



# EXERCISE CARIBE WAVE 26

## A Caribbean and Adjacent Region Tsunami Warning Exercise

19 March 2026

(Cayman Islands and Kick ‘em Jenny  
Scenarios)

Volume 1      Participant’s Handbook

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IOC Technical Series, 198 (volume 1)  
Paris, 20 January 2026  
English only

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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 Exercises CARIBE WAVE 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, and 2025. Each of these exercises has a handbook published as part of the IOC Technical Series. These CARIBE WAVE exercises followed the Pacific Wave exercises which commenced in 2008 with a 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.

Based on these previous exercises, **global guidelines for CARIBE WAVE exercises** have been developed in the [IOC Technical Series, 194 \(2024\)](#). These guidelines serve as a common core for the preparation of any regional exercise and should be considered in conjunction with the Participants' Manual before each exercise.

**For bibliographic purposes, this document should be cited as follows:**

IOC-UNESCO. 2026. *Exercise CARIBE WAVE 26. A Caribbean and Adjacent Region Tsunami Warning Exercise, 19 March 2026 (Cayman Islands and Kick 'em Jenny Scenarios). Volume 1: Participant's Handbook*. IOC Technical Series No. 198, Vol. 1. Paris: UNESCO (English only)

The evaluation report of the exercise will be published as Volume 2 of this publication.

Report prepared by the IOC Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/CARIBE-EWS)

Published in 2026  
by United Nations Educational, Scientific  
and Cultural Organization  
7, Place de Fontenoy, 75352 Paris 07 SP

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(IOC/2026/TS/198 Vol.1)

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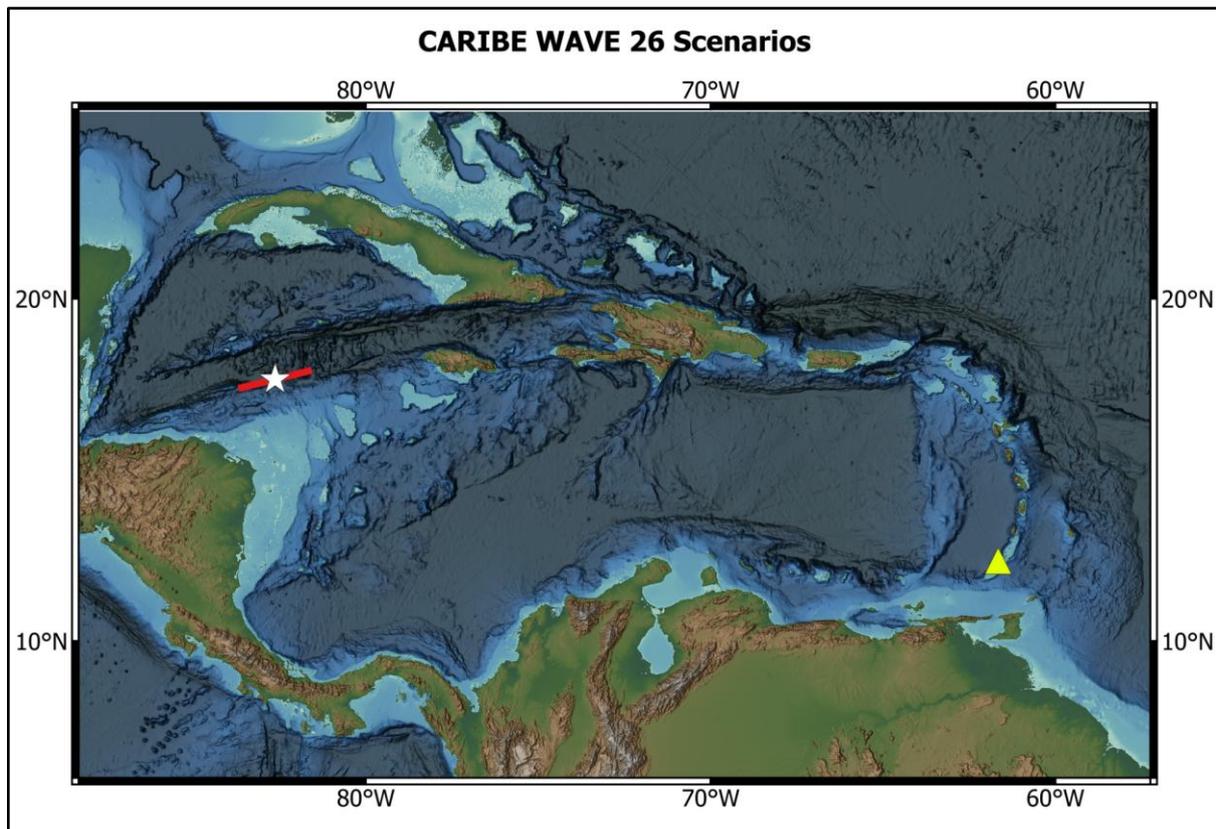
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## 1. INTRODUCTION

The Intergovernmental Coordination Group for 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 its annual tsunami exercise, CARIBE WAVE, on 19 March 2026 at 1500 UTC. The exercise CARIBE WAVE 26 will provide simulated tsunami threat messages based on two hypothetical scenarios: a tsunami generated by a magnitude 7.6 earthquake located southwest of the Cayman Islands and a tsunami generated by a flank collapse of the Kick 'em Jenny submarine volcano (Figure 1). Below is a description of the proposed scenarios for the exercise.



**Figure 1.** Map of the CARIBE WAVE 26 scenarios. White star indicates epicentral location and the red box indicates the map view of the ruptured fault segment of the Cayman Islands scenario, while the yellow triangle indicates the volcano location of the Kick 'em Jenny scenario. The figure is underlain by ETOPO 2022 model of NOAA National Centers for Environmental Information (2022). This figure was generated using QGIS.

## 2. CAYMAN ISLANDS SCENARIO

The Swan Islands Transform Fault is located along the boundary of the North American and Caribbean Plates (Peirce et al., 2019). This left-lateral fault marks the southern wall of the Cayman Trough together with the Oriente fault (Cheng and Wang, 2020). Here, the North America plate moves west-southwest at a rate of approximately 20 mm/yr (Dixon et al, 1998; DeMets et al, 2000). Several significant earthquakes have been recorded in the region. These include the 10 January 2018, M7.5 earthquake near Honduras that caused limited damage as well as a small tsunami (USGS, 2025). Before this, there was the May 2009 and February 1976 earthquakes that resulted in many fatalities (Cheng and Wang, 2020). The most recent event occurred on 8 February 2025, when a M7.6 earthquake struck south-southwest of the Cayman Islands (USGS, 2025). Strike-slip faults typically have a lower potential of producing

tsunamigenic earthquakes as there is less vertical displacement of the seafloor and in turn less vertical displacement of the water column. However, these events, when striking near land, still have the potential to trigger underwater landslides which may lead to a tsunami. Due to the distance offshore of the 8th February event, large impactful tsunami waves were not recorded (Kusky et al., 2025). However, for this earthquake, a preliminary magnitude of 8.0 was announced by the PTWC, initially raising concerns about a potential tsunami being generated before it was revised with a final magnitude of 7.6 (tsunami.gov). A tsunami threat message was issued indicating potential tsunami impact in 20 countries and territories; countries including but not limited to the Cayman Islands, Cuba, Jamaica, and Part of Central America, were initially issued a tsunami warning (tsunami.gov; Kusky et al., 2025). Regional review of the event response led to the identification of procedural gaps for some Member States and territories. Consequently, the CARIBE WAVE 26 exercise was selected to emulate the February 8<sup>th</sup> event to permit Member States and territories to put lessons learned into practice.

#### Cayman Islands Earthquake Scenario Parameters:

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Origin Time	15:00:00 UTC March 19, 2026
Latitude	17.646°
Longitude:	-82.6285°
Magnitude	7.6 – Mw
Depth	10 km

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### 3. KICK 'EM JENNY SCENARIO

There are many different ways volcanic tsunamis can be generated, including by pyroclastic flows, landslides, caldera collapse, and more (Schindelé et al., 2024). The scenario will be simulating a tsunami caused by flank instability of a volcano. Kick 'em Jenny is a submarine composite volcano sitting 185 m below the surface of the sea, located approximately 8 km north of Grenada at 12.30°N, 61.64°W (Lindsay, 2005; Global Volcanism Program, 2025). It is located along the seismically active region of the Lesser Antilles island arc which formed as a result of the subduction of the South American plate beneath the Caribbean plate. This submarine volcano has an elevation of 1,300 m above the seafloor and 300 m wide at its summit (Latchman et al., 2017). Previous investigations have revealed that it lies within a collapse scar created from a past flank instability episode (Dondin et al., 2017). On 24 July 1939, Kick 'em Jenny's had its first eruption on record that caused tsunami-like waves of around 2 m in amplitude in the Grenadines and the Grenada Island (Harbitz et al., 2012). Since then, it has erupted at least 14 times, making it the most frequently active volcano in the eastern Caribbean (Latchman et al., 2017). According to the U.S. National Oceanic and Atmospheric Administration (NOAA), Kick 'em-Jenny dome has been destroyed during eruptions. One of its eruptions occurred on 23 July 2015. More than 400 events were recorded during this period, with M3.7 the greatest one. The most recent magmatic eruption occurred on 29 April 2017; an advisory notice was issued by the Grenada National Disaster Management Agency (NaDMA) upon reports from the Seismic Research Centre (SRC) on increased seismicity with a high-amplitude signal that lasted 25 seconds. During this period, the largest magnitude recorded was 3.3. Subsequent eruptive activity consisted of one event that lasted 14 minutes, followed by about an hour of tremor (Latchman et al, 2017). More recently, during the period from 20 February to 20 March and October 2018, the SRC reported periods of increased seismic activity at the volcano. This exercise provides the opportunity to test procedures and products for tsunamis generated from volcanic activity through the Kick 'em Jenny scenario.

Kick 'em Jenny Scenario Parameters:

Origin Time	15:00:00 UTC March 19, 2026
Latitude	12.30 °N
Longitude	61.63 °W

#### 4. EARTHQUAKE IMPACT

According to the USGS, the CARIBE WAVE 26 simulated earthquake for the Cayman Islands scenario would produce an earthquake shaking green alert. Modified Mercalli intensity of up to V on the Mercalli Modified Scale could be observed for this scenario. It is estimated that over 44.5 million people would be exposed to Modified Mercalli intensities from II up to V. Complete information about the ShakeMap and PAGER output for the exercise scenario, is available in the [Annex II](#) of this handbook. In addition to tsunamis, secondary hazards could also include liquefaction and landslides. There is no ShakeMap or PAGER for the Kick 'em Jenny scenario as this is a non-seismic event.

#### 5. TIMELINE

The process of planning CARIBE WAVE 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. The timeline in [Table 1](#) lists the main actions to be taken before, during and after CARIBE WAVE 26.

