

EXERCISE CARIBE WAVE 20

A Caribbean and Adjacent Regions Tsunami Warning Exercise

19 March 2020

(Jamaica and Portugal Scenarios)

Volume 1

Participant Handbook

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NOTE: The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Intergovernmental Oceanographic Commission (IOC) pattern the contents of this handbook after the CARIBE WAVE [2011](#), [2013](#), [2014](#), [2015](#), [2016](#), [2017](#), [2018](#) and [2019](#) Exercises. Each of these exercises has a handbook published as IOC Technical Series. These CARIBE WAVE exercises followed the Pacific Wave exercises which commenced in 2008 with manual published by the Intergovernmental Oceanographic Commission (Exercise Pacific Wave 08: A Pacific-wide Tsunami Warning and Communication Exercise, 28–30 October 2008, [IOC Technical Series, 82](#), Paris, UNESCO 2008). The UNESCO How to Plan, Conduct and Evaluate Tsunami Wave Exercises, [IOC Manuals and Guides, 58 rev.](#), Paris, UNESCO 2013 (English and Spanish) is another important reference.

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Summary

The Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions ([ICG/CARIBE-EWS](#)) of the Intergovernmental Oceanographic Commission ([IOC](#)) of the United Nations Educational, Scientific and Cultural Organization ([UNESCO](#)) will be conducting a tsunami exercise on 19 March 2020. This exercise will be coordinated together with the U.S. National Oceanic and Atmospheric Administration ([NOAA](#)) and the Caribbean regional emergency management stakeholders ([CEPREDENAC](#) [Coordination Centre for the Prevention of Natural Disasters in Central America], [CDEMA](#) [Caribbean Disaster Emergency Management Agency], and EMIZA [État-major interministériel de la zone de défense et de sécurité Antilles]). The purpose of this exercise is to advance tsunami preparedness efforts in the Caribbean and adjacent regions.

Two exercise scenarios have been planned for this exercise. The first scenario described in this handbook simulates a tsunami generated by a magnitude 8.0 earthquake located along the Enriquillo-Plantain Garden Fault Zone (EPGFZ). The second scenario is a tsunami generated by a magnitude 8.5 earthquake located approximately 270 km off the Portugal coast.

The Pacific Tsunami Warning Center (PTWC), the CARIBE-EWS Tsunami Service Provider, will issue the initial dummy message for the two scenarios on 19 March 2020 at 1400 UTC, and will disseminate it over all its standard broadcast channels. The dummy message is issued to test communications between the PTWC and the officially designated Tsunami Warning Focal Points (TWFPs) and National Tsunami Warning Centres (NTWCs), and to start the exercise. As of 1407 UTC, the PTWC will send by email the simulated tsunami products to officially designated TWFPs and NTWCs. Each country and territory will choose one scenario and decide if and how to disseminate messages within its area of responsibility (AoR).

The manual includes the tsunami and earthquake scenarios information, timelines, PTWC dummy message and simulated exercise messages. High levels of vulnerability and risk to life and livelihoods from tsunamis along the coasts of the Caribbean and adjacent regions should provide a strong incentive for countries and local jurisdictions to prepare for a tsunami and participate in this exercise.

1. BACKGROUND

1.1 EXERCISE JUSTIFICATION AND FRAMEWORK

This tsunami exercise is being conducted to assist tsunami preparedness efforts throughout the Caribbean and adjacent regions. Recent tsunamis, such as those in the Indian Ocean (2004, 2018), Samoa (2009), Haiti (2010), Chile (2010, 2014, 2015), Japan (2011), and Honduras and Sulawesi (2018), attest to the importance of proper planning for tsunami response.

Historical tsunami records from sources such as the NOAA National Centers for Environmental Information ([NCEI](#)) show that from the years 1530 to 2018 tsunamis from earthquake, landslide, and volcanic sources have all impacted the region ([Figure 1](#)). According to NCEI, in the past 500 years, over 105 tsunamis have been observed (7–10% world's oceanic tsunamis) and approximately 4,500 people have lost their lives due to tsunamis in the Caribbean and adjacent regions. Since the most recent devastating tsunami of 1946, there has been an explosive population growth and influx of tourists along the Caribbean and Western Atlantic coasts increasing the tsunami vulnerability of the region ([von Hillebrandt-Andrade, 2013](#)).

In addition to tsunamis, the region also has a long history of destructive earthquakes. Historical records show that major earthquakes have struck the Caribbean region once about every 50 years during the past five centuries. Within the region, there are multiple fault segments and submarine features that could be the source of earthquake and landslide generated tsunamis ([Figure 2](#)). No fewer than four major plates (North America, South America, Nazca, and Cocos) border the perimeter of the Caribbean plate. Subduction occurs along the Eastern and Northeastern Atlantic margins of the Caribbean plate. While the Northern and Southern Caribbean plate boundaries are characterized with a predominant strike-slip displacement, the Eastern and Western boundaries mark locations where oceanic crust subducts beneath Caribbean plate lithosphere ([Benz et al., 2011](#)). In addition to the local and regional earthquake sources, the region is also threatened by teletsunamis/transatlantic tsunamis, like the 1755 Portugal event. Furthermore, six confirmed volcano tsunami source events and two landslides generated from volcanos have affected the Caribbean and adjacent regions (International Tsunami Information Center [[ITIC](#)] and National Centers for Environmental Information [[NCEI](#)], 2018).

Tsunami services for the Caribbean and adjacent regions within the UNESCO/IOC CARIBE-EWS framework are currently provided by the PTWC in Hawaii. It issues its messages two to ten minutes after an earthquake's occurrence. The PTWC international products include tsunami information and threat messages. Primary recipients of the PTWC messages include TWFPs and NTWCs. These agencies are responsible to determine and issue the corresponding alerts within their area of responsibility according to established protocols.

Nearly 160 million people live in the Caribbean, Central America and Northern South America. The question is not if another major tsunami will happen, but when it happens, will the region be prepared for the impact? The risk of tsunamis in the Caribbean is real and should be taken seriously. Member States need to exercise their Standard Operational Procedures (SOPs) for tsunamis to ensure readiness for the next tsunami.

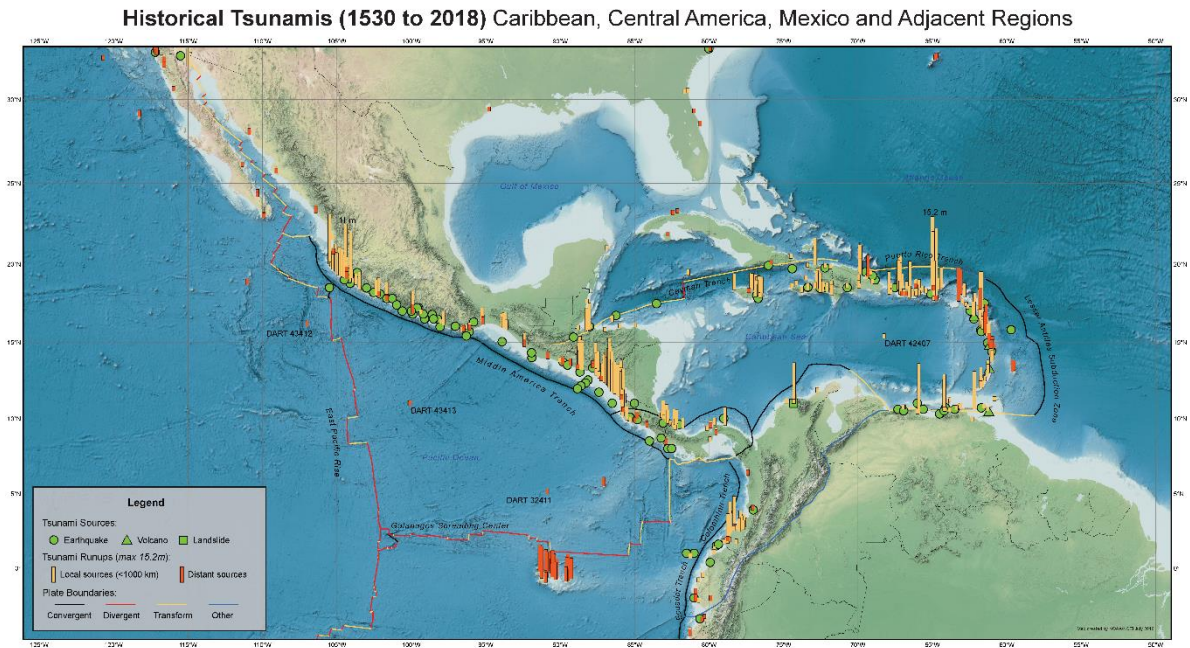


Figure 1. Map of historical tsunamis (1530 to 2018) in the Caribbean, Central America, Mexico and adjacent regions (National Centers for Environmental Information, <https://www.ngdc.noaa.gov/hazard/data/publications/CCAMAR-english.pdf>).

1.2 EXERCISE EARTHQUAKE AND TSUNAMI SCENARIOS

The exercise Caribe Wave 20 will provide simulated tsunami threat messages issued from the PTWC based on two hypothetical scenarios: a magnitude 8.0 earthquake located on the Enriquillo-Plantain Garden Fault Zone (EPGFZ) and a magnitude 8.5 earthquake located approximately 270 km off the Portugal coast (Figure 2). Below is a description of the proposed scenarios for the exercise.

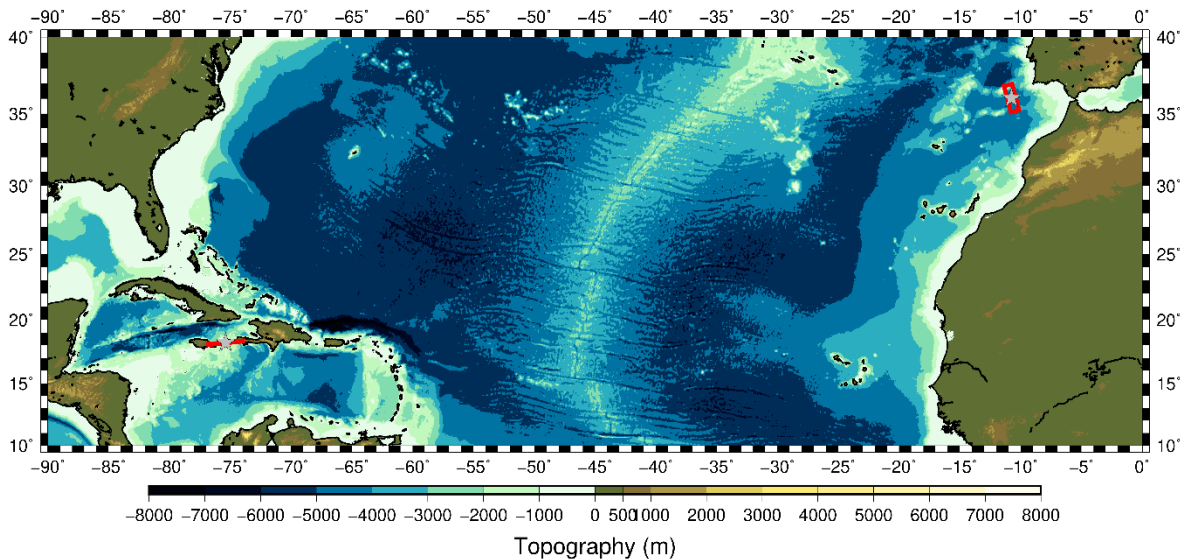


Figure 2. Map of the CARIBE WAVE 20 scenarios. Stars indicate epicentral locations and the red boxes indicate the map view of the ruptured fault segments. The figure is underlain by etopo1 model of [Amante and Eakins \(2009\)](#). This figure was generated using The Generic Mapping Tool (GMT) ([Wessel et al., 2013](#)).

1.2.1 Jamaica Scenario

Extensive diversity and complexity of tectonic regimes characterizes the perimeter of the Caribbean plate, involving no fewer than four major plates (North America, South America, Nazca, and Cocos). Northern and southern boundaries of the Caribbean are mostly characterized by strike-slip motion, whereas subduction zones occur at both eastern and western boundaries. Intermediate and deep earthquakes, Wadati-Benioff zones, ocean trenches, and arcs of volcanoes clearly indicate subduction of oceanic lithosphere along the Central American and Atlantic Ocean margins of the Caribbean plate. Along the north-eastern Caribbean plate boundary zone, from the Island of Hispaniola to the Island of Barbuda, relative motion between the North America plate and the Caribbean plate becomes increasingly complex and is partially accommodated by nearly arc-parallel subduction of the North America plate beneath the Caribbean plate (Feuillet et al., 2002). Moving east and south to the northern Lesser Antilles where the plate motion vector of the Caribbean plate relative to the North and South America plates is less oblique, resulting in active island-arc tectonics. The North and South America plates subduct towards the west beneath the Caribbean plate along the Lesser Antilles Trench at rates of approximately 20 mm/yr. (DeMets et al., 2010). As a result of this subduction, there exist both intermediate focus earthquakes within the subducted plates and a chain of active volcanoes along the island arc, data that has been used to divide the arc into a northern and southern arc. Along the southern Lesser Antilles trench, the accretionary prism is anomalously thick and wide, raising the earthquake and tsunami potential. Farther west, the Southern Caribbean Deformed Belt (SCDB) has been developed due to the southward-verging under-thrusting of Caribbean lithosphere beneath the northern coast of South America (DeMets et al., 2010). The following two sub-sections describe the Caribe Wave 20 scenarios and present a justification on their tsunamigenic potential regardless of their probability of occurrence.

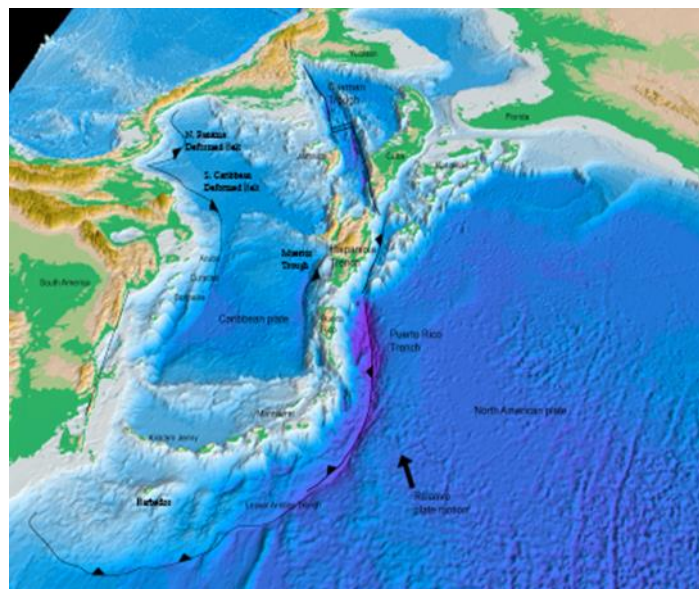


Figure 3. Major Tectonic features in the Caribbean (ten Brink et al., 2008).

The Enriquillo-Plantain Garden fault zone (EPGFZ) is located along the complex boundary between the North American and Caribbean plates (Prentice et al., 2010). This major active left-lateral strike-slip fault system is hundreds of km long and extends from the countries of Jamaica, Haiti, and the Dominican Republic (Koehler et al., 2013). Historical records show at least the occurrence of one large earthquake greater than Mw 6 per century (Wright, 2019). Most tsunamis reported in Jamaica and Haiti have been caused by sediment failure processes with the occurrence of an earthquake greater than Mw 5 associated to the EPGFZ (Wright,

2019). The most recent tsunami event associated with this fault occurred on 12 January 2010 in Haiti and was generated by a Mw 7.0 earthquake that devastated the Port-au-Prince region (Calais et al., 2010). This event caused the death of approximately 200,000 people and billions of dollars in damages (Calais et al., 2010). Also, the magnitude 7.5 earthquake that occurred on 7 June 1692 in Jamaica is considered to be associated with the EPGFZ (Lander et al., 2002). This event caused a landslide that generated a tsunami leading to major damages at the town of Port Royal (Lander et al., 2002). It was reported that approximately 2,000 people were killed in the 1692 earthquake and tsunami (Lander et al., 2002). For this exercise, some fault properties such as mechanism and magnitude exaggeration have been made slightly unrealistic from a seismologist's perspective to ensure the generation of a significant tsunami to test the CARIBE-EWS systems and local responses.

1.2.2 Portugal Scenario

This exercise is based on a hypothetical tsunami scenario similar to The Great Lisbon earthquake that occurred on 1 November 1755. During this event an estimated Mw between 8.5 and 9.0 major earthquake in Lisbon, Portugal generated a transoceanic tsunami that reached the European and African coasts, islands in the Atlantic, and the Caribbean islands (ten Brink et al., 2008). Along the Portuguese and Moroccan coast, the run-up was reported to have reached up to 15 m causing the death of approximately 50,000 people (Barkan et al., 2009). The tsunami waves propagated to the Atlantic Ocean impacting significantly Madeira and Azores Archipelagos (Roger et al., 2010). This transoceanic tsunami reached the island of Antigua within 9.3 hours, and waves with estimated run-up height of 7 m were reported at Saba, Netherlands Antilles (Lander et al., 2002). This scenario is considered here because transoceanic tsunamis can cause damages and losses to the coast of the Caribbean Islands. Hazards and risk studies in this area are a priority for implementing tsunami warning systems in the most vulnerable territories.

1.2.3 Earthquake impact

In addition to knowing the potential impact from the tsunami, it is also important to consider the potential earthquake impact. This is especially important for those in the near field. In consideration of this, the United States Geological Survey (USGS) provided for Caribe Wave 20 the scenario outputs of their ShakeMap and the Prompt Assessment of Global Earthquakes for Response (PAGER) products. These results provide emergency responders, government, aid agencies and the media the scope of the potential earthquake related disaster. ShakeMap illustrates the ground shaking levels close to the earthquake source depending on a set of parameters such as distance to the source, rock and soil behavior, and seismic wave propagation through the crust (<https://earthquake.usgs.gov/data/shakemap/>). PAGER is based on the earthquake shaking (via ShakeMap) and analyses of the population exposed to each level of shaking intensity with models of economic and fatality losses based on past earthquakes in each country or region of the world (<https://earthquake.usgs.gov/data/pager/>). For the Caribe Wave 20 scenarios, USGS estimated that significant casualties and damage are likely from the earthquakes themselves, which would require regional or national level response. According to the PAGER results, the countries that are going to receive the greatest impact from the magnitude 8.0 earthquake are Jamaica and Haiti for the Jamaica scenario. Complete information about the PAGER output for the exercise scenario is available in the Annex IV of this handbook.

