

International Tsunami Survey Teams (ITST) – 2010 Chile Tsunami

The ITST-Chile was an effort organized by UNESCO, IOC, ITIC, USGS, and local scientists, at the request of the Government of Chile (GoC), to assist them in immediately assessing the 27 February 2010 Chile tsunami and its impact. Altogether, there were more than 25 teams and 70 scientists that conducted surveys between mid-March and May 2010. The survey area was extensive, covering 800 km of coast. The goals included:

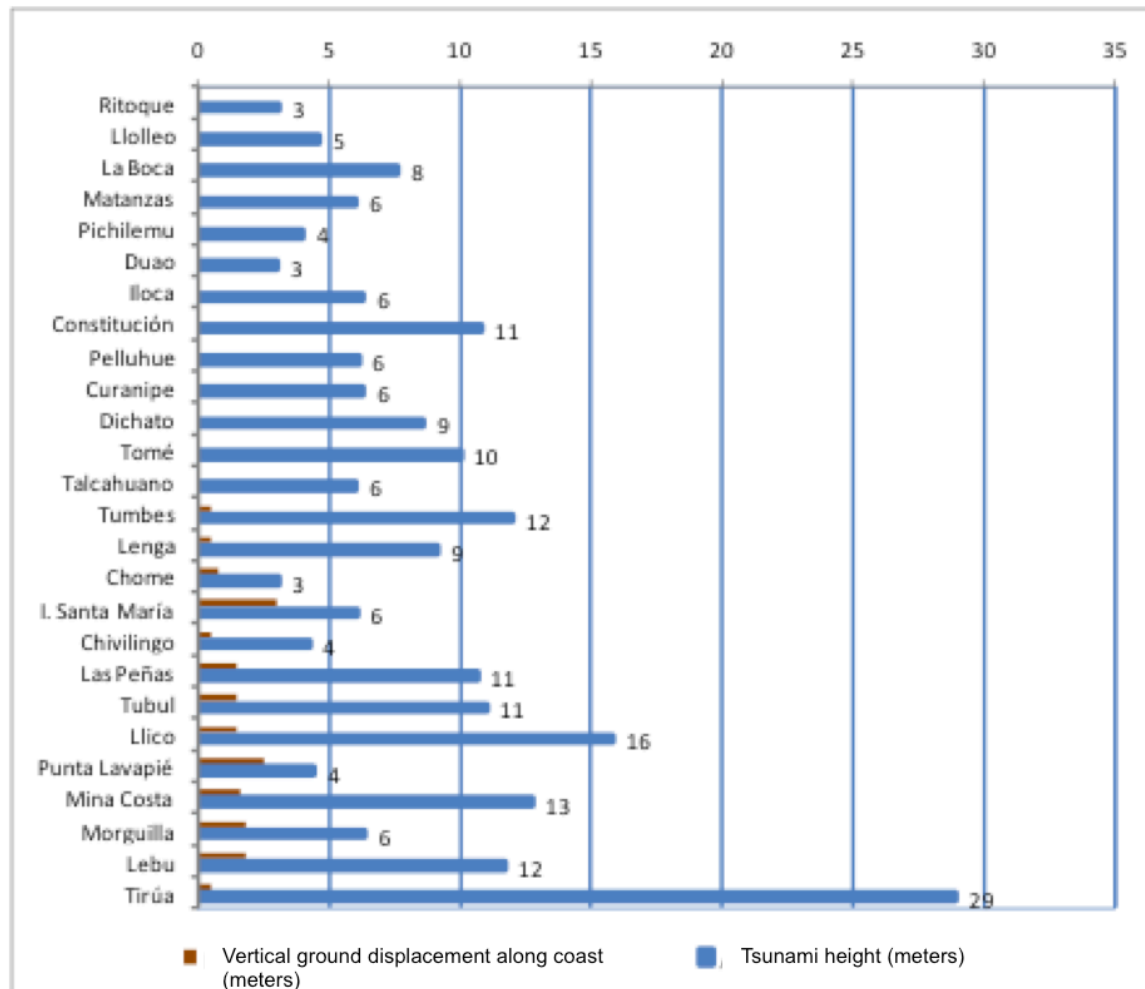
- Promote sharing of data among field parties
- Minimize logistical problems for visitors and hosts
- Link visitors to Chilean collaborators
- Provide the GoC with a summary of the ITST-Chile findings

The coordination for this effort was handled by the ITST - Chile Coordination Team (ICT). ICT members consisted of scientists of UNESCO Santiago (Ricardo Norambuena, Chile coordination), Universidad Católica de Valparaíso (Dr. Marco Cisternas, Science coordination), ITIC (Dr. Laura Kong, lead) and US Geological Survey (Dr. Brian Atwater).

Guidance for surveys in Chile were based in part on the results of the Rapid Response Post-tsunami survey, conducted 8-20 March 2010. Team leads were Ricardo Norambuena (UNESCO-Santiago), Marcelo Lagos (Universidad Católica de Chile), Daniel Melnick (Chilean but at Postdam University), Marco Cisternas (Universidad Católica de Valparaíso)

UNESCO Rapid Response Report of the February 27, 2010 Chile Tsunami (unpublished report, 2010).

The following is a preliminary summary graph of wave heights and vertical ground displacements from surveyed Chilean communities. Blue bar is tsunami wave height. Red bar is vertical ground displacement (uplift) in the southern region.



The following is a brief description of another ITST-Chile Team report.

Pure Applied Geophysics. Vol. 168 (2011), pp. 1989-2010. Fritz, et.al.

ITST - Chile was deployed within days of the 2010 Chile tsunami event and surveyed 800 km of coastline from Quintero to Mehuin and the Pacific Islands of Santa Maria, Mocha, Juan Fernandez 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. For more information, see the following:

<http://link.springer.com/article/10.1007%2Fs00024-011-0283-5#page-1>

http://www.researchgate.net/publication/225163430_Field_Survey_of_the_27_Feb_ruary_2010_Chile_Tsunami