ACTION	DUE DATE
Handbook Draft Circulated among ICG CARIBE-EWS CARIBE WAVE 26 Task Team	October 2025
Deadline for Comments	November 2025
Circular Letter Issued by IOC to MS	January 2026
Exercise Handbook Available Online	January 2026
First Webinar CW	20 January 2026 – English 21 January 2026 – Spanish 22 January 2026 – French
Second Webinar CW	24 February 2026 – English 25 February 2026 – Spanish 26 February 2026 – French
Countries Indicate Selected Scenario	6 March 2026
Exercise	19 March 2026
Hot-Wash	31 March 2026
Exercise Evaluation Due	3 April 2026
Draft CARIBE WAVE 26 Report	21 April 2026

**Table 1.** Timeline of actions to be taken before, during and after CARIBE WAVE 26.

## 6. PRODUCTS, STAGING AND DISSEMINATION

### 6.1 GENERAL

Expected impacts for these events are determined from pre-computed tsunami forecast models for the Cayman Islands scenario, while Kick 'em Jenny messages are based on simulated communications with the corresponding volcano observatory responsible for monitoring. [Annex I](#) provides the model results for the Cayman Islands scenario.

Each Member State needs to select one scenario for CARIBE WAVE 26. By 6 March 2026, they must complete the following survey ([https://www.surveymonkey.com/r/CW26\\_ScenarioSelection](https://www.surveymonkey.com/r/CW26_ScenarioSelection)) to select the scenario their country will use for the exercise. If the Member State does not inform the TSP and ITIC-CAR, the organizers will decide for which scenario the TSP will send the products. For the exercise, the TWFP/NTWC will receive only the simulated product for that scenario.

### 6.2 PACIFIC TSUNAMI WARNING CENTER (PTWC)

Tsunami messages for this exercise are issued by the PTWC based on the two hypothetical Cayman Islands and Kick 'em Jenny scenarios.

Participants should note the schedule in [Tables 2](#) and [3](#) for each scenario, and the times the PTWC messages will be issued. 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 IV](#)) cover a period of time between 5 minutes to 3 and a half hours from earthquake origin time, however in an actual event messages may continue for a much longer period of time. The dummy message will be sent through all of PTWC's standard broadcasting channels, and messages thereafter will be sent through email only. CARIBE WAVE 26 exercise will also be testing communication between the PTWC and NAVAREA operators in the Caribbean (NAVAREA VI) through NTWC.

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 Technical Series, 135](#)). As an additional planning tool, videos on the PTWC Enhanced Products and Staging for the Caribbean and Pacific were developed in English by ITIC (<https://vimeo.com/showcase/8956022>). To request access password, email [christa.vonh@noaa.gov](mailto:christa.vonh@noaa.gov).

#### 6.2.1 Master Schedule (Exercise Script)

<b>Cayman Islands Scenario</b>
--------------------------------

Tsunami generated by a magnitude 7.6 earthquake with epicenter at 17.646°N, 82.6285°W occurring the 19 of March 2026 at 1500 UTC. The initial alert is disseminated at 1505 UTC and will indicate a preliminary magnitude of 8.0. The magnitude will then be adjusted to 7.6 in message 3 with the dissemination of the graphical products.

Date	Time (UTC)	PTWC	
		Type of Product	Transmission Method
3/19/26	1500	---- Earthquake Occurs ----	
3/19/26	1500	Dummy	NWWS, GTS, EMWIN, AISR, Email
3/19/26	1505	Initial Tsunami Threat Message #1	Email
3/19/26	1515	Tsunami Threat Message #2	Email
3/19/26	1530	Tsunami Threat Message #3 with Forecast and Graphical Enhanced Products	Email
3/19/26	1600	Tsunami Threat Message #4	Email
3/19/26	1700	Tsunami Threat Message #5	Email
3/19/26	1715	Final Tsunami Threat Message #6	Email

**Table 2.** Timeline Messages issued by PTWC for the Cayman Islands scenario.

<b>Kick ‘em Jenny Scenario</b>
--------------------------------

A tsunami generated by a flank landslide of the Kick ‘em Jenny submarine volcano occurring the 19 of March 2026 at 1500 UTC. These messages are generated based on the information received from the SRC. The initial alert is disseminated at 1510 UTC.

Date	Time (UTC)	PTWC	
		Type of Product	Transmission Method
3/19/26	1500	---- Eruption Occurs ----	
3/19/26	1500	Dummy	NWWS, GTS, EMWIN, AISR, Email
3/19/26	1510	Initial Tsunami Information Statement #1	Email
3/19/26	1545	Tsunami Threat Message #2	Email
3/19/26	1630	Tsunami Threat Message #3	Email
3/19/26	1730	Tsunami Threat Message #4	Email
3/19/26	1830	Final Tsunami Threat Message #5	Email

**Table 3.** Timeline Messages issued by PTWC for the Kick ‘em Jenny scenario.

### 6.3 CENTRAL AMERICA TSUNAMI ADVISORY CENTER (CATAC)

Tsunami messages for this exercise are issued by CATAC based on the hypothetical Cayman Islands earthquake scenario.

Expected impacts for these events are determined from pre-computed tsunami forecast models. [Annex V](#) provides the model results of CATAC for the Cayman Islands scenario.

Participants should note the schedule in [Table 4](#) for the scenario, and the times the messages will be issued. This table includes the timeline for when messages would be issued by the CATAC 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 between 3 minutes and 2 hours from earthquake origin time, however in an actual event, messages may continue for a much longer period of time.

#### 6.3.1 Master Schedule (Exercise Script)

<b>Cayman Islands Scenario</b>
--------------------------------

Tsunami generated by a magnitude 7.6 earthquake with epicenter at 17.646°N, 82.6285°W occurring the 19 of March 2026 at 1500 UTC. The initial alert is disseminated at 1503 UTC and will indicate a preliminary magnitude of 8.0. The magnitude will then be adjusted to 7.6 in message 3.

Date	Time (UTC)	CATAC	
		Type of Product	Transmission Method
3/19/26	1500	---- Earthquake Occurs ----	
3/19/26	1500	Dummy Message	Email
3/19/26	1503	Initial Tsunami Threat Message #1	Email
3/19/26	1509	Tsunami Threat Message # 2	Email
3/19/26	1530	Tsunami Threat Message #3	Email
3/19/26	1600	Tsunami Threat Message #4	Email
3/19/26	1700	Final Tsunami Threat Message #5	Email

[Table 4.](#) Timeline Messages issued by CATAC for the Cayman Islands scenario.

### 6.4 SEISMIC RESEARCH CENTER (SRC)

For the Kick ‘em Jenny scenario, the SRC is the corresponding volcano observatory responsible for monitoring and determining the potential of a volcano induced tsunami threat. For the exercise, the SRC issues the Volcano Observatory Notice for tsUnami Threat (VONUT) text message, derived from the Volcano Observatory Notice for Aviation (VONA), which informs on any change in volcano alert levels or significant changes on volcanic eruptions and volcano flank destabilization (Clouard et al., 2024; Schindel  et al., 2024).

There are three messages. The first two VONUT will inform the PTWC of Kick ‘em Jenny volcanic activity, including the likelihood of an imminent eruption and possible flank collapse. The third VONUT alerts the PTWC of an eruption and major volcano flank collapse. This alert will be issued at the start of the CARIBE WAVE 26 exercise ([Annex VI](#)).

Participants should note the schedule in [Table 5](#), and the times the SRC messages will be issued. The simulated messages prepared by the SRC are provided only for the PTWC, CATAAC, and ICG-CARIBE EWS officers and institutions. Based on these products, the PTWC issues corresponding messages. Through this exercise, Member States are encouraged to review the simulated PTWC products and discuss potential tsunami generated from a volcanic eruption with their observatories, in order to better understand roles and responsibilities around potential volcanic events.

#### 6.4.1 Master Schedule (Exercise Script)

**Kick ‘em Jenny Scenario**

A tsunami generated by a flank landslide of the Kick ‘em Jenny submarine volcano occurring the 19 of March 2026 at 1500 UTC. The initial volcano alert is sent to PTWC at 1130 UTC.

Date	Time (UTC)	SRC	
		Type of Product	Transmission Method
3/19/26	1130	VONUT Message #1	Email
3/19/26	1430	VONUT Message #2	Email
3/19/26	1500	----- Eruption O c c u r s -----	
3/19/26	1500	VONUT Message #3	Email

[Table 5](#). Timeline Messages issued by SRC for the Kick ‘em Jenny scenario.

Person	Agency	Email
Gisela Báez-Sánchez <b>CARIBE WAVE Task Team Chair,</b>	Puerto Rico Seismic Network, USA	<a href="mailto:gisela.baez1@upr.edu">gisela.baez1@upr.edu</a>
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Mabius Francis <b>CARIBE WAVE Task Team Member,</b>	STLFS, Saint Lucia	<a href="mailto:mabiusfrancis@me.com">mabiusfrancis@me.com</a>
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**Table 5.** Members of the CARIBE WAVE 26 Task Team.

## 7. 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 26 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/CW26\\_Evaluation](https://www.surveymonkey.com/r/CW26_Evaluation).

The deadline for completing the evaluation is 3 April 2026.

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## ANNEX I. TSUNAMI SOURCE SCENARIOS DESCRIPTION

### Tsunami Source Scenarios Description

The following scenarios use a standard format to define the tsunami sources as described in the Figure I-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 downdip 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 represent the width and length of the plane, respectively. Letter  $W_{ap}$  represents apparent width and applies to the dimensions when observing the fault plane in map view.

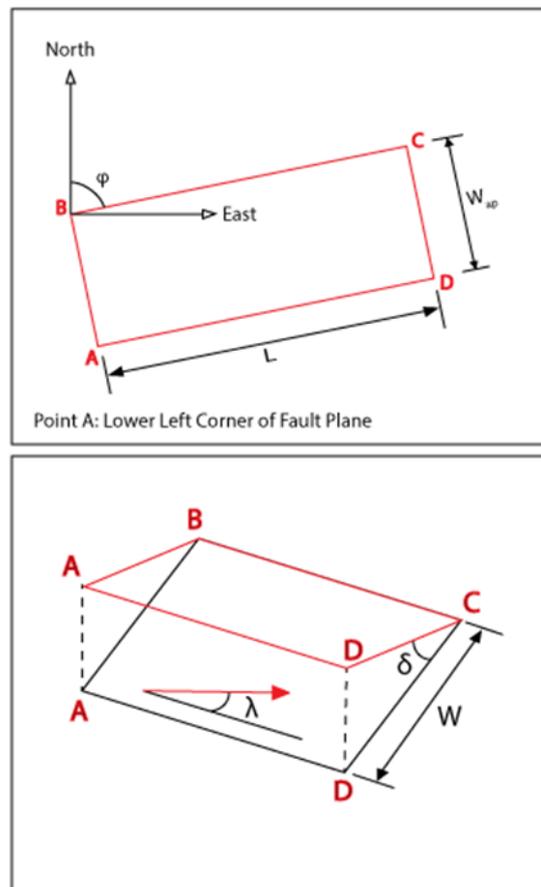


Figure I-1: Schematic of the standard used to describe all fault planes in the CARIBE WAVE Exercise scenarios.

