

Tsunami created swells worldwide

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Last year's Indian Ocean tsunami was so powerful it circled the globe twice and high waves were recorded in Halifax, Nova Scotia, and Peru, an analysis shows.

Waves recorded in Canada and South America were bigger than those in the Cocos Islands, closer to the epicenter of the earthquake that hit the ocean floor off Sumatra, Indonesia, according to Frank Gonzalez, head of tsunami research for the National Oceanic and Atmospheric Administration in Seattle.

Waves ranging from a few inches to 3 feet were recorded along the West Coast of the United States and off the coast of Brazil.

Underwater topography can affect waves as they pass over undersea mountains -- the shallow portion over the ridges slows while the portion moving through deep water moves faster, says Gonzalez.

"The ridges focus tsunami waves the way a lens focuses light," Gonzalez told the Seattle Times. "They form beams, and if those beams are aimed at coastal communities, the communities can experience high tsunami waves."

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