

POTENTIAL OVERLOOKED ANALOGUES TO THE INDIAN OCEAN TSUNAMI IN THE WESTERN AND SOUTHWESTERN PACIFIC

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ABSTRACT

In a more detailed examination of subducting margins of the Western and Southwestern Pacific, segments are found that are similar to the segment along the Indian Ocean that ruptured on 26 December 2004. Similarities are found in terms of hypocenter distributions and historical seismicity. The largest reported moment magnitudes in the Western and Southwestern Pacific since 1900 were an 8.5, an 8.4, and an 8.3. Should any substantially larger earthquakes occur along these segments or elsewhere in the Western or Southwestern Pacific, Civil Defense agencies in the Hawaiian Islands should be aware of any possible inadequacies in existing evacuation procedures for western and southern shores.