

Samoan Tsunami wave was 46 feet high

December 4 2009

(AP) -- The tsunami that killed more than 200 people in the Samoan islands and Tonga earlier this year towered up to 46 feet (14 meters) high - more than twice as tall as most of the buildings it slammed into, scientists said Friday.

New Zealand scientists studying the size, power and reach of the tsunami as part of efforts to guard against future disasters said they found up to three destructive [waves](#) were caused by the magnitude 8.0 undersea earthquake in September.

The massive waves that struck Samoa, American Samoa and Tonga totally destroyed traditional wooden buildings, many of them singly story, along the coast while reinforced concrete buildings sustained only minor damage, said Stefan Reese, a risk engineer with New Zealand's National Institute of Water and Atmospheric Research.

The waves were up to 46 feet (14 meters) high, Reese told The Associated Press. The scientists measured watermarks on buildings and trees to help confirm the height of the waves.

"In some areas there was virtually nothing left" after the waves reached up to 765 yards (700 meters) inland, Reese said.

Wide reefs saved some villages by helping to reduce the waves' height to about 10 feet (3 meters), Reese said.

The Samoan [quake](#) created a [sea floor](#) fault up to 190 miles (300

kilometers) long and 23 feet (7 meters) deep.

The Sept. 29 [tsunami](#) killed 34 people in American Samoa, 183 in Samoa and nine in Tonga.

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