<b>Cayman Islands Earthquake Scenario</b>
---

The Cayman Islands earthquake scenario consists of a rupture of a fault segment along the Swan Islands Fault with hypocenter at:

- Name of Scenario: CARIBE WAVE 26 Jamaica Scenario
- EQ Origin Time: 1500 UTC
- Hypocenter Latitude: 17.646°
- Hypocenter Longitude: -82.6285°
- Hypocenter Depth (km): 10 km
- EQ Magnitude (Mw): 7.6
- Slip (m): 2.4
- Shear modulus:  $3.3 \times 10^{11}$  dyne/cm<sup>2</sup>
- Seismic Moment:  $3.06 \times 10^{10}$  dyne-cm

Corner Point A	
Latitude	17.406°
Longitude	-83.6°
Depth (km)	20
Corner Point B	
Latitude	17.406°
Longitude	-83.6°
Depth (km)	0

Corner Point C	
Latitude	17.886°
Longitude	-81.657°
Depth (km)	0
Corner Point D	
Latitude	17.886°
Longitude	-81.657°
Depth (km)	20

Other Fault Parameters	
Strike ( $\phi$ phi)	255°
Dip ( $\delta$ delta)	90°
Rake ( $\lambda$ lambda)	0°
Length (km)	212.5
Width (W in km)	20
Width in Map View (km) [ $W_{ap} = W * \cos(\delta)$ ]	0

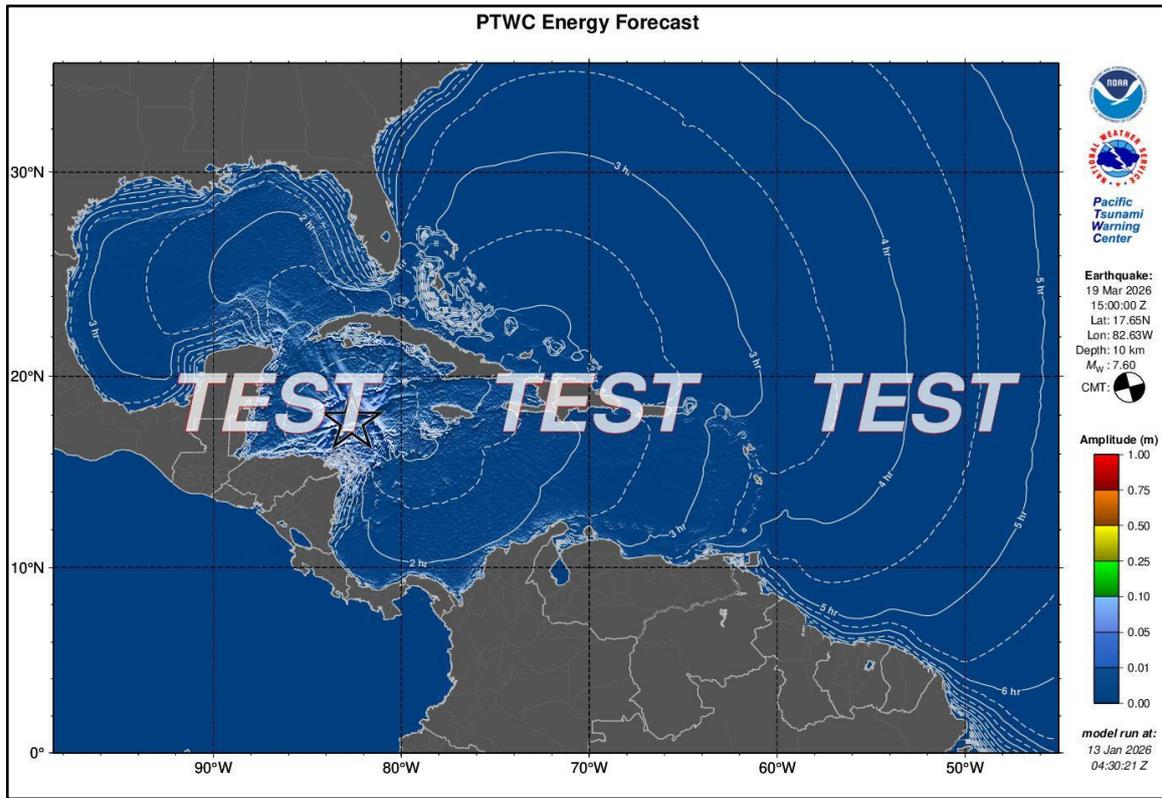


Figure I-2. RIFT maximum amplitude map for the Caribbean and Adjacent Regions for the Cayman Islands scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

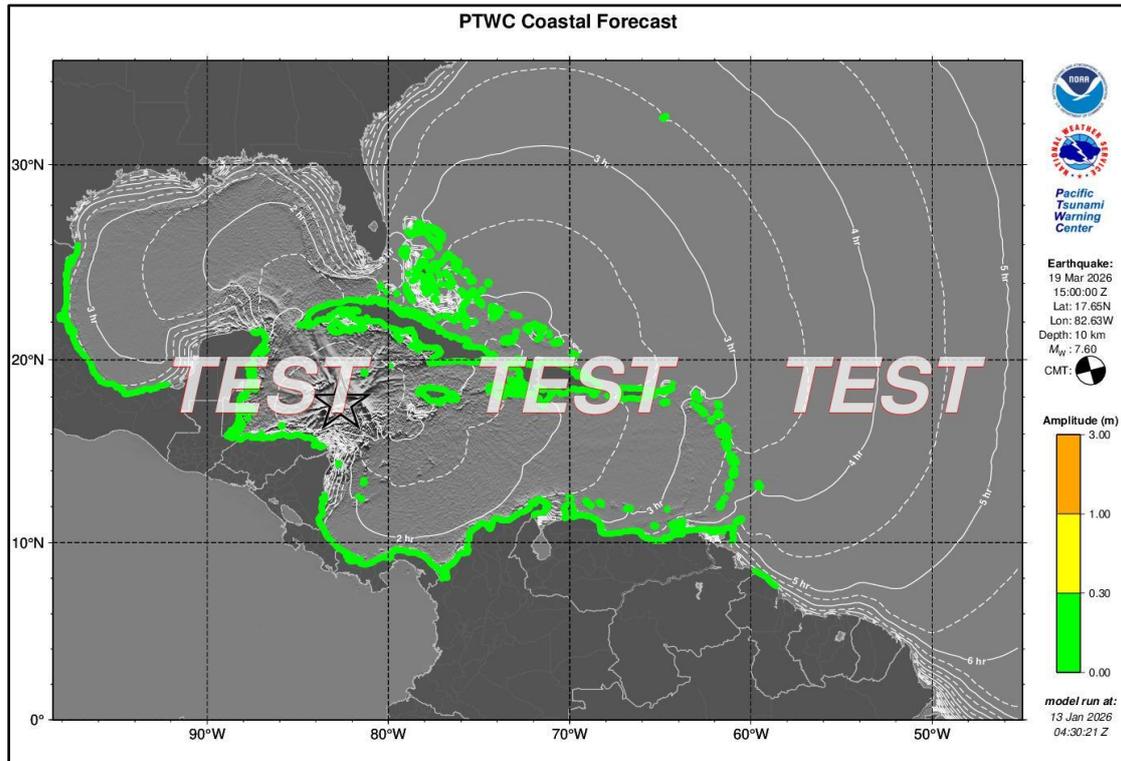


Figure I-3. RIFT coastal tsunami amplitude map for the Caribbean and Adjacent Regions for the Cayman Islands scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami.

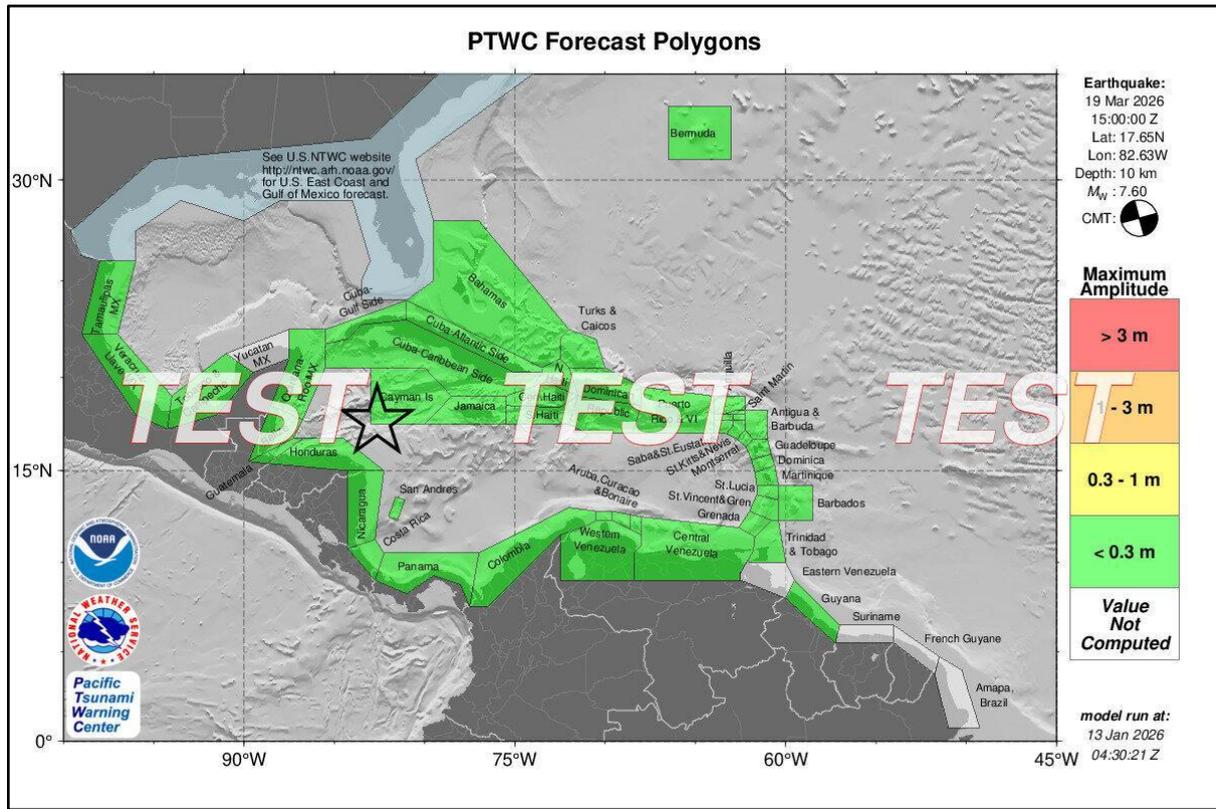


Figure I-4. RIFT forecast polygons for the Caribbean and Adjacent Regions for the Cayman Islands scenario. During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

