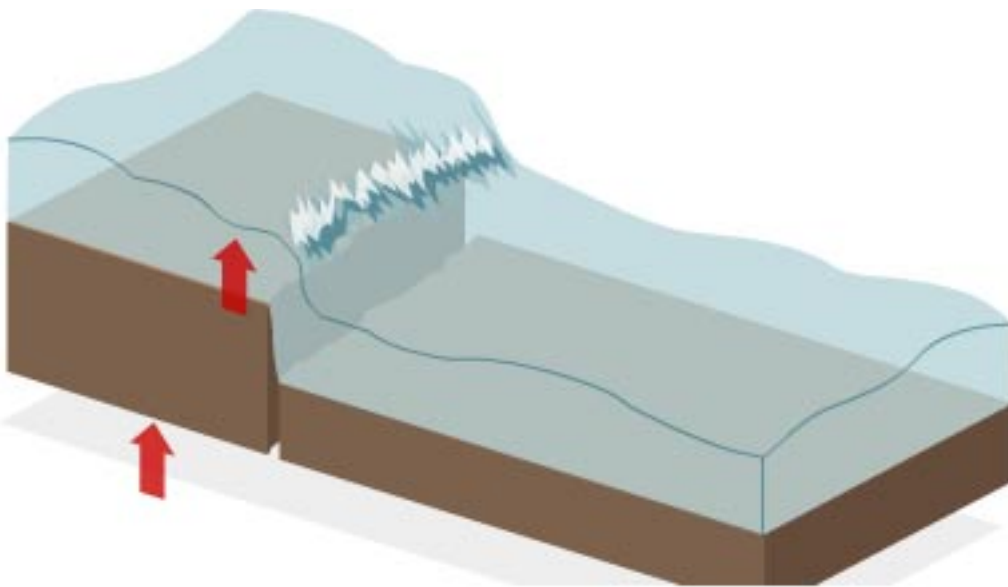
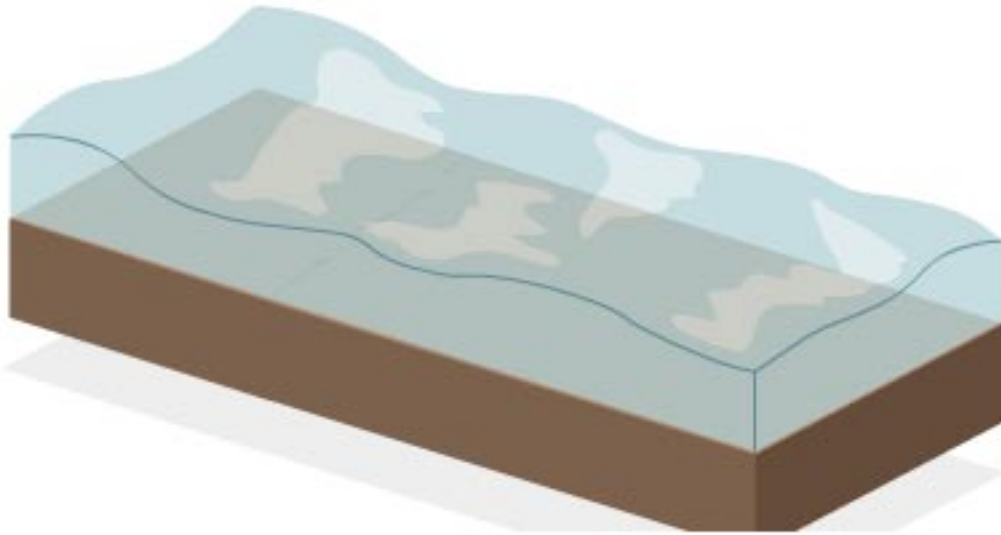
On 26 December 2004 the biggest earthquake for 40 years occurred between the Australian and Eurasian plates in the Indian Ocean. The quake triggered a tsunami - a series of large waves - that spread thousands of kilometres over several hours.