2. EXERCISE CONCEPT

2.1 PURPOSE

The purpose of the exercise is to improve Tsunami Warning System effectiveness in the Caribbean and adjacent regions. The exercise provides an opportunity for emergency

management organizations throughout the region 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 the Caribbean and adjacent regions, where tsunamis are infrequent but can be of very high impact. Every emergency management organization (EMO) are encouraged to participate.

2.2 OBJECTIVES

Each organization can develop its objectives for the exercise depending on its level of involvement in the scenario. The following are the exercise's overarching objectives to exercise and evaluate operations of the CARIBE-EWS Tsunami Warning System.

1. **Exercise and evaluate communications between Regional Tsunami Service Provider and Members States/Territories.**
 - A. Validate the **issuance** of tsunami products from the PTWC.
 - B. Validate the **receipt** of tsunami products by CARIBE-EWS Tsunami Warning Focal Points (TWFPs) and/or National Tsunami Warning Centres (NTWCs).
2. **Evaluate the tsunami procedures and programs within Members States/Territories.**
 - A. Validate **readiness** to respond to a tsunami.
 - B. Validate the **operational readiness** of the TWFPs/NTWCs and/or the National Disaster Management Office (NDMO).
 - C. Improve **operational readiness**. Before the exercise, ensure appropriate tools and response plan(s) have been developed, including public education materials.
 - D. Validate that the dissemination of warnings and information/advice by TWFPs and NTWCs, to relevant in-country agencies and the public is accurate and timely.
 - E. Evaluate the status of the implementation of the pilot CARIBE-EWS Tsunami Ready recognition program.

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 alarming the general public. Offices of Emergency Management (OEM) are, however, encouraged to 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 (SOP). Most countries in the region have participated in SOP workshops in 2013, 2014, 2015 and 2017, and should use the materials and expertise acquired to help guide exercise preparation and conduct. [Annex I](#) gives an overview of SOPs. Exercise participants may use their own past multi-hazard drills (e.g. flood, hurricane, tsunami, earthquake, etc.) as a framework to conduct Caribe Wave 20.

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 [Annex II](#) for a Sample Tabletop Exercise Guidelines).
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 centre, emergency command centre, command post, master control centre, etc.) and involve 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 centres 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.

| Style | Planning Period | Duration | Comments |
|----------------------|-----------------|-------------|---------------------------------------|
| Orientation Exercise | 2 weeks | 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 |

Table 1. Example Time Frames for Different Exercise Types

Another good resource for exercise planning and conduct is the document entitled *Methodological guidelines: How to prepare, conduct and evaluate a community-based tsunami response exercise (Annex II)*. This guide is recommended for Member States as it provides methodology and tools to conduct and evaluate a community based tsunami evacuation exercise.

2.4 TIMELINE

The process of planning Caribe Wave 20 takes more than a year; from the decision of the Intergovernmental Coordination Group (ICG) to conduct the exercise and the choice of the scenario(s) until the final reports are prepared and distributed. Listed below are the actions to be taken before, during and after Caribe Wave 20.

| ACTION | DUE DATE |
|---|---|
| Circular Letter Issued by IOC to MS | September 2019 |
| Handbook Draft Circulated among ICG CARIBE-EWS TNC/TWFP and TT Caribe Wave 20 | November 2019 |
| Deadline for Comments | December 2019 |
| Exercise Handbook Available Online | December 2019 |
| First Webinar CW | 21 January 2020 - English 22 January 2020 - Spanish 23 January 2020 - French |
| Second Webinar CW | 26 February 2020 - English 27 February 2020 - Spanish 28 February 2020 - French |
| Countries Indicate Selected Scenario | 6 March 2020 |
| Exercise | 19 March 2020 |
| Exercise Evaluation Due | 3 April 2020 |
| Final Draft Caribe Wave 20 Report | 10 April 2020 |

Table 2. Actions to be taken before, during and after CARIBE WAVE 20¹

¹ Some dates may have changed.

3. PTWC PRODUCTS

On 1 March 2016, the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS) fully transitioned to the PTWC Enhanced Products. The PTWC only issues Information and Threat messages for the Caribbean. While the first threat message is based on earthquake location, magnitude and travel time thresholds, as of the second threat message, for earthquake generated tsunamis, these products include wave forecasts. Several levels of tsunami threat have been established, and forecast threat levels are assigned to polygons representing segments of extended coastlines or to island groups. These improvements should greatly reduce the number of areas warned unnecessarily and provide some advance notice of the threat of potential local tsunamis. Details on the PTWC Enhanced Products for the CARIBE-EWS are provided in the *User's Guide (for) the Pacific Tsunami Warning Center Enhanced Products for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS)* ([IOC/2017/TS/135 Rev.](#)). For the Caribe Wave 20, threat messages and enhanced graphical products of the chosen scenario by each Member State and Territory will be disseminated by email to officially designated TWFPs and NTWCs. These products have also been included in [Annex III](#) and [VI](#). It is up to each country and territory to decide if and how to disseminate messages within its areas of responsibility.

4. EXERCISE OUTLINE

4.1 GENERAL

Tsunami messages for this exercise are issued by the PTWC based on two hypothetical earthquakes with the following hypocentre parameters:

Jamaica Earthquake Scenario:

| | |
|-------------|-----------------------------|
| Origin Time | 14:00:00 UTC March 19, 2020 |
| Latitude | 18.2°N |
| Longitude | 75.3°W |
| Magnitude | 8.0 – Mw |
| Depth | 25 km |

Portugal Earthquake Scenario:

| | |
|-------------|-----------------------------|
| Origin Time | 14:00:00 UTC March 19, 2020 |
| Latitude | 36.0°N |
| Longitude | 10.7°W |
| Magnitude | 8.5 – Mw |
| Depth | 5 km |

Expected impacts for these events are determined from pre-computed tsunami forecast models. The models indicate significant tsunamis along many coasts in the Caribbean Sea. [Annex III](#) provides the model results for the Jamaica and Portugal scenario.

The first simulated tsunami threat message issued by PTWC is based on the earthquake magnitude and location and the tsunami travel times. As of the second message is based on tsunami wave forecasts. Tsunami threat forecasts indicate the levels of threat that have been forecast and to which countries or places they apply. The levels are tsunami heights of 0.3–1 meter, 1–3 meters, and greater than 3 meters above the normal tide level are determined. The

threat information is updated usually within an hour. All simulated products (text and graphical) for the scenario chosen by the country will be disseminated through email to the corresponding TWFPs and NTWCs. Further dissemination will be the responsibility of the corresponding national and local authorities.

The PTWC will not issue live messages over broadcast dissemination channels other than to issue initial dummy message to start the exercise the 19 March 2020 at 1400 UTC. The initial dummy message will be disseminated over all standard PTWC broadcast channels. The World Meteorological Organization (WMO) and Advanced Weather Interactive Processing System (AWIPS) headers to be used in the dummy message are listed in [Table 3](#). Please note that the PTWC dummy messages are being issued with the WMO/AWIPS IDs WECA41 PHEB/TSUCAX. These are being issued to test communications with TWFPs and NTWCs, and to start the exercise. The content of the dummy messages is given in [Annex V](#).

For Caribe Wave 20, each Member State needs to select one scenario. By 6 March 2020, they must complete the following survey (<https://forms.gle/7IEBp187x1UXaXYy6>) to select the scenario their country will use for the exercise. If the Member State does not inform the PTWC and CTWP, the organizers will decide for which scenario the PTWC will send the products. For the exercise, the TWPF/ NTWC will receive only the simulated product for that scenario.

| Centre | WMO ID | AWIPS ID | NWWS | GTS | EMWIN | AISR | Fax | Email |
|--------|----------------|----------|------|-----|-------|------|-----|-------|
| PTWC | WECA41 PHEB | TSUCAX | Yes | Yes | Yes | Yes | Yes | Yes |

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

Table 3. Product Types Issued for Dummy Message with Transmission Methods

Participants should follow the schedule in [Tables 4](#) and [5](#) for each scenario, to look at new messages. Those tables include the timelines for when messages would be issued by the PTWC if this were a real event and can be used by EMOs to drive the exercise timing. The messages (as shown in [Annex V](#)) cover a period of time between 5 minutes and 7-hours from earthquake origin time, however in an actual event messages would likely continue for a much longer period of time.

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 [Annex VI](#), will facilitate this approach.

EMOs can 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.

4.2 MASTER SCHEDULE (EXERCISE SCRIPT)

4.2.1 Jamaica Scenario

Tsunami generated by a magnitude 8.0 earthquake with epicentre at 18.203°N, 75.376°W occurring the 19 March 2020 at 1400 UTC. The initial alert is disseminated at 1407 UTC.

| Date | Time (UTC) | PTWC | |
|---------|------------|---|------------------------------------|
| | | Type of Product | Transmission Method |
| 3/19/20 | 1400 | ---- Earthquake Occurs ---- | |
| 3/19/20 | 1400 | Dummy | NWWS, GTS, EMWIN, AISR, Fax, Email |
| 3/19/20 | 1407 | Tsunami Threat Message #1 | Email |
| 3/19/20 | 1415 | Tsunami Threat Message #2 | Email |
| 3/19/20 | 1425 | Tsunami Threat Message #3 and Graphic Enhanced Products | Email |
| 3/19/20 | 1500 | Tsunami threat Message #4 | Email |
| 3/19/20 | 1600 | Tsunami Threat Message #5 | Email |
| 3/19/20 | 1700 | Tsunami Threat Message #6 | Email |
| 3/19/20 | 1800 | Tsunami Threat Message #7 | Email |
| 3/19/20 | 1900 | Tsunami Threat Message #8 | Email |
| 3/19/20 | 2000 | Tsunami Threat Message #9 | Email |
| 3/19/20 | 2100 | Tsunami Threat Message #10 | Email |
| 3/19/20 | 2200 | Tsunami Threat Message #11 | Email |
| 3/19/20 | 2300 | Final Tsunami Threat Message #12 | Email |

Table 4. Timeline Messages issued by PTWC

4.2.2 Portugal Scenario

Tsunami generated by a magnitude 8.5 earthquake with epicentre at 36.0°N, 10.7°W occurring the 19 March 2020 at 1400 UTC. The initial alert is disseminated at 1407 UTC.

| Date | Time (UTC) | PTWC | |
|---------|------------|----------------------------------|------------------------------------|
| | | Type of Product | Transmission Method |
| 3/19/20 | 1400 | ---- Earthquake Occurs ---- | |
| 3/19/20 | 1400 | Dummy | NWWS, GTS, EMWIN, AISR, Fax, Email |
| 3/19/20 | 1407 | Tsunami Threat Message #1 | Email |
| 3/19/20 | 1415 | Tsunami Threat Message # 2 | Email |
| 3/19/20 | 1425 | Tsunami Threat Message #3 | Email |
| 3/19/20 | 1500 | Tsunami Threat Message #4 | Email |
| 3/19/20 | 1520 | Tsunami Threat Message #5 | Email |
| 3/19/20 | 1600 | Tsunami Threat Message #6 | Email |
| 3/19/20 | 1700 | Tsunami Threat Message #7 | Email |
| 3/19/20 | 1800 | Tsunami Threat Message #8 | Email |
| 3/19/20 | 1900 | Tsunami Threat Message #9 | Email |
| 3/19/20 | 2000 | Tsunami Threat Message #10 | Email |
| 3/19/20 | 2100 | Tsunami Threat Message #11 | Email |
| 3/19/20 | 2200 | Tsunami Threat Message #12 | Email |
| 3/19/20 | 2300 | Tsunami Threat Message #13 | Email |
| 3/20/20 | 0000 | Tsunami Threat Message #14 | Email |
| 3/20/20 | 0100 | Tsunami Threat Message #15 | Email |
| 3/20/20 | 0200 | Tsunami Threat Message #16 | Email |
| 3/20/20 | 0300 | Tsunami Threat Message #17 | Email |
| 3/20/20 | 0400 | Tsunami Threat Message #18 | Email |
| 3/20/20 | 0500 | Tsunami Threat Message #19 | Email |
| 3/20/20 | 0600 | Tsunami Threat Message #20 | Email |
| 3/20/20 | 0700 | Tsunami Threat Message #21 | Email |
| 3/20/20 | 0800 | Final Tsunami Threat Message #22 | Email |

Table 5. Timeline Messages issued by PTWC

4.3 ACTIONS IN CASE OF EMERGENCY

In the case of a real event occurring during the exercise, the PTWC will issue the corresponding messages for the event. Such messages will be given full priority and a decision will be made by the PTWC whether to issue the Caribe Wave 20 dummy messages and to send email messages to corresponding recipients. In the case of smaller earthquakes, PTWC will issue the corresponding Tsunami Information Statement and the exercise will not be disrupted. All documentation and correspondence relating to this exercise is to be clearly identified as “**CARIBE WAVE 20**” and “**Exercise**”.

4.4 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 the members of the Caribe Wave 20 Task Team ([Table 6](#)).

4.5 COMMUNITY REGISTRATION

For Caribe Wave 20, the ICG/CARIBE-EWS has teamed up with TsunamiZone.org for online registration. Under the Caribbean Zone Region tab, participants will be able to sign up and choose among the following community categories: individuals, businesses, schools, faith-based organizations, community groups, government agencies, individuals. The link for registration is the following: <http://tsunamizone.org/caribbean>. After registering, the participant will receive a confirmation email. If desired, participants can also opt to be listed in the “Who is participating?” section of the TsunamiZone website, along with participants in tsunami preparedness activities worldwide. The EMOs will thus have real time access to the status of registration of participants within their areas of responsibility. EMOs are encouraged to promote this registration system.

4.6 MEDIA ARRANGEMENTS

One advantage in conducting exercises is that it provides a venue to promote tsunami awareness. Many residents along the CARIBE-EWS coast may not realize that a regional tsunami warning system exists, nor that national authorities have protocols in place to issue tsunami alerts, let alone the proper response for individuals. Therefore, communities may wish to invite their local media to the exercise and to promote the awareness of the local tsunami hazard and protocols. Within all Member States, the media can also provide support in building awareness leading up to the exercise and avoid false alarms. Media should be provided with available informational brochures prepared by the local, regional and international agencies. It is also a good opportunity to distribute or prepare Media guides like that of the Puerto Rico Seismic Network (PRSN) (<http://www.prsn.uprm.edu/mediakit/en/index.php>) and the Seismic Research Centre (SRC) (<http://www.uwiseismic.com>) as additional guidance. [Annex VII](#) contains a sample press release, which can be adapted as necessary.

| Person | Telephone # | Email |
|---|----------------|--|
| Elizabeth Vanacore, PRSN CARIBE WAVE Chair | 1-787-833-8433 | elizabeth.vanacore@upr.edu |
| Silvia Chacón-Barrantes, CARIBE EWS Chair; SINAMOT Costa Rica | 506-830-96690 | silviach@una.ac.cr |

| Person | Telephone # | Email |
|---|----------------------------------|--|
| Dan McNamara Chair WG 1 Monitoring and Detection Systems | 303-273-8550 | mcnamara@usgs.gov |
| Nicolas Arcos Chair WG 2 Hazard Assessment | 1-303-497-3158 | nicolas.arcos@noaa.gov |
| Emilio Talavera Chair WG 3 Tsunami Related Services | 505-224-92761 ext. 102 | emilio.talavera@gf.ineter.gob.ni |
| Christa von Hillebrandt-Andrade Chair WG 4 Preparedness, Readiness and Resilience Manager NOAA/CTWP | 1-787-249-8307 | christa.vonh@noaa.gov |
| Alberto López Ivan Wong Matt Hornbach Richard D Koehler Scientific Experts – Jamaica Scenario | | alberto.lopez3@upr.edu wong@lettisci.com mhornback@smu.edu rkoehler@unr.edu |
| Maria Ana Viana Baptista Scientific Expert – Portugal Scenario | | mavbaptista@gmail.com |
| Ronald Jackson Director CDEMA | 246-425-0386 | ronald.Jackson@cdema.org |
| Claudia Herrera Melgar Executive Secretary CEPREDENAC | 502-2390-0200 | iajche@cepredenac.org memendez@cepredenac.org |
| Major Roselly Pepin Deputy Chief EMIZ Antilles | 596-59-05-81 | roselly.pepin@martinique.pref.gouv.fr |
| Bernardo Aliaga Technical Secretary UNESCO | 33-1-45683980 | b.aliaga@unesco.org |
| Charles McCreery Cindi Preller PTWC | 1-808-689-8207 1-808-725-6306 | charles.mccreery@noaa.gov cindi.preller@noaa.gov |
| David Wald, USGS Scientific Expert – Earthquake Impact Products | 1-303-273-8441 | wald@usgs.gov |
| Alison Brome Programme Officer for Coastal Hazards and CTIC | 246-243-7626 | a.brome@unesco.org |

Table 6. Members of the CARIBE WAVE 20 Task Team

Social media has been recognized as a very important means for disseminating tsunami information and products. CARIBE-EWS countries and territories are encouraged to share information on the exercise Caribe Wave 20 through this medium. Furthermore, it is requested that the hashtag **#CARIBEWAVE**, be used by the participants before and during the exercise.

4.7 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 misinterpretation by media or the public.

5. POST-EXERCISE EVALUATION

Each ICG/CARIBE-EWS Member State and territory is requested to provide feedback on the exercise. This feedback will assist the evaluation of Caribe Wave 20 and the development of subsequent exercises. It will also help response agencies to document lessons learned and lead to improvements of the national systems. To facilitate feedback, the online evaluation survey can be accessed at the following link: <https://www.surveymonkey.com/r/CaribeWave20>. The deadline for completing the evaluation is **3 April 2020**.

