

Exercise LANTEX 15 Florida Scenario Participant Handbook

A Western Atlantic Tsunami Warning Exercise
March 25, 2015

US National Tsunami Hazard Mitigation Program
Warning Coordination Subcommittee



NOTE: The contents of this handbook are patterned after previous LANTEX and CARIBE WAVE Exercises (e.g., Commission Océanographique Intergouvernementale. *Exercice Caribe Wave 11. A Caribbean Tsunami Warning Exercise, 23 March 2011*, IOC Technical Series No. 93. Paris, UNESCO, 2011 (English/ French/ Spanish), Intergovernmental Oceanographic Commission *Exercice Caribe Wave/Lantex 13, A Caribbean Tsunami Warning Exercise, 20 March 2013, Volume 1: Participant Handbook*, IOC Technical Series No. 101, Paris, UNESCO, 2012 and Intergovernmental Oceanographic commission. 2013. *Exercice Caribe Wave/Lantex 14. A Caribbean and Northwestern Atlantic Tsunami Warning Exercise, 26 Marc 2014. Volume 1: Participant Handbook. IOC Technical Series, 109 vol. 1. Paris: UNESCO. (English and Spanish)*). These CARIBE WAVE handbooks followed the Pacific Wave 08 manual published by the Intergovernmental Oceanographic Commission (*Exercice Pacific Wave 08, A Pacific-wide Tsunami Warning and Communication Exercise, 28-30 October 2008*, IOC Technical Series No. 82, Paris, UNESCO, 2008). The UNESCO *How to Plan, Conduct and Evaluate Tsunami Wave Exercises. IOC Manuals and Guides No. 58 rev.*, Paris: UNESCO, 2013 (English, Spanish) is another important reference.

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1. Background

This tsunami exercise is being conducted to assist tsunami preparedness efforts throughout the northern Atlantic region. Recent tsunamis and their associated earthquakes, such as the 2004 Indian Ocean, 2009 Samoa, 2010 Haiti and Chile, and 2011 Japan, attest to the importance of proper planning for tsunami response. This exercise will simulate a large earthquake located east of Florida which triggers a submarine landslide which in turn generates a tsunami.

At 1400 UTC on March 25, 2015 the CARIBE WAVE/LANTEX tsunami exercise will also take place. The scenario will be an earthquake off Panama which generates a tsunami. This exercise, organized under the framework of the United National Educational, Scientific, and Cultural Organization's (UNESCO) Intergovernmental Oceanographic Commission (IOC) Intergovernmental Coordination Group for Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG CARIBE EWS) and US NTHMP, is open to CARIBE EWS countries (more information is available at www.caribewave.info).

Contributing articles to this summary can be found at <http://projects.noc.ac.uk/landslide-tsunami/project-information> and <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.16.9503&rep=rep1&type=pdf>.

Submarine landslides are one of the most important processes for transporting sediment across the continental shelf, slope and into the deep ocean. Submarine landslides can be much larger (two orders of magnitude) than those on land. For example, the Storegga Slide off Norway affected an area larger than Scotland, and the amount of sediment it mobilized is enough to cover Scotland to a depth of 80 m. Gravity-driven downward movement of slope-forming material can occur at all inclined areas of the seafloor. Landslides in shallow water (<200m water depth) can often be linked to cyclic tide or storm wave loading, whereas fjords are subject to frequent small failures along their steep walls. Slope failures related to volcanic island flank collapses involve a complex interplay of sub-aerial and submarine components along slopes with high relief. The largest of all submarine landslides occur on nearly flat (<2°) continental slopes. Since the volume of mobilized material in a landslide is a critical parameter for tsunami generation, these enormous landslides are potentially highly tsunamigenic.

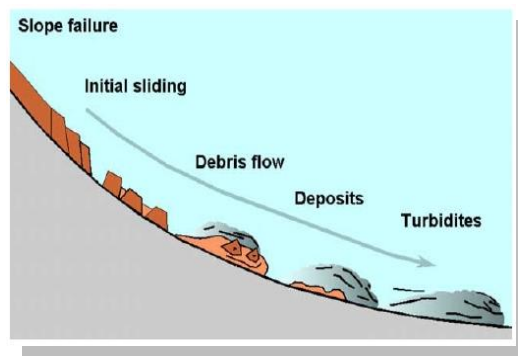


Figure 1. Submarine landslide schematic diagram.

Figure 1 shows the evolution of a submarine landslide on its way from the continental slope to the abyssal plain. On its downslope journey, the slide mass itself remains intact, breaks up into distinct blocks or deforms internally. In some cases the mass disintegrates as it moves downslope along the failure plane due to turbulence and water intake. A cloud of suspended particles forms and divides into a debris flow at the bottom and a turbidity current on top. The debris flow travels faster on steeper portions of the slope but stops eventually due to frictional forces, whilst the turbidity current can travel very long distances until turbulence decreases below a critical value. The potential of a slide to transform into these sediment flows, as well as the flow's intensity and run-out distances, depend on a number of factors, e. g., the density of the failed material, its initial excess pore pressure, whether the material is contractive or dilational, and its sensitivity, i. e., the amount of shear strength that is lost when the material fails.

Tsunamigenic underwater slides and slumps involve the failure of a mass of sediment that can range in length over more than six orders of magnitude, with larger events typically occurring less frequently (Prior and Coleman, 1979; Edgers and Karlsrud, 1982; Schwab et al., 1993). Damaging tsunamis may result from the failure of sediment along steep fjords banks, near boundaries of submarine canyon systems, at active river deltas, along volcanic islands or ridges, or at submerged alluvial plains including continental margins (Hampton et al., 1996). Terzaghi (1956) showed that underwater slides and slumps can often be related to excess pore water pressures along (at least) the initial failure plane. Prior and Coleman (1979) attribute excess pore water pressure to low tides, artesian water sources, recent external loads, rapid sedimentation, seismic ground motions, construction induced vibrations, volcanic activity, vaporization of gas hydrates, wave action, or any combination of these or similar factors. Hampton et al. (1996) separate these factors into those that reduce effective sediment strength and those that increase sediment stress. Sediment failure may occur spontaneously such as during extremely low tides; or, sediment failure may be triggered by a deterministic external agent such as ground motion during an earthquake (Kramer, 1996). The timing of spontaneous slides and slumps may be fundamentally unpredictable since failure of metastable sediments may precipitate from localized inhomogeneities of unknown weaknesses. A majority of tsunamigenic underwater slides and slumps appear to be triggered by nearby earthquakes.

Landslide tsunamis likely constitute the biggest tsunami hazard to the U.S. Atlantic coast. Only a small number of landslides have so far been dated and they are generally older than 10,000 years. Though, it is known that a major tsunamigenic, submarine landslide occurred in 1929 off the Newfoundland coast. Analysis of landslide statistics along the fluvial and glacial portions of the margin indicate that most of the landslides are translational, were probably initiated by seismic acceleration, and failed as aggregate slope failures (ten Brink et al, 2014).

Tsunami warning services for the United States, Canada, Puerto Rico, and the Virgin Islands are currently provided by the National Tsunami Warning Center (NTWC) in Palmer, Alaska, while the Pacific Tsunami Warning Center (PTWC) in Ewa Beach, Hawaii provides services for other locations within the Caribbean region. These Centers issue tsunami products to the region approximately two to ten minutes after an earthquake's occurrence. The NTWC products include warnings, advisories,

watches, and information statements, while the PTWC products include tsunami information and watch messages. Primary recipients of Tsunami Warning Center (TWC) messages include national tsunami warning focal points, Weather Forecast Offices (WFO), state/territory warning points/emergency operation centers, national Coast Guards, and military contacts. These agencies disseminate the messages to people potentially impacted by a tsunami. The Puerto Rico Seismic Network (PRSN) of the University of Puerto Rico at Mayagüez, Instituto Nicaraguense de Estudios Territoriales (*INETER*) in Nicaragua, La Fundación Venezolana de Investigaciones Sismológicas (*FUNVISIS*) in Venezuela, and other national and regional institutions also provide earthquake and tsunami information for their areas of responsibilities.

NOAA and the U.S. National Tsunami Hazard Mitigation Program (NTHMP) are providing the framework for this exercise as a means for emergency responders throughout the U.S. and Canadian east coasts to test and update tsunami response plans. The coastal impact which tsunamis can impart should provide a strong incentive for local jurisdictions to prepare for a tsunami. Given the potential impact of such an event in other locations in the Caribbean and Bermuda, the Pacific Tsunami Warning Center is also providing exercise products (www.caribewave.info) within the framework of the UNESCO IOC Intergovernmental Coordination Group for Tsunamis and Other Coastal Hazards for the Caribbean and Adjacent Regions (CARIBE EWS).

This exercise will provide simulated tsunami warning and watch messages from the NTWC based on a hypothetical magnitude 6.8 earthquake located approximately 215 miles E of Port Canaveral, Florida at 28.8°N, 77.0°W (Figure 2) which in turn triggers a sub-sea landslide. Exercises like this will help ensure that coasts are ready to respond in the event of a dangerous tsunami. Similar recent exercises in the Pacific and Caribbean Basins have proven effective in strengthening preparedness levels of emergency management organizations.

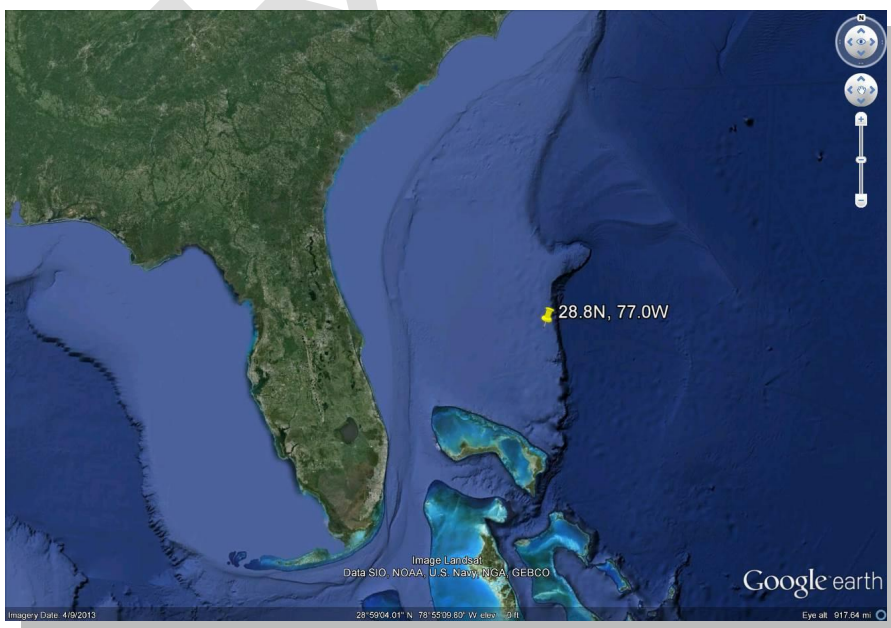


Figure 2. Lantex 15 source location.

2. Exercise Concept

2.1 Purpose

The purpose of the exercise is to improve Tsunami Warning System effectiveness along the Atlantic coasts. The exercise provides an opportunity for emergency management organizations throughout the Atlantic to exercise their operational lines of communications, review their tsunami response procedures, and promote tsunami preparedness. Regular exercising of response plans is critical to maintain readiness for an emergency. This is particularly true for tsunamis, which are infrequent but high impact events. Every impacted emergency management organization (EMO) is encouraged to participate.

2.2 Objectives

Each organization can develop their objectives for the exercise depending on their level of involvement in the scenario. The following are the exercise's overarching objectives.

- Ensure message transmission from TWCs to Tsunami Warning Focal Points (TWFP) and from these primary contacts to the EMOs.
- Test tsunami response plans for Atlantic EMOs that have developed plans, and provide a catalyst for countries and EMOs that have not developed plans.
- EMOs, Tsunami Warning Focal Points (TWFP) and Tsunami National Contacts review, discuss, and evaluate the various communication alternatives for receiving and disseminating tsunami messages.
- EMOs, Tsunami Warning Focal Points and Tsunami National Contacts review, discuss, and evaluate potential response actions and challenges.

2.3 Type of Exercise

The exercise should be carried out such that communications and decision making at various organizational levels are exercised and conducted without disrupting or alarming the general public. Individual localities, however, may at their discretion elect to extend the exercise down to the level of testing local notification systems such as the Emergency Alert System (EAS), sirens, or loudspeakers.

Exercises stimulate the development, training, testing, and evaluation of Disaster Plans and Standard Operating Procedures (SOPs). Exercise participants may use their own past multi-hazard drills (e.g. flood, hurricane, tsunami, earthquake, etc.) as a framework to conduct LANTEX15.

Exercises can be conducted at various scales of magnitude and sophistication. The following are examples of types of exercises conducted by EMOs:

1. **Orientation Exercise (Seminar):** An Orientation Exercise lays the groundwork for a comprehensive exercise program. It is a planned event, developed to bring

together individuals and officials with a role or interest in multi-hazard response planning, problem solving, development of standard operational procedures (SOPs), and resource integration and coordination. An Orientation Exercise will have a specific goal and written objectives and result in an agreed upon Plan of Action.

2. **Drill:** The Drill is a planned activity that tests, develops, and/or maintains skills in a single or limited emergency response procedure. Drills generally involve operational response of single departments or agencies. Drills can involve internal notifications and/or field activities.
3. **Tabletop Exercise:** The Tabletop Exercise is a planned activity in which local officials, key staff, and organizations with disaster management responsibilities are presented with simulated emergency situations. It is usually informal, in a conference room environment, and is designed to elicit constructive discussion from the participants. Participants will examine and attempt to resolve problems, based on plans and procedures, if they exist. Individuals are encouraged to discuss decisions in depth with emphasis on slow-paced problem solving, rather than rapid, real time decision-making. A Tabletop Exercise should have specific goals, objectives, and a scenario narrative (see Appendix A for a Sample Tabletop Exercise Outline).
4. **Functional Exercise:** A Functional Exercise is a planned activity designed to test and evaluate organizational capacities. It is also utilized to evaluate the capability of a community's emergency management system by testing the Emergency Operations Plan (EOP). It is based on a simulation of a realistic emergency situation that includes a description of the situation (narrative) with communications between players and simulators. The Functional Exercise gives the players (decision-makers) a fully simulated experience of being in a major disaster event. It should take place at the appropriate coordination location (i.e. emergency operations center, emergency command center, command post, master control center, etc.) and activate all the appropriate members designated by the plan. Both internal and external agencies (government, private sector, and volunteer agencies) should be involved. It requires players, controllers, simulators, and evaluators. Message traffic will be simulated and inserted by the control team for player response/actions, under real time constraints. It may or may not include public evacuations. A Functional Exercise should have specific goals, objectives, and a scenario narrative.
5. **Full-scale Exercise:** A Full-scale Exercise is the culmination of a progressive exercise program that has grown with the capacity of the community to conduct exercises. A Full-Scale exercise is a planned activity in a "challenging" environment that encompasses a majority of the emergency management functions. This type of exercise involves the actual mobilization and deployment of the appropriate personnel and resources needed to demonstrate operational capabilities. EOCs and other command centers are required to be activated. A Full-scale Exercise is the largest, costliest, and most complex exercise type. It may or may not include public evacuations.

Example Time Frames for Different Exercise Types

Style	Planning Period	Duration	Comments
Orientation Exercise	2 wks	Hours	Individual or mixed groups
Drill	2 months	1 day	Individual technical groups generally
Tabletop Exercise	1 month	1-3 days	Single or multiple agency
Functional Exercise	> 3 months	1-5 days	Multiple Agency participation
Full-scale Exercise	>6 months	1 day/ week	Multiple Agency participation

3. Exercise Outline

3.1 General

Tsunami Warning and Advisory messages for this exercise are issued by the NTWC based on a hypothetical earthquake with the following hypocenter parameters which in turn generates a tsunamigenic sub-sea landslide:

- Origin Time 13:00:00 UTC March 25, 2015
- Latitude 28.8°N
- Longitude 77.0°W
- Magnitude 6.8 – Mw
- Depth 5km

Expected impact for this event is determined from tsunami forecast models. The models indicated a significant tsunami along the Florida coast, but with less impact elsewhere. Appendix B provides landslide source parameters and associated model results.

Initially, NTWC issues a bulletin which places the Florida east coast in a Warning. The alert level is geographically expanded later to an Advisory for several other coasts. Definitions of the products that will be issued by the TWCs during this exercise are provided below.

National Tsunami Warning Center:

Tsunami Warning - A tsunami warning is issued when a tsunami with the potential to generate widespread inundation is imminent, expected, or occurring. Warnings alert the public that dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after initial arrival. Warnings alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time

to safely do so. Warnings may be updated, adjusted geographically, downgraded, or canceled. To provide the earliest possible alert, initial warnings are normally based only on seismic information.

Tsunami Advisory - A tsunami advisory is issued due to the threat of a potential tsunami which may produce strong currents or waves dangerous to those in or near the water. Coastal regions historically prone to damage due to strong currents induced by tsunamis are at the greatest risk. The threat may continue for several hours after the arrival of the initial wave, but significant widespread inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory.

NTWC will not issue live messages over broadcast dissemination channels other than to issue an initial dummy message to start the exercise at 1302 UTC on March 25, 2015. However, messages from the TWCs will be emailed to specific recipients who have registered to receive live dissemination throughout the event (<http://www.prsn.uprm.edu/caribewave-lantex2015/registro>). The content of the dummy message is given in Appendix C. The dummy message will indicate that exercise participants should refer to the first message provided in this handbook. From then on, participants should follow the schedule in Table 1 to look at new messages if they are not receiving them via email or fax. Table 1 is the timeline for when messages would be issued by the TWCs if this were a real event, and can be used by EMOs to drive the exercise timing. The warning messages (as shown in Appendix D) cover an 8-hour period, though in an actual event they would likely continue longer. World Meteorological Organization (WMO) and Advanced Weather Interactive Processing System (AWIPS) headers used in the dummy message are listed in Table 2.

