

The History of Earthquakes in the Caribbean



- **February 8th, 1843:** On this date, the biggest [earthquake](#) known to have affected the Eastern Caribbean occurred. Damaging intensities were experienced from St. Maarten to Dominica. In Antigua, the English Harbour sank and in Point-a-Pitre, Guadeloupe, all masonry was destroyed in the earthquake, with an associated fire consuming wooden structures. One third of the population, estimated at 4,000-6,000 persons, perished. The event was felt as far south as Caracas and British Guiana and was even felt 2,000 km away in Washington, Vermont and Charlestown, U.S.A. This earthquake was not instrumentally recorded. The [magnitude](#) is estimated to have been in the range 8.0-8.5.
- **June 7th, 1692:** 90% of the town of Port Royal in Jamaica was destroyed by an earthquake. Over 2,000 people were killed, including several by a fever epidemic that followed the event. Jamaica has a long history of earthquakes. The island was again affected by an earthquake in January 1907 and in January 1993, the latter measuring 5.3 on the Richter scale and causing minor damage.
- **1946:** The largest recorded earthquake to have occurred in the Caribbean is believed to have been the **El Cibao** earthquake in the Dominican Republic. The earthquake was of magnitude 8.1 and generated a tsunami which caused 75 deaths and rendered 20,000 homeless. Aftershocks extended through 1947 and 1948.
- **October 8th, 1974:** This was the largest earthquake to have occurred in the Eastern Caribbean (St. Kitts-Nevis to Trinidad & Tobago region) since continuous instrumental monitoring began in the region, and was of magnitude 7.5.
- Between **April - July 1997**, a series of earthquakes affected the southern Caribbean, particularly Trinidad and Tobago. Two of these events, on April 2 and April 22, caused damage to homes, public and commercial buildings and other property in Tobago. The cost of damage was estimated at approximately US \$3 million and about 200 people were affected.

A valuable resource for understanding earthquake hazards in the Caribbean are the earthquake [hazard](#) maps produced by [SRC](#), [EQU](#) and [PRSN](#). These maps, particularly those that identify (using acceleration, [intensity](#) and velocity) the earthquake hazard across all

sixteen Participating States, are highly informative. According to the SRC- produced maps, the Participating States are exposed to earthquakes in varying degrees. The intensity map below details the Expected MMI with a 10% probability of exceedance in a fifty-year period.

The potential intensity of ground-shaking that could be expected during an earthquake in the countries within the region ranges from MMI V to MMI VII. According to McCann (unpublished paper), "*The eastern margin of the Caribbean from Trinidad to Puerto Rico has the potential for large earthquakes. The northern Lesser Antilles is in the category of highest seismic potential....*". (Baastel, 2007).

Source:

http://www.weready.org/earthquake/index.php?option=com_content&view=article&id=20&Itemid=69