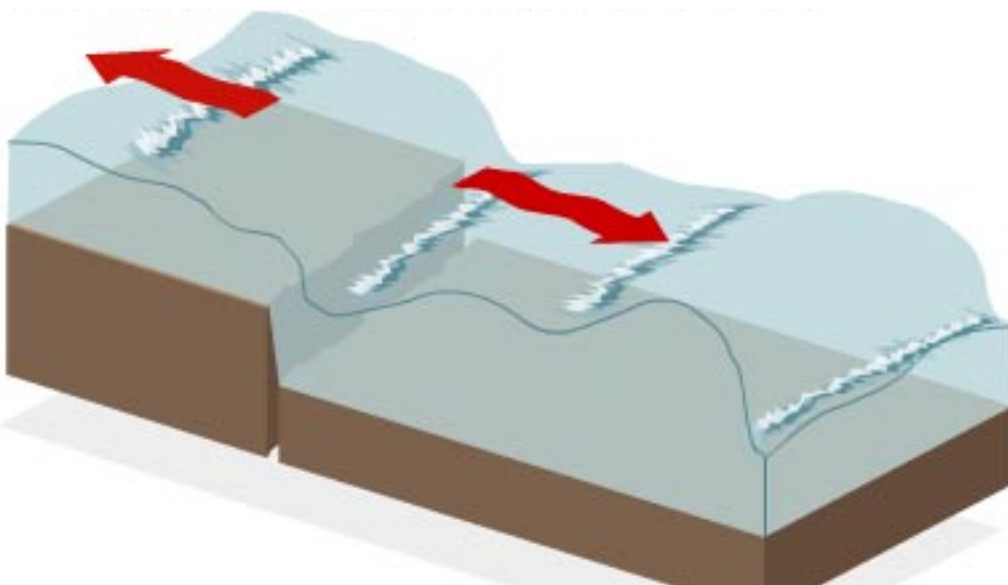
The earthquake caused the sea floor to rupture along the fault line, causing a giant wave which carved a path of destruction across the 4,500 km-wide Indian Ocean over a period of seven hours.



The tsunami formed when energy from the earthquake vertically jolted the seabed by several metres, displacing hundreds of cubic kilometres of water.

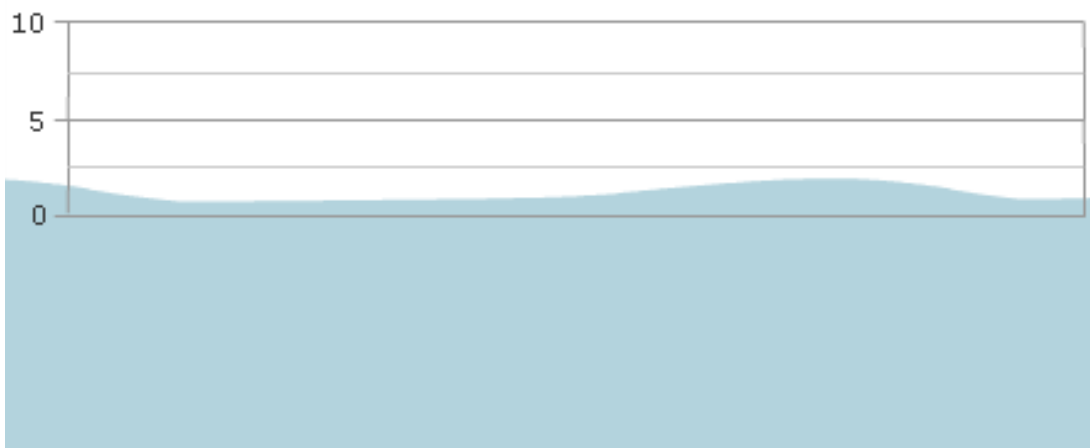


Large waves began moving through the ocean, away from the earthquake's epicentre. The tsunami's journey had begun.

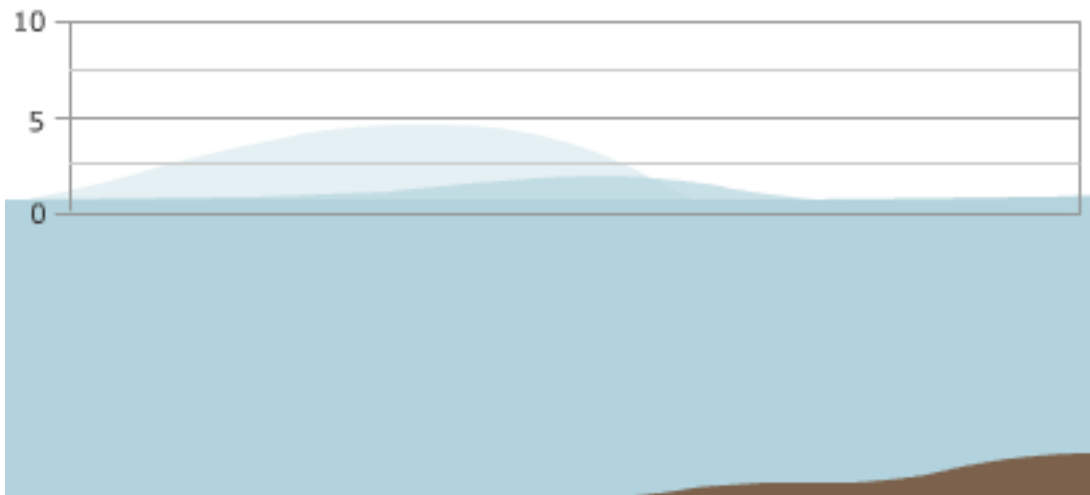


In deep water the tsunami moved at up to 800km/h (500mph). When it reached shallow water near coastal areas, the tsunami slowed but increased in height.