The US NTWC issues three official products each time a message is issued. The ones provided in Appendix D are known as the public message and do not contain codes or text intended for automated systems. English and Spanish versions of each message are provided for this exercise. The other message not shown in Appendix D is the segmented message. This message includes encoded NWS zones, Valid Time Event Codes (VTEC), and their level of threat. The segmentation is used for automated processing systems which parse NWS products. NTWC also issues additional graphical and web-based products to its web site.

Participants may elect to exercise using their own timelines in order to achieve their particular objectives. For example, a particular EMO's Exercise Controller may choose to feed the TWC bulletins into the exercise at times of their own choosing, or alternatively put them in envelopes with the time they must be opened written on each, with each key participant agency having their own set of envelopes. The messages, provided in Appendix D, will facilitate this approach.

EMOs are welcome to modify estimated arrival times and/or wave amplitudes to suit their exercise – for example, to have the tsunami arrive sooner and with larger

amplitude. Other exercise injects, such as tsunami damage reports, are also encouraged.

3.2 Master Schedule (Exercise Script)

Table 1: Scenario Timeline

Tsunami generated by landslide triggered by a magnitude 6.8 earthquake with epicenter at 28.8°N, 77.0°W occurring on March 25, 2015 at 1300 UTC. The initial warning is being disseminated at 1302 UTC.

Date (UTC)	Time (UTC)	NTWC Message				
		#	Type	Dummy	Email	
03/25/2015	1300		---- Earthquake Occurs ----			
03/25/2015	1302	01	Warn	Yes	Yes	
03/25/2015	1339	02	Warn	No	Yes	
03/25/2015	1408	03	Adv/Warn	No	Yes	
03/25/2015	1434	04	Adv/Warn	No	Yes	
03/25/2015	1501	05	Adv/Warn	No	Yes	
03/25/2015	1604	06	Adv/Warn	No	Yes	
03/25/2015	1703	07	Adv/Warn	No	Yes	
03/25/2015	1801	08	Adv/Warn	No	Yes	
03/25/2015	1900	09	Adv	No	Yes	
03/25/2015	2000	10	Adv	No	Yes	
03/25/2015	2100	11	Cancel	No	Yes	

The initial dummy message will be disseminated over all standard TWC broadcast channels as listed in Table 2. This is being issued to test communications with EMOs and Tsunami Warning Focal Points, and to start the exercise. All messages will be disseminated over a special email list to provide the messages in real time to organizations requesting this service. To request this service, please register online at <http://www.prsn.uprm.edu/caribewave-lantex2015/registro>. Please note that the NTWC Dummy message is being issued with the WMO/AWIPS IDs WEXX30 PAAQ /TSUATE, WEXX20 PAAQ /TSUAT1, and WEXX40 PAAQ /TSUSPN,.

TWC Message Types:

Warn	Tsunami Warning
Adv	Tsunami Advisory
Can	Cancellation

Dummy:

Yes	Dummy Issued
No	Dummy Not Issued

Email:

Yes	Message disseminated via special email list
No	Message not disseminated via special email list

Table 2: Product Types

Product Types Issued for Dummy Message with Transmission Methods

Center	WMO ID	AWIPS ID	NWWS	GTS	EMWIN	AISR	Fax	Email
NTWC	WEXX30 PAAQ	TSUATE	Yes	Yes	Yes	Yes	Yes	Yes
NTWC	WEXX20 PAAQ	TSUAT1	Yes	Yes	Yes	Yes	No	No
NTWC	WEXX40 PAAQ	TSUSPN	Yes	Yes	Yes	Yes	Yes	Yes

NWWS NOAA Weather Wire Service
GTS Global Telecommunications System
EMWIN Emergency Manager's Weather Information Network
AISR Aeronautical Information System Replacement

At 1400 UTC on March 25, 2015 a separate tsunami exercise (CARIB WAVE/LANTEX15) will also take place. The scenario will be an earthquake offshore Panama which generates a tsunami. This exercise, organized under the framework of the ICG CARIBE EWS. More information is available at www.caribewave.info.

3.3 Actions in Case of a Real Event

In the case of a real event occurring during the exercise, the TWCs will issue their normal messages for the event. Such messages will be given full priority and a decision will be made by the TWCs whether to issue the dummy message and to send email messages to selected recipients. Smaller earthquakes that only trigger a Tsunami Information Statement will not disrupt the exercise. All documentation and correspondence relating to this exercise is to be clearly identified as "**LANTEX 15**" and "**Exercise**."

3.4 Procedure for False Alarm

Any time disaster response exercises are conducted, the potential exists for the public or media to interpret the event as real. Procedures should be set up by all participating entities to address public or media concerns involving this exercise in case of mis-interpretation by media or the public.

3.5 Resources

Although EMOs will have advance notice of the exercise and may elect to stand up a special dedicated shift to allow normal core business to continue uninterrupted, it is requested that realistic resource levels be deployed in order to reflect some of the issues that are likely to be faced in a real event.

Questions on the exercise can be addressed to:

<u>Person</u>	<u>Telephone #</u>	<u>Email</u>
Christa von Hillebrandt,	787-833-8433	christa.vonh@noaa.gov

NWS CTWP Manager		
Walt Zaleski, NWS Southern Region	817-978-1100x106	walt.zaleski@noaa.gov
Paul Whitmore, NTWC Director	907-745-4212	paul.whitmore@noaa.gov
James Waddell, NTWC Rep.	907-745-4212	james.waddell@noaa.gov
Charles McCreery, PTWC Director	808-689-8207	Charles.mccreery@noaa.gov
Amy Godsey, NTHMP Gulf Rep.	850-617-9121	Amy.Godsey@em.myflorida.com
Harvey Thurm, NWS Eastern Region	631-244-0124	harvey.thurm@noaa.gov
Ed Fratto, NTHMP East Coast Rep.		efratto@nesec.org
John Parker, Environment Canada		john.k.parker@ec.gc.ca

3.6 Media Arrangements

One advantage in conducting exercises is that it provides a venue to promote awareness of the exercise topic. Many residents along the Atlantic coast may not realize that a tsunami warning system exists for their region, let alone the proper response. Communities may wish to invite their local media to the exercise to promote local awareness of the tsunami hazard. For all levels of exercising but especially for those countries executing full-scale and functional exercises, the media can also provide support in building awareness leading up to the Exercise. The media should be provided with available informational brochures prepared by the local, regional and international agencies. Appendix F contains a sample press release which can be adapted as necessary.

4 Post-Exercise Evaluation

All participating agencies are requested to provide brief feedback on the exercise. This feedback will assist NTHMP and NOAA in the development of subsequent exercises. Comments on the exercise, proposed improvements to the messages, or any other items related to the tsunami warning system in the Gulf can be addressed to the persons listed in section 3.5.

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Exercise

Appendix A. Example Table Top Exercise

Tabletop Exercise Development Steps

Source: California Office of Emergency Services

A Tabletop Exercise is a planned activity in which local officials, key staff, and organizations with disaster management responsibilities are presented with simulated emergency situations. It is usually informal and slow paced, in a conference room environment, and is designed to elicit constructive discussion from the participants to assess plans, policies, and procedures. Participants will examine and attempt to resolve problems, based on plans and procedures, if they exist. Individuals are encouraged to discuss decisions in depth based on their organization's Standard Operating Procedures (SOPs), with emphasis on slow-paced problem solving, rather than rapid, real time decision-making. An Exercise Controller (moderator) introduces a simulated tsunami scenario to participants via written message, simulated telephone or radio call, or by other means. Exercise problems and activities (injects) are further introduced. Participants conduct group discussions where resolution is generally agreed upon and then summarized by a group leader. A Tabletop Exercise should have specific goals, objectives, and a scenario narrative.

The following provides a Tabletop Exercise structure with sample text and example.

1. Vulnerability Analysis: Problem Statement

An example for a hurricane might be:

Due to the recent Hurricane incidents that the Southeast region of the United States, an awareness of the threat risk involved in these disasters has become more apparent, therefore the need for evacuation system is vital. The state of Louisiana continues its ongoing tasks of planning, preparing, and training for Hurricane preparedness.

2. Purpose (Mission): Intent, what you plan to accomplish (Policy Statement)

An example for a hurricane might be:

The State of Louisiana has realized and recognizes the need for a more efficient and effective evacuation system, and is responding with this Comprehensive Exercise Plan. These events will include seminars, workshops, a tabletop exercise, functional and full-scale exercises within an 18-month time frame, under the State Homeland Security grant program.

3. Scope: **Exercise Activities** **Agencies Involved** **Hazard Type** **Geographic Impact Area**

An example might be:

Emergency Services coordinators at local levels of government will identify representative jurisdictions from each of the six mutual aid regions located throughout the State to participate as host jurisdictions in a series of disaster preparedness exercises. These host jurisdictions will develop a progressive series of exercises each type building upon the previous type of exercise. The process will begin with a vulnerability analysis for each jurisdiction and continue through a progression of exercise activities including: orientation seminars, workshops, and tabletop and functional exercises. The eventual objective of these activities will be to reduce disaster impacts to their populations and city infrastructure. All events will be evaluated utilizing US Homeland Security Exercise Evaluation Program (HSEEP) after action reporting (AAR)

standards. Steps for corrective actions will be made a part of the after action process and report. Surrounding jurisdictions in the mutual aid area will act as exercise design team members, exercise evaluators, or exercise observers for the purpose of information transfer to increase their operational readiness. Jurisdictions will participate on a rotational basis every two years to provide the opportunity for multiple jurisdiction participation.

4. Goals and Objectives:

Criteria for good objectives: Think SMART

- Simple (concise)
- Measurable
- Achievable (can this be done during the exercise?)
- Realistic (and challenging)
- Task Oriented (oriented to functions)

An example might be:

Comprehensive Exercise Program (CEP) Objectives

- *To improve operational readiness*
- *To improve multi-agency coordination and response capabilities for effective disaster response*
- *To identify communication pathways and problem areas pre-event between local jurisdictions and operational area, regional and state emergency operations centers*
- *To establish uniform methods for resource ordering, tracking, and supply for agencies involved at all levels of government.*

5. Narrative:

The Narrative should describe the following:

- Triggering emergency/disaster event
- Describe the environment at the time the exercise begins
- Provide necessary background information
- Prepare participants for the exercise
- Discovery, report: how do you find out?
- Advance notice?
- Time, location, extent or level of damage

6. Evaluation:

The Evaluation should describe the following:

- Objectives Based
- Train Evaluation Teams
- Develop Evaluation Forms

7. After Action Report (AAR): The AAR should be compiled using the evaluation reports

8. Improvement Plan (IP): The IP should reduce vulnerabilities.

Appendix B. Scenario Description

The objective of this exercise is to simulate an event which impacts a large portion of the north-Atlantic region and reflects and possible scenario.

The earthquake hypocenter parameters are:

- Origin Time 13:00:00 UTC March 25, 2015
- Latitude 28.8°N
- Longitude 77.0°W
- Magnitude 6.8 – Mw
- Depth 5km

Landslide source parameters: 50 cubic km slide source which is moving eastward at 50 meters per second.

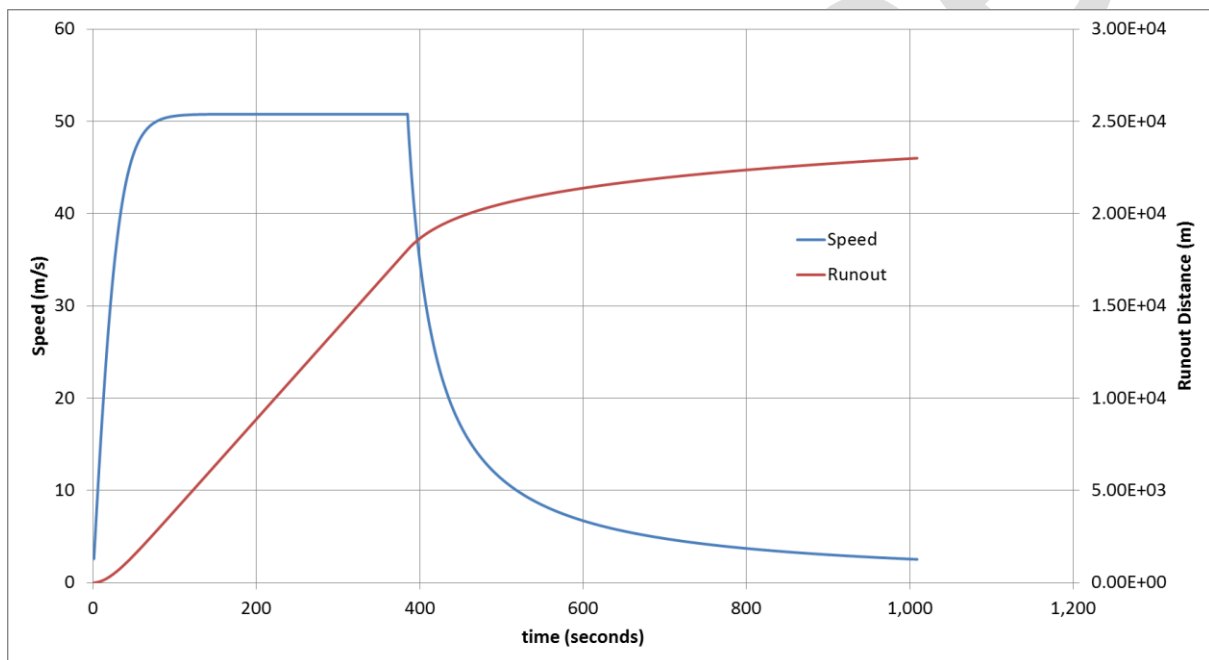


Figure B1. Lantex15's submarine landslide speed and runout over time.

Tsunami models were computed using the Alaska Tsunami Forecast Model (ATFM) to generate expected impacts throughout the region. The model indicates a tsunami between one and two meters along the Florida coast and up to a meter along other US and Canadian east coasts, Bermuda, and the Puerto Rico/Virgin Island north coastlines.

The model source was based on the landslide parameters which then provided the impetus for tsunami propagation throughout the Atlantic basin. Sample model outputs are shown in Figures B1 through B4 with forecast maximum heights above sea level provided in the Table B1. Note that the highest tsunami elevation reached on the shore could be double that of the model outputs since model outputs are determined at the coast.

Tsunami Travel Times

Tsunami travel time contours in hours, beginning from the earthquake origin time.

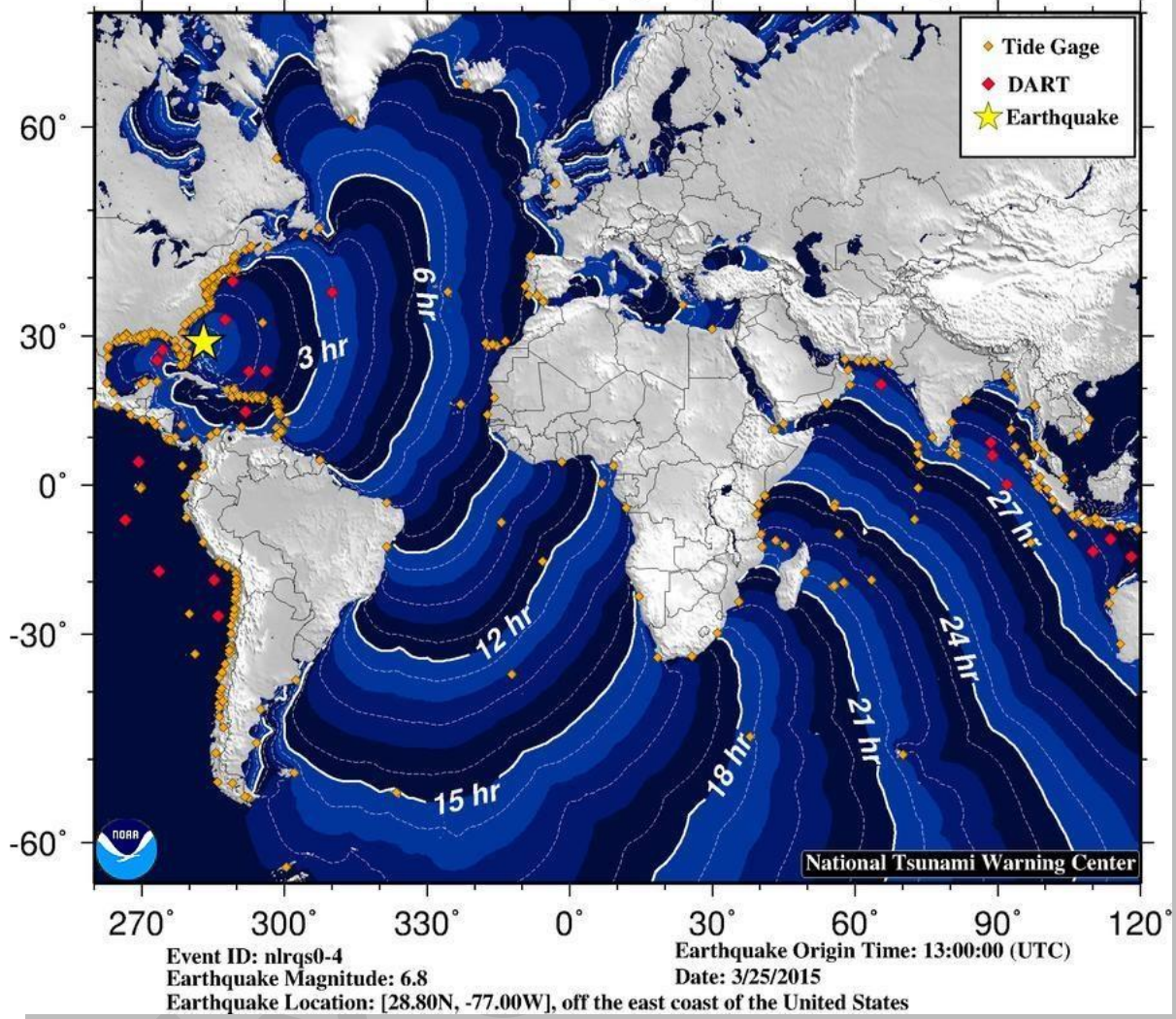


Figure B2. Tsunami travel times for the Lantex15 scenario.

