

Resumen

Abstract—On 27 February 2010, a magnitude $M_w = 8.8$ earthquake occurred off the coast of Chile's Maule region causing substantial damage and loss of life. Ancestral tsunami knowledge from the 1960 event combined with education and evacuation exercises prompted most coastal residents to spontaneously evacuate after the earthquake. Many of the tsunami victims were tourists in coastal campgrounds. The international tsunami survey team (ITST) was deployed within days of the event and surveyed 800 km of coastline from Quintero to Mehuín and the Pacific Islands of Santa María, Mocha, Juan Fernández Archipelago, and Rapa Nui (Easter). The collected survey data include more than 400 tsunami flow depth, runup and coastal uplift measurements. The tsunami peaked with a localized runup of 29 m on a coastal bluff at Constitución. The observed runup distributions exhibit significant variations on local and regional scales. Observations from the 2010 and 1960 Chile tsunamis are compared.

[Descarga](#)