WHY THE ATLANTIC GENERALLY CANNOT GENERATE TRANS-OCEANIC TSUNAMIS?


*Department of Civil Engineering
University of Ottawa, Ottawa, Canada
**School of Administrative Studies
York University, Toronto, Canada
***Centre for Atmospheric Sciences
Indian Institute of Technology Delhi, New Delhi

ABSTRACT

For the three oceans with major and concentrated population centers around the coastlines, namely, the Pacific, Atlantic and Indian Oceans, past events as well as numerical models appear to suggest that, while the Pacific and Indian Oceans can support trans-oceanic tsunamis, in general, the Atlantic Ocean cannot. There are seismological and physical oceanographic reasons for this difference in behaviour. It is not that the Atlantic Ocean does not give rise to tsunamis, but they are all generally local and do not impact the whole Atlantic Ocean. This local behaviour of tsunamis in the Atlantic Ocean needs to be taken into account in developing a tsunami warning system.

KEYWORDS: Tsunami, Atlantic Ocean, Lake Agassiz, Halifax Explosion, Canary Islands

REFERENCES