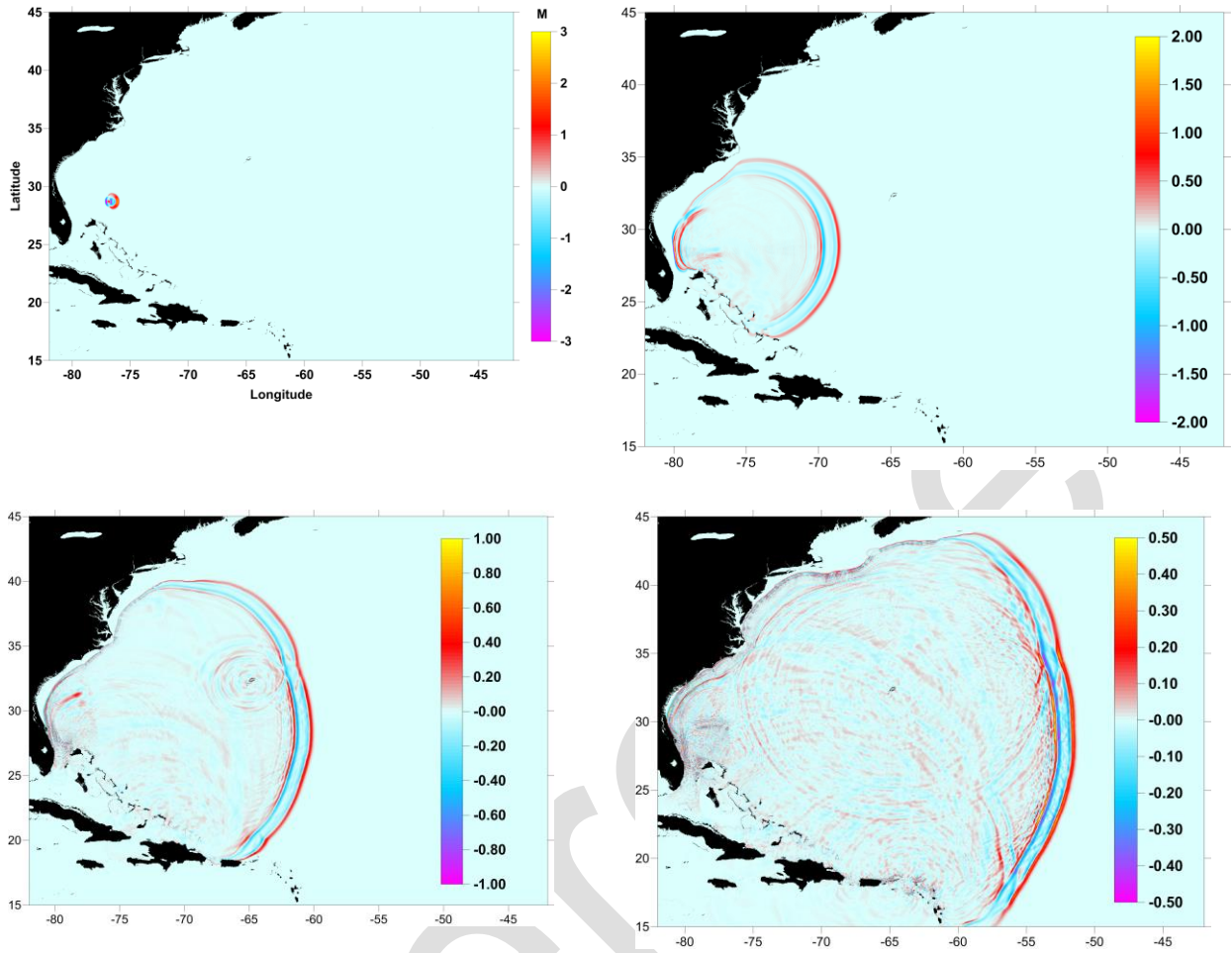
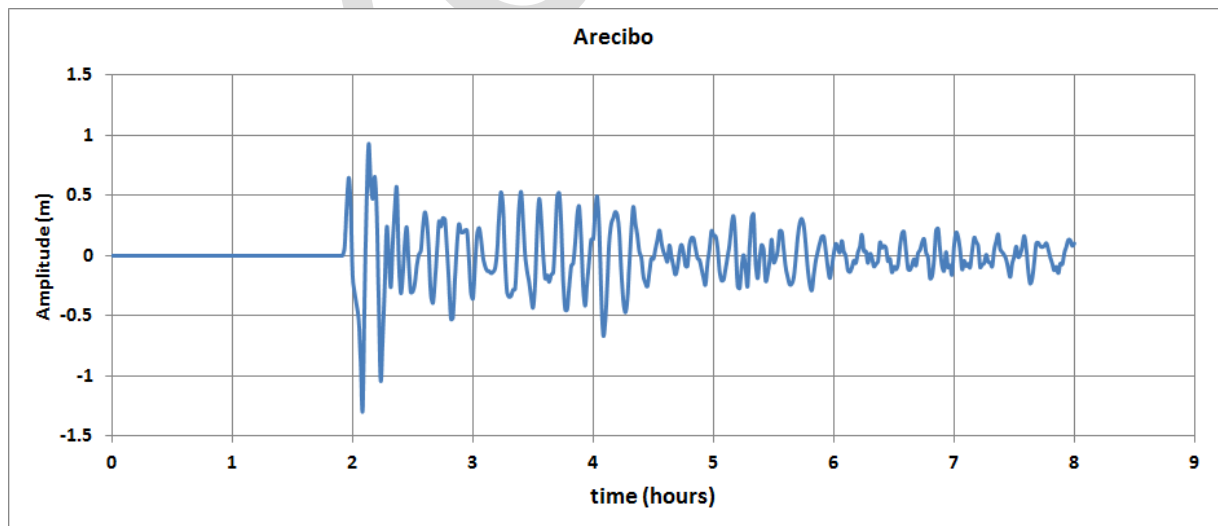
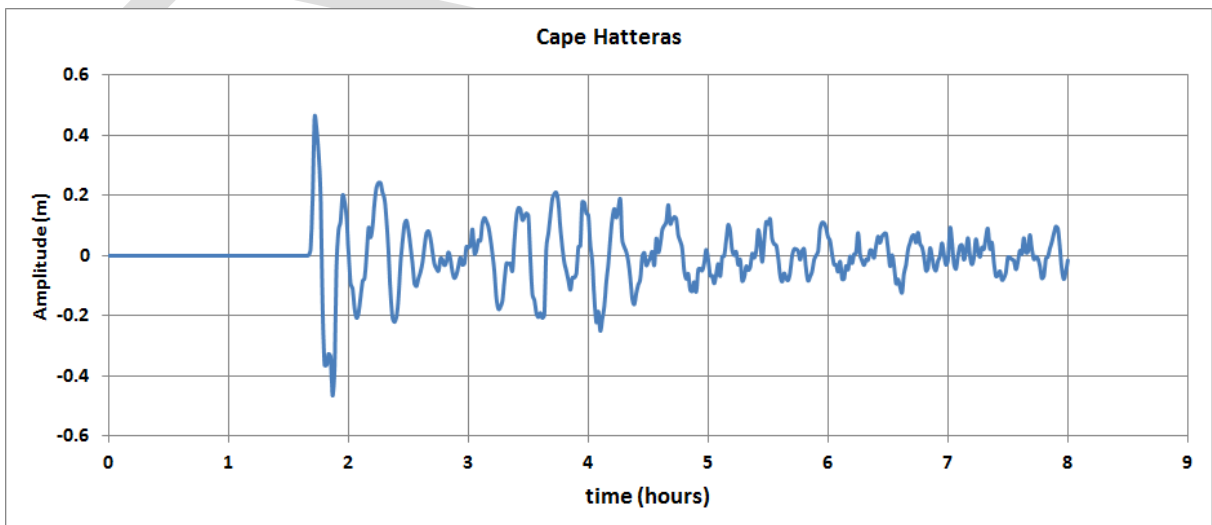
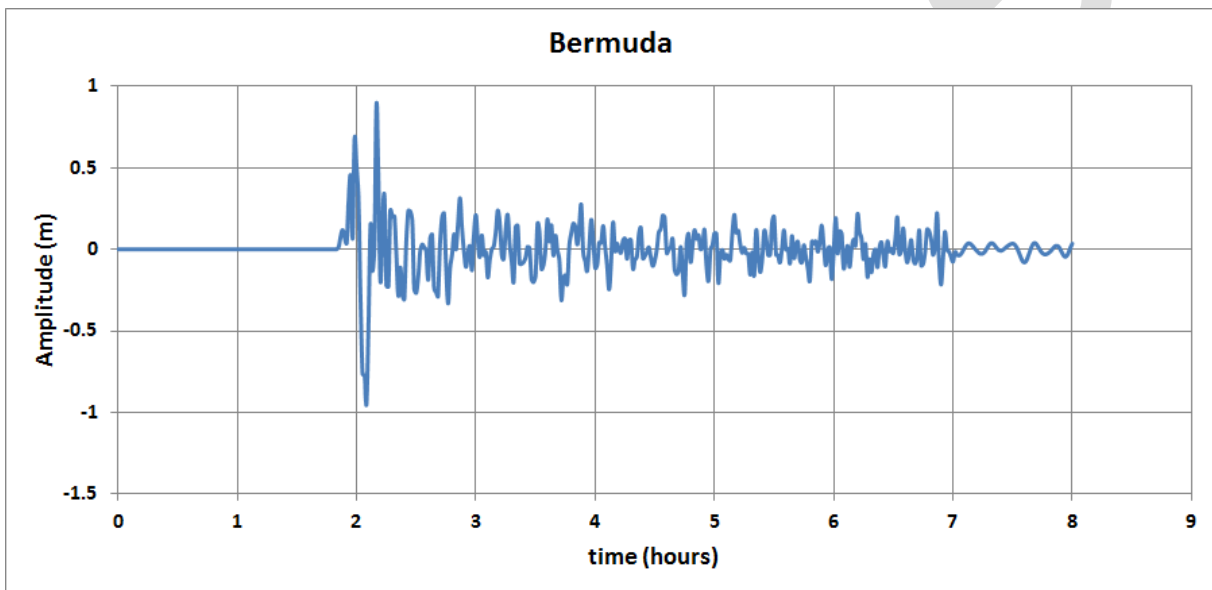
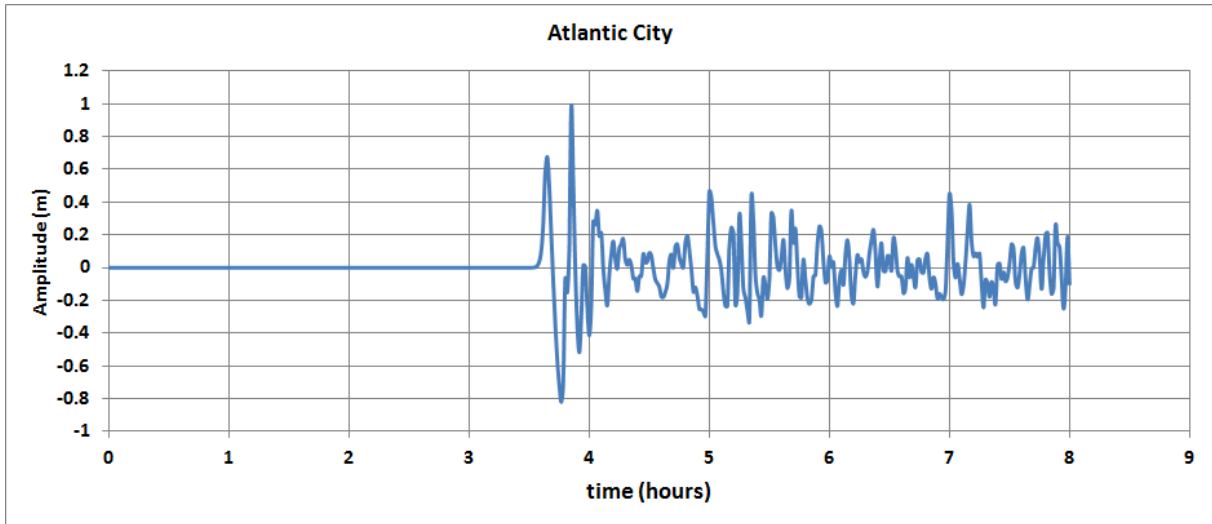
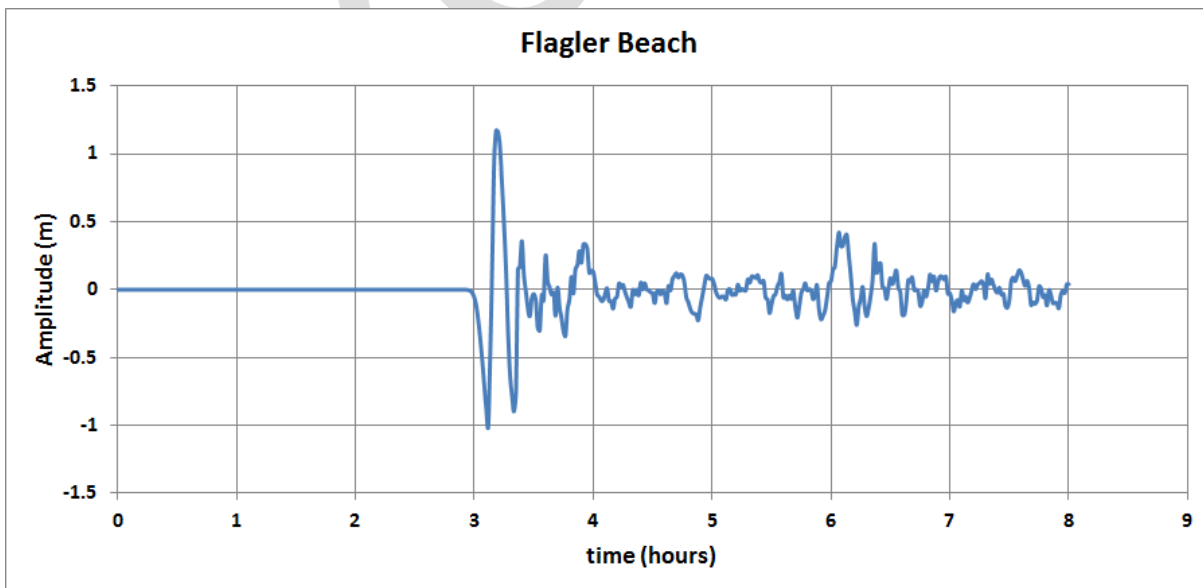
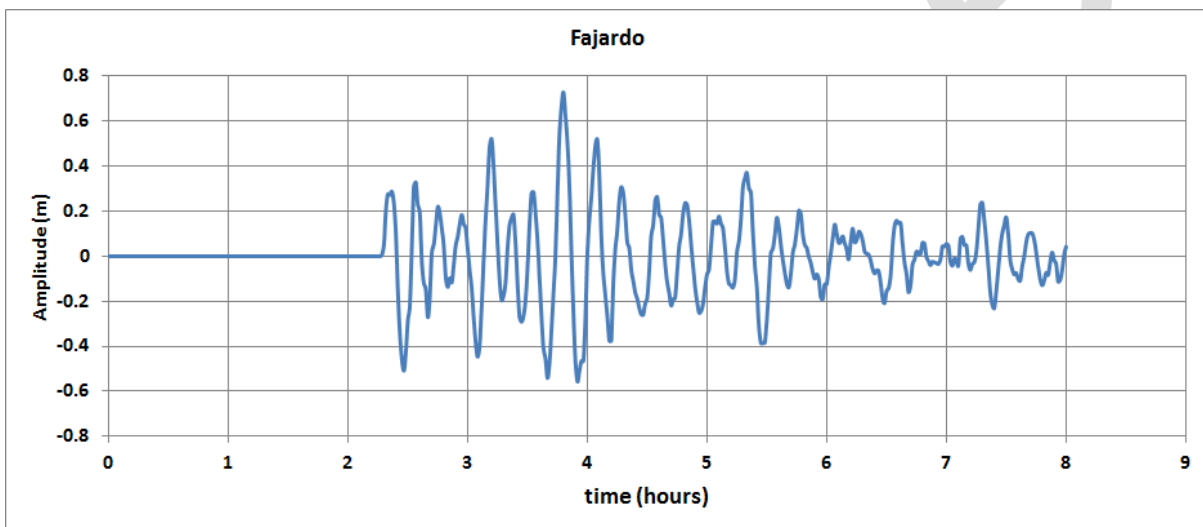
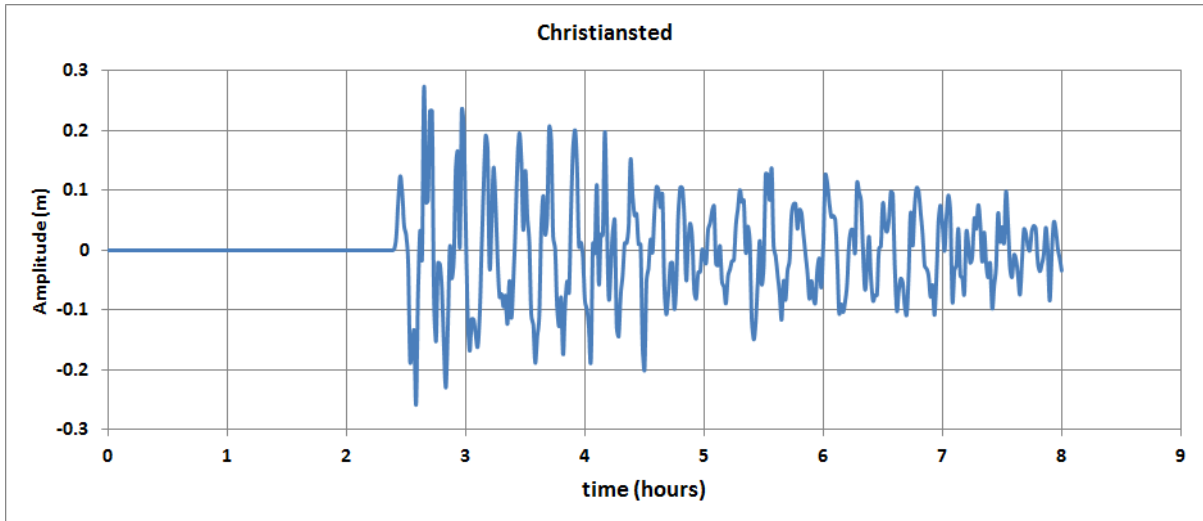
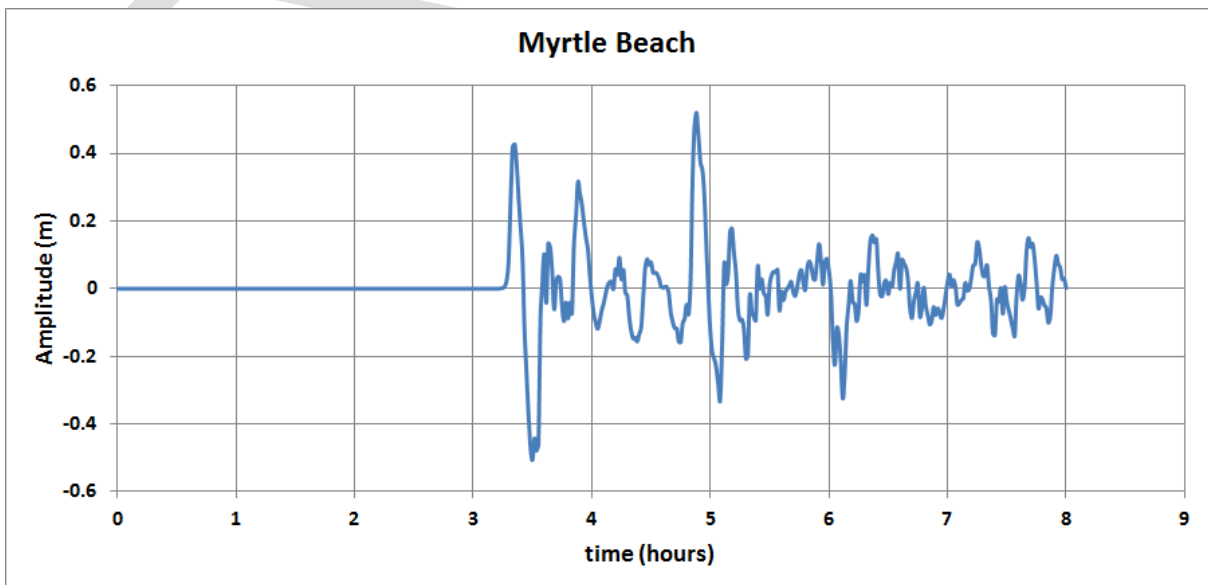
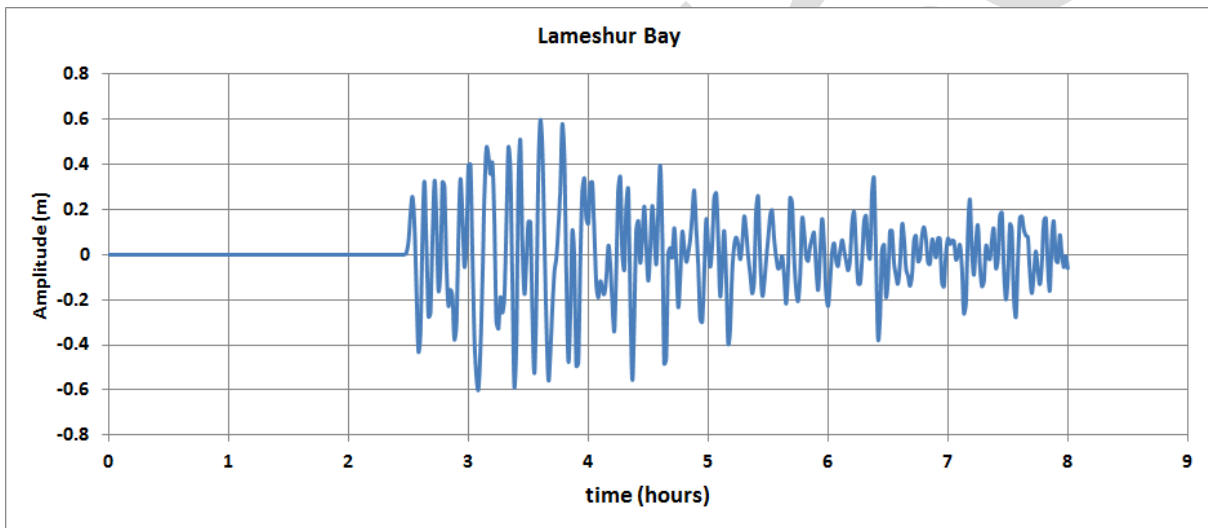
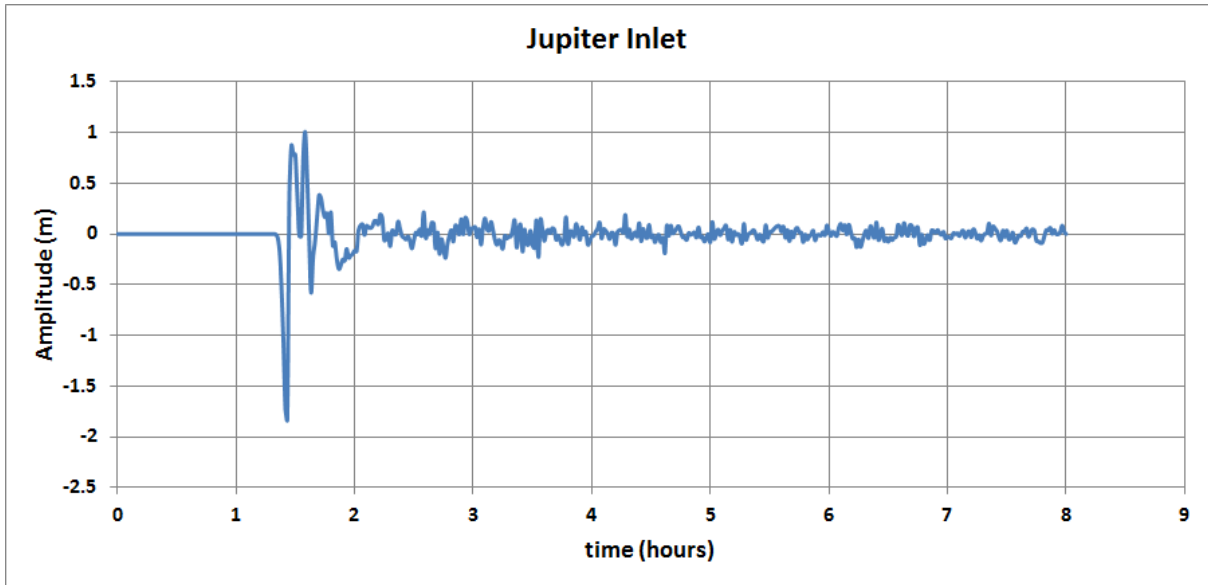