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ANNEX I

STANDARD OPERATING PROCEDURES

END-TO-END TSUNAMI WARNING for Tsunami Warning Focal Points and Tsunami Emergency Response Operations– AN OVERVIEW

September 2008 (updated 2012)

UNESCO/IOC Tsunami Unit (Paris) with ITIC (Hawaii)

This overview summarizes an end-to-end tsunami warning. In event time, it covers activities for monitoring, detection, threat evaluation and warning, alert dissemination, emergency response, and public action. An effective tsunami warning system is achieved when all people in vulnerable coastal communities are prepared to respond appropriately and in a timely manner upon recognizing that a potential destructive tsunami may be approaching. Meeting this challenge requires round-the-clock monitoring with real-time data streams and rapid alerting, as well as prepared communities, a strong emergency management system, and close and effective cooperation and coordination between all stakeholders. To warn without preparing, and further, to warn without providing a public safety message that is understandable to every person about what to do and where to go, is clearly useless. While alerts are the technical trigger for warning, any system will ultimately be judged by its ability to save lives, and by whether people move out of harm's way before a big tsunami hits. Towards these ends, education and awareness are clearly essential activities for successful early warning.

An end-to-end tsunami warning involves a number of stakeholders who must be able to work together and with good understanding of each other's roles, responsibilities, authorities, and action during a tsunami event. Planning and preparedness, and practicing in advance of the real event, helps to familiarize agencies and their staff with the steps and decision-making that need to be carried out without hesitation in a real emergency. Tsunami resilience is built upon a community's preparedness in tsunami knowledge, planning, warning, and awareness. All responding stakeholders should have a basic understanding of earthquake and tsunami science, and be familiar with warning concepts, detection, threat evaluation, and alerting methods, and emergency response and evacuation operations. The key components, requirements, and operations to enable an effective and timely warning and evacuation are covered in the following topics of end to-end tsunami warning:

- Tsunami Science and Hazard Assessment,
- Tsunami Risk Reduction Strategy and community-based disaster risk management,
- Stakeholders, Roles & Responsibilities, and Standard Operating Procedures (SOPs) and their Linkages,
- End-to-end Tsunami Response and SOPs,
- Tsunami Warning Focal Point (TWFP) and National Tsunami Warning Centre (NTWC) operations,
- Tsunami Emergency Response (TER) operations,
- Public Alerting,
- The Role of Media,
- Evacuation and Signage,
- Use of Exercises to Build Preparedness,
- Awareness and Education.

To ensure the long-term sustainability of a tsunami warning system, it should be noted that:

- Tsunamis should be part of an all-hazards (natural and anthropogenic) strategy.
- System redundancy is required to ensure reliability.
- Clearly understood TWFP/TWC and TER public safety messages are essential. Media partnerships for warning, as well as preparedness, are important.
- Awareness must be continuous forever. Tsunamis are low frequency, high impact natural disasters that are also unpredictable.
- National, provincial, and local Tsunami Coordination Committees ensure stakeholder coordination and implementation of the end-to-end tsunami warning.

For specific details and algorithms and for actual descriptions of tsunami warning and emergency response operations, including data networks and data collection, methods of evaluation and criteria for action, products issued and methods of communication of alerts, and evacuation, original source references or plans should be consulted. These are the high-level system descriptions or concepts of operation, agency operations manuals, and user's guides of each regional and national system.

Basic references providing a comprehensive summary on tsunami warning centre and emergency response operations considerations are:

- ITIC IOC Manual on Tsunami Warning Centre Standard Operating Procedures (Guidance and Samples), version 2010 (distributed as part of 2013 SOP capacity building).
- ITIC IOC Manual on Tsunami Emergency Response Standard Operating Procedures (Guidance and Samples), version 2010 (distributed as part of 2013 SOP capacity building)

For a description of the Caribbean tsunami warning system, consult the User's guide (for) the Pacific Tsunami Warning Center Enhanced Products for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE-EWS) (version 2.0 October, 2017). This document is available at UNESDOC (<https://unesdoc.unesco.org/ark:/48223/pf0000259725>) and on the website of the CTWP (<http://caribewave.info>).

TRAINING

In order to assist countries in strengthening their warning systems, the IOC has compiled and developed a Training Manual in close partnership with ITIC. It contains references, best practices, decision support tools, and guidance materials summarizing key components, requirements, and operations to enable an effective and timely warning and evacuation against tsunamis.

The Manual includes session plans, lectures (in PowerPoint), exercises, and multimedia materials. Together, they represent part of the IOC's collaborative contribution to national capacity building and training on end-to-end tsunami warning and tsunami standard operating procedures to countries of the Indian Ocean, Pacific, Southeast Asia, and the Caribbean. For more information, please contact Laura Kong, Director of ITIC (laura.kong@noaa.gov), Bernardo Aliaga, Technical Secretary, UNESCO/IOC (b.aliaga@unesco.org), Christa von Hillebrandt, US NWS Caribbean Tsunami Warning Program (christa.vonh@noaa.gov), or Alison Brome, Programme Officer for Coastal Hazards and CTIC (a.brome@unesco.org). The tables presented below can be used as a guide for preparing the timeline for the exercise.

| Tsunami Evacuation Responsibilities Checklist for Government Disaster Response Agencies | | |
|--|------------------------------|--------------|
| This is a simple checklist to use when doing an evacuation. List the agency(ies) / department(s) responsible for actions and recommended number of minutes (e.g. +10 minutes) after earthquake origin time. | Earthquake Origin Time: 0000 | |
| | Agency(ies) / Department(s): | Time (mins): |
| Strong and/or long duration earthquake is felt (vary depending distance from source) | _____ | ± |
| Tsunami message received from tsunami service provider (NTWCs) | _____ | ± |
| Call in staff | _____ | ± |
| Activate emergency centers / Notify public safety agencies | _____ | ± |
| Coordinate sounding of public sirens and alarm notifications | _____ | ± |
| Initiate media notifications and evacuation announcements | _____ | ± |
| Initiate evacuation of people away from coast (Tsunami Evacuation Maps) | _____ | ± |
| Put boats/ships out to sea if wave impact time permits | _____ | ± |
| Setup road-blocks and evacuation routes | _____ | ± |
| Guide people through traffic points to shelter | _____ | ± |
| Initiate recall of disaster response workers | _____ | ± |
| Open and operate refuge centres | _____ | ± |
| Prepare to start electrical generators | _____ | ± |
| If your facility is located in a tsunami evacuation zone: -Prepare to shut off utilities (e.g. electrical, gas, water) -Protect key equipment (e.g. computers) -Remove key documents (e.g. financial, personal information) | _____ | ± |
| Determine if tsunami has caused coastal damage / injuries and the need to initiate search and rescue operations | _____ | ± |
| Determine when to declare the “all clear” | _____ | ± |
| Prepare for post tsunami impact operations | _____ | ± |
| Do roll call for workers ____ and volunteers | _____ | ± |

Table I-1. Table to be used as a guide the timing, actions, authority, communication means and target audiences for a tsunami event.

ANNEX II

**GUIDELINES: HOW TO PREPARE, CONDUCT AND EVALUATE
A COMMUNITY-BASED TSUNAMI RESPONSE EXERCISE**

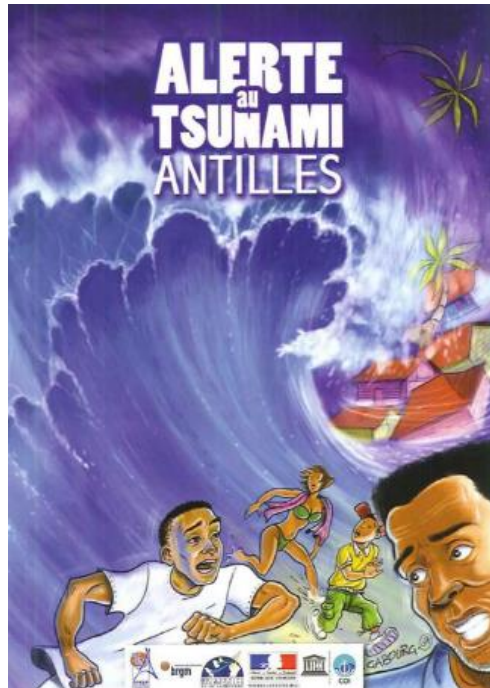


Figure II-1. Cover page of the *Methodological guidelines: How to prepare, conduct and evaluate a community-based tsunami response exercise (in review)*.

Available in English, Spanish, and French.

(http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=19139)

This guide which is under final review is recommended for Member States to consider Caribe Wave Exercises. It provides community leaders to conduct and evaluate a tsunami evacuation exercise with a methodology and tools. It is particularly relevant for bodies that would be directly exposed to the effects of a tsunami such as local government, schools, associations, and businesses. The guide is divided into three chapters where it focuses on the knowledge of the tsunami as a hazard, on establishing multi-annual program of exercises, and on the preparedness for conducting a tsunami evacuation exercises. A progressive approach is suggested to allow the guide's target audience to develop multi-annual exercises. This can be done by progressing relatively simply designed exercises that is crucial for selecting the most suited type of exercise to achieve the objectives set, while taking account of a community's existing level of readiness. The first phase is to conduct a tabletop exercise, this is appropriate if the objective is to raise awareness among a teaching team within a school setting about related dangers caused by a tsunami, and to teach people about the counter-measures they should take to make their classroom safe. The second phase takes account of lessons learned during the tabletop exercise and enables a partial tsunami evacuation exercise to be developed. In the third phase, community leaders could design an exercise in which the objective would be for a school community to evacuate to a predetermined safe location in less than 15 minutes. This guide aims to encourage a shared culture of exercises to develop between the municipal authorities tasked with ensuring the safety of those living in their area and community leaders – stakeholders in the social and economic life of the area.

ANNEX III

TSUNAMI SOURCE SCENARIOS DESCRIPTION

The following scenarios use a standard format to define the tsunami sources as described in the [Figure III-1](#) below. Each fault segment is defined by 4 corner points where point A is the lower left corner of the fault plane. Line segment A-D indicates the down dip bottom rectangular source area, whereas line B-C is the top portion of the rupture plane that is nearest to the sea-floor surface. Letters W and L represents the width and length of the plane, respectively. Letter W_{ap} represents apparent width and applies to the dimensions when observed the fault plane in map view.

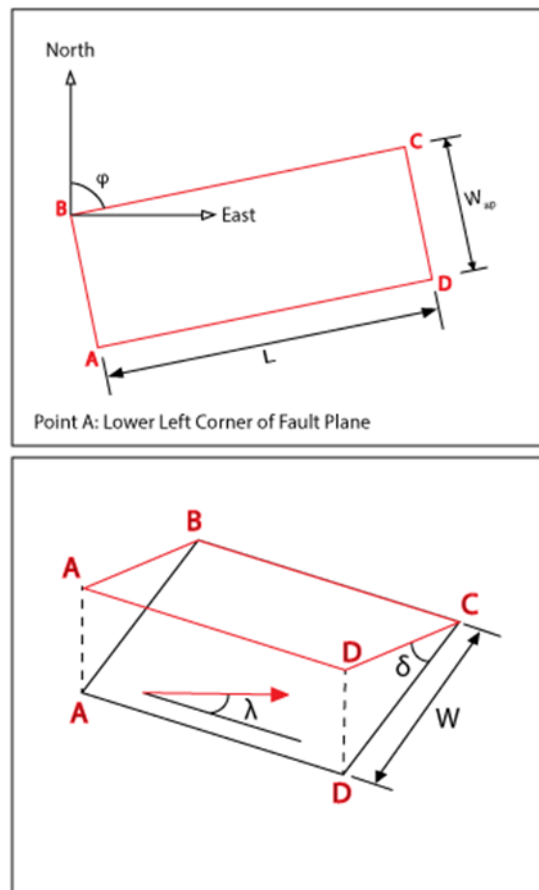


Figure III-1. Schematic of the standard used to describe all fault planes in the Caribe Wave Exercise scenarios.

Jamaica Earthquake Scenario

The Jamaica earthquake scenario consists of a rupture of a fault segment along the Enriquillo-Plantain Garden Fault with hypocentre at:

- Name of Scenario: Caribe Wave 20 Jamaica Scenario
- EQ Origin Time: 1400 UTC
- Hypocentre Longitude: 75.37°W
- Hypocentre Latitude: 18.20°N
- Hypocentre Depth (km): 25 km
- EQ Magnitude (Mw): 8.0
- Slip (m): 6
- Shear modulus: 3.3x10¹¹ dyne/cm²
- Seismic Moment: 0.1188E+29 dyne-cm

| Corner Point A | |
|----------------|---------|
| Latitude | 18.36° |
| Longitude | -73.97° |
| Depth (km) | 34.51 |
| Corner Point B | |
| Latitude | 18.31° |
| Longitude | -73.96° |
| Depth (km) | 15.49 |

| Corner Point C | |
|----------------|---------|
| Latitude | 18.04° |
| Longitude | -76.79° |
| Depth (km) | 15.49 |
| Corner Point D | |
| Latitude | 18.10° |
| Longitude | -76.79° |
| Depth (km) | 34.51 |

| Other Fault Parameters | |
|---|---------|
| Strike (ϕ phi) | 264.45° |
| Dip (δ delta) | 72° |
| Rake (λ lambda) | 0° |
| Length (km) | 300 |
| Width (W in km) | 20 |
| Width in Map View (km) [$W_{ap} = W * \cos(\delta)$] | 6.18 km |

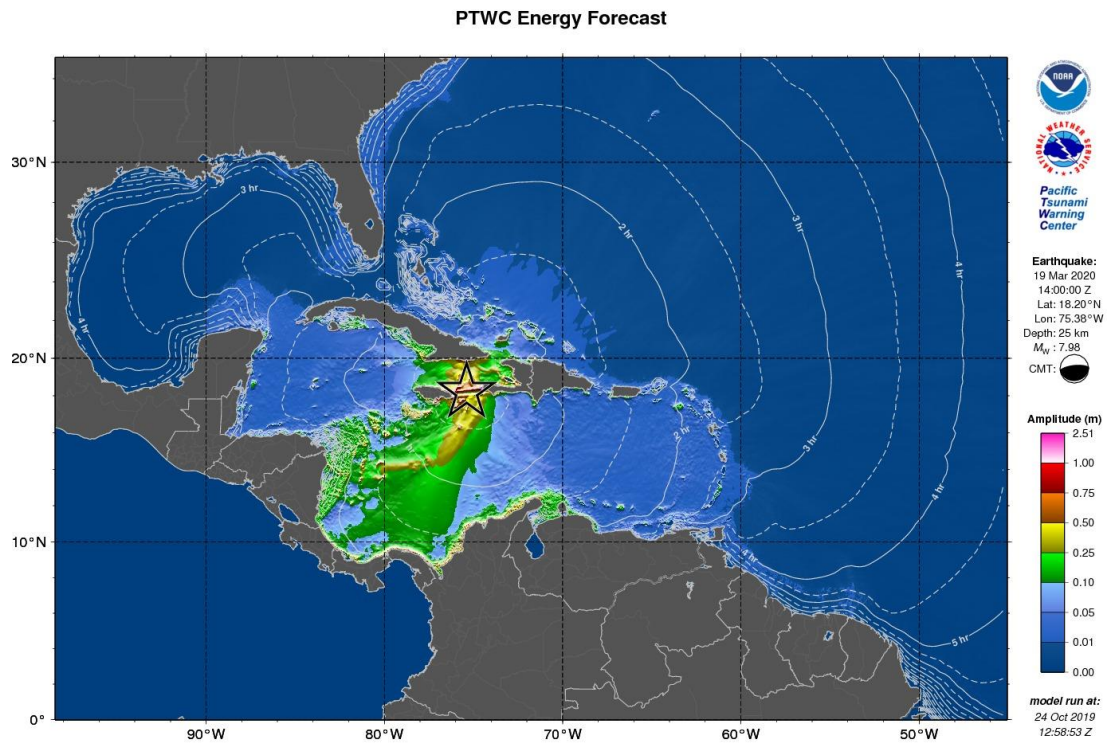


Figure III-2. RIFT maximum amplitude map for the Caribbean and Adjacent Regions for the Jamaica scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centres.

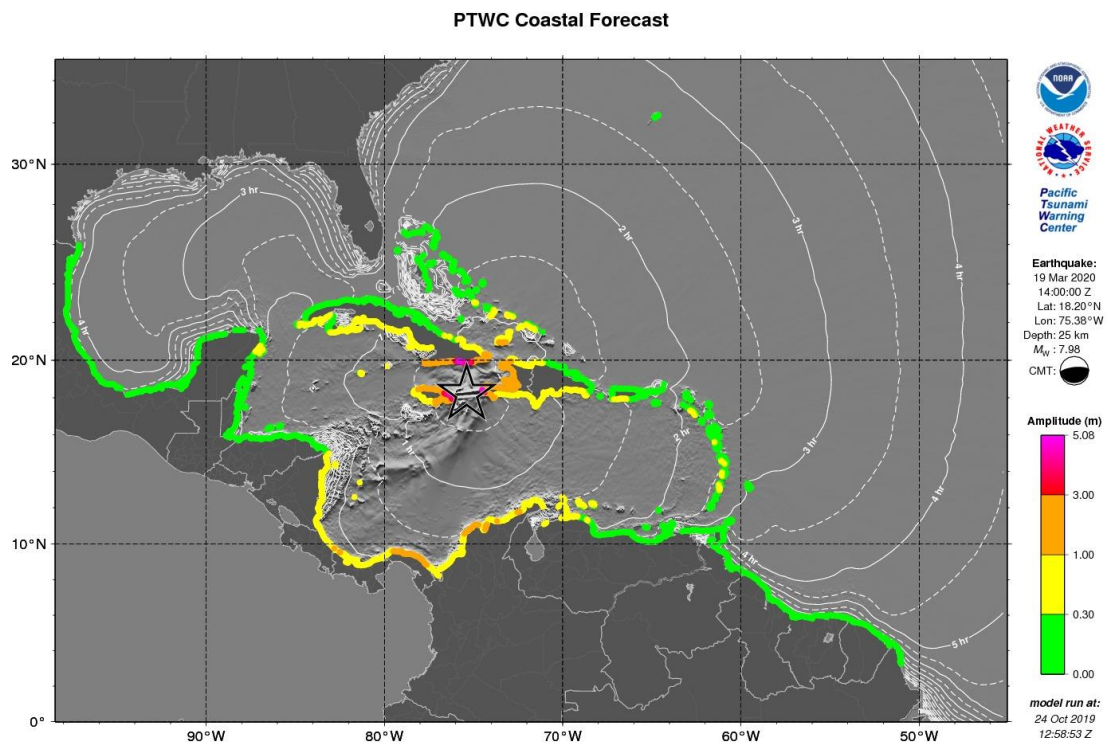


Figure III-3. RIFT coastal tsunami amplitude map for the Caribbean and Adjacent Regions for the Jamaica scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami.