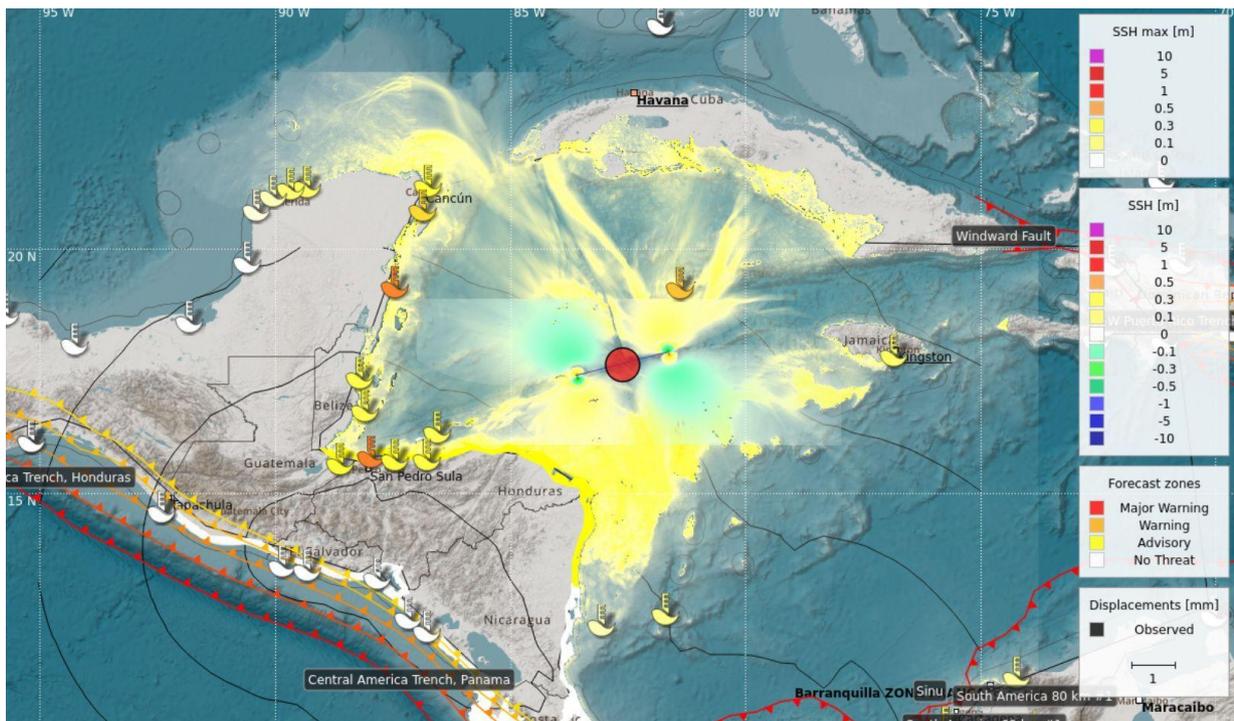


Figure I-5. CATAc Tsunami Heights and forecast zones for the Cayman Islands scenario.

**Kick ‘em Jenny Volcanic Scenario**

For the Kick ‘em Jenny scenario, data from previous studies and observations from the Seismic Research Center was used. This is a non-seismic scenario. Therefore, no earthquake point source or earthquake parameters were required.

## ANNEX II. 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 event 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 include the earthquake magnitude and the four corners of the rectangles from the fault plane and the depths at each of these four vertices. ShakeMap is then used as the shaking input for PAGER loss estimates. For the case of CARIBE WAVE 26, the fault plane is represented by one segment for the Cayman Islands scenario. The Cayman Islands scenario fault plane is 212.5 km long and 20 km wide.

Figures II-1, II-2, and II-3, show ShakeMap and PAGER outputs for the CARIBE WAVE 26 Cayman Islands earthquake scenario.

The ShakeMap shows intensities up to V on the Mercalli Modified Scale (Figure II-1). The strongest ground shaking is predicted near the southwest of the Cayman Islands and northeast of Honduras.

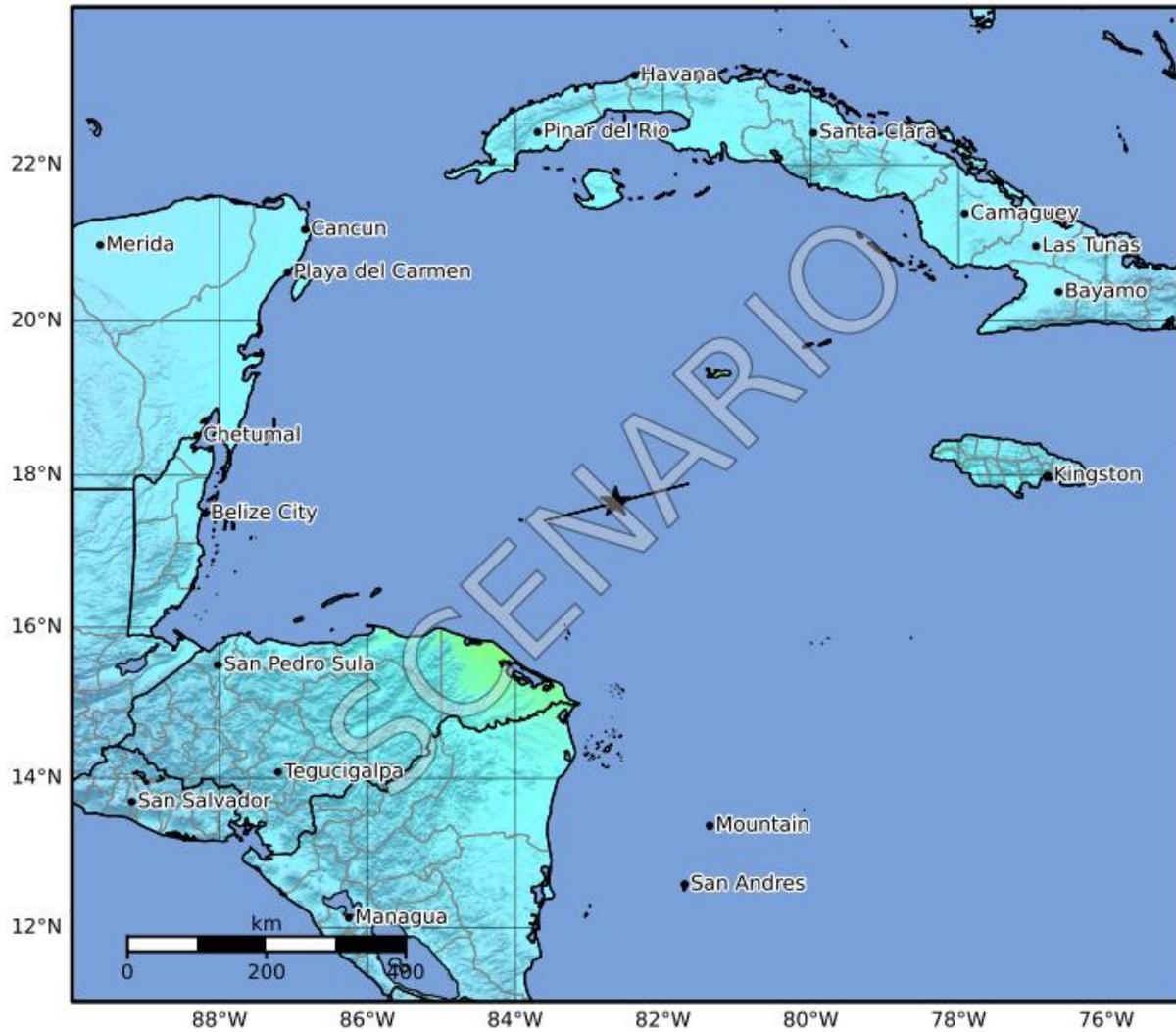
According to PAGER, (Figure II-3) the CARIBE WAVE 26 simulated earthquakes would produce an earthquake shaking green alert for the Cayman Islands scenario. There is a low likelihood of casualties and damage.

Regarding the population exposed to weak to moderate earthquake shaking, it is estimated that over 44.5 million people would be exposed to Modified Mercalli intensities from II to V (according to pager).

Note: There are no ShakeMap or PAGER products for the Kick 'em Jenny scenario as they are not needed for a nonseismic event such as this one.

### Cayman Islands Earthquake Scenario

Macroseismic Intensity Map USGS  
ShakeMap: CARIBE WAVE 26 Cayman Islands (M7.6)  
Nov 19, 2025 15:00:00 UTC M7.6 N17.65 W82.64 Depth: 10.0km ID:Cayman\_Is\_M7.6\_se



SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
PGA(%g)	<0.0464	0.297	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV(cm/s)	<0.0215	0.135	1.41	4.65	9.64	20	41.4	85.8	>178
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based on Worden et al. (2012)

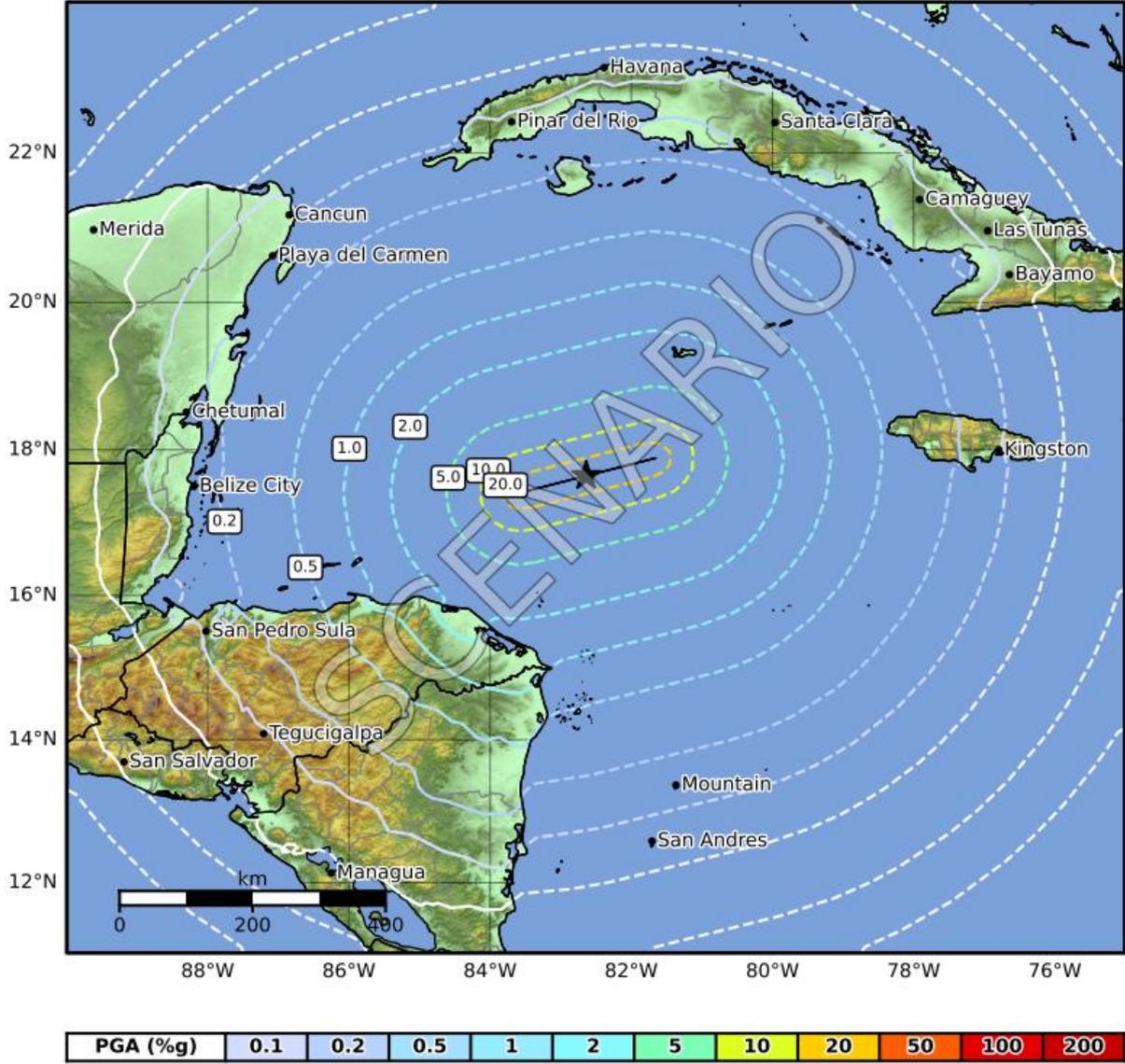
Version 1: Processed 2025-10-02T22:48:52Z

△ Seismic Instrument ○ Reported Intensity

★ Epicenter □ Rupture

Figure II-1. ShakeMap output for the CARIBE WAVE 26 Cayman Islands earthquake scenario. Macroseismic Intensity (USGS).