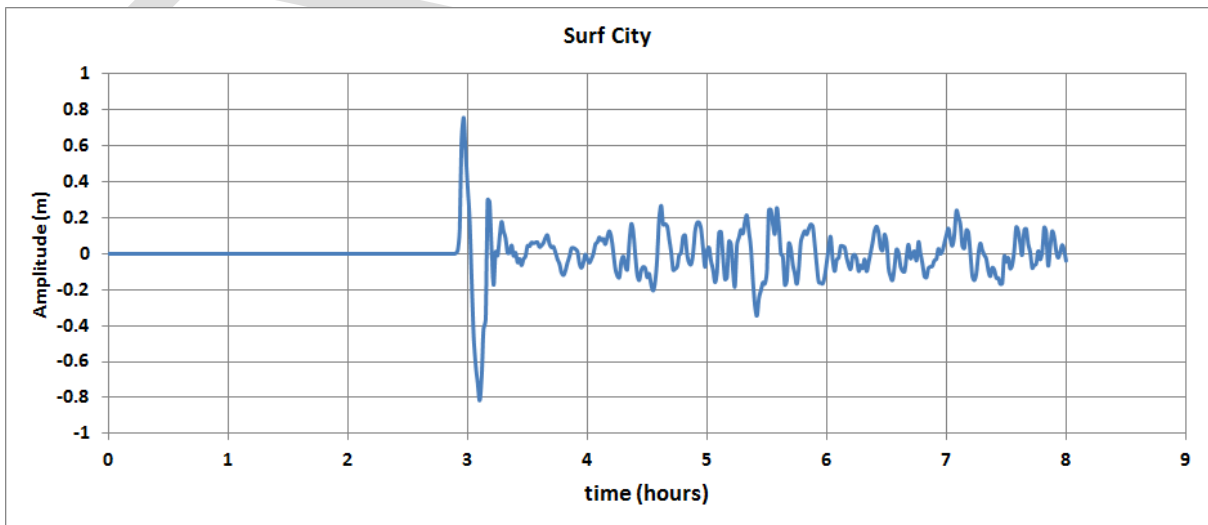
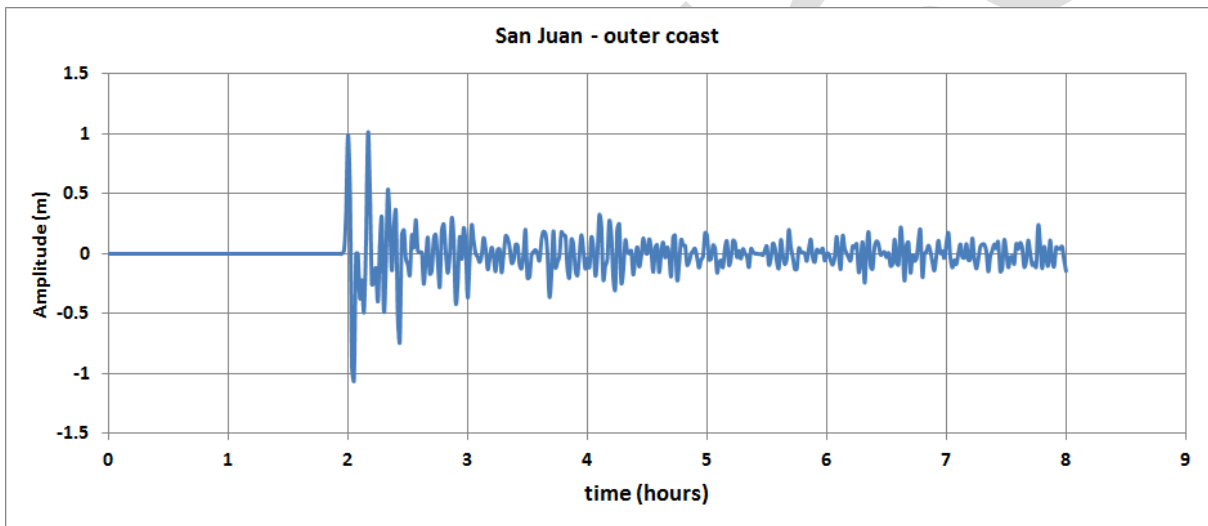
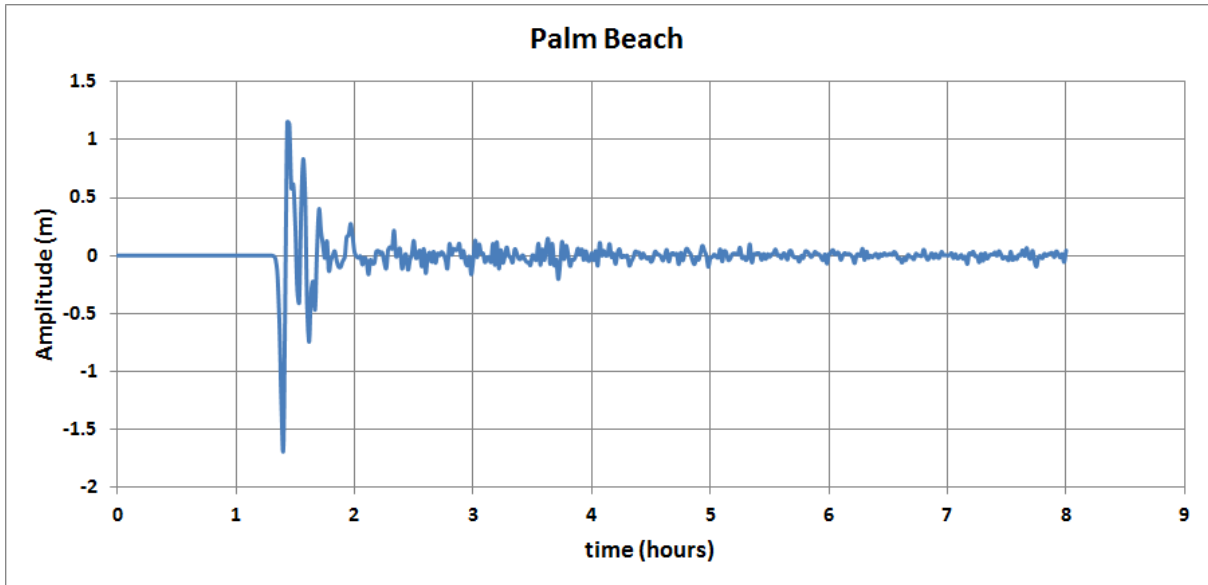
Figure B3. Snap shots of tsunami at 5 minutes, 1 hours, 2 hours, and 3 hours.











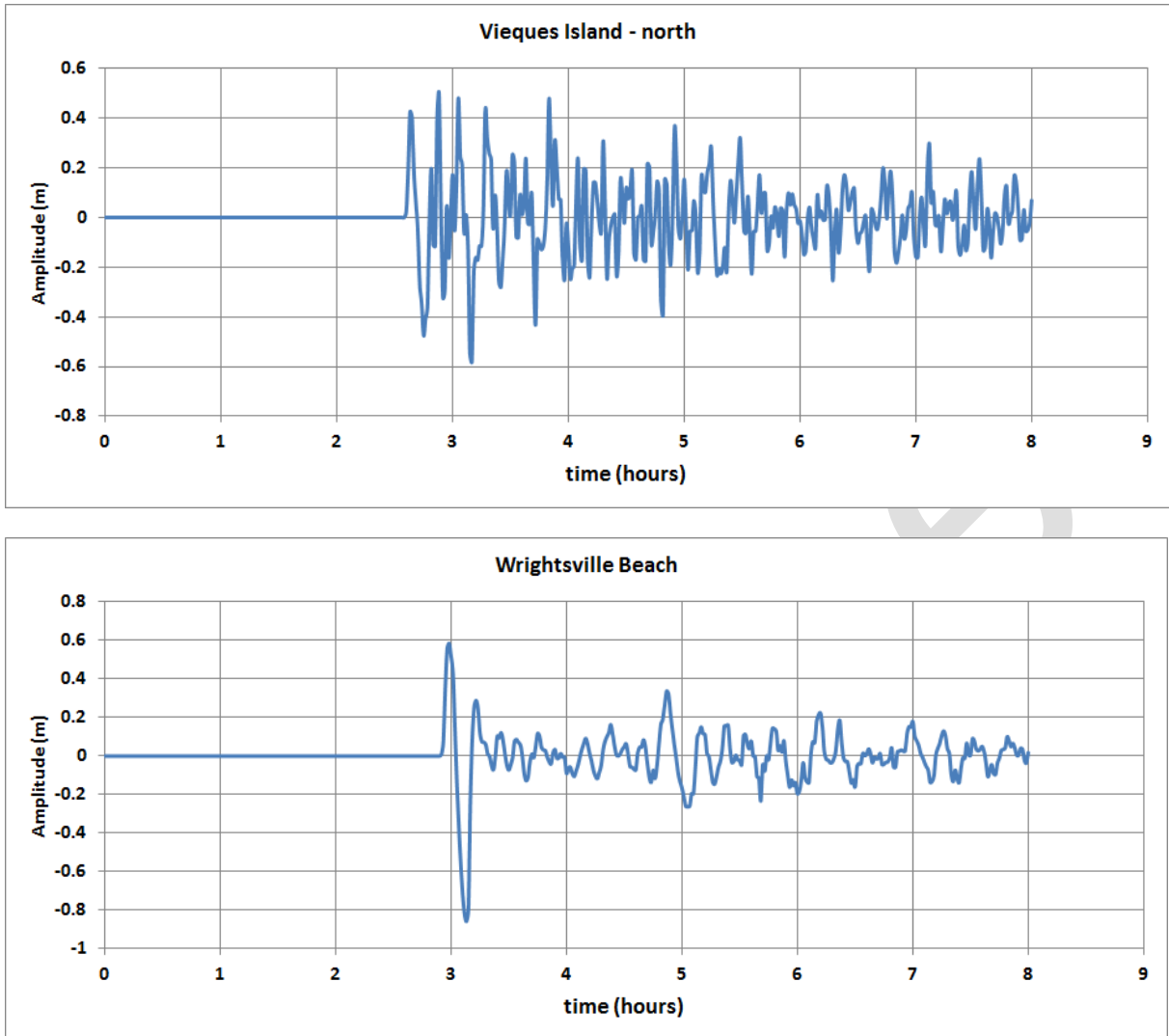


Figure B4. Sea level time series for selected Atlantic sites.

