PNG ON THE MOVE - GPS MONITORING OF PLATE TECTONICS AND EARTHQUAKES

Richard Stanaway Quickclose, PO Box 1364, Carlton, Victoria, Australia.

Abstract

PNG is one of the most tectonically active countries in the world. Major earthquakes and volcanic eruptions resulting from this tectonic activity pose significant threats to PNG's population and fragile infrastructure. Modern surveying techniques such as GPS can measure movement of tectonic plates to within a centimetre anywhere in PNG. These measurements have provided a much better understanding of PNG's tectonic setting and also have the potential to significantly improve the accuracy of PNG's geodetic datum. This paper highlights contributions made by The Australian National University, the National Mapping Bureau, RVO and UniTech's Department of Surveying and Land Studies showing some startling results from these surveys.