Peak Ground Acceleration Map USGS  
ShakeMap: CARIBE WAVE 26 Cayman Islands (M7.6)  
Nov 19, 2025 15:00:00 UTC M7.6 N17.65 W82.64 Depth: 10.0km ID:Cayman\_Is\_M7.6\_se



Scale based on Worden et al. (2012) Version 1: Processed 2025-10-02T22:48:52Z  
△ Seismic Instrument ○ Reported Intensity ★ Epicenter — Rupture

Figure II-2. ShakeMap output for the CARIBE WAVE 26 Cayman Islands earthquake scenario. Peak Ground Acceleration (USGS).



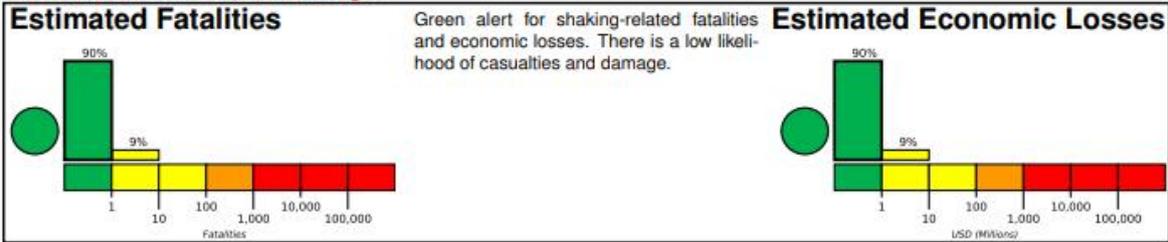
Earthquake Shaking ● Green Alert



**M 7.6, Scenario CARIBE WAVE 26 Cayman Islands (M7.6)**

Origin Time: 2025-11-19 15:00:00 UTC (Wed 09:00:00 local)  
Location: 17.6460° N 82.6390° W Depth: 10.0 km  
FOR TSUNAMI INFORMATION, SEE: [tsunami.gov](http://tsunami.gov)

**PAGER  
Version 2**



**Estimated Population Exposed to Earthquake Shaking**

ESTIMATED POPULATION EXPOSURE (k=x1000)	-*	30,838k*	13,527k	138k	0	0	0	0	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 highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and informal (metal, timber, GI etc.) construction.

**Historical Earthquakes**

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2002-12-23	323	5.8	V(7k)	-
1996-10-05	384	5.5	VI(9k)	-
2004-12-14	194	6.8	VI(42k)	-

**Selected City Exposure**

from geonames.org

MMI	City	Population
V	Brus Laguna	4k
V	Bodden Town	10k
V	East End	2k
V	Wawina	1k
V	George Town	29k
V	Paptalaya	1k
III	Kingston	938k
III	Tegucigalpa	851k
III	Havana	2,164k
III	Merida	717k
III	Managua	973k

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/>

Event ID: [us cayman.is.m7.6.se](http://earthquake.usgs.gov/data/pager/)

Figure II-3. PAGER output for CARIBE WAVE 26 Cayman Islands earthquake scenario (USGS).

## ANNEX III. PTWC DUMMY (START OF EXERCISE) MESSAGES

### PTWC

WECA41 PHEB 191500  
TSUCAX

TEST...INITIAL DUMMY START OF EXERCISE MESSAGE...TEST  
NWS PACIFIC TSUNAMI WARNING CENTER/NOAA/NWS  
ISSUED AT 1500Z 19 MAR 2026

...TEST... CARIBE WAVE 26 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 26  
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 WEBSITE CARIBEWAVE.ORG. THE EXERCISE  
PURPOSE IS TO EXERCISE AND EVALUATE THE CARIBE EWS TSUNAMI  
WARNING SYSTEM.  
\$\$

## ANNEX IV. PTWC EXERCISE MESSAGES

### **Cayman Islands Scenario – PTWC Products**

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The following simulated messages were created by the PTWC for the CARIBE WAVE 26 tsunami exercise. They are representative of the official standard products that would be issued by the PTWC for a magnitude 7.6 earthquake and subsequent tsunami originating along the Swan Islands fault. During a real event, the PTWC would also post the text products on [tsunami.gov](https://tsunami.gov). The alerts would likely persist longer during a real event than is depicted in this exercise.

#### **PTWC Message #1**

ZCZC  
WECA41 PHEB 191505  
TSUCAX

TEST...Tsunami Message Number 1...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1505 UTC Thu Mar 19 2026

...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         1500 UTC Mar 19 2026  
\* Coordinates         17.6 North 82.6 West  
\* Depth               10 KM / 6 Miles  
\* Location            North Of Honduras

TEST... EVALUATION ...TEST

-----  
\* This is a test message. An earthquake with a preliminary magnitude of 8.0 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.

\* 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

ARUBA... BAHAMAS... BARBUDA... BELIZE... BONAIRE... BR  
VIRGIN IS... CAYMAN ISLANDS... COLOMBIA... COSTA RICA...  
CUBA... DOMINICAN REP... GUATEMALA... HAITI... HONDURAS...  
JAMAICA... MEXICO... PANAMA... PUERTO RICO... SABA... SAN  
ANDRES PROVID... TURKS N CAICOS and US VIRGIN IS

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	COORDINATES	ETA (UTC)
CAYMAN ISLANDS		
Grand Cayman	19.3N 81.3W	1526 03/19
Cayman Brac	19.7N 79.9W	1530 03/19

CUBA				
Cienfuegos	22.0N	80.5W	1549	03/19
Santiago D Cuba	19.9N	75.8W	1556	03/19
Baracoa	20.4N	74.5W	1626	03/19
La Habana	23.2N	82.4W	1633	03/19
Gibara	21.1N	76.1W	1646	03/19
HONDURAS				
Puerto Cortes	15.9N	88.0W	1557	03/19
Trujillo	15.9N	86.0W	1643	03/19
MEXICO				
Cozumel	20.5N	87.0W	1558	03/19
JAMAICA				
Montego Bay	18.5N	77.9W	1605	03/19
Kingston	17.9N	76.9W	1644	03/19
HAITI				
Jeremie	18.6N	74.1W	1616	03/19
Cap Haiten	19.8N	72.2W	1638	03/19
Jacamel	18.1N	72.5W	1641	03/19
Port Au Prince	18.5N	72.4W	1719	03/19
BAHAMAS				
Great Inagua	20.9N	73.7W	1633	03/19
Mayaguana	22.3N	73.0W	1646	03/19
Long Island	23.3N	75.1W	1706	03/19
San Salvador	24.1N	74.5W	1706	03/19
Exuma	23.6N	75.9W	1716	03/19
Crooked Island	22.7N	74.1W	1721	03/19
Cat Island	24.4N	75.5W	1725	03/19
Eleuthera Island	25.2N	76.1W	1733	03/19
Bimini	25.8N	79.3W	1740	03/19
Andros Island	25.0N	77.9W	1742	03/19
Nassau	25.1N	77.4W	1754	03/19
SAN ANDRES PROVID				
San Andres	13.4N	81.4W	1641	03/19
Providencia	12.6N	81.7W	1651	03/19
TURKS N CAICOS				
West Caicos	21.7N	72.5W	1643	03/19
Grand Turk	21.5N	71.1W	1657	03/19
DOMINICAN REP				
Puerto Plata	19.8N	70.7W	1649	03/19
Santo Domingo	18.5N	69.9W	1718	03/19
Cabo Engano	18.6N	68.3W	1729	03/19
BELIZE				
Belize City	17.5N	88.2W	1707	03/19
COLOMBIA				
Santa Marta	11.2N	74.2W	1712	03/19
Cartagena	10.4N	75.6W	1713	03/19
Barranquilla	11.1N	74.9W	1731	03/19
Punta Caribana	8.6N	76.9W	1746	03/19
Riohacha	11.6N	72.9W	1755	03/19
PANAMA				
Aligandi	9.2N	78.0W	1718	03/19
Puerto Carreto	8.8N	77.6W	1728	03/19
Puerto Obaldia	8.7N	77.4W	1741	03/19

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Colon	9.4N	79.9W	1742	03/19
Bocas Del Toro	9.4N	82.2W	1746	03/19
PUERTO RICO				
Mayaguez	18.2N	67.2W	1726	03/19
San Juan	18.5N	66.1W	1729	03/19
COSTA RICA				
Puerto Limon	10.0N	83.0W	1729	03/19
ARUBA				
Oranjestad	12.5N	70.0W	1737	03/19
BONAIRE				
Onima	12.3N	68.3W	1743	03/19
US VIRGIN IS				
Christiansted	17.7N	64.7W	1749	03/19
GUATEMALA				
Puerto Barrios	15.7N	88.6W	1749	03/19
BR VIRGIN IS				
Anegada	18.8N	64.3W	1753	03/19
SABA				
Saba	17.6N	63.2W	1802	03/19
BARBUDA				
Castle Bay	17.6N	61.7W	1804	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 swept 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](http://earthquake.usgs.gov).
  - \* This is a test message. Further information about this event

may be found at [www.tsunami.gov](http://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](http://www.tsunami.gov).

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

\$\$

NNNN

**PTWC Message #2**

ZCZC  
WECA41 PHEB 191515  
TSUCAX

TEST...Tsunami Message Number 2...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1515 UTC Thu Mar 19 2026

...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 \*\*\*\*

Magnitude and Forecast updated.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

-----  
\* Magnitude           7.8  
\* Origin Time        1500 UTC Mar 19 2026  
\* Coordinates        17.6 North 82.6 West  
\* Depth              10 KM / 6 Miles  
\* Location           North Of Honduras

TEST... EVALUATION ...TEST

-----  
\* This is a test message. An earthquake with a preliminary magnitude of 7.8 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.  
  
\* This is a test message. Based on the preliminary earthquake parameters... hazardous tsunami waves are possible for coasts that could be impacted within two hours of the earthquake.