LANTEX 15 Handbook

Location	Travel Time (hrs)	MaxAmp(m)	Leading Edge
DART 41424	0.70	0.25	elevation
Cape Hatteras	1.13	0.46	elevation
DART 41420	1.23	0.40	elevation
Jupiter Inlet	1.35	1.00	recession
Palm Beach	1.43	1.15	recession
DART 41421	1.67	0.35	elevation
DART 44402	1.78	0.18	elevation
Aguadilla	1.85	0.33	elevation
Bermuda	1.85	0.89	elevation
Arecibo	1.90	0.93	elevation
San Juan coast	1.95	1.00	elevation
Mona Island	2.02	0.37	elevation
San Juan TG	2.03	0.14	elevation
Mayaguez	2.05	0.33	elevation
Fajardo	2.22	0.73	elevation
Oregon Inlet	2.23	0.09	elevation
Ponce	2.27	0.09	elevation
Magueyes Island	2.30	0.10	elevation
Culebra	2.33	0.39	elevation
Virgin Gorda	2.33	0.38	elevation
Christiansted	2.38	0.27	elevation
Penuelas	2.40	0.24	elevation
Beaufort	2.40	0.21	elevation
DART 42407	2.42	0.01	elevation
Yabucoa	2.48	0.20	elevation
Lameshur Bay	2.48	0.60	elevation
Limetree Bay	2.50	0.20	elevation
Roadtown	2.52	0.30	elevation
Vieques Is. south	2.52	0.21	elevation
Duck	2.52	0.44	elevation
Vieques Is. north	2.58	0.50	elevation
Currituck	2.73	0.36	elevation
South Santee River	2.80	0.30	elevation
Surf City	2.92	0.76	elevation
Wrightsville Beach	2.92	0.59	elevation
Ocean City	3.05	0.17	elevation
Charleston	3.11	0.15	elevation
Flagler Beach	3.13	1.17	recession
Springmaid Pier	3.20	0.50	elevation
Myrtle Beach	3.22	0.49	elevation
DART 44401	3.28	0.13	elevation
Cape Henlopen	3.50	0.12	elevation
Jacksonville Beach	3.50	0.11	recession
Fernandina Beach	3.55	0.14	recession
Atlantic City	3.57	0.98	elevation
Lewes	3.60	0.08	elevation
Montauk	3.67	0.22	elevation
Altamaha Sound	3.73	0.10	recession
Cape May	3.82	0.19	elevation
Lockeport	3.98	0.20	elevation
Sandy Hook	4.25	0.04	elevation
Nantucket	4.42	0.04	elevation
Charlesville	4.50	0.11	elevation
Manhattan	4.75	0.02	elevation
Halifax	4.90	0.26	elevation
New Haven	5.05	0.02	elevation
Portland	5.25	0.08	elevation
Boston	5.40	0.02	elevation
Chezzetcook Inlet	5.66	0.14	elevation
Sable Island	6.88	0.22	elevation
US/Canada Border	7.29	0.06	elevation
Grand Manan Is.	7.45	0.20	elevation

Table B1: Coastal height forecast for LANTEX15. The height is the elevation of the tsunami above sea level. The height is a measure offshore; the onshore elevations may be double those of the coastal height.

Appendix C. TWC Dummy Messages

WEXX20 PAAQ 251302
TSUAT1

TEST...TSUNAMI EXERCISE MESSAGE NUMBER 1...TEST
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
0902 AM AST WED MAR 25 2015

... LANTEX 15 TSUNAMI EXERCISE MESSAGE. REFER TO NTCW MESSAGE 1 IN THE EXERCISE HANDBOOK. THIS IS AN EXERCISE ONLY...

THIS MESSAGE IS BEING USED TO START THE LANTEX 15 ATLANTIC TSUNAMI EXERCISE. THIS WILL BE THE ONLY EXERCISE MESSAGE BROADCAST FROM THE NATIONAL TSUNAMI WARNING CENTER EXCLUDING SPECIAL EMAIL MESSAGES DISCUSSED IN THE HANDBOOK. THE HANDBOOK IS AVAILABLE AT THE WEB SITE NTCW.ARH.NOAA.GOV. THE EXERCISE PURPOSE IS TO PROVIDE EMERGENCY MANAGEMENT A REALISTIC SCENARIO TO TEST TSUNAMI RESPONSE PLANS.

THIS IS ONLY AN EXERCISE.

\$\$

WEXX30 PAAQ 251302
TSUATE

TEST...PUBLIC TSUNAMI EXERCISE MESSAGE NUMBER 1...TEST
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
0902 AM AST WED MAR 25 2015

... LANTEX 15 TSUNAMI EXERCISE MESSAGE. REFER TO NTCW MESSAGE 1 IN THE EXERCISE HANDBOOK. THIS IS AN EXERCISE ONLY...

THIS MESSAGE IS BEING USED TO START THE LANTEX 15 ATLANTIC TSUNAMI EXERCISE. THIS WILL BE THE ONLY EXERCISE MESSAGE BROADCAST FROM THE NATIONAL TSUNAMI WARNING CENTER EXCLUDING SPECIAL EMAIL MESSAGES DISCUSSED IN THE HANDBOOK. THE HANDBOOK IS AVAILABLE AT THE WEB SITE NTCW.ARH.NOAA.GOV. THE EXERCISE PURPOSE IS TO PROVIDE EMERGENCY MANAGEMENT A REALISTIC SCENARIO TO TEST TSUNAMI RESPONSE PLANS.

THIS IS ONLY AN EXERCISE.

\$\$

WEXX40 PAAQ 251302
TSUSPN

TEST...MENSAJE DE EJERCICIO DE TSUNAMI NUMERO 1...TEST
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
0902 AM AST WED MAR 25 2015

...MENSAJE PARA DAR COMIENZO AL EJERCICIO DE TSUNAMI LANTEX 15. REFERIRSE AL MENSAJE 1 DE NTCW EN EL MANUAL PARA EL EJERCICIO. ESTO ES UN EJERCICIO SOLAMENTE...

ESTE MENSAJE ESTA SIENDO USADO PARA DAR COMIENZO AL EJERCICIO DE TSUNAMI LANTEX 15. ESTE SERA EL UNICO MENSAJE QUE SERA EMITIDO DESDE EL CENTRO NACIONAL DE ALERTA DE TSUNAMI EXCLUYENDO LOS MENSAJES ESPECIALES DE CORREO ELECTRONICO DISCUTIDOS EN EL MANUAL. EL MANUAL ESTA DISPONIBLE EN LA PAGINA NTCW.ARH.NOAA.GOV. EL PROPOSITO DEL EJERCICIO ES PROVEER A LAS AUTORIDADES DE MANEJO DE EMERGENCIA UN ESCENARIO REALISTICO PARA PROBAR LOS PLANES DE RESPUESTA A TSUNAMIS.

ESTE ES SOLO UN EJERCICIO.

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Appendix D. TWC Exercise Messages

The following messages, created for the LANTEX 15 tsunami exercise, are representative of the official standard products issued by the NTWC during a magnitude 6.8 earthquake and associated landslide-generated tsunami originating approximately 215 miles E of Port Canaveral, Florida at 28.8°N, 77.0°W. During a real event, the TWC would also issue graphical and html-based products to the web site and via RSS.

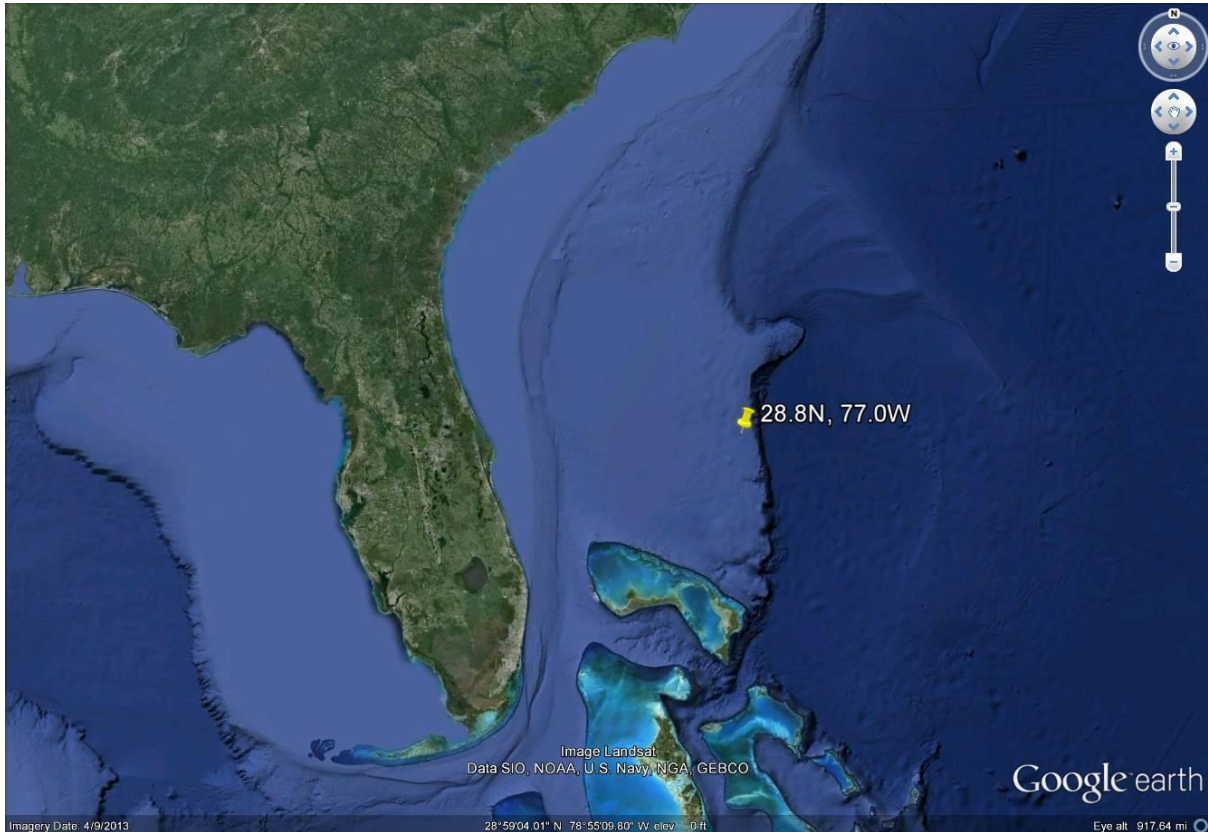


Figure D1: Event location.

NTWC Bulletin #1

WEXX30 PAAQ 251302
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 1
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
902 AM EDT WED MAR 25 2015

...A TSUNAMI WARNING IS NOW IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI WARNING IN EFFECT FOR...

LANTEX 15 Handbook

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THE LEVEL OF TSUNAMI DANGER IS BEING EVALUATED. FURTHER INFORMATION WILL BE PROVIDED IN SUPPLEMENTARY MESSAGES.

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
----	-----
* FLORIDA	
MIAMI	1053 EDT MAR 25
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25

NEXT UPDATE AND ADDITIONAL INFORMATION

-
- * THIS MESSAGE WILL BE UPDATED WITHIN 30 MINUTES.
 - * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
 - * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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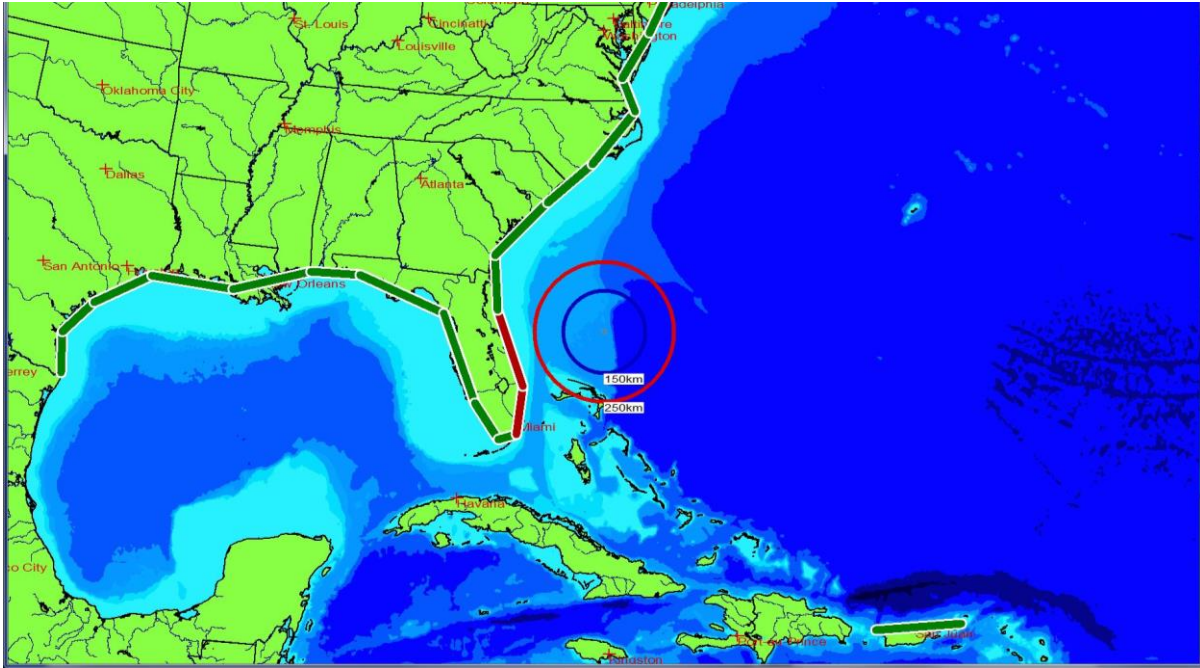


Figure D2: Tsunami Watch/Warning areas after Bulletin 1.

NTWC Bulletin #2

WEXX30 PAAQ 251339
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 2
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
939 AM EDT WED MAR 25 2015

UPDATES

- * THERE ARE NO UPDATES IN THIS MESSAGE.

...THE TSUNAMI WARNING REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI WARNING IN EFFECT FOR...

LANTEX 15 Handbook

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THE LEVEL OF TSUNAMI DANGER IS BEING EVALUATED. FURTHER INFORMATION WILL BE PROVIDED IN SUPPLEMENTARY MESSAGES.

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
* FLORIDA	
MIAMI	1053 EDT MAR 25
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25

NEXT UPDATE AND ADDITIONAL INFORMATION

LANTEX 15 Handbook

- * THIS MESSAGE WILL BE UPDATED WITHIN 30 MINUTES.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #3

WEXX30 PAAQ 251408
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 3
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
1008 AM EDT WED MAR 25 2015

UPDATES

- * BASED ON DEEP OCEAN PRESSURE SENSOR DATA, NTWC SUSPECTS THE EARTHQUAKE HAS RESULTED IN A LARGE SUBMARINE LANDSLIDE WHICH HAS GENERATED A TSUNAMI.
- * REVISED ALERT AREAS

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...A TSUNAMI ADVISORY IS NOW IN EFFECT...

WARNINGS/ADVISORIES/WATCHES - UPDATED

TSUNAMI WARNING IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

LANTEX 15 Handbook

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
- * CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR MANY HOURS AFTER THE TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS - UPDATED

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI	
* NORTH CAROLINA		
CAPE HATTERAS	1044	EDT MAR 25
* FLORIDA		
MIAMI	1053	EDT MAR 25
DAYTONA	1124	EDT MAR 25
MELBOURNE BEACH	1131	EDT MAR 25
JACKSONVILLE BEA	1157	EDT MAR 25
* PUERTO RICO		
AGUADILLA	1057	AST MAR 25
SAN JUAN TG	1102	AST MAR 25
MAYAGUEZ	1108	AST MAR 25

LANTEX 15 Handbook

CULEBRA 1134 AST MAR 25

* US VIRGIN ISLANDS

CHRISTIANSTED 1120 AST MAR 25

LAMESHUR BAY 1129 AST MAR 25

CHARLOTTE AMALIE 1141 AST MAR 25

* BRITISH VIRGIN IS.

ROADTOWN 1128 AST MAR 25

* SOUTH CAROLINA

MYRTLE BEACH 1221 EDT MAR 25

CHARLESTON 1229 EDT MAR 25

* VIRGINIA

VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA

SAVANNAH 1231 EDT MAR 25

* NEW YORK

MONTAUK 1233 EDT MAR 25

MANHATTAN 1357 EDT MAR 25

* NEW JERSEY

ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA

LOCKEPORT 1346 ADT MAR 25

SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS

NANTUCKET 1312 EDT MAR 25

BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK

GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND

SAINT LAWRENCE 1537 NDT MAR 25

* MAINE

PORTLAND 1428 EDT MAR 25

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8

* ORIGIN TIME 0900 EDT MAR 25 2015

0800 CDT MAR 25 2015

0900 AST MAR 25 2015

1300 UTC MAR 25 2015

* COORDINATES 28.8 NORTH 77.0 WEST

* DEPTH 3 MILES

* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

-
- * THIS MESSAGE WILL BE UPDATED WITHIN 30 MINUTES.
 - * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
 - * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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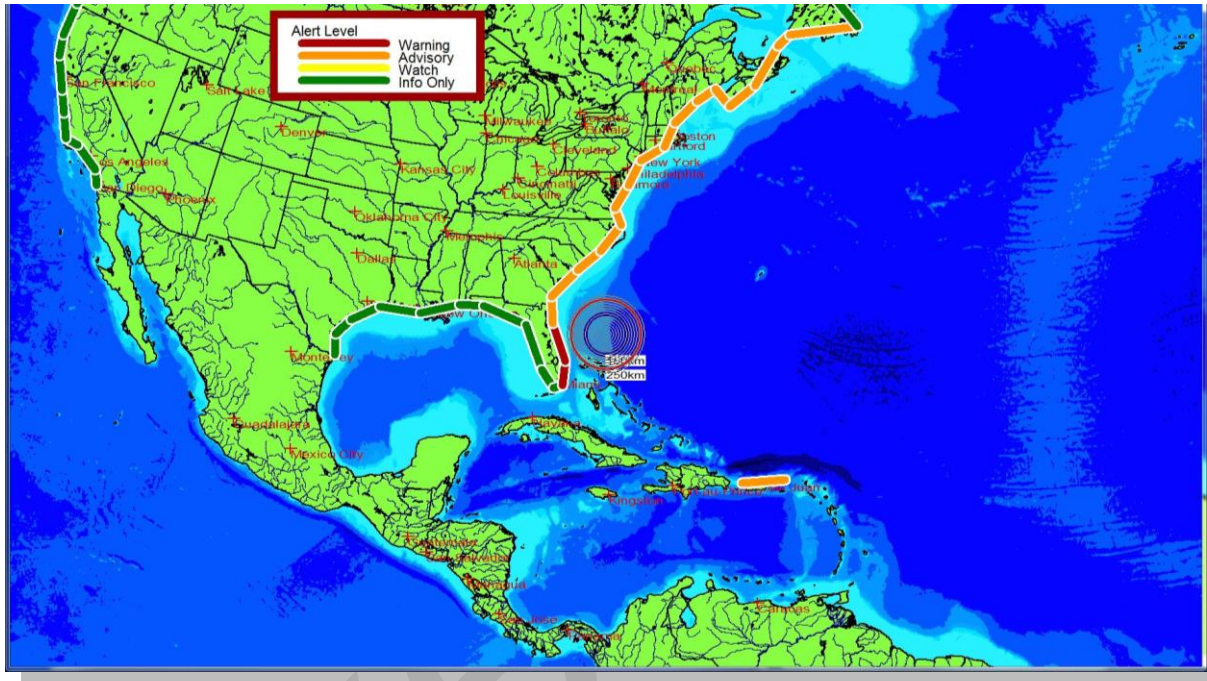


Figure D3: Tsunami Watch/Warning areas after Bulletin 3.