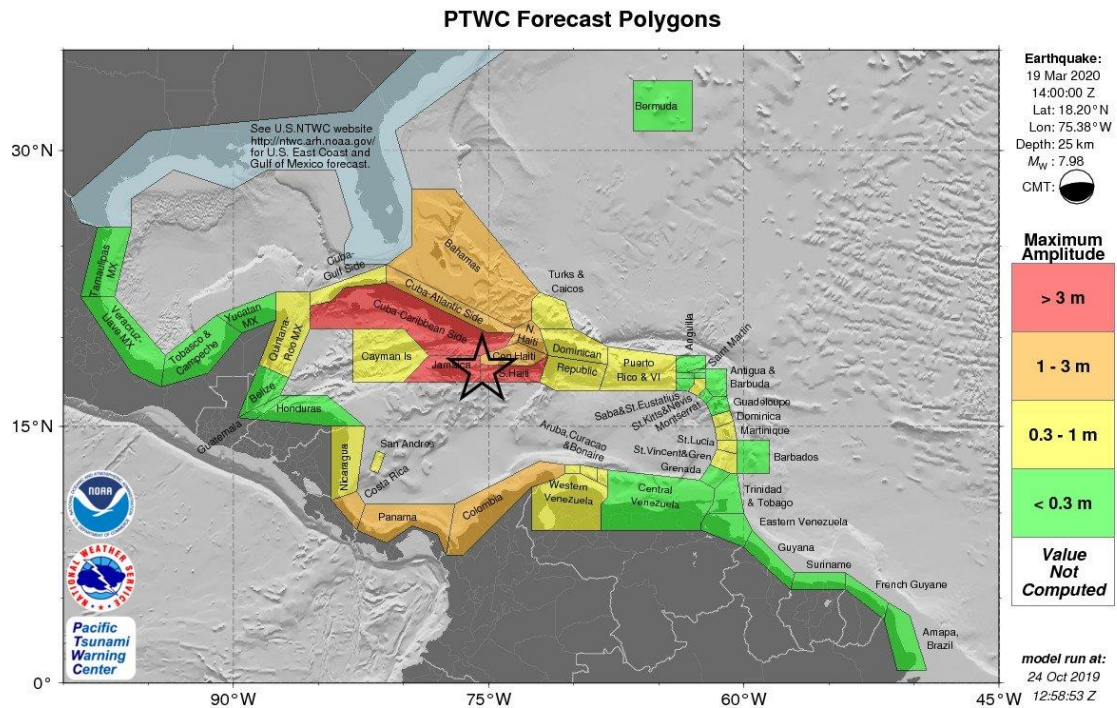


Figure III-4. RIFT forecast polygons for the Caribbean and Adjacent Regions for the Jamaica scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centres.

Portugal Earthquake Scenario

The Portugal earthquake scenario consists of a rupture 270 km off the coast with hypocentre at:

- Name of Scenario: Caribe Wave 20 Portugal Scenario
- EQ Origin Time: 1400 UTC
- Hypocentre Longitude: 10.75°W
- Hypocentre Latitude: 36.04°N
- Hypocentre Depth (km): 5 km
- EQ Magnitude (M_w): 8.5
- Strike (ϕ phi): 345°
- Dip (δ delta): 40°
- Slip (m): 90
- Length (km): 200
- Width (W in km): 80
- Shear modulus: 3.3x10¹¹ dyne/cm²

PTWC Energy Forecast

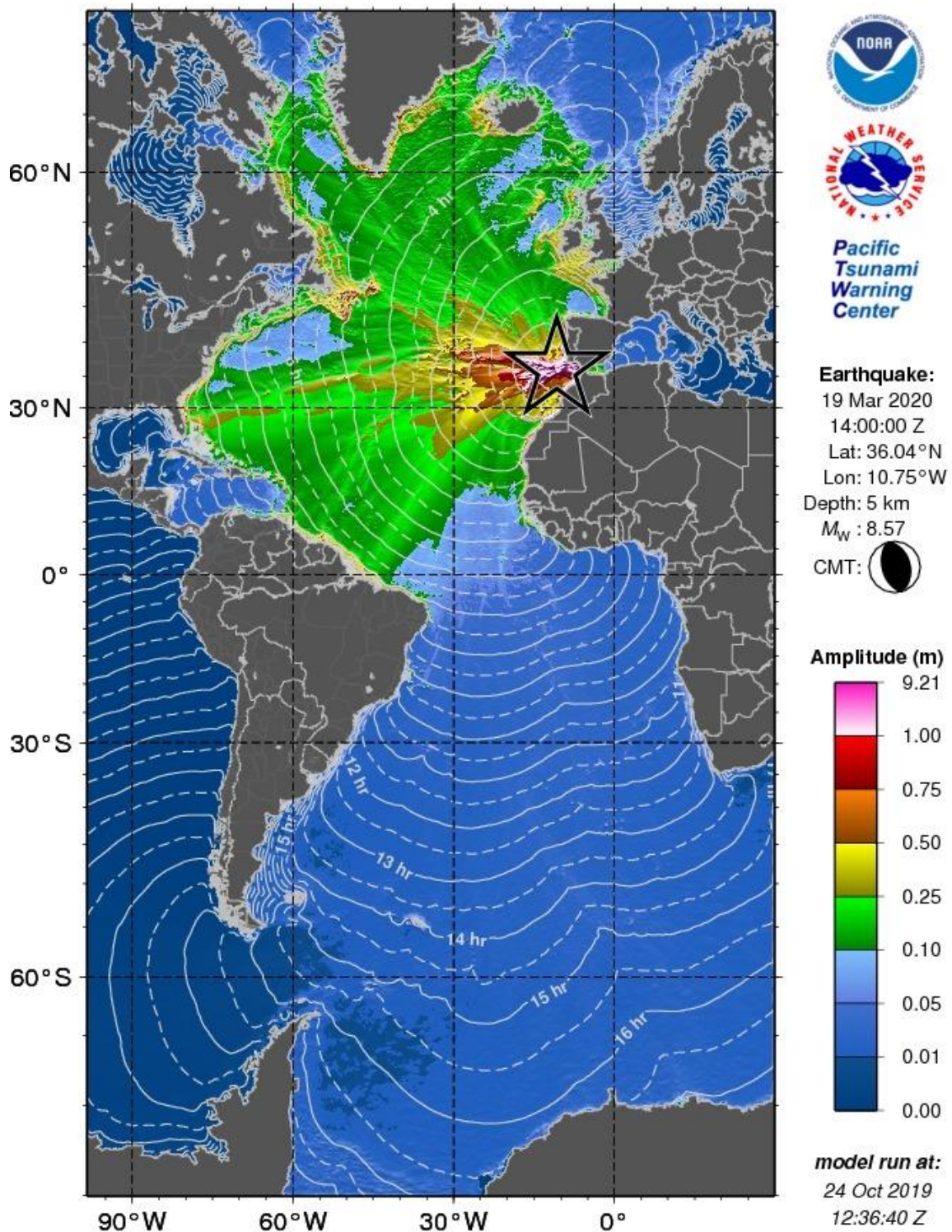


Figure III-5. RIFT maximum amplitude map for the Caribbean and Adjacent Regions for the Portugal scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centres.

PTWC Coastal Forecast

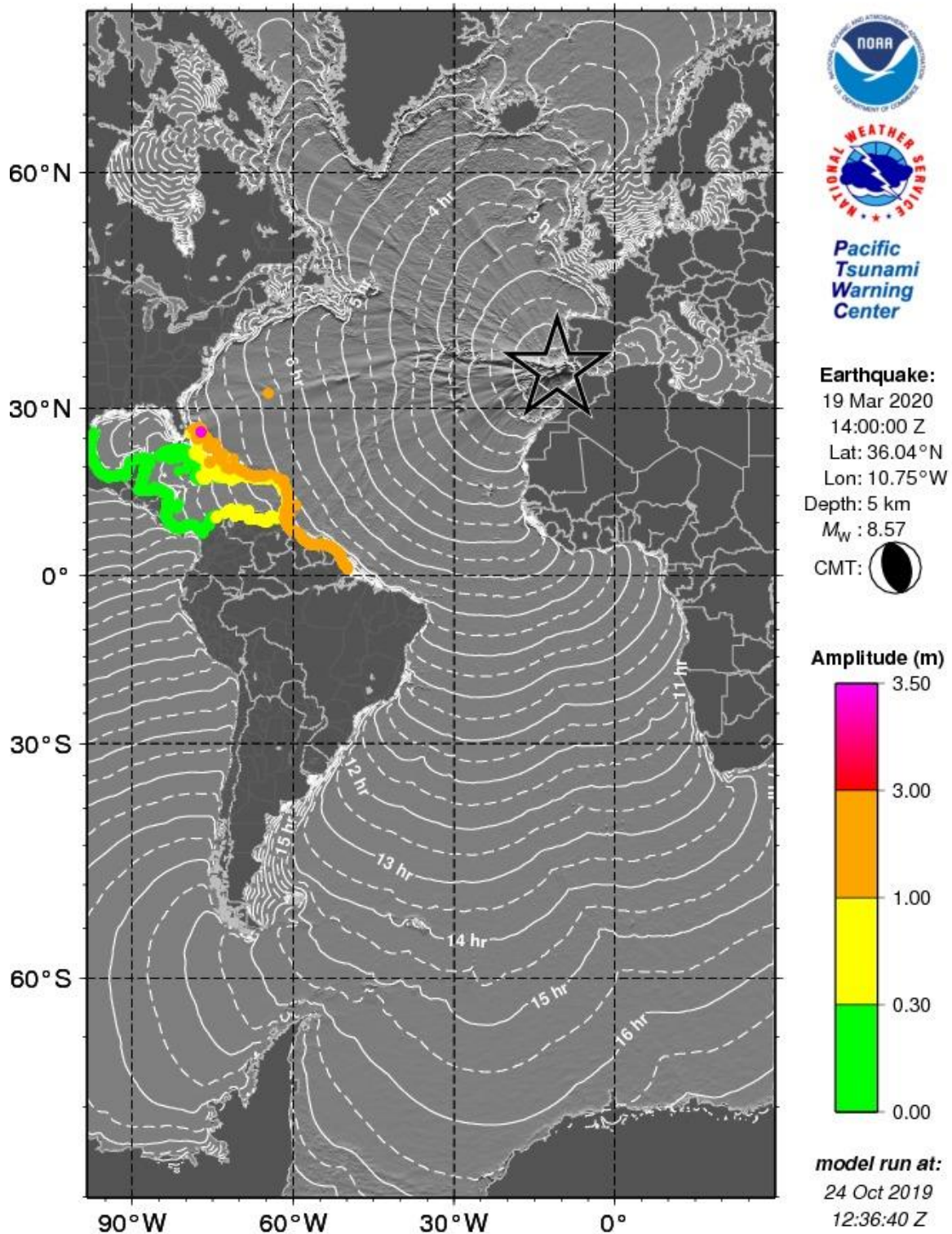


Figure III-6. RIFT coastal tsunami amplitude map for the Caribbean and Adjacent Regions for the Portugal scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami.

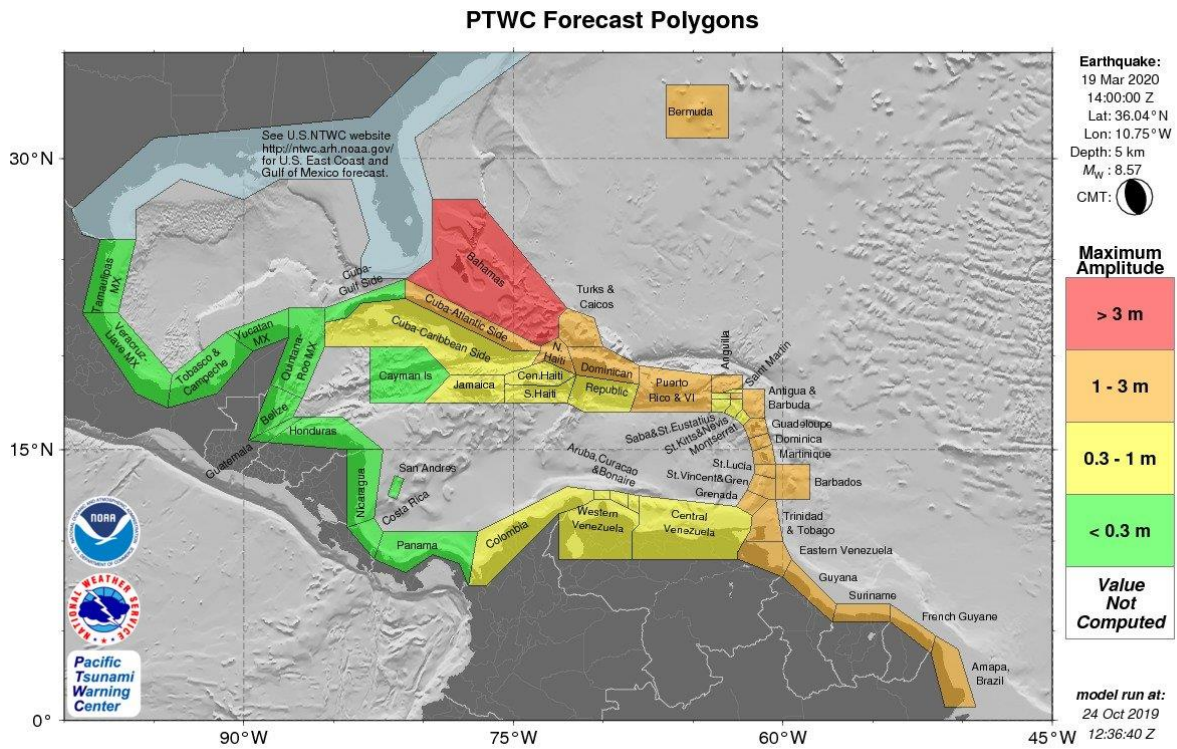


Figure III-7. RIFT forecast polygons for the Caribbean and Adjacent Regions for the Portugal scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centres.

ANNEX IV

EARTHQUAKE IMPACT SCENARIOS

When planning for a tsunami it is important to also take into consideration the potential earthquake impact in areas close to the source, as these impacts can affect tsunami response and increase the tsunami impact by hindering evacuation and contributing debris to be carried by the waves. For earthquake impact, the USGS has developed ShakeMap and the Prompt Assessment of Global Earthquakes for Response (PAGER). The main purpose of ShakeMap is to display the levels of ground shaking produced by the earthquake. The ground shaking events levels in the region are studied depending on the magnitude of the earthquake, the distance from the earthquake source, rock and soil behavior in the region, and propagation of the seismic waves through the Earth's crust. Based on the output of ShakeMap, PAGER estimates the population exposed to earthquake shaking, fatalities and economic losses.

Earthquake Event

The input information for ShakeMap and PAGER are the four corners of the boxes from the fault plane and the depths at each of these four corners. For the case of Caribe Wave 20, the fault plane is represented by one segment for each of the scenarios. The Jamaica fault plane is 300 km long and 20 km wide, and the Portugal fault plane is 200 km long and 80 km wide.

Figures [IV-1](#) and [IV-2](#), show ShakeMap and PAGER outputs for the Caribe Wave 20 Jamaica earthquake scenario.

For the Jamaica scenario, the ShakeMap show intensities up to VIII on the Mercalli Modified Scale ([Figure IV-1](#)). The strongest ground shaking is predicted near the East coast of Jamaica and Southwest of Haiti.

According to PAGER, ([Figure IV-2](#)) the Caribe Wave 20 simulated earthquakes would produce earthquake shaking red alert for Jamaica scenario. Fatalities are probable and economic losses might exceed the gross domestic product (GDP) of Jamaica.

Regarding population exposed to earthquake shaking, it is estimated that approximately 1,934k people for Jamaica scenario would be exposed to Modified Mercalli intensities from III up to VIII (according to pager).