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

-----

\* This is a test message. Hazardous tsunami waves from this earthquake are possible within two hours of the earthquake along some coasts of

BAHAMAS... CAYMAN ISLANDS... CUBA... DOMINICAN REP...  
HAITI... HONDURAS... JAMAICA... MEXICO... SAN ANDRES  
PROVID and TURKS N CAICOS

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	COORDINATES	ETA (UTC)
-----		
CAYMAN ISLANDS		
Grand Cayman	19.3N 81.3W	1526 03/19
Cayman Brac	19.7N 79.9W	1530 03/19
CUBA		
Cienfuegos	22.0N 80.5W	1549 03/19
Santiago D Cuba	19.9N 75.8W	1556 03/19
Baracoa	20.4N 74.5W	1626 03/19
La Habana	23.2N 82.4W	1633 03/19
Gibara	21.1N 76.1W	1646 03/19
HONDURAS		
Puerto Cortes	15.9N 88.0W	1557 03/19
Trujillo	15.9N 86.0W	1643 03/19
MEXICO		
Cozumel	20.5N 87.0W	1558 03/19
JAMAICA		

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Montego Bay	18.5N	77.9W	1605	03/19
Kingston	17.9N	76.9W	1644	03/19
HAITI				
Jeremie	18.6N	74.1W	1616	03/19
Cap Haiten	19.8N	72.2W	1638	03/19
Jacamel	18.1N	72.5W	1641	03/19
BAHAMAS				
Great Inagua	20.9N	73.7W	1633	03/19
Mayaguana	22.3N	73.0W	1646	03/19
SAN ANDRES PROVID				
San Andres	13.4N	81.4W	1641	03/19
Providencia	12.6N	81.7W	1651	03/19
TURKS N CAICOS				
West Caicos	21.7N	72.5W	1643	03/19
Grand Turk	21.5N	71.1W	1657	03/19
DOMINICAN REP				
Puerto Plata	19.8N	70.7W	1649	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 swept 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](http://earthquake.usgs.gov).
- \* This is a test message. Further information about this event may be found at [www.tsunami.gov](http://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](http://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 191530  
TSUCAX

TEST...Tsunami Message Number 3...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1530 UTC Thu Mar 19 2026

...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 \*\*\*\*

Magnitude and Forecast updated.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

-----  
\* Magnitude           7.6  
\* Origin Time        1500 UTC Mar 19 2026  
\* Coordinates        17.6 North 82.6 West  
\* Depth              10 KM / 6 Miles  
\* Location           North Of Honduras

TEST... EVALUATION ...TEST

-----  
\* This is a test message. An earthquake with a preliminary magnitude of 7.6 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.

\* This is a test message. Based on all available data... hazardous tsunami waves are not forecast for any coasts covered by this product. However... the forecast has not yet been verified by any sea-level gauge observations.

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

- \* The numerical tsunami forecast based upon the earthquake mechanism predicts tsunami amplitudes below 0.3 meters for all coasts covered by this international product.
- \* This center will continue to issue tsunami threat messages until the forecast can be verified or until enough time has passed for the tsunami threat to dissipate.

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 swept 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](http://earthquake.usgs.gov).

- \* This is a test message. Further information about this event may be found at [www.tsunami.gov](http://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](http://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 191600  
TSUCAX

TEST...Tsunami Message Number 4...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1600 UTC Thu Mar 19 2026

...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 \*\*\*\*

No updates

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

-----  
\* Magnitude           7.6  
\* Origin Time        1500 UTC Mar 19 2026  
\* Coordinates        17.6 North 82.6 West  
\* Depth              10 KM / 6 Miles  
\* Location           North Of Honduras

TEST... EVALUATION ...TEST

-----  
\* This is a test message. An earthquake with a preliminary magnitude of 7.6 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.

\* This is a test message. Based on all available data... hazardous tsunami waves are not forecast for any coasts covered by this product. However... the forecast has not yet been verified by any sea-level gauge observations.

TEST... TSUNAMI THREAT FORECAST ...TEST

-----

- \* The numerical tsunami forecast based upon the earthquake mechanism predicts tsunami amplitudes below 0.3 meters for all coasts covered by this international product.
- \* This center will continue to issue tsunami threat messages until the forecast can be verified or until enough time has passed for the tsunami threat to dissipate.

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 swept 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](http://earthquake.usgs.gov).

\* This is a test message. Further information about this event may be found at [www.tsunami.gov](http://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](http://www.tsunami.gov).

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

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**PTWC Message #5**

ZCZC  
WECA41 PHEB 191700  
TSUCAX

TEST...Tsunami Message Number 5...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1700 UTC Thu Mar 19 2026

...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 \*\*\*\*

Evaluation updated

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

-----

\* Magnitude           7.6  
\* Origin Time        1500 UTC Mar 19 2026  
\* Coordinates        17.6 North 82.6 West  
\* Depth              10 KM / 6 Miles  
\* Location           North Of Honduras

TEST... EVALUATION ...TEST

-----

- \* This is a test message. An earthquake with a preliminary magnitude of 7.6 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.
- \* This is a test message. Based on all available data... hazardous tsunami waves are not forecast for any coasts covered by this product.
- \* This is a test message. Small tsunami waves have now been

observed that are in agreement with the forecast.

TEST... TSUNAMI THREAT FORECAST ...TEST

-----

- \* 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 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 swept 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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LON	UTC	AMPLITUDE	TP	MIN
-----						
MEXICO						
Puerto Morelos	20.9N	86.9W	1603	0.11M/ 0.4FT	H	13

TIME UTC - Time of the reported observation

MS TP - Measurement Type

C is the maximum crest

T is the maximum trough

H is half maximum crest-to-trough

PER MIN - Tsunami wave period in minutes

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](http://earthquake.usgs.gov).

\* This is a test message. Further information about this event may be found at [www.tsunami.gov](http://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](http://www.tsunami.gov).

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

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**PTWC Message #6**

ZCZC  
WECA41 PHEB 191715  
TSUCAX

TEST...Tsunami Message Number 6...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1715 UTC Thu Mar 19 2026

...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           7.6  
\* Origin Time         1500 UTC Mar 19 2026  
\* Coordinates         17.6 North 82.6 West  
\* Depth               10 KM / 6 Miles  
\* Location             North Of Honduras

TEST... EVALUATION ...TEST

- 
- \* This is a test message. An earthquake with a preliminary magnitude of 7.6 occurred north of Honduras at 1500 UTC on Thursday March 19 2026.
  - \* 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 ...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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LON	UTC	AMPLITUDE	TP	MIN
-----						
COLOMBIA						
San Andres	12.6N	81.7W	1701	0.02M/ 0.1FT	H	9
MEXICO						
Puerto Morelos	20.9N	86.9W	1603	0.11M/ 0.4FT	H	13

TIME UTC - Time of the reported observation  
MS TP - Measurement Type  
    C is the maximum crest  
    T is the maximum trough  
    H is half maximum crest-to-trough  
PER MIN - Tsunami wave period in minutes

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](http://earthquake.usgs.gov).
- \* This is a test message. Further information about this event may be found at [www.tsunami.gov](http://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](http://www.tsunami.gov).

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

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## Kick 'em Jenny Scenario

PTWC created the following messages for the CARIBE WAVE 26 tsunami exercise. These messages are generated based on the information received from the SRC for a tsunami generated by a flank landslide of the Kick 'em Jenny submarine volcano. During a real event, the PTWC would also post the text products on [tsunami.gov](https://tsunami.gov). The alerts would probably persist longer during a real event than is depicted in this exercise.

### **PTWC Message #1**

ZCZC  
WECA43 PHEB 191510  
TIBCAX

TEST...Tsunami Information Statement Number 1...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1510 UTC Thu Mar 19 2026

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

\* This is a test message. The University of the West Indies Seismic Research Centre has reported that a significant volcanic event occurred at Kick-em-Jenny Volcano in Grenada at around 1500 UTC on Thursday March 19 2026. Kick-em-Jenny Volcano is located at 12.30N and 61.63W.

\* This is a test message. It is not known whether hazardous tsunami waves were generated by this event. The Pacific Tsunami Warning Center is monitoring the nearest sea level gauges and will issue further information if tsunami waves are observed.

TEST... RECOMMENDED ACTIONS ...TEST

-----

- \* This is a test message. Government agencies responsible for responding to tsunami threats should be aware of this volcanic activity and be prepared to act if tsunami waves are observed that threaten their coasts.
- \* This is a test message. Persons located in nearby coastal areas should stay alert for information and follow instructions from their national and local authorities.

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 Kick Em Jenny Volcano from the University of the West Indies Seismic Research Centre - UWI-SRC - can be found on the internet at [uwiseismic.com](http://uwiseismic.com).
- \* 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](http://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  
WECA41 PHEB 191545  
TSUCAX

TEST...Tsunami Message Number 2...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1545 UTC Thu Mar 19 2026

...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... EVALUATION ...TEST  
-----

\* This is a test message. Volcanic activity associated with the Kick-em-Jenny Volcano in Grenada occurred around 1500 UTC on Thursday March 19 2026. Kick-em-Jenny Volcano is located at 12.30N and 61.63W.

\* This is a test message. Tsunami waves generated by this volcanic activity have been observed on one or more nearby sea level gauges indicating a hazardous tsunami threat for some coasts in the region.

TEST... TSUNAMI THREAT FORECAST ...TEST  
-----

\* This is a test message. Tsunami waves from volcanic activity cannot be accurately forecast in real time. However, based on all available information hazardous tsunami waves from this volcano are possible along the some coasts of

BARBADOS... DOMINICA... GRENADA... MARTINIQUE... SAINT  
LUCIA... SAINT VINCENT and TRINIDAD TOBAGO

\* This is a test message. As further data are received the estimated area of tsunami threat may expand or contract in future messages.

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	COORDINATES	ETA (UTC)
TRINIDAD TOBAGO		
Pirates Bay	11.3N 60.6W	1523 03/19
GRENADA		
Saint Georges	12.0N 61.8W	1524 03/19
BARBADOS		
Bridgetown	13.1N 59.6W	1527 03/19
SAINT VINCENT		
Kingstown	13.1N 61.2W	1529 03/19
SAINT LUCIA		
Castries	14.0N 61.0W	1537 03/19
MARTINIQUE		
Fort De France	14.6N 61.1W	1543 03/19
DOMINICA		
Roseau	15.3N 61.4W	1552 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 swept 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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LON	UTC	AMPLITUDE	TP	MIN
-----						
GRENADA						
Prickley Bay	12.0N	61.8W	1530	1.05M/ 3.4FT	H	12
SAINT_VINCENT_AND_THE_GRENADINES						
Calliaqua	13.1N	61.2W	1528	0.57M/ 1.9FT	H	11
Chateaubelair	13.3N	61.2W	1521	0.71M/ 2.3FT	H	8

TIME UTC - Time of the reported observation  
MS TP - Measurement Type  
    C is the maximum crest  
    T is the maximum trough  
    H is half maximum crest-to-trough  
PER MIN - Tsunami wave period in minutes

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 Kick-em-Jenny Volcano from the University of the West Indies Seismic Research Centre can be found on the internet at [uwiseismic.com/volcanoes/kick-em-jenny](http://uwiseismic.com/volcanoes/kick-em-jenny)
- \* 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](http://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 191630  
TSUCAX

TEST...Tsunami Message Number 3...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1630 UTC Thu Mar 19 2026

...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 threat forecast is updated in this message.

TEST... EVALUATION ...TEST  
-----

- \* This is a test message. Volcanic activity associated with the Kick-em-Jenny Volcano in Grenada occurred around 1500 UTC on Thursday March 19 2026. Kick-em-Jenny Volcano is located at 12.30N and 61.63W.
- \* This is a test message. Tsunami waves generated by this volcanic activity have been observed on one or more nearby sea level gauges indicating a hazardous tsunami threat for some coasts in the region.