NTWC Bulletin #4

WEXX30 PAAQ 251434
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 4
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
1034 AM EDT WED MAR 25 2015

UPDATES

* THERE ARE NO UPDATES IN THIS MESSAGE.

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

LANTEX 15 Handbook

TSUNAMI WARNING IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

IMPACTS FOR TSUNAMI ADVISORY AREAS

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- * THE FIRST WAVE MAY NOT BE THE LARGEST.

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- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS

LANTEX 15 Handbook

INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE		FORECAST START OF OF TSUNAMI
* NORTH CAROLINA		
CAPE HATTERAS	1044	EDT MAR 25
* FLORIDA		
MIAMI	1053	EDT MAR 25
DAYTONA	1124	EDT MAR 25
MELBOURNE BEACH	1131	EDT MAR 25
JACKSONVILLE BEA	1157	EDT MAR 25
* PUERTO RICO		
AGUADILLA	1057	AST MAR 25
SAN JUAN TG	1102	AST MAR 25
MAYAGUEZ	1108	AST MAR 25
CULEBRA	1134	AST MAR 25
* US VIRGIN ISLANDS		
CHRISTIANSTED	1120	AST MAR 25
LAMESHUR BAY	1129	AST MAR 25
CHARLOTTE AMALIE	1141	AST MAR 25
* BRITISH VIRGIN IS.		
ROADTOWN	1128	AST MAR 25
* SOUTH CAROLINA		
MYRTLE BEACH	1221	EDT MAR 25
CHARLESTON	1229	EDT MAR 25
* VIRGINIA		
VIRGINIA BEACH	1225	EDT MAR 25
* GEORGIA		
SAVANNAH	1231	EDT MAR 25
* NEW YORK		
MONTAUK	1233	EDT MAR 25
MANHATTAN	1357	EDT MAR 25
* NEW JERSEY		
ATLANTIC CITY	1235	EDT MAR 25
* NOVA SCOTIA		
LOCKEPORT	1346	ADT MAR 25
SCATARIE ISLAND	1456	ADT MAR 25
* MASSACHUSETTS		
NANTUCKET	1312	EDT MAR 25
BOSTON	1440	EDT MAR 25

LANTEX 15 Handbook

* NEW BRUNSWICK
GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
PORTLAND 1428 EDT MAR 25

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

- * THIS MESSAGE WILL BE UPDATED WITHIN 30 MINUTES.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #5

WEXX30 PAAQ 251501
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 5
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
1101 AM EDT WED MAR 25 2015

UPDATES

- * THERE ARE NO UPDATES IN THIS MESSAGE.

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

LANTEX 15 Handbook

TSUNAMI WARNING IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
- * CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR MANY HOURS AFTER THE TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

LANTEX 15 Handbook

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
* NORTH CAROLINA	
CAPE HATTERAS	1044 EDT MAR 25
* FLORIDA	
MIAMI	1053 EDT MAR 25
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25
JACKSONVILLE BEA	1157 EDT MAR 25
* PUERTO RICO	
AGUADILLA	1057 AST MAR 25
SAN JUAN TG	1102 AST MAR 25
MAYAGUEZ	1108 AST MAR 25
CULEBRA	1134 AST MAR 25
* US VIRGIN ISLANDS	
CHRISTIANSTED	1120 AST MAR 25
LAMESHUR BAY	1129 AST MAR 25
CHARLOTTE AMALIE	1141 AST MAR 25
* BRITISH VIRGIN IS.	
ROADTOWN	1128 AST MAR 25
* SOUTH CAROLINA	
MYRTLE BEACH	1221 EDT MAR 25
CHARLESTON	1229 EDT MAR 25
* VIRGINIA	
VIRGINIA BEACH	1225 EDT MAR 25
* GEORGIA	
SAVANNAH	1231 EDT MAR 25
* NEW YORK	
MONTAUK	1233 EDT MAR 25
MANHATTAN	1357 EDT MAR 25
* NEW JERSEY	
ATLANTIC CITY	1235 EDT MAR 25
* NOVA SCOTIA	
LOCKEPORT	1346 ADT MAR 25
SCATARIE ISLAND	1456 ADT MAR 25
* MASSACHUSETTS	
NANTUCKET	1312 EDT MAR 25
BOSTON	1440 EDT MAR 25
* NEW BRUNSWICK	

LANTEX 15 Handbook

GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
PORTLAND 1428 EDT MAR 25

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

* THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.

* REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.

* CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #6

WEXX30 PAAQ 251604
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 6
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
1204 PM EDT WED MAR 25 2015

UPDATES

* UPDATED OBSERVATIONS

...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI WARNING IN EFFECT FOR...

LANTEX 15 Handbook

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
- * CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR MANY HOURS AFTER THE TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

LANTEX 15 Handbook

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
* FLORIDA	
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25
JACKSONVILLE BEA	1157 EDT MAR 25
* PUERTO RICO	
MAYAGUEZ	1108 AST MAR 25
CULEBRA	1134 AST MAR 25
* US VIRGIN ISLANDS	
CHRISTIANSTED	1120 AST MAR 25
LAMESHUR BAY	1129 AST MAR 25
CHARLOTTE AMALIE	1141 AST MAR 25
* BRITISH VIRGIN IS.	
ROADTOWN	1128 AST MAR 25
* SOUTH CAROLINA	
MYRTLE BEACH	1221 EDT MAR 25
CHARLESTON	1229 EDT MAR 25
* VIRGINIA	
VIRGINIA BEACH	1225 EDT MAR 25
* GEORGIA	
SAVANNAH	1231 EDT MAR 25
* NEW YORK	
MONTAUK	1233 EDT MAR 25
MANHATTAN	1357 EDT MAR 25
* NEW JERSEY	
ATLANTIC CITY	1235 EDT MAR 25
* NOVA SCOTIA	
LOCKEPORT	1346 ADT MAR 25
SCATARIE ISLAND	1456 ADT MAR 25
* MASSACHUSETTS	
NANTUCKET	1312 EDT MAR 25
BOSTON	1440 EDT MAR 25
* NEW BRUNSWICK	
GRAND MANAN ISLA	1457 ADT MAR 25
* NEWFOUNDLAND	
SAINT LAWRENCE	1537 NDT MAR 25
* MAINE	
PORTLAND	1428 EDT MAR 25

LANTEX 15 Handbook

ADDITIONAL OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
BERMUDA	1509 UTC 03-25	2.92 FT
OREGON INLET, NC	1523 UTC 03-25	0.30 FT
DUCK, NC	1536 UTC 03-25	1.44 FT
BEAUFORT, NC	1536 UTC 03-25	0.69 FT
WRIGHTSVILLE, NC	1558 UTC 03-25	1.90 FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE TIDE LEVEL AT THE TIME OF MEASUREMENT.

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

- * THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #7

WEXX30 PAAQ 251703
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 7
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
103 PM EDT WED MAR 25 2015

UPDATES

- * UPDATED OBSERVATIONS

...THE TSUNAMI WARNING REMAINS IN EFFECT...

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...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI WARNING IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

IMPACTS FOR TSUNAMI WARNING AREAS

- * WIDESPREAD DANGEROUS COASTAL FLOODING ACCOMPANIED BY POWERFUL CURRENTS ARE POSSIBLE AND MAY CONTINUE FOR MANY HOURS AFTER TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
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RECOMMENDED ACTIONS

- * IF YOU ARE IN A WARNING AREA - MOVE INLAND TO HIGHER GROUND.
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LANTEX 15 Handbook

- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI		
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* SOUTH CAROLINA			
MYRTLE BEACH	1221	EDT	MAR 25
CHARLESTON	1229	EDT	MAR 25
* VIRGINIA			
VIRGINIA BEACH	1225	EDT	MAR 25
* GEORGIA			
SAVANNAH	1231	EDT	MAR 25
* NEW YORK			
MONTAUK	1233	EDT	MAR 25
MANHATTAN	1357	EDT	MAR 25
* NEW JERSEY			
ATLANTIC CITY	1235	EDT	MAR 25
* NOVA SCOTIA			
LOCKEPORT	1346	ADT	MAR 25
SCATARIE ISLAND	1456	ADT	MAR 25
* MASSACHUSETTS			
NANTUCKET	1312	EDT	MAR 25
BOSTON	1440	EDT	MAR 25
* NEW BRUNSWICK			
GRAND MANAN ISLA	1457	ADT	MAR 25
* NEWFOUNDLAND			
SAINT LAWRENCE	1537	NDT	MAR 25
* MAINE			
PORTLAND	1428	EDT	MAR 25

ADDITIONAL OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT			OBSERVED MAX TSUNAMI HEIGHT
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BERMUDA	1509	UTC	03-25	2.92 FT
OREGON INLET, NC	1523	UTC	03-25	0.30 FT
DUCK, NC	1536	UTC	03-25	1.44 FT

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BEAUFORT, NC	1536	UTC	03-25	0.69	FT
WRIGHTSVILLE, NC	1558	UTC	03-25	1.90	FT
OCEAN CITY, MD	1610	UTC	03-25	0.56	FT
CHARLESTON, SC	1620	UTC	03-25	0.36	FT
SPRINGMAID PIER, SC	1621	UTC	03-25	1.64	FT
VACA KEY, FL	1627	UTC	03-25	0.13	FT
KEY WEST, FL	1636	UTC	03-25	0.03	FT
LEWES, DE	1645	UTC	03-25	0.26	FT
FERNANDINA BEACH, FL	1647	UTC	03-25	0.46	FT
CHESAPEAKE BRIDGE, VA	1648	UTC	03-25	0.20	FT
ATLANTIC CITY, NJ	1651	UTC	03-25	3.22	FT
MONTAUK, NY	1651	UTC	03-25	0.03	FT
CAPE MAY, NJ	1654	UTC	03-25	0.20	FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE TIDE LEVEL AT THE TIME OF MEASUREMENT.

PRELIMINARY EARTHQUAKE PARAMETERS

- * MAGNITUDE 6.8
- * ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
- * COORDINATES 28.8 NORTH 77.0 WEST
- * DEPTH 3 MILES
- * LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

- * THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #8

WEXX30 PAAQ 251801
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 8
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
201 PM EDT WED MAR 25 2015

UPDATES

* UPDATED OBSERVATIONS

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...THE TSUNAMI WARNING REMAINS IN EFFECT...

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI WARNING IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO FLAGLER BEACH FLORIDA

TSUNAMI ADVISORY IN EFFECT FOR...

- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

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- * THE FIRST WAVE MAY NOT BE THE LARGEST.

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- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF

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HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.

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- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
* NEW YORK MANHATTAN	1357 EDT MAR 25
* NOVA SCOTIA SCATARIE ISLAND	1456 ADT MAR 25
* MASSACHUSETTS NANTUCKET	1312 EDT MAR 25
BOSTON	1440 EDT MAR 25
* NEW BRUNSWICK GRAND MANAN ISLA	1457 ADT MAR 25
* NEWFOUNDLAND SAINT LAWRENCE	1537 NDT MAR 25
* MAINE PORTLAND	1428 EDT MAR 25

ADDITIONAL OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
OCEAN CITY, MD	1610 UTC 03-25	0.56 FT
SPRINGMAID PIER, SC	1621 UTC 03-25	1.64 FT
VACA KEY, FL	1627 UTC 03-25	0.13 FT
KEY WEST, FL	1636 UTC 03-25	0.03 FT
LEWES, DE	1645 UTC 03-25	0.26 FT
FERNANDINA BEACH, FL	1647 UTC 03-25	0.46 FT
CHESAPEAKE BRIDGE, VA	1648 UTC 03-25	0.20 FT
ATLANTIC CITY, NJ	1651 UTC 03-25	3.22 FT
CAPE MAY, NJ	1718 UTC 03-25	0.62 FT
QUONSET POINT, RI	1722 UTC 03-25	0.20 FT
SANDY HOOK, NJ	1725 UTC 03-25	0.03 FT
MONTAUK, NY	1727 UTC 03-25	0.75 FT
CHARLESTON, SC	1739 UTC 03-25	0.52 FT

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NANTUCKET, MA	1741	UTC	03-25	0.10	FT
BAR HARBOR, ME	1747	UTC	03-25	0.10	FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE
TIDE LEVEL AT THE TIME OF MEASUREMENT.

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
 0800 CDT MAR 25 2015
 0900 AST MAR 25 2015
 1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

* THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.

* REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE
INFORMATION.

* CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN
ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC
TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #9

WEXX30 PAAQ 251900
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 9
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
300 PM EDT WED MAR 25 2015

UPDATES

* UPDATED OBSERVATIONS
* REVISED ALERT AREAS

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES - UPDATED

TSUNAMI ADVISORY IN EFFECT FOR...

* THE COASTAL AREAS OF FLORIDA FROM OCEAN REEF FLORIDA TO
FLAGLER BEACH FLORIDA

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- * THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM FLAGLER BEACH FLORIDA TO LA MANCHE NEWFOUNDLAND
- * COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

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IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
- * CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR MANY HOURS AFTER THE TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS - UPDATED

- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

FORECASTS OF TSUNAMI ACTIVITY

SITE	FORECAST START OF OF TSUNAMI
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* MASSACHUSETTS	
BOSTON	1440 EDT MAR 25
* NEWFOUNDLAND	
SAINT LAWRENCE	1537 NDT MAR 25
* MAINE	
PORTLAND	1428 EDT MAR 25

LANTEX 15 Handbook

ADDITIONAL OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
CAPE MAY, NJ	1718 UTC 03-25	0.62 FT
QUONSET POINT, RI	1722 UTC 03-25	0.20 FT
SANDY HOOK, NJ	1725 UTC 03-25	0.03 FT
MONTAUK, NY	1727 UTC 03-25	0.75 FT
CHARLESTON, SC	1739 UTC 03-25	0.52 FT
NANTUCKET, MA	1741 UTC 03-25	0.10 FT
YORKTOWN, VA	1818 UTC 03-25	0.07 FT
SHIP JOHN SHOAL, DE	1821 UTC 03-25	0.01 FT
PORTLAND, ME	1828 UTC 03-25	0.07 FT
BOSTON, MA	1836 UTC 03-25	0.03 FT
BAR HARBOR, ME	1852 UTC 03-25	0.26 FT
BRIDGEPORT, CT	1855 UTC 03-25	0.02 FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE TIDE LEVEL AT THE TIME OF MEASUREMENT.

PRELIMINARY EARTHQUAKE PARAMETERS

* MAGNITUDE 6.8
* ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDINATES 28.8 NORTH 77.0 WEST
* DEPTH 3 MILES
* LOCATION OFF EAST COAST OF UNITED STATES

NEXT UPDATE AND ADDITIONAL INFORMATION

* THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.
* REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
* CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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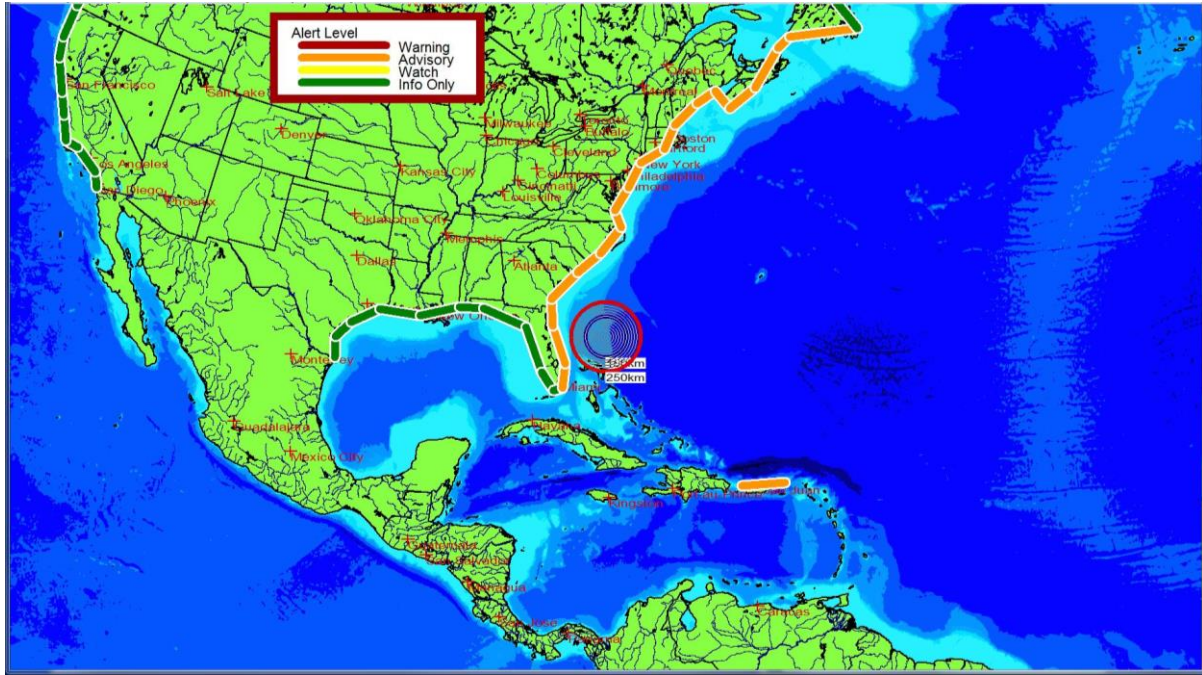


Figure D4: Tsunami Watch/Warning areas after Bulletin 9.

NTWC Bulletin #10

WEXX30 PAAQ 252000
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 10
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
400 PM EDT WED MAR 25 2015

UPDATES

* UPDATED OBSERVATIONS

...THE TSUNAMI ADVISORY REMAINS IN EFFECT...

