## **Palaeotsunamis in Oceanic Islands**

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Following the 2004 Indian Ocean Tsunami there has been a lot of effort to try and identify evidence for its historic and prehistoric precursors around the Indian Ocean. Similar work is being carried out in many parts of the World but these efforts are somewhat *ad hoc* and do not lend themselves to the development of useful national and regional palaeotsunami databases that can be used for tsunami hazard and risk assessments.. This is unfortunate. As more data are collected around the World, a growing number of palaeotsunamis are starting to become what we term "hybrids" - historic in one country and prehistoric in another. The ability to learn information from historic sources adds immense value to the understanding of the nature and extent of such events. The 1700AD Cascadia event is probably the most well-known of these, although the 1575AD Chilean tsunami is another one of increasing importance.

The collation and interpretation of palaeotsunami data is fraught with difficulties. Globally, we are becoming increasingly aware that the study of contemporary tsunamis is a multi-disciplinary field. The same applies to palaeotsunamis. Nearly every palaeotsunami database that has been developed however, consists almost entirely of geological data. This is severely limiting. We give an example of the New Zealand palaeotsunami database that includes geological, geomorphological, geochemical, archaeological, anthropological, palaeoecological, and hybrid tsunami information. This is quite a remarkable dataset, but serves little value beyond the country even though its neighbour, Australia, also has a palaeotsunami database. An attempt to develop an Australasian palaeotsunami database however, reveals that the two datasets are not immediately compatible. There are two fundamental problems inconsistencies in chronological interpretations and differences between the criteria used to infer a palaeotsunami origin. These inconsistencies are not insurmountable, but they are complex. Before we can make effective use of national and regional palaeotsunami databases we must critically review existing data, only then can we make use of their full potential. Attempts to establish a Pacific Island Country (PIC) database in the wake of the 2009 South Pacific Tsunami highlighted another problem - we appear to know more about the Holocene palaeotsunami record for the Indian Ocean that has fewer events, than we do for PICs located in a region susceptible to tsunamis originating from numerous 'Ring of Fire' sources. To put this in context, there are 22 PICs scattered over one third of the globe, and at best we have reliable data for single events from a mere handful of sites. This is entirely unacceptable.