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

- \* This is a test message. Tsunami waves from volcanic activity cannot be accurately forecast in real time. However, based on all available information hazardous tsunami waves from this volcano are possible along the some coasts of

ANGUILLA... ANTIGUA AND BARBUDA... ARUBA... BAHAMAS...  
BARBADOS... BONAIRE... BR VIRGIN IS... COLOMBIA...  
CURACAO... DOMINICA... DOMINICAN REP... GRENADA...  
GUADELOUPE... HAITI... MARTINIQUE... MONTSERRAT... PUERTO  
RICO... SABA... SAINT BARTHELEMY... SAINT KITTS... SAINT  
LUCIA... SAINT MARTIN... SAINT VINCENT... SINT  
EUSTATIUS... SINT MAARTEN... TRINIDAD TOBAGO... TURKS N  
CAICOS... US VIRGIN IS and VENEZUELA

\* This is a test message. As further data are received the estimated area of tsunami threat may expand or contract in future messages.

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	COORDINATES	ETA (UTC)
-----		
SAINT LUCIA		
Castries	14.0N 61.0W	1537 03/19
MARTINIQUE		
Fort De France	14.6N 61.1W	1543 03/19
DOMINICA		
Roseau	15.3N 61.4W	1552 03/19
GUADELOUPE		
Basse Terre	16.0N 61.7W	1601 03/19
ANTIGUA AND BARBUDA		
Green Island	17.1N 61.7W	1617 03/19
Castle Bay	17.6N 61.7W	1625 03/19
Palmetto Point	17.6N 61.9W	1639 03/19
Carlisle Bay	17.0N 61.8W	1645 03/19
Saint Johns	17.1N 61.9W	1647 03/19
MONTSERRAT		
Plymouth	16.7N 62.2W	1619 03/19
SAINT KITTS		
Basseterre	17.3N 62.7W	1629 03/19
BONAIRE		
Onima	12.3N 68.3W	1630 03/19
US VIRGIN IS		
Christiansted	17.7N 64.7W	1633 03/19
Charlotte Amalie	18.3N 64.9W	1728 03/19
SINT EUSTATIUS		
Sint Eustatius	17.5N 63.0W	1633 03/19
SABA		
Saba	17.6N 63.2W	1634 03/19
CURACAO		
Willemstad	12.1N 68.9W	1638 03/19
TRINIDAD TOBAGO		

Port Of Spain	10.6N	61.5W	1642	03/19
VENEZUELA				
Cumana	10.5N	64.2W	1644	03/19
Maiquetia	10.6N	67.0W	1646	03/19
SINT MAARTEN				
Simpson Baai	18.0N	63.1W	1652	03/19
PUERTO RICO				
Mayaguez	18.2N	67.2W	1653	03/19
San Juan	18.5N	66.1W	1659	03/19
ARUBA				
Oranjestad	12.5N	70.0W	1654	03/19
ANGUILLA				
The Valley	18.3N	63.1W	1659	03/19
BR VIRGIN IS				
Anegada	18.8N	64.3W	1700	03/19
Roadtown	18.4N	64.6W	1733	03/19
DOMINICAN REP				
Santo Domingo	18.5N	69.9W	1703	03/19
Cabo Engano	18.6N	68.3W	1706	03/19
Puerto Plata	19.8N	70.7W	1727	03/19
SAINT BARTHELEMY				
Saint Barthelemy	17.9N	62.8W	1704	03/19
SAINT MARTIN				
Baie Lucas	18.1N	63.0W	1708	03/19
Baie Grand Case	18.1N	63.1W	1710	03/19
Baie Blanche	18.1N	63.0W	1721	03/19
HAITI				
Jacamel	18.1N	72.5W	1721	03/19
Cap Haiten	19.8N	72.2W	1743	03/19
COLOMBIA				
Riohacha	11.6N	72.9W	1737	03/19
Barranquilla	11.1N	74.9W	1743	03/19
TURKS N CAICOS				
Grand Turk	21.5N	71.1W	1738	03/19
West Caicos	21.7N	72.5W	1751	03/19
BAHAMAS				
Mayaguana	22.3N	73.0W	1750	03/19
Great Inagua	20.9N	73.7W	1756	03/19
Crooked Island	22.7N	74.1W	1758	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 swept 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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LOX	UTC	AMPLITUDE	TP	MIN
-----						
USA-PUERTO_RICO						
Yabucoa	18.1N	65.8W	1630	0.34M/	1.1FT H	14
USA-VIRGIN_ISLANDS						
Limetree	17.7N	64.8W	1622	0.19M/	0.6FT H	8
St Croix	17.7N	64.7W	1627	0.14M/	0.4FT H	11
DART-DEEP_OCEAN_GAUGES						
Caribbean 42407	15.3N	68.2W	1622	0.06M/	0.2FT H	14
MONTSERRAT						
Little Bay	16.8N	62.2W	1611	0.49M/	1.6FT H	8
GUADELOUPE						
Point A Pitre	16.2N	61.5W	1607	0.07M/	0.2FT H	9
Deshaiies	16.3N	61.8W	1559	0.62M/	2.0FT H	10
BARBADOS						
Consett Bay Jetty	13.2N	59.5W	1556	0.36M/	1.2FT H	12
Bridgetown Port	13.1N	59.6W	1549	0.47M/	1.6FT H	13
Port St Charles	13.3N	59.6W	1557	0.40M/	1.3FT H	13
SAINT_LUCIA						
Ganters Bay	14.0N	61.0W	1600	0.40M/	1.3FT H	13
Soufriere	13.9N	61.1W	1557	0.63M/	2.1FT H	13
DOMINICA						
Portsmouth	15.6N	61.5W	1554	0.47M/	1.5FT H	11
Roseau	15.3N	61.4W	1550	1.53M/	5.0FT H	11
MARTINIQUE						
Fort De France	14.6N	61.1W	1547	0.25M/	0.8FT H	7
GRENADA						
Prickley Bay	12.0N	61.8W	1530	1.05M/	3.4FT H	12
SAINT_VINCENT_AND_THE_GRENADINES						
Calliaqua	13.1N	61.2W	1528	0.57M/	1.9FT H	11
Chateaubelair	13.3N	61.2W	1521	0.71M/	2.3FT H	8
MEXICO						
Puerto Morelos	20.9N	86.9W	1603	0.11M/	0.4FT H	13

TIME UTC - Time of the reported observation

MS TP - Measurement Type

C is the maximum crest

T is the maximum trough

H is half maximum crest-to-trough

PER MIN - Tsunami wave period in minutes

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 Kick-em-Jenny Volcano from the University of the West Indies Seismic Research Centre can be found on the internet at

uwiseismic.com/volcanoes/kick-em-jenny

- \* 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](http://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 191730  
TSUCAX

TEST...Tsunami Message Number 4...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1730 UTC Thu Mar 19 2026

...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... EVALUATION ...TEST  
-----

\* This is a test message. Volcanic activity associated with the Kick-em-Jenny Volcano in Grenada occurred around 1500 UTC on Thursday March 19 2026. Kick-em-Jenny Volcano is located at 12.30N and 61.63W.

\* This is a test message. Tsunami waves generated by this volcanic activity have been observed on one or more nearby sea level gauges indicating a hazardous tsunami threat for some coasts in the region.

TEST... TSUNAMI THREAT FORECAST ...TEST  
-----

\* This is a test message. Tsunami waves from volcanic activity cannot be accurately forecast in real time. However, based on all available information hazardous tsunami waves from this volcano are possible along the some coasts of

ANGUILLA... ANTIGUA AND BARBUDA... ARUBA... BAHAMAS...  
BARBADOS... BONAIRE... BR VIRGIN IS... COLOMBIA...  
CURACAO... DOMINICA... DOMINICAN REP... GRENADA...  
GUADELOUPE... HAITI... MARTINIQUE... MONTSERRAT... PUERTO  
RICO... SABA... SAINT BARTHELEMY... SAINT KITTS... SAINT  
LUCIA... SAINT MARTIN... SAINT VINCENT... SINT  
EUSTATIUS... SINT MAARTEN... TRINIDAD TOBAGO... TURKS N  
CAICOS... US VIRGIN IS and VENEZUELA

\* This is a test message. As further data are received the

estimated area of tsunami threat may expand or contract in future messages.

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	COORDINATES	ETA (UTC)
BONAIRE		
Onima	12.3N 68.3W	1630 03/19
US VIRGIN IS		
Christiansted	17.7N 64.7W	1633 03/19
Charlotte Amalie	18.3N 64.9W	1728 03/19
SINT EUSTATIUS		
Sint Eustatius	17.5N 63.0W	1633 03/19
SABA		
Saba	17.6N 63.2W	1634 03/19
CURACAO		
Willemstad	12.1N 68.9W	1638 03/19
ANTIGUA AND BARBUDA		
Palmetto Point	17.6N 61.9W	1639 03/19
Carlisle Bay	17.0N 61.8W	1645 03/19
Saint Johns	17.1N 61.9W	1647 03/19
TRINIDAD TOBAGO		
Port Of Spain	10.6N 61.5W	1642 03/19
VENEZUELA		
Cumana	10.5N 64.2W	1644 03/19
Maiquetia	10.6N 67.0W	1646 03/19
SINT MAARTEN		
Simpson Baai	18.0N 63.1W	1652 03/19
PUERTO RICO		
Mayaguez	18.2N 67.2W	1653 03/19
San Juan	18.5N 66.1W	1659 03/19
ARUBA		
Oranjestad	12.5N 70.0W	1654 03/19
ANGUILLA		
The Valley	18.3N 63.1W	1659 03/19
BR VIRGIN IS		
Anegada	18.8N 64.3W	1700 03/19
Roadtown	18.4N 64.6W	1733 03/19

DOMINICAN REP					
Santo Domingo	18.5N	69.9W	1703	03/19	
Cabo Engano	18.6N	68.3W	1706	03/19	
Puerto Plata	19.8N	70.7W	1727	03/19	
SAINT BARTHELEMY					
Saint Barthelemy	17.9N	62.8W	1704	03/19	
SAINT MARTIN					
Baie Lucas	18.1N	63.0W	1708	03/19	
Baie Grand Case	18.1N	63.1W	1710	03/19	
Baie Blanche	18.1N	63.0W	1721	03/19	
HAITI					
Jacamel	18.1N	72.5W	1721	03/19	
Cap Haiten	19.8N	72.2W	1743	03/19	
COLOMBIA					
Riohacha	11.6N	72.9W	1737	03/19	
Barranquilla	11.1N	74.9W	1743	03/19	
TURKS N CAICOS					
Grand Turk	21.5N	71.1W	1738	03/19	
West Caicos	21.7N	72.5W	1751	03/19	
BAHAMAS					
Mayaguana	22.3N	73.0W	1750	03/19	
Great Inagua	20.9N	73.7W	1756	03/19	
Crooked Island	22.7N	74.1W	1758	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 swept 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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LON	UTC	AMPLITUDE	TP	MIN
-----						
DOMINICAN_REPUBLIC						
Port San Andres	18.4N	69.6W	1719	0.37M/ 1.2FT	H	11
Punta Cana	18.5N	68.4W	1652	0.41M/ 1.3FT	H	11
USA-VIRGIN_ISLANDS						