WARNINGS/ADVISORIES/WATCHES

TSUNAMI ADVISORY IN EFFECT FOR...

* THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM OCEAN REEF FLORIDA TO LA MANCHE NEWFOUNDLAND

* COASTAL AREAS OF PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS.

LANTEX 15 Handbook

FOR OTHER US AND CANADIAN COASTS IN THE ATLANTIC AND GULF OF MEXICO - THERE IS NO TSUNAMI THREAT.

IMPACTS FOR TSUNAMI ADVISORY AREAS

- * A TSUNAMI CAPABLE OF PRODUCING STRONG CURRENTS OR WAVES DANGEROUS TO PERSONS IN OR VERY NEAR THE WATER IS EXPECTED.
- * CURRENTS MAY BE HAZARDOUS TO SWIMMERS... BOATS... AND COASTAL STRUCTURES AND MAY CONTINUE FOR MANY HOURS AFTER THE TSUNAMI ARRIVAL.
- * THE FIRST WAVE MAY NOT BE THE LARGEST.

RECOMMENDED ACTIONS

- * IF YOU ARE IN AN ADVISORY AREA - MOVE OFF THE BEACH AND OUT OF HARBORS AND MARINAS. WIDESPREAD INUNDATION OF LAND IS NOT EXPECTED FOR ADVISORY AREAS.
- * BE ALERT TO INSTRUCTIONS FROM YOUR LOCAL EMERGENCY OFFICIALS.
- * DO NOT GO TO THE COAST TO OBSERVE THE TSUNAMI.
- * DO NOT RETURN TO THE COAST UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

ADDITIONAL OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
YORKTOWN, VA	1818 UTC 03-25	0.07 FT
SHIP JOHN SHOAL, DE	1821 UTC 03-25	0.01 FT
BOSTON, MA	1836 UTC 03-25	0.03 FT
BRIDGEPORT, CT	1855 UTC 03-25	0.02 FT
BAR HARBOR, ME	1906 UTC 03-25	0.72 FT
SANDY HOOK, NJ	1931 UTC 03-25	0.13 FT
PORTLAND, ME	1933 UTC 03-25	0.30 FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE TIDE LEVEL AT THE TIME OF MEASUREMENT.

PRELIMINARY EARTHQUAKE PARAMETERS

- * MAGNITUDE 6.8
- * ORIGIN TIME 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
- * COORDINATES 28.8 NORTH 77.0 WEST
- * DEPTH 3 MILES
- * LOCATION OFF EAST COAST OF UNITED STATES

LANTEX 15 Handbook

NEXT UPDATE AND ADDITIONAL INFORMATION

- * THIS MESSAGE WILL BE UPDATED WITHIN 60 MINUTES.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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NTWC Bulletin #11

WEXX30 PAAQ 252100
TSUATE

BULLETIN
PUBLIC TSUNAMI MESSAGE NUMBER 11
NWS NATIONAL TSUNAMI WARNING CENTER PALMER AK
500 PM EDT WED MAR 25 2015

...THE TSUNAMI ADVISORY IS CANCELLED...

CANCELLATIONS

- * THE TSUNAMI ADVISORY IS CANCELED FOR THE COASTAL AREAS OF FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA AND NEWFOUNDLAND FROM OCEAN REEF FLORIDA TO LA MANCHE NEWFOUNDLAND
- * THE TSUNAMI ADVISORY IS CANCELED FOR PUERTO RICO - THE U.S. VIRGIN ISLANDS AND THE BRITISH VIRGIN ISLANDS

IMPACTS - UPDATED

- * TSUNAMI ACTIVITY HAS SUBSIDED ALONG THE COASTS OF PUERTO RICO... U.S. VIRGIN ISLANDS... BRITISH VIRGIN ISLANDS... AND U.S. AND CANADIAN COASTS IN THE ATLANTIC.
- * ONGOING ACTIVITY MAY PERSIST IN SOME AREAS CAUSING STRONG CURRENTS DANGEROUS TO SWIMMERS AND BOATS.
- * THE DETERMINATION TO RE-OCCUPY HAZARD ZONES MUST BE MADE BY LOCAL OFFICIALS.

RECOMMENDED ACTIONS - UPDATED

- * DO NOT RE-OCCUPY HAZARD ZONES UNTIL LOCAL EMERGENCY OFFICIALS INDICATE IT IS SAFE TO DO SO.

LANTEX 15 Handbook

OBSERVATIONS OF TSUNAMI ACTIVITY - UPDATED

SITE	TIME OF MEASUREMENT	OBSERVED MAX TSUNAMI HEIGHT
BAR HARBOR, ME	1906 UTC 03-25	0.72 FT
SANDY HOOK, NJ	1931 UTC 03-25	0.13 FT
PORTLAND, ME	1933 UTC 03-25	0.30 FT
SHIP JOHN SHOAL, DE	2001 UTC 03-25	0.02 FT
BRIDGEPORT, CT	2004 UTC 03-25	0.03 FT
KINGS POINT, NY	2007 UTC 03-25	0.01 FT
NANTUCKET, MA	2016 UTC 03-25	0.13 FT
BOSTON, MA	2051 UTC 03-25	0.07 FT

HEIGHT - OBSERVED MAX TSUNAMI HEIGHT IS THE WATER LEVEL ABOVE THE TIDE LEVEL AT THE TIME OF MEASUREMENT.

NEXT UPDATE AND ADDITIONAL INFORMATION

- * THIS WILL BE THE FINAL U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGE ISSUED FOR THIS EVENT.
- * REFER TO THE INTERNET SITE NTWC.ARH.NOAA.GOV FOR MORE INFORMATION.
- * CARIBBEAN COASTAL REGIONS OUTSIDE PUERTO RICO... U.S. VIRGIN ISLANDS AND BRITISH VIRGIN ISLANDS SHOULD REFER TO THE PACIFIC TSUNAMI WARNING CENTER MESSAGES AT PTWC.WEATHER.GOV.

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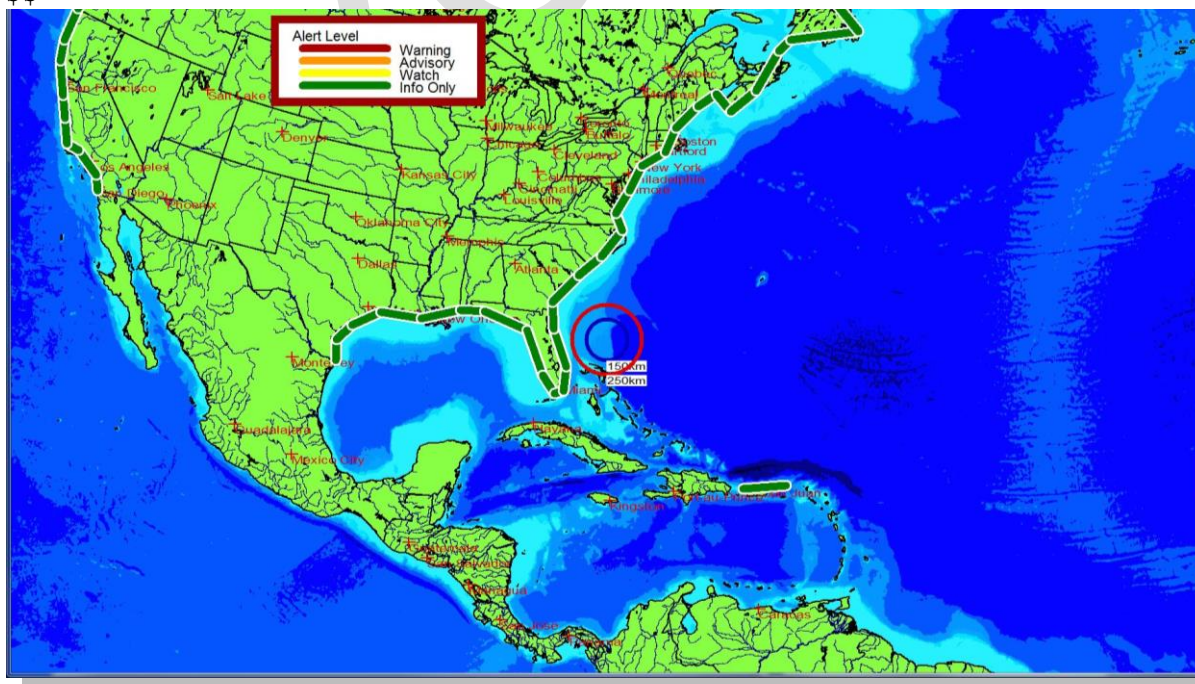


Figure D5: Tsunami Watch/Warning areas after Bulletin 11.

NTWC Spanish Bulletin #1

WEXX40 PAAQ 251302
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 1
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
902 AM EDT WED MAR 25 2015

...UN AVISO DE TSUNAMI ESTA AHORA EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA
FLAGLER BEACH FLORIDA

PARA OTRAS COSTAS DEL PACIFICO DE LOS ESTADOS UNIDOS Y CANADA
EN NORTE AMERICA - EL NIVEL DE AMENAZA DE TSUNAMI ESTA SIENDO
EVALUADO. SE PROVEERA INFORMACION ADICIONAL EN MENSAJES
SUPLEMENTARIOS.

PARAMETROS PRELIMINARES DEL TERREMOTO

-
- * MAGNITUD 6.8
 - * TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
 - * COORDENADAS 28.8 NORTE 77.0 OESTE
 - * PROFUNDIDAD 3 MILLAS
 - * LOCALIZACION OFF EAST COAST OF UNITED STATES

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

-
- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES
CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS
DESPUES DE LA LLEGADA DEL TSUNAMI.
 - * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

-
- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO
A LUGARES ELEVADOS.
 - * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE
EMERGENCIA.
 - * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.

LANTEX 15 Handbook

- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
-----	-----

* FLORIDA	
MIAMI	1053 EDT MAR 25
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

- * ESTE MENSAJE SERA ACTUALIZADO EN 30 MINUTOS.
- * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.
- * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #2

WEXX40 PAAQ 251339
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 2
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
939 AM EDT WED MAR 25 2015

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

PARA OTRAS COSTAS DEL PACIFICO DE LOS ESTADOS UNIDOS Y CANADA EN NORTE AMERICA - EL NIVEL DE AMENAZA DE TSUNAMI ESTA SIENDO EVALUADO. SE PROVEERA INFORMACION ADICIONAL EN MENSAJES

LANTEX 15 Handbook

SUPLEMENTARIOS.

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
* FLORIDA	
MIAMI	1053 EDT MAR 25
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

- * ESTE MENSAJE SERA ACTUALIZADO EN 30 MINUTOS.
- * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.

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* REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #3

WEXX40 PAAQ 251408
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 3
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
1008 AM EDT WED MAR 25 2015

ACTUALIZACIONES

-
- * BASED ON DEEP OCEAN PRESSURE SENSOR DATA, NTWC SUSPECTS THE EARTHQUAKE HAS RESULTED IN A LARGE SUBMARINE LANDSLIDE WHICH HAS GENERATED A TSUNAMI.
 - * MODIFICA LAS REGIONES BAJO ALERTA

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...UNA ADVERTENCIA DE TSUNAMI ESTA AHORA EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS - ACTUALIZADOS

----- AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

LANTEX 15 Handbook

* AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.

* LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

* UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.

* CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.

* LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS - ACTUALIZADAS

* SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.

* SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA

* ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.

* NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.

* NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	
* NORTH CAROLINA		
CAPE HATTERAS	1044	EDT MAR 25
* FLORIDA		
MIAMI	1053	EDT MAR 25
DAYTONA	1124	EDT MAR 25
MELBOURNE BEACH	1131	EDT MAR 25
JACKSONVILLE BEA	1157	EDT MAR 25
* PUERTO RICO		
AGUADILLA	1057	AST MAR 25
SAN JUAN TG	1102	AST MAR 25
MAYAGUEZ	1108	AST MAR 25

LANTEX 15 Handbook

CULEBRA 1134 AST MAR 25

* US VIRGIN ISLANDS

CHRISTIANSTED 1120 AST MAR 25

LAMESHUR BAY 1129 AST MAR 25

CHARLOTTE AMALIE 1141 AST MAR 25

* BRITISH VIRGIN IS.

ROADTOWN 1128 AST MAR 25

* SOUTH CAROLINA

MYRTLE BEACH 1221 EDT MAR 25

CHARLESTON 1229 EDT MAR 25

* VIRGINIA

VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA

SAVANNAH 1231 EDT MAR 25

* NEW YORK

MONTAUK 1233 EDT MAR 25

MANHATTAN 1357 EDT MAR 25

* NEW JERSEY

ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA

LOCKEPORT 1346 ADT MAR 25

SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS

NANTUCKET 1312 EDT MAR 25

BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK

GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND

SAINT LAWRENCE 1537 NDT MAR 25

* MAINE

PORTLAND 1428 EDT MAR 25

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8

* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015

0800 CDT MAR 25 2015

0900 AST MAR 25 2015

1300 UTC MAR 25 2015

* COORDENADAS 28.8 NORTE 77.0 OESTE

* PROFUNDIDAD 3 MILLAS

* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

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NTWC Spanish Bulletin #4

WEXX40 PAAQ 251434
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 4
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
1034 AM EDT WED MAR 25 2015

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

LANTEX 15 Handbook

- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	
* NORTH CAROLINA		
CAPE HATTERAS	1044	EDT MAR 25
* FLORIDA		
MIAMI	1053	EDT MAR 25
DAYTONA	1124	EDT MAR 25
MELBOURNE BEACH	1131	EDT MAR 25
JACKSONVILLE BEA	1157	EDT MAR 25
* PUERTO RICO		
AGUADILLA	1057	AST MAR 25
SAN JUAN TG	1102	AST MAR 25
MAYAGUEZ	1108	AST MAR 25
CULEBRA	1134	AST MAR 25

LANTEX 15 Handbook

* US VIRGIN ISLANDS
CHRISTIANSTED 1120 AST MAR 25
LAMESHUR BAY 1129 AST MAR 25
CHARLOTTE AMALIE 1141 AST MAR 25

* BRITISH VIRGIN IS.
ROADTOWN 1128 AST MAR 25

* SOUTH CAROLINA
MYRTLE BEACH 1221 EDT MAR 25
CHARLESTON 1229 EDT MAR 25

* VIRGINIA
VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA
SAVANNAH 1231 EDT MAR 25

* NEW YORK
MONTAUK 1233 EDT MAR 25
MANHATTAN 1357 EDT MAR 25

* NEW JERSEY
ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA
LOCKEPORT 1346 ADT MAR 25
SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS
NANTUCKET 1312 EDT MAR 25
BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK
GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
PORTLAND 1428 EDT MAR 25

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

LANTEX 15 Handbook

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- * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #5

WEXX40 PAAQ 251501
TSUSPN

BULLETIN

MENSAJE DE TSUNAMI NUMERO 5
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
1101 AM EDT WED MAR 25 2015

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

-
- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS

LANTEX 15 Handbook

DESPUES DE LA LLEGADA DEL TSUNAMI.

- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	
* NORTH CAROLINA		
CAPE HATTERAS	1044	EDT MAR 25
* FLORIDA		
MIAMI	1053	EDT MAR 25
DAYTONA	1124	EDT MAR 25
MELBOURNE BEACH	1131	EDT MAR 25
JACKSONVILLE BEA	1157	EDT MAR 25
* PUERTO RICO		
AGUADILLA	1057	AST MAR 25
SAN JUAN TG	1102	AST MAR 25
MAYAGUEZ	1108	AST MAR 25
CULEBRA	1134	AST MAR 25
* US VIRGIN ISLANDS		

LANTEX 15 Handbook

CHRISTIANSTED 1120 AST MAR 25
LAMESHUR BAY 1129 AST MAR 25
CHARLOTTE AMALIE 1141 AST MAR 25

* BRITISH VIRGIN IS.
ROADTOWN 1128 AST MAR 25

* SOUTH CAROLINA
MYRTLE BEACH 1221 EDT MAR 25
CHARLESTON 1229 EDT MAR 25

* VIRGINIA
VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA
SAVANNAH 1231 EDT MAR 25

* NEW YORK
MONTAUK 1233 EDT MAR 25
MANHATTAN 1357 EDT MAR 25

* NEW JERSEY
ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA
LOCKEPORT 1346 ADT MAR 25
SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS
NANTUCKET 1312 EDT MAR 25
BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK
GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
PORTLAND 1428 EDT MAR 25

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

* ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.