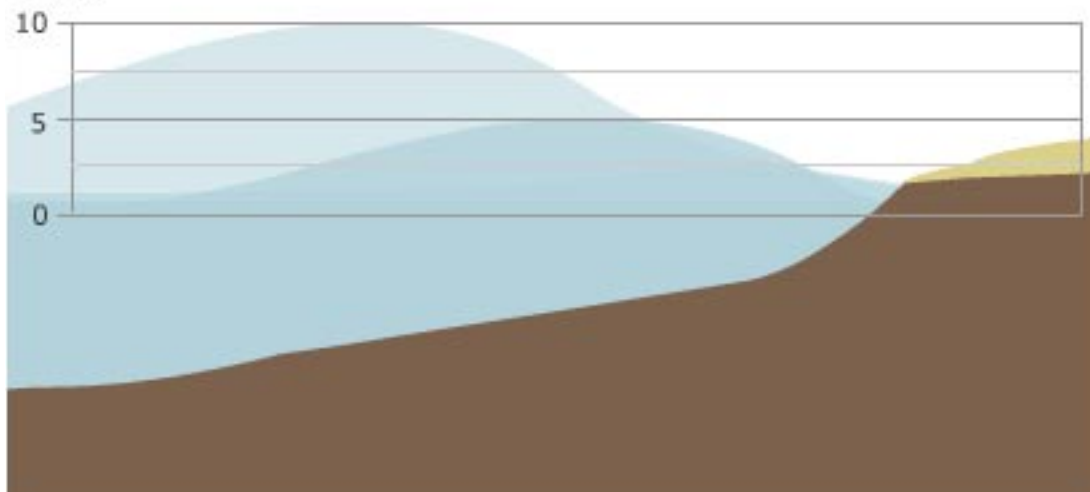
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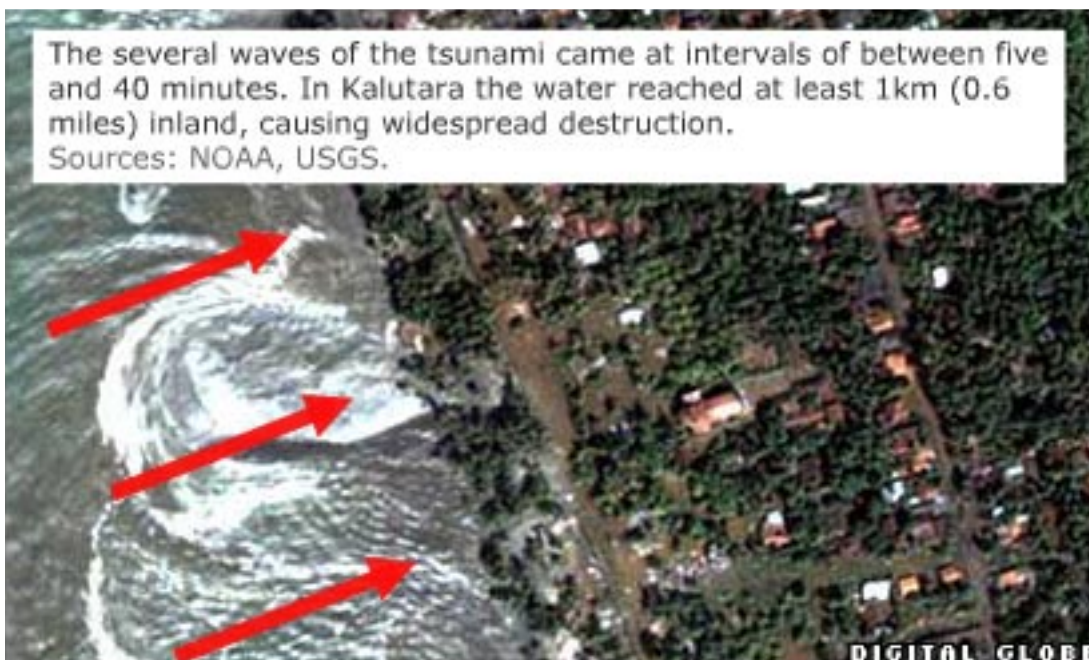
Coastal areas like the Sri Lankan tourist resort of Kalutara, as seen in this satellite picture from earlier in 2004, had almost no warning of the approaching tsunami.



The only sign came just before the tsunami struck when the waterline suddenly retreated, exposing hundreds of metres of beach and seabed.



The several waves of the tsunami came at intervals of between five and 40 minutes. In Kalutara the water reached at least 1km (0.6 miles) inland, causing widespread destruction. Sources: NOAA, USGS.



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