Jamaica Earthquake Scenario

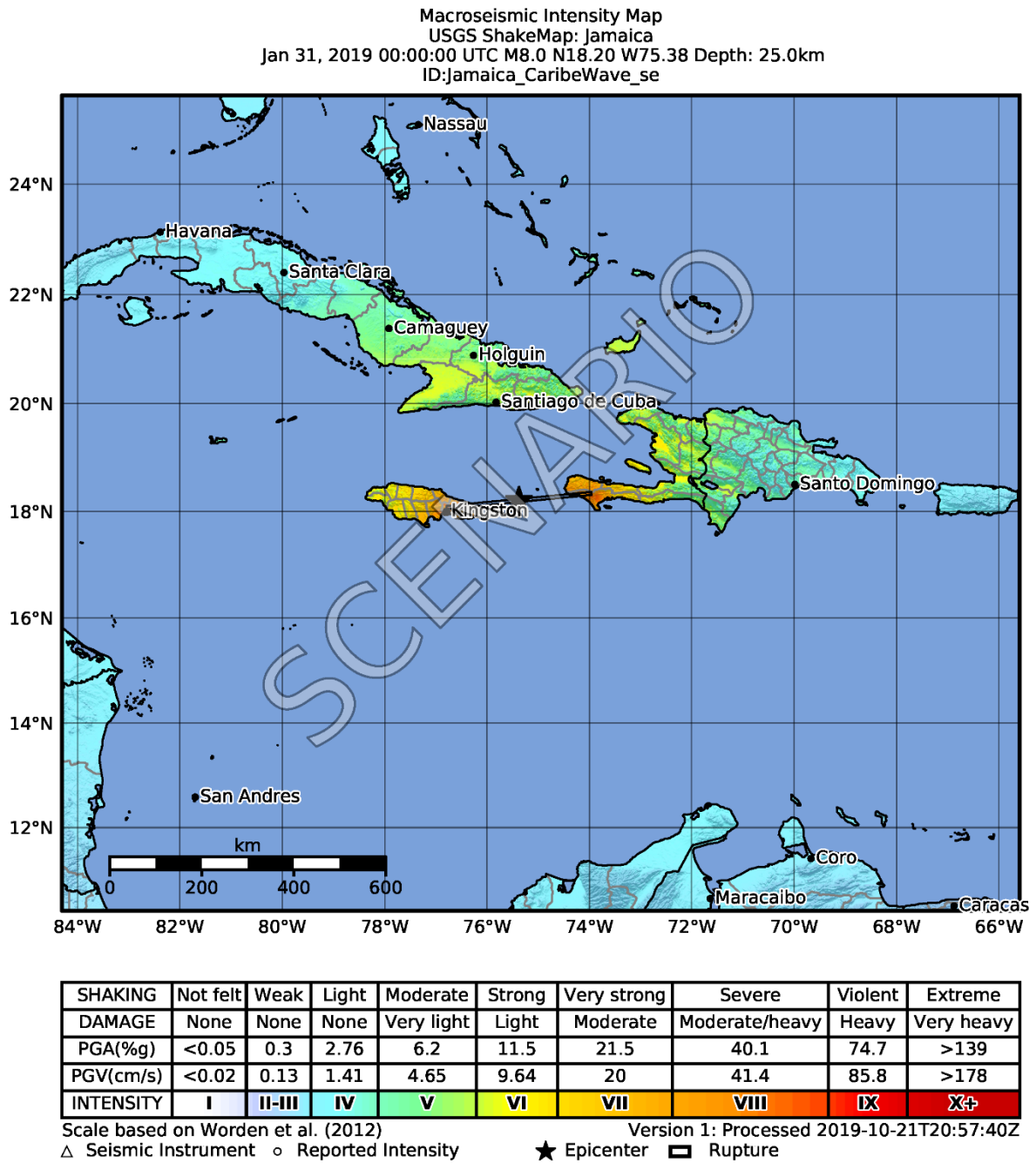


Figure IV-1. ShakeMap output for the CARIBE WAVE 20 Jamaica earthquake scenario (USGS).



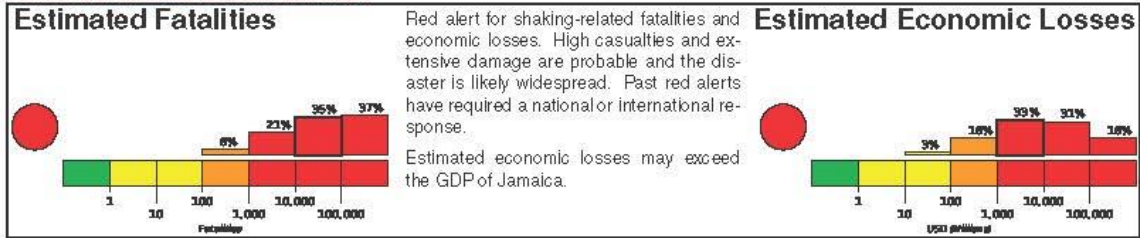
Earthquake Shaking **Red Alert**



PAGER
Version 11

M 8.0, Scenario Jamaica

Origin Time: 2019-01-31 00:00:00 UTC (Wed 19:00:00 local)
Location: 18.2030° N 75.3760° W Depth: 25.0 km
FOR TSUNAMI INFORMATION, SEE: tsunami.gov



Estimated Population Exposed to Earthquake Shaking

| | | | | | | | | | | |
|---|-----------------------|----------|---------|----------|----------|-------------|------------|------------|----------|----------|
| ESTIMATED POPULATION EXPOSURE (k=x1000) | —* | 11,836k* | 17,632k | 15,621k | 6,214k | 1,455k | 1,934k | 128k | 0 | |
| ESTIMATED MODIFIED MERCALLI INTENSITY | I | II-III | IV | V | VI | VII | VIII | IX | X+ | |
| PERCEIVED SHAKING | Not felt | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme | |
| POTENTIAL DAMAGE | Resistant Structures | None | None | None | V. Light | Light | Moderate | Mod./Heavy | Heavy | V. Heavy |
| | Vulnerable Structures | None | None | None | Light | Moderate | Mod./Heavy | Heavy | V. Heavy | V. Heavy |

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though resistant structures exist. The predominant vulnerable building types are wood and rubble/field stone with cement construction.

Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|------------|------------|------|------------|----------------|
| 1988-05-09 | 118 | 4.5 | VI(10k) | 0 |
| 1976-02-19 | 244 | 5.9 | VII(5k) | 1 |
| 1994-03-02 | 331 | 5.4 | VII(47k) | 4 |

Selected City Exposure

from GeoNames.org

| MMI | City | Population |
|------|------------------|------------|
| IX | Half Way Tree | 19k |
| VIII | Kingston | 938k |
| VII | New Kingston | 584k |
| VII | Mona Heights | 3k |
| VII | Constant Spring | 13k |
| VII | Chantal | 2k |
| V | Santo Domingo | 2,202k |
| IV | Barranquilla | 1,380k |
| III | Havana | 2,164k |
| III | Maracaibo | 2,225k |
| III | Caracas | 3,000k |

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. <http://earthquake.usgs.gov/data/pager/>

bold cities appear on map.

Event ID: us.Jamaica.CaribeWave.se

Figure IV-2. PAGER output for CARIBE WAVE 20 Jamaica earthquake scenario (USGS).

ANNEX V

TWC DUMMY (START OF EXERCISE) MESSAGES

PTWC

WECA41 PHEB 191400

TSUCAX

TEST...INITIAL DUMMY START OF EXERCISE MESSAGE...TEST

NWS PACIFIC TSUNAMI WARNING CENTER/NOAA/NWS

ISSUED AT 1400Z 19 MAR 2020

...TEST... CARIBE WAVE 20 TSUNAMI EXERCISE DUMMY MESSAGE.

REFER TO THE EXERCISE HANDBOOK. THIS IS AN EXERCISE ONLY. TEST...

THIS MESSAGE IS BEING USED TO START THE CARIBE WAVE 20
TSUNAMI EXERCISE AND TEST COMMUNICATIONS WITH UNESCO IOC CARIBE
EWS NTWCS AND TWFPS. THIS WILL BE THE ONLY EXERCISE MESSAGE
BROADCAST FROM THE PACIFIC TSUNAMI WARNING CENTER EXCLUDING
SPECIAL EMAIL MESSAGES DISCUSSED IN THE HANDBOOK. THE HANDBOOK
IS AVAILABLE AT THE WEB SITE CARIBEWAVE.INFO. THE EXERCISE
PURPOSE IS TO EXERCISE AND EVALUATE THE CARIBE EWS TSUNAMI
WARNING SYSTEM.

\$\$

ANNEX VI

TWC EXERCISE MESSAGES

Jamaica Scenario

The following messages created for the Caribe Wave 20 tsunami exercise are representative of the official standard products issued by the PTWC for a magnitude 8.0 earthquake and subsequent tsunami originating in the Enriquillo-Plantain Garden Fault Zone. During a real event, the PTWC would also post the text products on tsunami.gov. The alerts would persist longer during a real event than is depicted in this exercise.

PTWC Message #1

ZCZC
WECA41 PHEB 191407
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1407 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 7.9
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 7.9 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON THE PRELIMINARY EARTHQUAKE PARAMETERS... WIDESPREAD HAZARDOUS TSUNAMI WAVES ARE POSSIBLE.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. HAZARDOUS TSUNAMI WAVES FROM THIS EARTHQUAKE ARE POSSIBLE WITHIN THE NEXT THREE HOURS ALONG

SOME COASTS OF

CUBA... HAITI... CAYMAN ISLANDS... BAHAMAS... JAMAICA...
 TURKS N CAICOS... DOMINICAN REP... COLOMBIA... ARUBA...
 PUERTO RICO... BONAIRE... US VIRGIN IS... SAN ANDRES
 PROVID... PANAMA... MEXICO... CURACAO... SABA...
 HONDURAS... SAINT KITTS... BR VIRGIN IS... SINT
 EUSTATIUS... VENEZUELA... MONTSERRAT... SINT MAARTEN...
 COSTA RICA... GUADELOUPE... ANGUILLA... DOMINICA... SAINT
 LUCIA... MARTINIQUE... SAINT VINCENT... SAINT MARTIN...
 SAINT BARTHELEMY... BARBUDA... GRENADA... ANTIGUA...
 BERMUDA... BARBADOS AND NICARAGUA

TEST... RECOMMENDED ACTIONS ...TEST

-
- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
 - * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

-
- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THE REGION IDENTIFIED WITH A POTENTIAL TSUNAMI THREAT. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|----------------|-------------|-------|-----------|-------|
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 1422 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 1424 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 1433 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 1442 | 03/19 |
| CAYMAN BRAC | CAYMAN ISLANDS | 19.7N | 79.9W | 1446 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 1448 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 1451 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 1454 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 1454 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 1458 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 1502 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 1502 | 03/19 |
| GRAND CAYMAN | CAYMAN ISLANDS | 19.3N | 81.3W | 1502 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 1505 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 1510 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 1511 | 03/19 |

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| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 1513 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 1522 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 1522 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 1526 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 1527 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 1529 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 1532 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 1532 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 1535 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 1535 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 1537 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 1538 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 1541 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 1541 | 03/19 |
| SAN ANDRES | SAN ANDRES PROVI | 13.4N | 81.4W | 1544 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 1544 | 03/19 |
| PROVIDENCIA | SAN ANDRES PROVI | 12.6N | 81.7W | 1547 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 1548 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 1549 | 03/19 |
| ALIGANDI | PANAMA | 9.2N | 78.0W | 1550 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 1558 | 03/19 |
| PUERTO CARRETO | PANAMA | 8.8N | 77.6W | 1558 | 03/19 |
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 1603 | 03/19 |
| PUERTO CORTES | HONDURAS | 15.9N | 88.0W | 1603 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 | 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 1611 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 1611 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 1612 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 1612 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 | 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 1617 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 1620 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 | 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 | 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 | 03/19 |
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 1634 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 1638 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 1639 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 1643 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 1644 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 1645 | 03/19 |

| | | | | | |
|--------------|--------------|-------|-------|------|-------|
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 1650 | 03/19 |
| TRUJILLO | HONDURAS | 15.9N | 86.0W | 1650 | 03/19 |
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 1650 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 1653 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 1656 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

\$\$

NNNN

PTWC Message #2

ZCZC
WECA41 PHEB 191415
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 2...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1415 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THE EARTHQUAKE MAGNITUDE IS REVISED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON THE PRELIMINARY EARTHQUAKE PARAMETERS... WIDESPREAD HAZARDOUS TSUNAMI WAVES ARE POSSIBLE.

TEST... TSUNAMI THREAT FORECAST...UPDATED ...TEST

* THIS IS A TEST MESSAGE. HAZARDOUS TSUNAMI WAVES FROM THIS

EARTHQUAKE ARE POSSIBLE WITHIN THE NEXT THREE HOURS ALONG
SOME COASTS OF

CUBA... HAITI... CAYMAN ISLANDS... BAHAMAS... JAMAICA...
TURKS N CAICOS... DOMINICAN REP... COLOMBIA... ARUBA...
PUERTO RICO... BONAIRE... US VIRGIN IS... SAN ANDRES
PROVID... PANAMA... MEXICO... CURACAO... SABA...
HONDURAS... SAINT KITTS... BR VIRGIN IS... SINT
EUSTATIUS... VENEZUELA... MONTSERRAT... SINT MAARTEN...
COSTA RICA... GUADELOUPE... ANGUILLA... DOMINICA... SAINT
LUCIA... MARTINIQUE... SAINT VINCENT... SAINT MARTIN...
SAINT BARTHELEMY... BARBUDA... GRENADA... ANTIGUA...
BERMUDA... BARBADOS... NICARAGUA AND BELIZE

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR
THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND
INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH
THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL
AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW
INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF
THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THE REGION
IDENTIFIED WITH A POTENTIAL TSUNAMI THREAT. ACTUAL ARRIVAL
TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE
LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN
WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|----------------|-------------|-------|------------|
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 1422 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 1424 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 1433 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 1442 03/19 |
| CAYMAN BRAC | CAYMAN ISLANDS | 19.7N | 79.9W | 1446 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 1448 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 1451 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 1454 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 1454 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 1458 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 1502 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 1502 03/19 |
| GRAND CAYMAN | CAYMAN ISLANDS | 19.3N | 81.3W | 1502 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 1505 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 1510 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 1511 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 1513 03/19 |

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| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 1522 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 1522 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 1526 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 1527 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 1529 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 1532 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 1532 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 1535 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 1535 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 1537 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 1538 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 1541 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 1541 | 03/19 |
| SAN ANDRES | SAN ANDRES PROVI | 13.4N | 81.4W | 1544 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 1544 | 03/19 |
| PROVIDENCIA | SAN ANDRES PROVI | 12.6N | 81.7W | 1547 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 1548 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 1549 | 03/19 |
| ALIGANDI | PANAMA | 9.2N | 78.0W | 1550 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 1558 | 03/19 |
| PUERTO CARRETO | PANAMA | 8.8N | 77.6W | 1558 | 03/19 |
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 1603 | 03/19 |
| PUERTO CORTES | HONDURAS | 15.9N | 88.0W | 1603 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 | 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 1611 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 1611 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 1612 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 1612 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 | 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 1617 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 1620 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 | 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 | 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 | 03/19 |
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 1634 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 1638 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 1639 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 1643 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 1644 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 1645 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 1650 | 03/19 |
| TRUJILLO | HONDURAS | 15.9N | 86.0W | 1650 | 03/19 |
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 1650 | 03/19 |

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|--------------|---------------|-------|-------|------|-------|
| BAIE BLANCHE | SAINTE MARTIN | 18.1N | 63.0W | 1653 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 1656 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| BELIZE CITY | BELIZE | 17.5N | 88.2W | 1713 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #3

ZCZC
WECA41 PHEB 191425
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 3...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1425 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

FORECAST TSUNAMI AMPLITUDES ARE PROVIDED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST...UPDATED ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------|--------|-------------|-----------|
|----------|--------|-------------|-----------|

| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 1422 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 1424 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 1433 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 1442 | 03/19 |
| CAYMAN BRAC | CAYMAN ISLANDS | 19.7N | 79.9W | 1446 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 1448 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 1451 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 1454 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 1454 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 1458 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 1502 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 1502 | 03/19 |
| GRAND CAYMAN | CAYMAN ISLANDS | 19.3N | 81.3W | 1502 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 1505 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 1510 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 1511 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 1513 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 1522 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 1522 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 1526 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 1527 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 1529 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 1532 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 1532 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 1535 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 1535 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 1537 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 1538 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 1541 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 1541 | 03/19 |
| SAN ANDRES | SAN ANDRES PROVI | 13.4N | 81.4W | 1544 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 1544 | 03/19 |
| PROVIDENCIA | SAN ANDRES PROVI | 12.6N | 81.7W | 1547 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 1548 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 1549 | 03/19 |
| ALIGANDI | PANAMA | 9.2N | 78.0W | 1550 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 1558 | 03/19 |
| PUERTO CARRETO | PANAMA | 8.8N | 77.6W | 1558 | 03/19 |
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 | 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 | 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 | 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 | 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 | 03/19 |
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |

| | | | | | |
|-----------------|---------------|-------|-------|------|-------|
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 1735 | 03/19 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 1751 | 03/19 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 | 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 | 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #4

ZCZC
WECA41 PHEB 191500
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 4...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1500 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TSUNAMI WAVES HAVE NOW BEEN CONFIRMED.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

* THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

* THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

* THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.

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TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

* THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|------------------|-------------|-------|------------|
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 1422 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 1424 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 1433 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 1442 03/19 |
| CAYMAN BRAC | CAYMAN ISLANDS | 19.7N | 79.9W | 1446 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 1448 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 1451 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 1454 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 1454 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 1458 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 1502 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 1502 03/19 |
| GRAND CAYMAN | CAYMAN ISLANDS | 19.3N | 81.3W | 1502 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 1505 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 1510 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 1511 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 1513 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 1522 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 1522 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 1526 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 1527 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 1529 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 1532 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 1532 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 1535 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 1535 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 1537 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 1538 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 1541 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 1541 03/19 |
| SAN ANDRES | SAN ANDRES PROVI | 13.4N | 81.4W | 1544 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 1544 03/19 |
| PROVIDENCIA | SAN ANDRES PROVI | 12.6N | 81.7W | 1547 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 1548 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 1549 03/19 |
| ALIGANDI | PANAMA | 9.2N | 78.0W | 1550 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 1558 03/19 |
| PUERTO CARRETO | PANAMA | 8.8N | 77.6W | 1558 03/19 |
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 03/19 |

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|-----------------|---------------|-------|-------|------|-------|
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 1735 | 03/19 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 1751 | 03/19 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 | 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 | 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|----------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.

* THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT
MAY BE FOUND AT WWW.TSUNAMI.GOV.

* THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF
COAST... US EAST COAST... AND THE MARITIME PROVINCES OF
CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER
MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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NNNN

PTWC Message #5

ZCZC
WECA41 PHEB 191600
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 5...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1600 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------|--------|-------------|-----------|
|----------|--------|-------------|-----------|

| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| GIBARA | CUBA | 21.1N | 76.1W | 1502 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 1502 | 03/19 |
| GRAND CAYMAN | CAYMAN ISLANDS | 19.3N | 81.3W | 1502 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 1505 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 1510 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 1511 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 1513 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 1522 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 1522 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 1526 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 1527 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 1529 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 1532 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 1532 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 1535 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 1535 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 1537 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 1538 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 1541 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 1541 | 03/19 |
| SAN ANDRES | SAN ANDRES PROVI | 13.4N | 81.4W | 1544 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 1544 | 03/19 |
| PROVIDENCIA | SAN ANDRES PROVI | 12.6N | 81.7W | 1547 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 1548 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 1549 | 03/19 |
| ALIGANDI | PANAMA | 9.2N | 78.0W | 1550 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 1558 | 03/19 |
| PUERTO CARRETO | PANAMA | 8.8N | 77.6W | 1558 | 03/19 |
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 | 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 | 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 | 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 | 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 | 03/19 |
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 1735 | 03/19 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 1751 | 03/19 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 | 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 | 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

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TEST... TSUNAMI OBSERVATIONS ...TEST

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| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOX | | | |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

* THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.

* THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.

* THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.

* THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #6

ZCZC
WECA41 PHEB 191700
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 6...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1700 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
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TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

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| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------|--------|-------------|-----------|
|----------|--------|-------------|-----------|

| | | | | | |
|-----------------|---------------|-------|-------|------|-------|
| COZUMEL | MEXICO | 20.5N | 87.0W | 1600 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 1602 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 1602 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 1608 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 1609 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 1610 | 03/19 |
| PUERTO OBALDIA | PANAMA | 8.7N | 77.4W | 1610 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 1615 | 03/19 |
| PUERTO LIMON | COSTA RICA | 10.0N | 83.0W | 1616 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 1621 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 1621 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 1622 | 03/19 |
| COLON | PANAMA | 9.4N | 79.9W | 1622 | 03/19 |
| LA HABANA | CUBA | 23.2N | 82.4W | 1624 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 1627 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 1627 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 1630 | 03/19 |
| BOCAS DEL TORO | PANAMA | 9.4N | 82.2W | 1633 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 1633 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 1635 | 03/19 |
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 1735 | 03/19 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 1751 | 03/19 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 | 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 | 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 | 03/19 |

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 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LON | | | | |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ | 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ | 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ | 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ | 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ | 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ | 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ | 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ | 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ | 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ | 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ | 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ | 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ | 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ | 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ | 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ | 2.9FT | 26 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ | 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

* THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN

ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.

* THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.

* THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.

* THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #7

ZCZC
WECA41 PHEB 191800
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 7...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1800 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------|--------|-------------|-----------|
|----------|--------|-------------|-----------|

| | | | | | |
|-----------------|--------------|-------|-------|------|-------|
| PUNTA GORDA | NICARAGUA | 11.4N | 83.8W | 1706 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 1707 | 03/19 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 1735 | 03/19 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 1751 | 03/19 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 | 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 | 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 | 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOX | | | |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ 0.7FT | 22 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ | 2.9FT | 26 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ | 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAAAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #8

ZCZC
WECA41 PHEB 191900
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 8...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1900 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|-----------|-------------|-------|------------|
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 1850 03/19 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LOX | | | | |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ | 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ | 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ | 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ | 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ | 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ | 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ | 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ | 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ | 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ | 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ | 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ | 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ | 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ | 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ | 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ | 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ | 2.9FT | 26 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ | 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

\$\$

NNNN

PTWC Message #9

ZCZC
WECA41 PHEB 192000
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 9...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2000 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|----------------|-----------|-------------|-------|------------|
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 1910 03/19 |
| PUERTO CABEZAS | NICARAGUA | 14.0N | 83.4W | 2032 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOX | | | |
| WRIGHT BEACH NC | 34.2N | 77.8W | 1901 | 0.09M/ 0.3FT | 18 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ 2.9FT | 26 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ | 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #10

ZCZC
WECA41 PHEB 192100
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 10...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2100 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------------|-----------|-------------|------------|
| PUERTO CABEZAS | NICARAGUA | 14.0N 83.4W | 2032 03/19 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOX | | | |
| WRIGHT BEACH NC | 34.2N | 77.8W | 1901 | 0.09M/ 0.3FT | 18 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ 2.9FT | 26 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ 0.4FT | 22 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAAAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #11

ZCZC
WECA41 PHEB 192200
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 11...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2200 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

CUBA... HAITI... AND JAMAICA.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

COLOMBIA... COSTA RICA... PANAMA... AND BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

DOMINICAN REPUBLIC... MEXICO... NICARAGUA... VENEZUELA...
ARUBA... BONAIRE... CAYMAN ISLANDS... CURACAO...
DOMINICA... MARTINIQUE... PUERTO RICO AND VIRGIN
ISLANDS... SAINT KITTS AND NEVIS... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... SAN ANDRES AND
PROVIDENCIA... AND TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM

ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.

* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

* THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LON | | | | |
| WRIGHT BEACH NC | 34.2N | 77.8W | 1901 | 0.09M/ | 0.3FT | 18 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ | 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ | 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ | 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ | 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ | 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ | 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ | 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ | 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ | 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ | 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ | 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ | 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ | 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ | 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ | 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ | 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ | 2.9FT | 26 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ | 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ | 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ | 0.6FT | 28 |
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #12

ZCZC
WECA41 PHEB 192300
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 12...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2300 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST FINAL TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE *****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 18.2 NORTH 75.4 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION JAMAICA REGION

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... THE TSUNAMI THREAT FROM THIS EARTHQUAKE HAS PASSED AND THERE IS NO FURTHER THREAT.

TEST... TSUNAMI THREAT FORECAST...UPDATED ...TEST

* THIS IS A TEST MESSAGE. THE TSUNAMI THREAT HAS NOW LARGELY PASSED.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR ANY IMPACTED COASTAL AREAS SHOULD MONITOR CONDITIONS AT THE COAST TO DETERMINE IF AND WHEN IT IS SAFE TO RESUME NORMAL ACTIVITIES.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED NEAR IMPACTED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM LOCAL AUTHORITIES.
- * THIS IS A TEST MESSAGE. REMAIN OBSERVANT AND EXERCISE NORMAL CAUTION NEAR THE SEA.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. MINOR SEA LEVEL FLUCTUATIONS UP TO 30 CM ABOVE AND BELOW THE NORMAL TIDE MAY OCCUR IN COASTAL AREAS NEAR THE EARTHQUAKE OVER THE NEXT FEW HOURS.... AND CONTINUING FOR UP TO SEVERAL HOURS.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOH | | | |
| WRIGHT BEACH NC | 34.2N | 77.8W | 1901 | 0.09M/ 0.3FT | 18 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 1701 | 0.28M/ 0.9FT | 28 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 1700 | 0.16M/ 0.5FT | 20 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 1659 | 0.12M/ 0.4FT | 22 |
| CALLIAQUA VC | 13.1N | 61.2W | 1648 | 0.33M/ 1.1FT | 26 |
| BLOWING POINT AI | 18.2N | 63.1W | 1643 | 0.25M/ 0.8FT | 22 |
| POINT A PITRE GP | 16.2N | 61.5W | 1639 | 0.13M/ 0.4FT | 28 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 1645 | 0.10M/ 0.3FT | 18 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 1639 | 0.31M/ 1.0FT | 14 |
| SAINT MARTIN FR | 18.1N | 63.1W | 1635 | 0.17M/ 0.6FT | 18 |
| ISLA MUJERES MX | 21.3N | 86.7W | 1634 | 0.25M/ 0.8FT | 24 |
| CULEBRA IS PR | 18.3N | 65.3W | 1635 | 0.09M/ 0.3FT | 26 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 1635 | 0.20M/ 0.7FT | 22 |
| ROSEAU DM | 15.3N | 61.4W | 1631 | 0.23M/ 0.8FT | 22 |
| PORTSMOUTH DM | 15.6N | 61.5W | 1631 | 0.30M/ 1.0FT | 26 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 1628 | 0.17M/ 0.6FT | 16 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 1627 | 0.22M/ 0.7FT | 22 |
| LIMON CR | 10.0N | 83.0W | 1626 | 0.89M/ 2.9FT | 26 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 1625 | 0.13M/ 0.4FT | 22 |
| SAPZURRO CO | 8.7N | 77.4W | 1617 | 0.69M/ 2.3FT | 18 |
| BASSETERRE KN | 17.3N | 62.7W | 1620 | 0.17M/ 0.6FT | 28 |

| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| CARRIE BOW CAY BZ | 16.8N | 88.1W | 1617 | 0.17M/ | 0.5FT | 24 |
| PUERTO CORTES HN | 15.8N | 88.0W | 1610 | 0.18M/ | 0.6FT | 14 |
| SIAN KAAAN MX | 19.3N | 87.4W | 1612 | 0.21M/ | 0.7FT | 26 |
| EL PORVENIR PA | 9.6N | 78.9W | 1607 | 1.18M/ | 3.9FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 28 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1601 | 0.25M/ | 0.8FT | 22 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 1603 | 0.25M/ | 0.8FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 1556 | 0.57M/ | 1.9FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 1558 | 0.07M/ | 0.2FT | 22 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 1558 | 0.25M/ | 0.8FT | 28 |
| ARECIBO PR | 18.5N | 66.7W | 1551 | 0.10M/ | 0.3FT | 16 |
| LIMETREE VI | 17.7N | 64.8W | 1552 | 0.23M/ | 0.8FT | 18 |
| ST CROIX VI | 17.7N | 64.7W | 1549 | 0.15M/ | 0.5FT | 20 |
| ISLA NAVAL CO | 10.2N | 75.8W | 1547 | 0.73M/ | 2.4FT | 24 |
| ROATAN ISLAND HN | 16.3N | 86.5W | 1552 | 0.15M/ | 0.5FT | 26 |
| YABUCOA PR | 18.1N | 65.8W | 1544 | 0.28M/ | 0.9FT | 18 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 1547 | 0.39M/ | 1.3FT | 26 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 1541 | 0.29M/ | 1.0FT | 26 |
| MAYAGUEZ PR | 18.2N | 67.2W | 1547 | 0.29M/ | 1.0FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 1537 | 0.72M/ | 2.4FT | 20 |
| PUNTA CANA DO | 18.5N | 68.4W | 1539 | 0.23M/ | 0.7FT | 22 |
| MONA ISLAND PR | 18.1N | 67.9W | 1529 | 0.29M/ | 0.9FT | 22 |
| DART 42407 | 15.3N | 68.2W | 1524 | 0.03M/ | 0.1FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 1521 | 0.18M/ | 0.6FT | 24 |
| PUERTO PLATA DO | 19.8N | 70.7W | 1518 | 0.19M/ | 0.6FT | 14 |
| BARAHONA DO | 18.2N | 71.1W | 1516 | 0.52M/ | 1.7FT | 20 |
| GEORGE TOWN CY | 19.3N | 81.4W | 1505 | 0.32M/ | 1.1FT | 24 |
| CAP HAITIEN HT | 19.8N | 72.2W | 1504 | 0.46M/ | 1.5FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 1456 | 2.08M/ | 6.8FT | 16 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THIS WILL BE THE FINAL STATEMENT ISSUED FOR THIS EVENT UNLESS NEW INFORMATION IS RECEIVED OR THE SITUATION CHANGES.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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Portugal Scenario

The following messages created for the Caribe Wave 20 tsunami exercise are representative of the official standard products issued by the PTWC for a magnitude 8.5 earthquake and subsequent tsunami originating 270 km off the Portugal coast. During a real event, the PTWC would also post the text products on tsunami.gov. The alerts would persist longer during a real event than is depicted in this exercise.

PTWC Message #1

ZCZC
WECA43 PHEB 191407
TIBCAX

TEST...TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1407 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI INFORMATION STATEMENT TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS STATEMENT IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.2
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.2 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. THE TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE IS STILL UNDER INVESTIGATION. FURTHER INFORMATION ON THE THREAT WILL BE ISSUED AS SOON AS POSSIBLE.

TEST... RECOMMENDED ACTIONS ...TEST

* THIS IS A TEST MESSAGE. CONSIDER AND PREPARE FOR THE POSSIBILITY OF A TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

* THIS IS A TEST MESSAGE. FURTHER STATEMENTS ON THE TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE WILL BE ISSUED AS SOON AS INFORMATION BECOMES AVAILABLE OR IN NO MORE THAN ONE HOUR.

* THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.

* THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.

* THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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PTWC Message #2

ZCZC
WECA43 PHEB 191415
TIBCAX

TEST...TSUNAMI INFORMATION STATEMENT NUMBER 2...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1415 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI INFORMATION STATEMENT TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS STATEMENT IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THE EARTHQUAKE MAGNITUDE IS REVISED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

| | |
|---------------|-------------------------------|
| * MAGNITUDE | 8.4 |
| * ORIGIN TIME | 1400 UTC MAR 19 2020 |
| * COORDINATES | 36.0 NORTH 10.8 WEST |
| * DEPTH | 5 KM / 3 MILES |
| * LOCATION | AZORES-CAPE ST. VINCENT RIDGE |

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.4 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. THE TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE IS STILL UNDER INVESTIGATION. FURTHER INFORMATION ON THE THREAT WILL BE ISSUED AS SOON AS POSSIBLE.

TEST... RECOMMENDED ACTIONS ...TEST

* THIS IS A TEST MESSAGE. CONSIDER AND PREPARE FOR THE POSSIBILITY OF A TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

* THIS IS A TEST MESSAGE. FURTHER STATEMENTS ON THE TSUNAMI THREAT TO THE CARIBBEAN REGION FROM THIS EARTHQUAKE WILL BE ISSUED AS SOON AS INFORMATION BECOMES AVAILABLE OR IN NO MORE THAN ONE HOUR.

* THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.

* THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.

* THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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PTWC Message #3

ZCZC
WECA41 PHEB 191425
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 3...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1425 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THE EARTHQUAKE MAGNITUDE IS REVISED IN THIS MESSAGE.

FORECAST TSUNAMI AMPLITUDES ARE PROVIDED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST...UPDATED ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|------------|------------|-------------|-------|------------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 03/19 |

| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |

| | | | | | |
|-----------------|-----------|-------|-------|------|-------|
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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PTWC Message #4

ZCZC
WECA41 PHEB 191500
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 4...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1500 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1
METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

* THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY
VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE
FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI
AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH
FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN
THE FORECAST INDICATES.

* THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS
MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA
LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

* THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR
THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND
INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH
THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.

* THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL
AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW
INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

* THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF
THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED
REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND
THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A
SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE
MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|----------------|----------------|-------------|-------|------------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 03/19 |

| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |

| | | | | | |
|-----------------|-----------|-------|-------|------|-------|
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #5

ZCZC
WECA41 PHEB 191520
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 5...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1520 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TSUNAMI WAVES HAVE NOW BEEN CONFIRMED.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND

THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|------------------|-------------|-------|------------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD |
|----------------|-------------------|-----|-----------------|------------------------|-------------|
| | LAT | LON | (UTC) | HEIGHT | (MIN) |
| ----- | | | | | |

| | | | | | |
|----------------|-------|-------|------|---------------|----|
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #6

ZCZC
WECA41 PHEB 191600
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 6...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1600 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|------------------|-------------|-------|-----------|-------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |

| | | | | | | |
|----------------|-------|-------|------|---------------|-------|----|
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

\$\$

NNNN

PTWC Message #7

ZCZC
WECA41 PHEB 191700
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 7...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1700 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
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TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|------------------|-------------|-------|------------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 03/19 |

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|-----------------|-----------------|-------|-------|------|-------|
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
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 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|-------------------|-------------------|------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ 2.4FT | 28 |

| | | | | | |
|------------------|-------|-------|------|---------------|----|
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #8

ZCZC
WECA41 PHEB 191800
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 8...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1800 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|------------------|-------------|-------|-----------|-------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ 3.5FT | 26 |

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| | | | | | |
|-------------------|-------|-------|------|---------------|----|
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #9

ZCZC
WECA41 PHEB 191900
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 9...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1900 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|----------|--------|-------------|-----------|
|----------|--------|-------------|-----------|

| | | | | | |
|-----------------|------------------|-------|-------|------|-------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |

| | | | | | |
|-----------------|-----------|-------|-------|------|-------|
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|-----------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ 4.0FT | 22 |

| | | | | | | |
|---------------------|-------|-------|------|---------|--------|----|
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

NNNN

PTWC Message #10

ZCZC
WECA41 PHEB 192000
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 10...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2000 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|------------------|-------------|-------|-----------|-------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 | 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

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 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

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- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|-----------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ 0.4FT | 22 |

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| | | | | | | |
|---------------------|-------|-------|------|---------|--------|----|
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #11

ZCZC
WECA41 PHEB 192100
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 11...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2100 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.

- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED

REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|------------------|-------------|-------|------------|
| ESSO PIER | BERMUDA | 32.4N | 64.7W | 2051 03/19 |
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|----------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ 0.2FT | 24 |

| | | | | | | |
|---------------------|-------|-------|------|---------------|-------|----|
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #12

ZCZC
WECA41 PHEB 192200
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 12...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2200 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

- * THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA...
HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF
OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.

- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

* THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|------------------|-------------|-------|-----------|-------|
| ROSEAU | DOMINICA | 15.3N | 61.4W | 2118 | 03/19 |
| PLYMOUTH | MONTSERRAT | 16.7N | 62.2W | 2118 | 03/19 |
| BRIDGETOWN | BARBADOS | 13.1N | 59.6W | 2118 | 03/19 |
| CASTRIES | SAINT LUCIA | 14.0N | 61.0W | 2119 | 03/19 |
| BASSE TERRE | GUADELOUPE | 16.0N | 61.7W | 2122 | 03/19 |
| SINT EUSTATIUS | SINT EUSTATIUS | 17.5N | 63.0W | 2123 | 03/19 |
| SABA | SABA | 17.6N | 63.2W | 2124 | 03/19 |
| FORT DE FRANCE | MARTINIQUE | 14.6N | 61.1W | 2125 | 03/19 |
| SAN JUAN | PUERTO RICO | 18.5N | 66.1W | 2125 | 03/19 |
| CHRISTIANSTED | US VIRGIN IS | 17.7N | 64.7W | 2126 | 03/19 |
| ANEGADA | BR VIRGIN IS | 18.8N | 64.3W | 2126 | 03/19 |
| THE VALLEY | ANGUILLA | 18.3N | 63.1W | 2127 | 03/19 |
| SAINT JOHNS | ANTIGUA | 17.1N | 61.9W | 2127 | 03/19 |
| BASSETERRE | SAINT KITTS | 17.3N | 62.7W | 2128 | 03/19 |
| PALMETTO POINT | BARBUDA | 17.6N | 61.9W | 2128 | 03/19 |
| SIMPSON BAAI | SINT MAARTEN | 18.0N | 63.1W | 2131 | 03/19 |
| KINGSTOWN | SAINT VINCENT | 13.1N | 61.2W | 2136 | 03/19 |
| MAYAGUEZ | PUERTO RICO | 18.2N | 67.2W | 2137 | 03/19 |
| CABO ENGANO | DOMINICAN REP | 18.6N | 68.3W | 2151 | 03/19 |
| GRAND TURK | TURKS N CAICOS | 21.5N | 71.1W | 2152 | 03/19 |
| PUERTO PLATA | DOMINICAN REP | 19.8N | 70.7W | 2153 | 03/19 |
| BAIE LUCAS | SAINT MARTIN | 18.1N | 63.0W | 2153 | 03/19 |
| SAINT BARTHELEM | SAINT BARTHELEMY | 17.9N | 62.8W | 2154 | 03/19 |
| BAIE GRAND CASE | SAINT MARTIN | 18.1N | 63.1W | 2154 | 03/19 |
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |

| | | | | | |
|-----------------|-----------------|-------|-------|------|-------|
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

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- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS

MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LON | | | | |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |

| | | | | | |
|-------------------|-------|-------|------|---------------|----|
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

TEST...NEXT UPDATE AND ADDITIONAL INFORMATION...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #13

ZCZC
WECA41 PHEB 192300
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 13...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
2300 UTC THU MAR 19 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

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TEST... TSUNAMI THREAT FORECAST ...TEST

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BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

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COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

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TEST... RECOMMENDED ACTIONS ...TEST

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TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|-----------------|-------------|-------|-----------|-------|
| PIRATES BAY | TRINIDAD TOBAGO | 11.3N | 60.6W | 2201 | 03/19 |
| MAYAGUANA | BAHAMAS | 22.3N | 73.0W | 2202 | 03/19 |
| CHARLOTTE AMALI | US VIRGIN IS | 18.3N | 64.9W | 2203 | 03/19 |
| SAINT GEORGES | GRENADA | 12.0N | 61.8W | 2203 | 03/19 |
| WEST CAICOS | TURKS N CAICOS | 21.7N | 72.5W | 2205 | 03/19 |
| BAIE BLANCHE | SAINT MARTIN | 18.1N | 63.0W | 2207 | 03/19 |
| SAN SALVADOR | BAHAMAS | 24.1N | 74.5W | 2208 | 03/19 |
| CAP HAITEN | HAITI | 19.8N | 72.2W | 2209 | 03/19 |
| SANTO DOMINGO | DOMINICAN REP | 18.5N | 69.9W | 2216 | 03/19 |
| LONG ISLAND | BAHAMAS | 23.3N | 75.1W | 2221 | 03/19 |
| ONIMA | BONAIRE | 12.3N | 68.3W | 2223 | 03/19 |
| GREAT INAGUA | BAHAMAS | 20.9N | 73.7W | 2223 | 03/19 |
| EXUMA | BAHAMAS | 23.6N | 75.9W | 2224 | 03/19 |
| CAT ISLAND | BAHAMAS | 24.4N | 75.5W | 2224 | 03/19 |
| BARACOA | CUBA | 20.4N | 74.5W | 2227 | 03/19 |
| ELEUTHERA ISLAN | BAHAMAS | 25.2N | 76.1W | 2229 | 03/19 |
| CROOKED ISLAND | BAHAMAS | 22.7N | 74.1W | 2234 | 03/19 |
| JACAMEL | HAITI | 18.1N | 72.5W | 2235 | 03/19 |
| ANDROS ISLAND | BAHAMAS | 25.0N | 77.9W | 2235 | 03/19 |
| GIBARA | CUBA | 21.1N | 76.1W | 2237 | 03/19 |
| ORANJESTAD | ARUBA | 12.5N | 70.0W | 2237 | 03/19 |
| ROADTOWN | BR VIRGIN IS | 18.4N | 64.6W | 2240 | 03/19 |
| JEREMIE | HAITI | 18.6N | 74.1W | 2241 | 03/19 |
| SANTIAGO D CUBA | CUBA | 19.9N | 75.8W | 2244 | 03/19 |
| NASSAU | BAHAMAS | 25.1N | 77.4W | 2247 | 03/19 |
| CAYENNE | FRENCH GUYANE | 4.9N | 52.3W | 2247 | 03/19 |
| MAIQUETIA | VENEZUELA | 10.6N | 67.0W | 2250 | 03/19 |
| WILLEMSTAD | CURACAO | 12.1N | 68.9W | 2257 | 03/19 |
| ABACO ISLAND | BAHAMAS | 26.6N | 77.1W | 2258 | 03/19 |
| FREEPORT | BAHAMAS | 26.5N | 78.8W | 2259 | 03/19 |
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ 2.8FT | 24 |

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| | | | | | | |
|----------------------|-------|-------|------|---------------|-------|----|
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINTE PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | 22 | |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 | |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 | |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 | |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 | |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 | |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
- * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
- * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #14

ZCZC
WECA41 PHEB 200000
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 14...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0000 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) | |
|-----------------|-----------------|-------------|-------|-----------|-------|
| CUMANA | VENEZUELA | 10.5N | 64.2W | 2303 | 03/19 |
| PORT OF SPAIN | TRINIDAD TOBAGO | 10.6N | 61.5W | 2308 | 03/19 |
| BIMINI | BAHAMAS | 25.8N | 79.3W | 2312 | 03/19 |
| SANTA MARTA | COLOMBIA | 11.2N | 74.2W | 2322 | 03/19 |
| MONTEGO BAY | JAMAICA | 18.5N | 77.9W | 2326 | 03/19 |
| PORT AU PRINCE | HAITI | 18.5N | 72.4W | 2334 | 03/19 |
| CIENFUEGOS | CUBA | 22.0N | 80.5W | 2337 | 03/19 |
| CARTAGENA | COLOMBIA | 10.4N | 75.6W | 2338 | 03/19 |
| KINGSTON | JAMAICA | 17.9N | 76.9W | 2343 | 03/19 |
| BARRANQUILLA | COLOMBIA | 11.1N | 74.9W | 2347 | 03/19 |
| RIOHACHA | COLOMBIA | 11.6N | 72.9W | 2351 | 03/19 |
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 | 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 | 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 | 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 | 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 | 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|----------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |

| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ | 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ | 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |

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|---------------------|-------|-------|------|---------|--------|----|
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

\$\$

NNNN

PTWC Message #15

ZCZC
WECA41 PHEB 200100
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 15...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0100 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | | ETA (UTC) |
|-----------------|-----------|-------------|-------|------------|
| PUNTA CARIBANA | COLOMBIA | 8.6N | 76.9W | 0022 03/20 |
| GEORGETOWN | GUYANA | 6.8N | 58.2W | 0033 03/20 |
| PARAMARIBO | SURINAME | 5.9N | 55.2W | 0033 03/20 |
| PUNTO FIJO | VENEZUELA | 11.7N | 70.2W | 0104 03/20 |
| PORLAMAR | VENEZUELA | 10.9N | 63.8W | 0157 03/20 |
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|-------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ 0.9FT | 16 |

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|---------------------|-------|-------|------|--------|-------|----|
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |

| | | | | | | |
|---------------------|-------|-------|------|---------------|-------|----|
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #16

ZCZC
WECA41 PHEB 200200
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 16...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0200 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|------------|-----------|-------------|------------|
| PUNTO FIJO | VENEZUELA | 11.7N 70.2W | 0104 03/20 |
| PORLAMAR | VENEZUELA | 10.9N 63.8W | 0157 03/20 |

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| | | | | | |
|-----------------|-----------|-------|-------|------|-------|
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LOH | | | |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ 1.1FT | 22 |

| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |

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|---------------------|-------|-------|------|---------|--------|----|
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #17

ZCZC
WECA41 PHEB 200300
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 17...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0300 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS

OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

LOCATION REGION COORDINATES ETA (UTC)

| | | | | | |
|-----------------|-----------|-------|-------|------|-------|
| SANTA CRZ D SUR | CUBA | 20.7N | 78.0W | 0201 | 03/20 |
| GOLFO VENEZUELA | VENEZUELA | 11.4N | 71.2W | 0203 | 03/20 |
| ILHA DE MARACA | BRAZIL | 2.2N | 50.5W | 0210 | 03/20 |
| NUEVA GERONA | CUBA | 21.9N | 82.8W | 0339 | 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

-
- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
 - * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
 - * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

-
- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ 0.9FT | 16 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |

| | | | | | | |
|---------------------|-------|-------|------|---------------|-------|----|
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #18

ZCZC
WECA41 PHEB 200400
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 18...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0400 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... ESTIMATED TIMES OF ARRIVAL ...TEST

- * THIS IS A TEST MESSAGE. ESTIMATED TIMES OF ARRIVAL -ETA- OF THE INITIAL TSUNAMI WAVE FOR PLACES WITHIN THREATENED REGIONS ARE GIVEN BELOW. ACTUAL ARRIVAL TIMES MAY DIFFER AND THE INITIAL WAVE MAY NOT BE THE LARGEST. A TSUNAMI IS A SERIES OF WAVES AND THE TIME BETWEEN WAVES CAN BE FIVE MINUTES TO ONE HOUR.

| LOCATION | REGION | COORDINATES | ETA (UTC) |
|--------------|--------|-------------|------------|
| NUEVA GERONA | CUBA | 21.9N 82.8W | 0339 03/20 |

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.
- * THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |

| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ | 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ | 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |

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| | | | | | | |
|---------------------|-------|-------|------|---------|--------|----|
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

\$\$

NNNN

PTWC Message #19

ZCZC
WECA41 PHEB 200500
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 19...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0500 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM

ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.

* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

* THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LON | | | | |
| KING EDWARD POINT U | 54.3S | 36.5W | 0422 | 0.18M/ | 0.6FT | 22 |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ | 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ | 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ | 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ | 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ | 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ | 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ | 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ | 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ | 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ | 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ | 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ | 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ | 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ | 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ | 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ | 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ | 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ | 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ | 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ | 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ | 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |

| | | | | | |
|-------------------|-------|-------|------|---------------|----|
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

TEST...NEXT UPDATE AND ADDITIONAL INFORMATION...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #20

ZCZC
WECA41 PHEB 200600
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 20...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0600 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM

ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.

* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

* THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------|-------------------|
| | LAT | LON | | | | |
| PORT STANLEY UK | 51.8S | 57.9W | 0544 | 0.12M/ | 0.4FT | 22 |
| KING EDWARD POINT U | 54.3S | 36.5W | 0422 | 0.18M/ | 0.6FT | 22 |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ | 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ | 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ | 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ | 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ | 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ | 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ | 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ | 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ | 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ | 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ | 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ | 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ | 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ | 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ | 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ | 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ | 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ | 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ | 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ | 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ | 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ | 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ | 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ | 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |

| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |

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| | | | | | |
|-------------------|-------|-------|------|---------------|----|
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ 2.3FT | 24 |
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| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ 2.4FT | 28 |
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| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | 14 |

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THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #21

ZCZC
WECA41 PHEB 200700
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 21...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0700 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

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**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. TSUNAMI WAVES HAVE BEEN OBSERVED.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

TEST... TSUNAMI THREAT FORECAST ...TEST

* THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING MORE THAN 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BAHAMAS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 1 TO 3 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE ALONG SOME COASTS OF

BRAZIL... CUBA... DOMINICAN REPUBLIC... FRENCH GUYANE...
GUYANA... HAITI... SURINAME... VENEZUELA... ANGUILLA...
ANTIGUA AND BARBUDA... BARBADOS... BERMUDA... DOMINICA...
GRENADA... GUADELOUPE... MARTINIQUE... PUERTO RICO AND
VIRGIN ISLANDS... SAINT BARTHELEMY... SAINT LUCIA... SAINT
VINCENT AND THE GRENADINES... TRINIDAD AND TOBAGO... AND
TURKS AND CAICOS ISLANDS.

- * THIS IS A TEST MESSAGE. TSUNAMI WAVES REACHING 0.3 TO 1 METERS ABOVE THE TIDE LEVEL ARE POSSIBLE FOR SOME COASTS OF

COLOMBIA... ARUBA... BONAIRE... CURACAO... JAMAICA...
MONTSERRAT... SABA AND SAINT EUSTATIUS... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

- * THIS IS A TEST MESSAGE. ACTUAL AMPLITUDES AT THE COAST MAY VARY FROM FORECAST AMPLITUDES DUE TO UNCERTAINTIES IN THE FORECAST AND LOCAL FEATURES. IN PARTICULAR MAXIMUM TSUNAMI AMPLITUDES ON ATOLLS OR SMALL ISLANDS AND AT LOCATIONS WITH FRINGING OR BARRIER REEFS WILL LIKELY BE MUCH SMALLER THAN THE FORECAST INDICATES.

- * THIS IS A TEST MESSAGE. FOR ALL OTHER AREAS COVERED BY THIS MESSAGE... THERE IS NO TSUNAMI THREAT ALTHOUGH SMALL SEA LEVEL CHANGES MAY OCCUR.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR THREATENED COASTAL AREAS SHOULD TAKE ACTION TO INFORM AND INSTRUCT ANY COASTAL POPULATIONS AT RISK IN ACCORDANCE WITH THEIR OWN EVALUATION... PROCEDURES AND THE LEVEL OF THREAT.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED IN THREATENED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR. THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE INITIAL WAVE.
- * THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM

ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.

* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.

TEST... TSUNAMI OBSERVATIONS ...TEST

* THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD |
|---------------------|-------------------|-------|-----------------|------------------------|-------------|
| | LAT | LON | (UTC) | | (MIN) |
| PORT STANLEY UK | 51.8S | 57.9W | 0544 | 0.12M/ 0.4FT | 22 |
| KING EDWARD POINT U | 54.3S | 36.5W | 0422 | 0.18M/ 0.6FT | 22 |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ 2.7FT | 18 |
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ 4.4FT | 28 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |

| | | | | | | |
|-------------------|-------|-------|------|---------------|-------|----|
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/12.5FT | | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/12.5FT | | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/27.4FT | | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/36.2FT | | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/50.6FT | | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/33.6FT | | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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NNNN

PTWC Message #22

ZCZC
WECA41 PHEB 200800
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 22...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0800 UTC FRI MAR 20 2020

...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
...TEST FINAL TSUNAMI THREAT MESSAGE TEST...

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

THIS IS A TEST MESSAGE. THIS MESSAGE IS ISSUED FOR INFORMATION ONLY IN SUPPORT OF THE UNESCO/IOC TSUNAMI AND OTHER COASTAL HAZARDS WARNING SYSTEM FOR THE CARIBBEAN AND ADJACENT REGIONS AND IS MEANT FOR NATIONAL AUTHORITIES IN EACH COUNTRY OF THAT SYSTEM.

THIS IS A TEST MESSAGE. NATIONAL AUTHORITIES WILL DETERMINE THE APPROPRIATE LEVEL OF ALERT FOR EACH COUNTRY AND MAY ISSUE ADDITIONAL OR MORE REFINED INFORMATION.

**** NOTICE **** NOTICE **** NOTICE **** NOTICE **** NOTICE ****

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.5
* ORIGIN TIME 1400 UTC MAR 19 2020
* COORDINATES 36.0 NORTH 10.8 WEST
* DEPTH 5 KM / 3 MILES
* LOCATION AZORES-CAPE ST. VINCENT RIDGE

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1400 UTC ON THURSDAY MARCH 19 2020.

* THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... THE TSUNAMI THREAT FROM THIS EARTHQUAKE HAS PASSED AND THERE IS NO FURTHER THREAT.

TEST... TSUNAMI THREAT FORECAST...UPDATED ...TEST

* THIS IS A TEST MESSAGE. THE TSUNAMI THREAT HAS NOW LARGELY PASSED.

TEST... RECOMMENDED ACTIONS ...TEST

- * THIS IS A TEST MESSAGE. GOVERNMENT AGENCIES RESPONSIBLE FOR ANY IMPACTED COASTAL AREAS SHOULD MONITOR CONDITIONS AT THE COAST TO DETERMINE IF AND WHEN IT IS SAFE TO RESUME NORMAL ACTIVITIES.
- * THIS IS A TEST MESSAGE. PERSONS LOCATED NEAR IMPACTED COASTAL AREAS SHOULD STAY ALERT FOR INFORMATION AND FOLLOW INSTRUCTIONS FROM LOCAL AUTHORITIES.
- * THIS IS A TEST MESSAGE. REMAIN OBSERVANT AND EXERCISE NORMAL CAUTION NEAR THE SEA.

TEST... POTENTIAL IMPACTS ...TEST

- * THIS IS A TEST MESSAGE. MINOR SEA LEVEL FLUCTUATIONS UP TO 30 CM ABOVE AND BELOW THE NORMAL TIDE MAY OCCUR IN COASTAL AREAS NEAR THE EARTHQUAKE OVER THE NEXT FEW HOURS.... AND CONTINUING FOR UP TO SEVERAL HOURS.

