

# TSUNAMI: IMPROVING THE ODDS

New Zealanders are better protected from catastrophic tsunami thanks to KAREN.

## Early warning saves lives

GNS Science's GeoNet is drastically reducing the likelihood of major devastation and serious economic upheaval from tsunami. Data from global networks is streamed in real-time into GeoNet. This data helps predict the likely magnitude of the tsunami and means NZ emergency services can respond quickly to the threat; protecting property and saving the lives of people living along NZ's coastline.

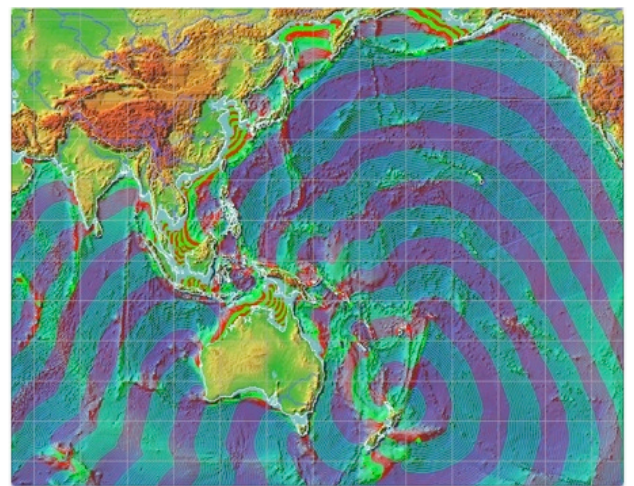
## KAREN enables an effective warning system

International cooperation is the key to the safety of New Zealanders. During a geological event, real-time seismic and sea level data from collaborators across the Pacific travels at lightning speeds across KAREN to GeoNet. This means our scientists get the birds eye view of the tsunami they need to better predict the scale, location and impact.

## Better data means better prepared

Data from geological events are stored at GNS Science and freely available for anyone to use. New Zealand scientists have ready access to these huge blocks of data over KAREN.

"Over KAREN we can quickly collect the global information we need to predict how tsunami will strike NZ's coastline," Ken Gledhill, GeoNet Project Director.



TSUNAMI TRAVEL-TIMES FROM AROUND THE PACIFIC RIM TO NEW ZEALAND

Web services deliver these data in standard formats, enabling researchers to use tools of their choice to visualise and study these events.

"This research is extremely valuable and makes a very practical contribution to life in New Zealand; impacting decisions on where to locate new developments and how to construct buildings so they're more resilient to future events," said Ken.

FIND OUT MORE ABOUT GNS SCIENCE'S GEONET AT:  
[WWW.KAREN.NET.NZ/GEONET-TSUNAMI](http://WWW.KAREN.NET.NZ/GEONET-TSUNAMI)