LANTEX 15 Handbook

- * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.
- * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #6

WEXX40 PAAQ 251604
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 6
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
1204 PM EDT WED MAR 25 2015

ACTUALIZACIONES

- * NUEVAS OBSERVACIONES

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

LANTEX 15 Handbook

- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
* FLORIDA	
DAYTONA	1124 EDT MAR 25
MELBOURNE BEACH	1131 EDT MAR 25
JACKSONVILLE BEA	1157 EDT MAR 25
* PUERTO RICO	
MAYAGUEZ	1108 AST MAR 25
CULEBRA	1134 AST MAR 25
* US VIRGIN ISLANDS	
CHRISTIANSTED	1120 AST MAR 25
LAMESHUR BAY	1129 AST MAR 25
CHARLOTTE AMALIE	1141 AST MAR 25

LANTEX 15 Handbook

* BRITISH VIRGIN IS.
 ROADTOWN 1128 AST MAR 25

* SOUTH CAROLINA
 MYRTLE BEACH 1221 EDT MAR 25
 CHARLESTON 1229 EDT MAR 25

* VIRGINIA
 VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA
 SAVANNAH 1231 EDT MAR 25

* NEW YORK
 MONTAUK 1233 EDT MAR 25
 MANHATTAN 1357 EDT MAR 25

* NEW JERSEY
 ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA
 LOCKEPORT 1346 ADT MAR 25
 SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS
 NANTUCKET 1312 EDT MAR 25
 BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK
 GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
 SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
 PORTLAND 1428 EDT MAR 25

OBSERVACIONES ADICIONALES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION			ALTURA MAX OBSERVADA DEL TSUNAMI
BERMUDA	1509	UTC	03-25	2.92 FT
OREGON INLET, NC	1523	UTC	03-25	0.30 FT
DUCK, NC	1536	UTC	03-25	1.44 FT
BEAUFORT, NC	1536	UTC	03-25	0.69 FT
WRIGHTSVILLE, NC	1558	UTC	03-25	1.90 FT

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA
 POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
 * TIEMPO DE ORIGEN 0900 EDT MAR 25 2015

LANTEX 15 Handbook

0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

-
- * ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.
 - * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.
 - * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #7

WEXX40 PAAQ 251703
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 7
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
103 PM EDT WED MAR 25 2015

ACTUALIZACIONES

-
- * NUEVAS OBSERVACIONES
- ...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...
- ...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

-
- AVISO DE TSUNAMI EN EFECTO PARA...
- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA

LANTEX 15 Handbook

HASTA LA MANCHE NEWFOUNDLAND

- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
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* SOUTH CAROLINA
MYRTLE BEACH 1221 EDT MAR 25

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CHARLESTON 1229 EDT MAR 25

* VIRGINIA
VIRGINIA BEACH 1225 EDT MAR 25

* GEORGIA
SAVANNAH 1231 EDT MAR 25

* NEW YORK
MONTAUK 1233 EDT MAR 25
MANHATTAN 1357 EDT MAR 25

* NEW JERSEY
ATLANTIC CITY 1235 EDT MAR 25

* NOVA SCOTIA
LOCKEPORT 1346 ADT MAR 25
SCATARIE ISLAND 1456 ADT MAR 25

* MASSACHUSETTS
NANTUCKET 1312 EDT MAR 25
BOSTON 1440 EDT MAR 25

* NEW BRUNSWICK
GRAND MANAN ISLA 1457 ADT MAR 25

* NEWFOUNDLAND
SAINT LAWRENCE 1537 NDT MAR 25

* MAINE
PORTLAND 1428 EDT MAR 25

OBSERVACIONES ADICIONALES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION			ALTURA MAX OBSERVADA DEL TSUNAMI	
BERMUDA	1509	UTC	03-25	2.92	FT
OREGON INLET, NC	1523	UTC	03-25	0.30	FT
DUCK, NC	1536	UTC	03-25	1.44	FT
BEAUFORT, NC	1536	UTC	03-25	0.69	FT
WRIGHTSVILLE, NC	1558	UTC	03-25	1.90	FT
OCEAN CITY, MD	1610	UTC	03-25	0.56	FT
CHARLESTON, SC	1620	UTC	03-25	0.36	FT
SPRINGMAID PIER, SC	1621	UTC	03-25	1.64	FT
VACA KEY, FL	1627	UTC	03-25	0.13	FT
KEY WEST, FL	1636	UTC	03-25	0.03	FT
LEWES, DE	1645	UTC	03-25	0.26	FT
FERNANDINA BEACH, FL	1647	UTC	03-25	0.46	FT
CHESAPEAKE BRIDGE, VA	1648	UTC	03-25	0.20	FT
ATLANTIC CITY, NJ	1651	UTC	03-25	3.22	FT
MONTAUK, NY	1651	UTC	03-25	0.03	FT
CAPE MAY, NJ	1654	UTC	03-25	0.20	FT

LANTEX 15 Handbook

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA
POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

* ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.

* PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE
INTERNET NTWC.ARH.NOAA.GOV.

* REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS
VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS
DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO
DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET
PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #8

WEXX40 PAAQ 251801
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 8
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
201 PM EDT WED MAR 25 2015

ACTUALIZACIONES

* NUEVAS OBSERVACIONES

...EL AVISO DE TSUNAMI PERMANECE EN EFECTO...

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS

AVISO DE TSUNAMI EN EFECTO PARA...

* AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA
FLAGLER BEACH FLORIDA

LANTEX 15 Handbook

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO AVISO DE TSUNAMI

- * AMPLIAS INUNDACIONES COSTERAS PELIGROSAS ACOMPAÑADAS POR FUERTES CORRIENTES SON POSIBLES Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO AVISO - MUEVASE TIERRA ADENTRO A LUGARES ELEVADOS.
- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
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- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LANTEX 15 Handbook

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI	
* NEW YORK		
MANHATTAN	1357	EDT MAR 25
* NOVA SCOTIA		
SCATARIE ISLAND	1456	ADT MAR 25
* MASSACHUSETTS		
NANTUCKET	1312	EDT MAR 25
BOSTON	1440	EDT MAR 25
* NEW BRUNSWICK		
GRAND MANAN ISLA	1457	ADT MAR 25
* NEWFOUNDLAND		
SAINT LAWRENCE	1537	NDT MAR 25
* MAINE		
PORTLAND	1428	EDT MAR 25

OBSERVACIONES ADICIONALES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION			ALTURA MAX OBSERVADA DEL TSUNAMI	
OCEAN CITY, MD	1610	UTC	03-25	0.56	FT
SPRINGMAID PIER, SC	1621	UTC	03-25	1.64	FT
VACA KEY, FL	1627	UTC	03-25	0.13	FT
KEY WEST, FL	1636	UTC	03-25	0.03	FT
LEWES, DE	1645	UTC	03-25	0.26	FT
FERNANDINA BEACH, FL	1647	UTC	03-25	0.46	FT
CHESAPEAKE BRIDGE, VA	1648	UTC	03-25	0.20	FT
ATLANTIC CITY, NJ	1651	UTC	03-25	3.22	FT
CAPE MAY, NJ	1718	UTC	03-25	0.62	FT
QUONSET POINT, RI	1722	UTC	03-25	0.20	FT
SANDY HOOK, NJ	1725	UTC	03-25	0.03	FT
MONTAUK, NY	1727	UTC	03-25	0.75	FT
CHARLESTON, SC	1739	UTC	03-25	0.52	FT
NANTUCKET, MA	1741	UTC	03-25	0.10	FT
BAR HARBOR, ME	1747	UTC	03-25	0.10	FT

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA
POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015

LANTEX 15 Handbook

0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

-
- * ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.
 - * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.
 - * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #9

WEXX40 PAAQ 251900
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 9
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
300 PM EDT WED MAR 25 2015

ACTUALIZACIONES

-
- * NUEVAS OBSERVACIONES
 - * MODIFICA LAS REGIONES BAJO ALERTA

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

AVISOS/ADVERTENCIAS/VIGILANCIAS - ACTUALIZADOS

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA DESDE OCEAN REEF FLORIDA HASTA FLAGLER BEACH FLORIDA
- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE FLAGLER BEACH FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

LANTEX 15 Handbook

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
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- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS - ACTUALIZADAS

- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

PRONOSTICOS DEL TSUNAMI

LUGAR	LLEGADA PRONOSTICADA DEL TSUNAMI
* MASSACHUSETTS BOSTON	1440 EDT MAR 25
* NEWFOUNDLAND SAINT LAWRENCE	1537 NDT MAR 25
* MAINE PORTLAND	1428 EDT MAR 25

OBSERVACIONES ADICIONALES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
CAPE MAY, NJ	1718 UTC 03-25	0.62 FT
QUONSET POINT, RI	1722 UTC 03-25	0.20 FT
SANDY HOOK, NJ	1725 UTC 03-25	0.03 FT

LANTEX 15 Handbook

MONTAUK, NY	1727	UTC	03-25	0.75	FT
CHARLESTON, SC	1739	UTC	03-25	0.52	FT
NANTUCKET, MA	1741	UTC	03-25	0.10	FT
YORKTOWN, VA	1818	UTC	03-25	0.07	FT
SHIP JOHN SHOAL, DE	1821	UTC	03-25	0.01	FT
PORTLAND, ME	1828	UTC	03-25	0.07	FT
BOSTON, MA	1836	UTC	03-25	0.03	FT
BAR HARBOR, ME	1852	UTC	03-25	0.26	FT
BRIDGEPORT, CT	1855	UTC	03-25	0.02	FT

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA
POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PARAMETROS PRELIMINARES DEL TERREMOTO

* MAGNITUD 6.8
* TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
* COORDENADAS 28.8 NORTE 77.0 OESTE
* PROFUNDIDAD 3 MILLAS
* LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

* ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.
* PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE
INTERNET NTWC.ARH.NOAA.GOV.
* REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS
VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS
DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO
DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET
PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #10

WEXX40 PAAQ 252000
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 10
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
400 PM EDT WED MAR 25 2015

ACTUALIZACIONES

* NUEVAS OBSERVACIONES

...LA ADVERTENCIA DE TSUNAMI PERMANECE EN EFECTO...

LANTEX 15 Handbook

AVISOS/ADVERTENCIAS/VIGILANCIAS

ADVERTENCIA DE TSUNAMI EN EFECTO PARA...

- * AREAS COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY - NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y NEWFOUNDLAND DESDE OCEAN REEF FLORIDA HASTA LA MANCHE NEWFOUNDLAND
- * AREAS COSTERAS DE PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS.

PARA OTRAS COSTAS DE ESTADOS UNIDOS Y CANADA EN EL ATLANTICO Y GOLFO DE MEXICO - NO EXISTE AMENAZA DE TSUNAMI.

IMPACTOS PARA AREAS BAJO ADVERTENCIA DE TSUNAMI

- * UN TSUNAMI CAPAZ DE PRODUCIR FUERTES CORRIENTES U OLAS PELIGROSAS A PERSONAS EN O MUY CERCA DEL AGUA ES ESPERADO.
- * CORRIENTES PUEDEN SER PELIGROSAS PARA NADADORES...EMBARCACIONES Y ESTRUCTURAS COSTERAS Y PUEDEN CONTINUAR POR MUCHAS HORAS DESPUES DE LA LLEGADA DEL TSUNAMI.
- * LA PRIMERA OLA PUEDE NO SER LA MAS GRANDE.

ACCIONES RECOMENDADAS

- * SI SE ENCUENTRA EN UN AREA BAJO ADVERTENCIA - SALGASE DE LA PLAYA BAHIAS Y MARINAS. NO SE ESPERAN INUNDACIONES GENERALIZADAS PARA AREAS BAJO ADVERTENCIA
- * ESTE ALERTA A INSTRUCCIONES DE SUS AUTORIDADES DE MANEJO DE EMERGENCIA.
- * NO VAYA A LA COSTA PARA OBSERVAR EL TSUNAMI.
- * NO REGRESE A LA COSTA HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

OBSERVACIONES ADICIONALES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
YORKTOWN, VA	1818 UTC 03-25	0.07 FT
SHIP JOHN SHOAL, DE	1821 UTC 03-25	0.01 FT
BOSTON, MA	1836 UTC 03-25	0.03 FT

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BRIDGEPORT, CT	1855	UTC	03-25	0.02	FT
BAR HARBOR, ME	1906	UTC	03-25	0.72	FT
SANDY HOOK, NJ	1931	UTC	03-25	0.13	FT
PORTLAND, ME	1933	UTC	03-25	0.30	FT

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA
POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PARAMETROS PRELIMINARES DEL TERREMOTO

- * MAGNITUD 6.8
- * TIEMPO DE ORIGEN 0900 EDT MAR 25 2015
0800 CDT MAR 25 2015
0900 AST MAR 25 2015
1300 UTC MAR 25 2015
- * COORDENADAS 28.8 NORTE 77.0 OESTE
- * PROFUNDIDAD 3 MILLAS
- * LOCALIZACION OFF EAST COAST OF UNITED STATES

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

- * ESTE MENSAJE SERA ACTUALIZADO EN 60 MINUTOS.
- * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE
INTERNET NTWC.ARH.NOAA.GOV.
- * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS
VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS
DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO
DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET
PTWC.WEATHER.GOV.

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NTWC Spanish Bulletin #11

WEXX40 PAAQ 252100
TSUSPN

BULLETIN
MENSAJE DE TSUNAMI NUMERO 11
NWS CENTRO NACIONAL DE ALERTA DE TSUNAMI PALMER AK
500 PM EDT WED MAR 25 2015

...LA ADVERTENCIA DE TSUNAMI HA SIDO CANCELADA...

CANCELACIONES

- * LA ADVERTENCIA DE TSUNAMI HA SIDO CANCELADO PARA AREAS
COSTERAS DE FLORIDA - GEORGIA - SOUTH CAROLINA - NORTH
CAROLINA - VIRGINIA - MARYLAND - DELAWARE - NEW JERSEY -
NEW YORK - CONNECTICUT - RHODE ISLAND - MASSACHUSETTS - NEW
HAMPSHIRE - MAINE - NEW BRUNSWICK - NOVA SCOTIA Y
NEWFOUNDLAND DESDE OCEAN REEF FLORIDA HASTA LA MANCHE
NEWFOUNDLAND

LANTEX 15 Handbook

- * LA ADVERTENCIA DE TSUNAMI HA SIDO CANCELADA PARA PUERTO RICO - ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS

IMPACTOS - ACTUALIZADOS

- * LA ACTIVIDAD DE TSUNAMI HA DISMINUIDO A LO LARGO DE LAS COSTAS DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS... ISLAS VIRGENES BRITANICAS Y DE LAS COSTAS DEL ATLANTICO DE ESTADOS UNIDOS Y CANADA.
- * ACTIVIDAD EN CURSO PUEDE SEGUIR EN ALGUNAS AREAS CAUSANDO FUERTES CORRIENTES PELIGROSOS PARA NADADORES Y EMBARCACIONES.
- * LA DETERMINACION PARA VOLVER A OCUPAR ZONAS DE PELIGRO DEBE SER HECHA POR AUTORIDADES LOCALES.

ACCIONES RECOMENDADAS - ACTUALIZADAS

- * NO REGRESEN A ZONAS DESALOJADAS HASTA QUE LAS AUTORIDADES LOCALES DE MANEJO DE EMERGENCIA INDIQUEN QUE ES SEGURO HACERLO.

OBSERVACIONES DEL TSUNAMI - ACTUALIZADAS

LUGAR	HORA DE LA MEDICION	ALTURA MAX OBSERVADA DEL TSUNAMI
BAR HARBOR, ME	1906 UTC 03-25	0.72 FT
SANDY HOOK, NJ	1931 UTC 03-25	0.13 FT
PORTLAND, ME	1933 UTC 03-25	0.30 FT
SHIP JOHN SHOAL, DE	2001 UTC 03-25	0.02 FT
BRIDGEPORT, CT	2004 UTC 03-25	0.03 FT
KINGS POINT, NY	2007 UTC 03-25	0.01 FT
NANTUCKET, MA	2016 UTC 03-25	0.13 FT
BOSTON, MA	2051 UTC 03-25	0.07 FT

ALTURA - ALTURA MAX OBSERVADA DEL TSUNAMI ES EL NIVEL DEL AGUA POR ENCIMA DE LA MAREA A LA HORA DE LA MEDICION.

PROXIMA ACTUALIZACION E INFORMACION ADICIONAL

- * ESTE SERA EL ULTIMO BOLETIN PROVENIENTE DEL CENTRO NACIONAL DE ALERTA DE TSUNAMI DE LOS ESTADOS UNIDOS PARA ESTE EVENTO.
- * PARA ACCEDER A INFORMACION ADICIONAL CONSULTE EL SITIO DE INTERNET NTWC.ARH.NOAA.GOV.
- * REGIONES COSTERAS DEL CARIBE FUERA DE PUERTO RICO... ISLAS VIRGENES DE LOS ESTADOS UNIDOS E ISLAS VIRGENES BRITANICAS DEBEN CONSULTAR LOS MENSAJES EMITIDOS POR EL CENTRO DE ALERTA DE TSUNAMI DEL PACIFICO EN SU SITIO DE INTERNET

PTWC.WEATHER.GOV.

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Exercise

Appendix F. Sample Press Release for Local Media

TEMPLATE FOR NEWS RELEASE

USE AGENCY MASTHEAD

Contact: (insert name)
(insert phone number)
(insert email address)

FOR IMMEDIATE RELEASE
(insert date)

ATLANTIC TSUNAMI EXERCISE TO BE CONDUCTED March 25, 2015

(insert community/county/state name) will join other localities in the Atlantic as a participant in a tsunami response exercise on March 25, 2015. The purpose of this exercise is to evaluate local tsunami response plans, increase tsunami preparedness, and improve coordination throughout the region.

(insert a promotional comment from a local official, such as “The 2010 Haiti and Chile earthquakes and tsunamis have reminded the world again of the urgent need to be more prepared for such events,” said (insert name of appropriate official). “This important exercise will test the current procedures of the Tsunami Warning System and help identify operational strengths and weaknesses in each community.” (Please modify for uniqueness.)

The exercise, titled LANTEX 15, will simulate a widespread Tsunami Warning and Advisory situation throughout the north-Atlantic which requires implementation of local tsunami response plans. The exercise will *(insert “include” or “not include”)* public notification.

The exercise will simulate a major earthquake and tsunami generated 215 miles east of Port Canaveral, Florida at 9:00 am Atlantic Standard Time *(or appropriate local time)* on March 25, 2015. Exercise participants will be provided with a handbook which describes the scenario and contains tsunami messages from the U.S. National Tsunami Warning Center (NTWC). The NTWC is responsible for providing tsunami information to the Atlantic coasts of U.S. and Canada, the Gulf of Mexico coast, Puerto Rico, and the Virgin Islands while the Pacific Tsunami Warning Center provides tsunami information for the other countries in the Caribbean Sea and Adjacent Regions.

Insert paragraph tailored for specific community. Could identify participating agencies and specific plans. Could describe current early warning program, past tsunami exercises (if any), ongoing mitigation and public education programs, etc. Could describe tsunami threat, history of tsunami hazards, if any.

If any real tsunami threat occurs during the time period of the exercise, the exercise will be terminated.

The exercise is sponsored by the U.S. National Tsunami Hazard Mitigation Program (NTHMP – a partnership of 29 states and territories and three federal

agencies). For more information on the U.S. tsunami warning system, see www.tsunami.gov. For more information on the NTHMP, see nthmp.tsunami.gov. For more information on the ICG/CARIBE-EWS, see <http://www.ioc-tsunami.org/content/view/36/1036/>.

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On the Web:

National Tsunami Warning Center

<http://NTWC.arh.noaa.gov>

Pacific Tsunami Warning Center

<http://ptwc.weather.gov>

NOAA Tsunami Program

<http://www.tsunami.gov>

NTHMP:

<http://nthmp.tsunami.gov>

Insert state/local emergency response URLs

Exercise