TEST... TSUNAMI OBSERVATIONS ...TEST

- * THIS IS A TEST MESSAGE. THE FOLLOWING ARE TSUNAMI WAVE OBSERVATIONS FROM COASTAL AND/OR DEEP-OCEAN SEA LEVEL GAUGES AT THE INDICATED LOCATIONS. THE MAXIMUM TSUNAMI HEIGHT IS MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

| GAUGE LOCATION | GAUGE COORDINATES | | TIME OF MEASURE (UTC) | MAXIMUM TSUNAMI HEIGHT | WAVE PERIOD (MIN) |
|---------------------|-------------------|-------|-----------------------|------------------------|-------------------|
| | LAT | LON | | | |
| PORT STANLEY UK | 51.8S | 57.9W | 0544 | 0.12M/ 0.4FT | 22 |
| KING EDWARD POINT U | 54.3S | 36.5W | 0422 | 0.18M/ 0.6FT | 22 |
| GOUGH ISLAND UK | 40.3S | 9.9W | 0230 | 0.23M/ 0.7FT | 26 |
| TRISTAN DA CUNHA UK | 37.0S | 12.3W | 0146 | 0.27M/ 0.9FT | 16 |
| WOODS HOLE MA | 41.5N | 70.7W | 0140 | 0.83M/ 2.7FT | 14 |
| ARRAIAL DO CABO BR | 23.0S | 42.0W | 0127 | 0.16M/ 0.5FT | 18 |
| KEY WEST FL | 24.6N | 81.8W | 0122 | 0.10M/ 0.3FT | 26 |
| NEW LONDON CT | 41.4N | 72.1W | 0119 | 0.89M/ 2.9FT | 24 |
| ISLA MUJERES MX | 21.3N | 86.7W | 0109 | 0.06M/ 0.2FT | 14 |
| BOCAS DEL TORO PA | 9.4N | 82.3W | 0105 | 0.19M/ 0.6FT | 24 |
| VACA KEY FL | 24.7N | 81.1W | 0059 | 0.15M/ 0.5FT | 28 |
| CEIBA CABOTAGE HN | 15.8N | 86.8W | 0055 | 0.05M/ 0.2FT | 22 |
| LIMON CR | 10.0N | 83.0W | 0051 | 0.28M/ 0.9FT | 14 |
| SIAN KAN MX | 19.3N | 87.4W | 0040 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0032 | 0.07M/ 0.2FT | 20 |
| PUERTO MORELOS MX | 20.9N | 86.9W | 0034 | 0.07M/ 0.2FT | 24 |
| SAPZURRO CO | 8.7N | 77.4W | 0026 | 0.18M/ 0.6FT | 24 |
| EL PORVENIR PA | 9.6N | 78.9W | 0020 | 0.21M/ 0.7FT | 16 |
| SAN ANDRES CO | 12.6N | 81.7W | 0021 | 0.20M/ 0.7FT | 22 |
| NEWPORT RI | 41.5N | 71.3W | 0003 | 0.82M/ 2.7FT | 22 |
| ISLA NAVAL CO | 10.2N | 75.8W | 2351 | 0.17M/ 0.6FT | 22 |
| PORT ROYAL JM | 17.9N | 76.8W | 2353 | 0.46M/ 1.5FT | 26 |
| SANTA MARTA CO | 11.2N | 74.2W | 2334 | 0.26M/ 0.9FT | 16 |
| SALVADOR BR | 13.0S | 38.5W | 2331 | 0.33M/ 1.1FT | 22 |
| PORT OF SPAIN TT | 10.6N | 61.5W | 2314 | 1.01M/ 3.3FT | 26 |
| NANTUCKET ISLAND MA | 41.3N | 70.1W | 2305 | 0.81M/ 2.7FT | 18 |

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| | | | | | | |
|---------------------|-------|-------|------|--------|-------|----|
| SAINT HELENA UK | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 14 |
| SAINT HELENA RUPERT | 15.9S | 5.7W | 2307 | 0.37M/ | 1.2FT | 26 |
| TORTOLA VI UK | 18.4N | 64.6W | 2251 | 0.70M/ | 2.3FT | 24 |
| HATTERAS NC | 35.2N | 75.7W | 2247 | 1.10M/ | 3.6FT | 16 |
| ORANGESTAD AW | 12.5N | 70.0W | 2244 | 0.45M/ | 1.5FT | 28 |
| BULLEN BAY CURACAO | 12.2N | 69.0W | 2245 | 0.52M/ | 1.7FT | 16 |
| BARAHONA DO | 18.2N | 71.1W | 2237 | 0.34M/ | 1.1FT | 16 |
| ILE ROYAL GUIANA FR | 5.3N | 52.6W | 2229 | 1.35M/ | 4.4FT | 28 |
| CAP HAITIEN HT | 19.8N | 72.2W | 2217 | 0.93M/ | 3.1FT | 16 |
| PRICKLEY BAY GD | 12.0N | 61.8W | 2216 | 0.59M/ | 1.9FT | 26 |
| DART 42407 | 15.3N | 68.2W | 2208 | 0.04M/ | 0.1FT | 24 |
| MAGUEYES ISLAND PR | 18.0N | 67.0W | 2213 | 0.56M/ | 1.8FT | 28 |
| PUERTO PLATA DO | 19.8N | 70.7W | 2200 | 0.97M/ | 3.2FT | 16 |
| GRAND TURK ISLAND T | 21.4N | 71.1W | 2205 | 1.45M/ | 4.8FT | 24 |
| LAMESHURBAYSTJOHNVI | 18.3N | 64.7W | 2205 | 0.83M/ | 2.7FT | 16 |
| BLOWING POINT AI | 18.2N | 63.1W | 2157 | 0.93M/ | 3.1FT | 26 |
| PUNTA CANA DO | 18.5N | 68.4W | 2159 | 0.85M/ | 2.8FT | 24 |
| MONA ISLAND PR | 18.1N | 67.9W | 2200 | 0.69M/ | 2.3FT | 24 |
| SAINT MARTIN FR | 18.1N | 63.1W | 2158 | 0.93M/ | 3.1FT | 14 |
| ISABELII VIEQUES PR | 18.2N | 65.4W | 2201 | 0.70M/ | 2.3FT | 16 |
| GANTERS BAY ST LUCI | 14.0N | 61.0W | 2155 | 0.64M/ | 2.1FT | 20 |
| MAYAGUEZ PR | 18.2N | 67.2W | 2151 | 1.21M/ | 4.0FT | 20 |
| BARBUDA AG | 17.6N | 61.8W | 2146 | 1.04M/ | 3.4FT | 18 |
| ESPERANZA VIEQUES P | 18.1N | 65.5W | 2144 | 0.68M/ | 2.2FT | 28 |
| CALLIAQUA VC | 13.1N | 61.2W | 2146 | 0.56M/ | 1.8FT | 22 |
| YABUCOA PR | 18.1N | 65.8W | 2139 | 0.70M/ | 2.3FT | 28 |
| DART 41424 | 33.0N | 72.7W | 2141 | 0.10M/ | 0.3FT | 24 |
| ARECIBO PR | 18.5N | 66.7W | 2139 | 1.57M/ | 5.1FT | 14 |
| LIMETREE VI | 17.7N | 64.8W | 2134 | 0.62M/ | 2.0FT | 28 |
| BASSETERRE KN | 17.3N | 62.7W | 2141 | 0.84M/ | 2.8FT | 24 |
| ST CROIX VI | 17.7N | 64.7W | 2138 | 0.73M/ | 2.4FT | 28 |
| SAN JUAN PR | 18.5N | 66.1W | 2136 | 1.28M/ | 4.2FT | 28 |
| FORT DE FRANCE MQ | 14.6N | 61.1W | 2135 | 0.73M/ | 2.4FT | 16 |
| ROSEAU DM | 15.3N | 61.4W | 2131 | 0.64M/ | 2.1FT | 18 |
| PORTSMOUTH DM | 15.6N | 61.5W | 2128 | 0.70M/ | 2.3FT | 28 |
| DART 41420 | 23.4N | 67.3W | 2125 | 0.14M/ | 0.5FT | 26 |
| LE ROBERT MARTINIQU | 14.7N | 60.9W | 2125 | 1.34M/ | 4.4FT | 28 |
| LE PRECHEUR MARTINI | 14.8N | 61.2W | 2126 | 0.66M/ | 2.2FT | 26 |
| DESHAIES GUADELOUPE | 16.3N | 61.8W | 2128 | 0.73M/ | 2.4FT | 22 |
| PORT ST CHARLES BB | 13.3N | 59.6W | 2125 | 1.61M/ | 5.3FT | 28 |
| DART 44402 | 39.3N | 70.7W | 2127 | 0.10M/ | 0.3FT | 24 |
| SAINT PIERRE MIQUEL | 46.5N | 56.1W | 2119 | 1.02M/ | 3.4FT | 20 |
| PARHAM AT | 17.1N | 61.8W | 2115 | 1.31M/ | 4.3FT | 26 |
| DESIRADE GUADELOUPE | 16.3N | 61.1W | 2106 | 1.21M/ | 4.0FT | 20 |
| DART 41425 | 28.7N | 65.7W | 2110 | 0.25M/ | 0.8FT | 16 |
| DART 41421 | 23.4N | 63.8W | 2106 | 0.14M/ | 0.5FT | 20 |
| BERMUDA UK | 32.4N | 64.7W | 2105 | 2.30M/ | 7.6FT | 20 |
| SALERNO IT | 40.7N | 14.8E | 1906 | 0.07M/ | 0.2FT | 24 |
| SETE FR | 43.4N | 3.7E | 1901 | 0.11M/ | 0.4FT | 28 |
| MALIN HEAD IE | 55.4N | 7.3W | 1854 | 0.71M/ | 2.3FT | 18 |
| FOS-SUR-MER FR | 43.4N | 4.9E | 1849 | 0.11M/ | 0.3FT | 20 |
| PORT-VENDRES FR | 43.0N | 3.1E | 1848 | 0.12M/ | 0.4FT | 22 |
| GENOVA IT | 44.4N | 8.9E | 1837 | 0.15M/ | 0.5FT | 26 |
| NOUADHIBOU MR | 20.8N | 17.0W | 1835 | 1.22M/ | 4.0FT | 22 |
| IMPERIA IT | 43.9N | 8.0E | 1820 | 0.13M/ | 0.4FT | 24 |
| MONACO MC | 43.7N | 7.4E | 1820 | 0.11M/ | 0.4FT | 28 |
| NICE FR | 43.7N | 7.3E | 1823 | 0.13M/ | 0.4FT | 18 |
| CARLOFORTE IT | 39.1N | 8.3E | 1816 | 0.14M/ | 0.4FT | 14 |

| | | | | | | |
|---------------------|-------|-------|------|---------|--------|----|
| LA FIGUEIRETTE | 43.5N | 6.9E | 1812 | 0.12M/ | 0.4FT | 18 |
| PORT FERREOL FR | 43.4N | 6.7E | 1811 | 0.12M/ | 0.4FT | 24 |
| AJACCIO FR | 41.9N | 8.8E | 1814 | 0.10M/ | 0.3FT | 26 |
| PRAIA CV | 14.9N | 23.5W | 1801 | 0.78M/ | 2.6FT | 22 |
| LHERBAUDIÈRE FR | 47.0N | 2.3W | 1801 | 0.82M/ | 2.7FT | 26 |
| BARCELONA ES | 41.3N | 2.2E | 1754 | 0.11M/ | 0.4FT | 16 |
| LES SABLES DOLONNE | 46.5N | 1.8W | 1752 | 0.69M/ | 2.3FT | 22 |
| PALMEIRA CAPE VERDE | 16.8N | 23.0W | 1738 | 1.07M/ | 3.5FT | 26 |
| CONCARMEAU FR | 47.9N | 3.9W | 1732 | 0.87M/ | 2.9FT | 22 |
| VALENCIA ES | 39.4N | 0.3W | 1728 | 0.19M/ | 0.6FT | 18 |
| LE CONQUET FR | 48.4N | 4.8W | 1730 | 0.93M/ | 3.0FT | 28 |
| MIMIZAN FR | 44.2N | 1.3W | 1702 | 0.69M/ | 2.3FT | 24 |
| BOUCAU BAYONNE FR | 43.5N | 1.5W | 1645 | 0.73M/ | 2.4FT | 26 |
| CARTAGENA ES | 37.6N | 1.0W | 1630 | 0.40M/ | 1.3FT | 28 |
| SAID MA | 35.1N | 2.3W | 1627 | 0.74M/ | 2.4FT | 28 |
| PONTA DELGADA PT | 37.7N | 25.7W | 1604 | 3.82M/ | 12.5FT | 22 |
| FERROL ES | 43.5N | 8.3W | 1600 | 1.46M/ | 4.8FT | 16 |
| ELHIERRO ES | 27.8N | 17.9W | 1554 | 1.78M/ | 5.9FT | 22 |
| FUERTEVENTURA ES | 28.5N | 13.9W | 1551 | 2.39M/ | 7.9FT | 28 |
| LAGOMERA ES | 28.1N | 17.1W | 1545 | 1.89M/ | 6.2FT | 16 |
| LA PALMA ES | 28.7N | 17.8W | 1543 | 2.99M/ | 9.8FT | 18 |
| TENERIFE ES | 28.5N | 16.2W | 1540 | 3.00M/ | 9.8FT | 20 |
| ARRECIFE ES | 29.0N | 13.5W | 1529 | 2.72M/ | 8.9FT | 24 |
| LASPALMAS ES | 28.1N | 15.4W | 1532 | 3.80M/ | 12.5FT | 18 |
| ALGECIRAS ES | 36.2N | 5.4W | 1534 | 1.27M/ | 4.2FT | 26 |
| CADIZ ES | 36.5N | 6.3W | 1528 | 8.34M/ | 27.4FT | 20 |
| HUELVA ES | 37.1N | 6.8W | 1526 | 11.04M/ | 36.2FT | 22 |
| ALBUFEIRA PT | 37.1N | 8.3W | 1505 | 15.43M/ | 50.6FT | 16 |
| PORTO SANTO PT | 33.1N | 16.3W | 1503 | 10.23M/ | 33.6FT | 14 |

TEST... NEXT UPDATE AND ADDITIONAL INFORMATION ...TEST

-
- * THIS IS A TEST MESSAGE. THIS WILL BE THE FINAL STATEMENT ISSUED FOR THIS EVENT UNLESS NEW INFORMATION IS RECEIVED OR THE SITUATION CHANGES.
 - * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN LOWERCASE LETTERS-.
 - * THIS IS A TEST MESSAGE. FURTHER INFORMATION ABOUT THIS EVENT MAY BE FOUND AT WWW.TSUNAMI.GOV.
 - * THIS IS A TEST MESSAGE. COASTAL REGIONS OF THE US GULF COAST... US EAST COAST... AND THE MARITIME PROVINCES OF CANADA SHOULD REFER TO U.S. NATIONAL TSUNAMI WARNING CENTER MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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ANNEX VII

SAMPLE PRESS RELEASE FOR LOCAL MEDIA

TEMPLATE FOR NEWS RELEASE

USE AGENCY MASTHEAD

Contact: (insert name)

FOR IMMEDIATE RELEASE

(insert phone number)

(insert date)

(insert email address)

CARIBBEAN TSUNAMI EXERCISE TO BE CONDUCTED MARCH 19, 2020

(insert community/county/state name) will join other localities in the Caribbean as a participant in a tsunami response exercise on March 19, 2020. The purpose of this exercise is to evaluate national and local tsunami response plans, increase tsunami preparedness, and improve coordination throughout the region. This exercise includes two simulated scenarios of an earthquake occurrence in Jamaica and Portugal.

(insert a promotional comment from a local official, such as “The 2010 Haiti, 2010, 2014, 2015 Chilean, 2011 Japan, and the recent 2018 Sulawesi earthquakes and tsunamis have reminded the world 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 CARIBE WAVE 20, will simulate a widespread Tsunami Threat situation throughout the Caribbean, which requires implementation of local tsunami response plans. The exercise will *(insert “include” or “not include”)* public notification.

The exercise will simulate *(insert description of chosen scenario - source and appropriate local time)* on March 19, 2020. A handbook has been prepared which describes the scenarios and contains tsunami messages from the Pacific Tsunami Warning Center (PTWC). The PTWC is the Regional Tsunami Service Provider 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 UNESCO/IOC Intergovernmental Coordination Group for Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS), the Caribbean Emergency Management Agency (CDEMA), the Centro de Coordinación para la Prevención de los Desastres Naturales en América Central (CEPREDENAC), EMIZ Antillas and the U.S. National Oceanic and Atmospheric Administration (NOAA).

For more information on the U.S. tsunami warning system, see <https://www.tsunami.gov>.

For more information on the ICG/CARIBE-EWS, see http://ioc-tsunami.org/index.php?option=com_oe&task=viewEventRecord&eventID=2359.

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On the Web:

ICG/CARIBE EWS

<http://www.ioc-tsunami.org>

Pacific Tsunami Warning Center

<https://tsunami.gov>

NOAA Tsunami Program

<https://www.tsunami.gov>

Caribbean Tsunami Warning Program

<https://www.weather.gov/ctwp/>

Caribbean Tsunami Information Centre

<https://www.ctic.ioc-unesco.org>

Insert state/local emergency response URLs

ANNEX VIII

LIST OF ACRONYMS

| | |
|-----------------------|--|
| AISR | Aeronautical Information System Replacement |
| AWIPS | Advanced Weather Interactive Processing System |
| CDEMA | Caribbean Disaster Emergency Management Agency |
| CEPREDENAC | Coordination Centre for the Prevention of Natural Disasters in Central America |
| CTIC | Caribbean Tsunami Information Centre |
| CTWP | Caribbean Tsunami Warning Program |
| CW | Caribe Wave |
| EAS | Emergency Alert System |
| EMIZA | État-major Interministériel de la Zone de Défense et de Sécurité Antilles |
| EMO | Emergency Management Organization |
| EMWIN | Emergency Managers Weather Information Network |
| EOC | Emergency Operations Center |
| EOP | Emergency Operations Plan |
| EPGFZ | Enriquillo-Plantain Garden Fault Zone |
| GDP | Gross Domestic Product |
| GMT | Generic Mapping Tool |
| GTS | Global Telecommunication System |
| ICG | Intergovernmental Coordination Group |
| ICG/CARIBE-EWS | Intergovernmental Coordination Group for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions |
| IOC | Intergovernmental Oceanographic Commission |
| ITIC | International Tsunami Information Center |
| MS | Member States |
| NCEI | National Centers for Environmental Information |
| NDMO | National Disaster Management Office |

| | |
|---------------|---|
| NOAA | U.S. National Oceanic and Atmospheric Administration |
| NTWC | National Tsunami Warning Centre |
| NWWS | NOAA Weather Wire Service |
| OEM | Offices of Emergency Management |
| PAGER | Prompt Assessment of Global Earthquakes for Response |
| PRSN | Puerto Rico Seismic Network |
| PTWC | Pacific Tsunami Warning Center |
| SCDB | Southern Caribbean Deformed Belt |
| SOP | Standard Operating Procedures |
| SRC | Seismic Research Centre |
| TER | Tsunami Emergency Response |
| TT | Task Team |
| TWFP | Tsunami Warning Focal Points |
| UNESCO | United Nations Educational, Scientific, and Cultural Organization |
| USGS | United States Geological Survey |
| WMO | World Meteorological Organization |