

Preliminary Executive Summary

CARIBE WAVE/LANTEX 2013 Tsunami Exercise

30 Member States and 15 of the territories* in the Caribbean and Adjacent Regions participated in the second regional tsunami exercise, CARIBE WAVE/LANTEX 2013 held on March 20, 2013. This represents a participation rate of at least 94% (up from 75% in 2011) of all the countries and territories in the region.

The exercise was conducted under the framework of the UNESCO IOC Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG CARIBE EWS) and the US National Tsunami Hazard Mitigation Program.

481 organizations and individuals (almost 200 more than in 2011) registered to receive the bulletins issued by the Pacific Tsunami Warning Center (PTWC), West Coast and Alaska Tsunami Warning Center (WC/ATWC), and/or the Puerto Rico Seismic Network. In 2011, 300 organizations registered for the special email services.

According to the registrations, 47,952 people were going to participate in the event throughout the Caribbean and Adjacent Regions; of these, 45,526 are from Puerto Rico where it was the 5th Commonwealth wide tsunami exercise.

Registered participants included 46 UNESCO CARIBE EWS Tsunami Warning Focal Points (TWFP) and National Contacts, 131 International, State, Territorial and Local Emergency Management Organizations, 118 Schools and Universities (30,060 participants), 71 Governmental Agencies, 21 Private Organizations, 8 Health Facilities, 5 Members of the Media and 95 Individuals and Families.

The CARIBE WAVE/LANTEX 13 scenario simulated a tsunami generated by a M 8.5 earthquake originating 57 miles north of Oranjestad, Aruba in the Caribbean Sea. According to models, the whole Caribbean basin and parts of Western Atlantic would be impacted by the tsunami, with the largest waves expected from this scenario along the coasts of Aruba, Bonaire, Curacao, Venezuela and Colombia and the southern Coast of Hispaniola, with coastal wave forecasts of up to 17 meters.

The initial dummy message (“start of exercise”) was issued by the PTWC and WCATWC at 1302 UTC (9:02 AST) and disseminated over its standard broadcast channels to all its stakeholders and TWFP, irrespective of if they registered. The Puerto Rico Seismic Network (PRSN) and other national and regional organizations also issued messages for its areas of responsibility.

Sirens, emails, emergency alert systems, text messages, media outlets, NOAA weather radio, and social media were used by many TWFP to further disseminate the messages.

Thru the exercise it has been possible to:

- Validate the **issuance** of tsunami products from the PTWC and WCATWC which currently serve the region. The message was issued according to schedule to the officially designated Tsunami Warning Focal Points.
- Validate the **receipt and dissemination** of tsunami products by Tsunami Warning Focal Points (TWFP). No institution has reported issues with the reception of the message from the TWC.
- To begin a process of **exposure to proposed enhanced PTWC products**, which include graphics.
- To **validate the readiness of the Caribbean and Adjacent Regions** to respond to a local/regional source tsunami.

In addition to the communication tests, exercises were conducted at various additional levels of magnitudes and sophistication and included seminars, table top exercises, video/web conferencing and drills.

Planning for CARIBE WAVE took over a year and was coordinated by a task team led by the US NWS Caribbean Tsunami Warning Program and included the UNESCO IOC, CARIBE EWS officers, PTWC, WCATWC, the International Tsunami Information Center, regional emergency management organizations and Tsunami National Contacts and Tsunami Warning Focal Points.

The Exercise Handbook, which was distributed in December 2012, and other information and supporting documents for the exercise will remain posted on different websites including the CTWP (<http://www.srh.noaa.gov/srh/ctwp/>) and the PRSN (<http://redsismica.uprm.edu>).

To provide feedback on the exercise, the new PTWC products and state of preparedness, an online questionnaire is available at https://www.surveymonkey.com/s/caribewave13_eval . Each of the countries and territories, as well as other participants are requested to respond by April 1, 2013. The results of CARIBE WAVE/LANTEX 2013 will be presented at the VIII Session of the ICG CARIBE EWS to take place in Port of Spain, Trinidad April 29-May 1, 2013.

* Aruba, Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, France (Martinique, Guadeloupe, Guyane, St. Barthelemy, St Martin), Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Netherlands (Bonaire, Saba and Sint Eustatius), Nicaragua, Panama, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad and Tobago, United Kingdom (Anguilla, British Virgin Islands, Bermuda, Cayman Islands, Turks and Caicos), United States (Puerto Rico and the US Virgin Islands) and Venezuela (Bolivarian Republic of).

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