Charlotte-amalie	18.3N	64.9W	1707	0.08M/	0.3FT	H	12
Lameshurbay	18.3N	64.7W	1705	0.21M/	0.7FT	H	7
Limetree	17.7N	64.8W	1622	0.19M/	0.6FT	H	8
St Croix	17.7N	64.7W	1627	0.14M/	0.4FT	H	11
USA-PUERTO_RICO							
Arecibo	18.5N	66.7W	1711	0.05M/	0.2FT	H	9
Salinas	17.9N	66.2W	1658	0.15M/	0.5FT	H	11
Aguadilla	18.5N	67.2W	1658	0.21M/	0.7FT	H	13
Mayaguez	18.2N	67.2W	1649	0.10M/	0.3FT	H	13
Mona Island	18.1N	67.9W	1646	0.44M/	1.5FT	H	12
Esperanza Vieques	18.1N	65.5W	1633	0.70M/	2.3FT	H	7
Guayanilla	18.0N	66.8W	1633	0.39M/	1.3FT	H	14
Yabucoa	18.1N	65.8W	1630	0.34M/	1.1FT	H	14
CURACAO							
Bullen Bay	12.2N	69.0W	1638	0.18M/	0.6FT	H	13
ANGUILLA							
Road Bay	18.2N	63.1W	1700	0.10M/	0.3FT	H	12
GRENADA							
Prickley Bay	12.0N	61.8W	1530	1.05M/	3.4FT	H	12
TRINIDAD_AND_TOBAGO							
Port Of Spain	10.6N	61.5W	1654	0.04M/	0.1FT	H	8
DART-DEEP_OCEAN_GAUGES							
Caribbean 42407	15.3N	68.2W	1622	0.06M/	0.2FT	H	14
MONTSERRAT							
Little Bay	16.8N	62.2W	1611	0.49M/	1.6FT	H	8
GUADELOUPE							
Point A Pitre	16.2N	61.5W	1607	0.07M/	0.2FT	H	9
Deshaies	16.3N	61.8W	1559	0.62M/	2.0FT	H	10
BARBADOS							
Consett Bay Jetty	13.2N	59.5W	1556	0.36M/	1.2FT	H	12
Bridgetown Port	13.1N	59.6W	1549	0.47M/	1.6FT	H	13
Port St Charles	13.3N	59.6W	1557	0.40M/	1.3FT	H	13
SAINT_LUCIA							
Ganters Bay	14.0N	61.0W	1600	0.40M/	1.3FT	H	13
Soufriere	13.9N	61.1W	1557	0.63M/	2.1FT	H	13
DOMINICA							
Portsmouth	15.6N	61.5W	1554	0.47M/	1.5FT	H	11
Roseau	15.3N	61.4W	1550	1.53M/	5.0FT	H	11
MARTINIQUE							
Fort De France	14.6N	61.1W	1547	0.25M/	0.8FT	H	7
SAINT_VINCENT_AND_THE_GRENADINES							
Calliaqua	13.1N	61.2W	1528	0.57M/	1.9FT	H	11
Chateaubelair	13.3N	61.2W	1521	0.71M/	2.3FT	H	8
PANAMA							
El Porvenir	9.6N	78.9W	1728	0.03M/	0.1FT	H	14
COLOMBIA							
Isla Naval	10.2N	75.8W	1726	0.03M/	0.1FT	H	8
Cartagena	10.4N	75.5W	1722	0.04M/	0.1FT	H	14
Santa Marta	11.2N	74.2W	1726	0.04M/	0.1FT	H	14
San Andres	12.6N	81.7W	1701	0.02M/	0.1FT	H	9
MEXICO							
Puerto Morelos	20.9N	86.9W	1603	0.11M/	0.4FT	H	13

TIME UTC - Time of the reported observation

MS TP - Measurement Type

C is the maximum crest

T is the maximum trough

H is half maximum crest-to-trough

PER MIN - Tsunami wave period in minutes

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 Kick-em-Jenny Volcano from the University of the West Indies Seismic Research Centre can be found on the internet at [uwiseismic.com/volcanoes/kick-em-jenny](http://uwiseismic.com/volcanoes/kick-em-jenny)
  
- \* 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](http://www.tsunami.gov).

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

\$\$

NNNN

**PTWC Message #5**

ZCZC  
WECA41 PHEB 191830  
TSUCAX

TEST...Tsunami Message Number 5...TEST  
NWS Pacific Tsunami Warning Center Honolulu HI  
1830 UTC Thu Mar 19 2026

...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... EVALUATION ...TEST  
-----

- \* This is a test message. Volcanic activity associated with the Kick-em-Jenny Volcano in Grenada occurred around 1500 UTC on Thursday March 19 2026. Kick-em-Jenny Volcano is located at 12.30N and 61.63W.
- \* This is a test message. Based on all available data... the tsunami threat from this volcanic event has now passed and there is no further tsunami threat.
- \* This is a test message. However... because volcanic activity may occur in multiple phases the Pacific Tsunami Warning Center will continue to stay in contact with the University of the West Indies Seismic Research Centre about future Kick-em-Jenny Volcano activity and will continue monitor nearby sea level gauges in case of any subsequent tsunami threats.

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 above and below the normal tide may continue over the next few 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	COORDINATES		TIME	TSUNAMI	MS	PER
	LAT	LON	UTC	AMPLITUDE	TP	MIN
-----						
DOMINICAN_REPUBLIC						
Port San Andres	18.4N	69.6W	1719	0.37M/	1.2FT H	11
Punta Cana	18.5N	68.4W	1652	0.41M/	1.3FT H	11
USA-VIRGIN_ISLANDS						
Charlotte-amalie	18.3N	64.9W	1707	0.08M/	0.3FT H	12
Lameshurbay	18.3N	64.7W	1705	0.21M/	0.7FT H	7
Limetree	17.7N	64.8W	1622	0.19M/	0.6FT H	8
St Croix	17.7N	64.7W	1627	0.14M/	0.4FT H	11
USA-PUERTO_RICO						
Arecibo	18.5N	66.7W	1711	0.05M/	0.2FT H	9
Salinas	17.9N	66.2W	1658	0.15M/	0.5FT H	11
Aguadilla	18.5N	67.2W	1658	0.21M/	0.7FT H	13
Mayaguez	18.2N	67.2W	1649	0.10M/	0.3FT H	13
Mona Island	18.1N	67.9W	1646	0.44M/	1.5FT H	12
Esperanza Vieques	18.1N	65.5W	1633	0.70M/	2.3FT H	7
Guayanilla	18.0N	66.8W	1633	0.39M/	1.3FT H	14
Yabucoa	18.1N	65.8W	1630	0.34M/	1.1FT H	14
CURACAO						
Bullen Bay	12.2N	69.0W	1638	0.18M/	0.6FT H	13
ANGUILLA						
Road Bay	18.2N	63.1W	1700	0.10M/	0.3FT H	12
GRENADA						
Prickley Bay	12.0N	61.8W	1530	1.05M/	3.4FT H	12
TRINIDAD_AND_TOBAGO						
Port Of Spain	10.6N	61.5W	1654	0.04M/	0.1FT H	8
DART-DEEP_OCEAN_GAUGES						
Caribbean 42407	15.3N	68.2W	1622	0.06M/	0.2FT H	14
MONTSERRAT						
Little Bay	16.8N	62.2W	1611	0.49M/	1.6FT H	8
GUADELOUPE						
Point A Pitre	16.2N	61.5W	1607	0.07M/	0.2FT H	9
Deshaies	16.3N	61.8W	1559	0.62M/	2.0FT H	10
BARBADOS						
Consett Bay Jetty	13.2N	59.5W	1556	0.36M/	1.2FT H	12
Bridgetown Port	13.1N	59.6W	1549	0.47M/	1.6FT H	13

Port St Charles	13.3N	59.6W	1557	0.40M/	1.3FT	H	13
SAINT_LUCIA							
Ganters Bay	14.0N	61.0W	1600	0.40M/	1.3FT	H	13
Soufriere	13.9N	61.1W	1557	0.63M/	2.1FT	H	13
DOMINICA							
Portsmouth	15.6N	61.5W	1554	0.47M/	1.5FT	H	11
Roseau	15.3N	61.4W	1550	1.53M/	5.0FT	H	11
MARTINIQUE							
Fort De France	14.6N	61.1W	1547	0.25M/	0.8FT	H	7
SAINT_VINCENT_AND_THE_GRENADINES							
Calliaqua	13.1N	61.2W	1528	0.57M/	1.9FT	H	11
Chateaubelair	13.3N	61.2W	1521	0.71M/	2.3FT	H	8
PANAMA							
Bocas Del Toro	9.4N	82.3W	1755	0.03M/	0.1FT	H	13
El Porvenir	9.6N	78.9W	1728	0.03M/	0.1FT	H	14
COLOMBIA							
Isla Fuerte	9.4N	76.2W	1749	0.03M/	0.1FT	H	9
Sapzurro	8.7N	77.4W	1754	0.03M/	0.1FT	H	12
Covenas	9.4N	76.2W	1742	0.03M/	0.1FT	H	7
Ballenas	11.7N	72.7W	1745	0.04M/	0.1FT	H	13
Isla Naval	10.2N	75.8W	1726	0.03M/	0.1FT	H	8
Cartagena	10.4N	75.5W	1722	0.04M/	0.1FT	H	14
Santa Marta	11.2N	74.2W	1726	0.04M/	0.1FT	H	14
San Andres	12.6N	81.7W	1701	0.02M/	0.1FT	H	9
COSTA_RICA							
Limon	10.0N	83.0W	1738	0.03M/	0.1FT	H	14
MEXICO							
Puerto Morelos	20.9N	86.9W	1603	0.11M/	0.4FT	H	13

TIME UTC - Time of the reported observation

MS TP - Measurement Type

C is the maximum crest

T is the maximum trough

H is half maximum crest-to-trough

PER MIN - Tsunami wave period in minutes

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 Kick-em-Jenny Volcano from the University of the West Indies Seismic Research Centre can be found on the internet at [uwiseismic.com/volcanoes/kick-em-jenny](http://uwiseismic.com/volcanoes/kick-em-jenny)

\* 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](http://www.tsunami.gov).

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

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## ANNEX V. CATAAC EXERCISE MESSAGES

### Cayman Islands Scenario – Central America Tsunami Advisory Products

The following messages created for the CARIBE WAVE 26 tsunami exercise are representative of the official standard products issued by the Central America Tsunami Advisory Center (CATAAC) for a magnitude 7.6 earthquake and subsequent tsunami originating along the Swan Islands Fault. During a real event, CATAAC would also post the text products on <http://catac.ineter.gob.ni/>. The alerts may persist longer during a real event than is depicted in this exercise.

#### CATAAC MESSAGES ENGLISH:

##### Dummy Message:

!This is just a test message sent by CATAAC in support of Exercise CaribeWave 26!

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Central America Tsunami Advisory Center (CATAAC)

XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX

Notice: This message is published for information purposes only in support of Central American countries. National authorities

are responsible for determining the level of alert and for taking appropriate measures for their country.

Issued : 2026-03-19 09:00 Central American Time  
2026-03-19 10:00 Panama Time  
2026-03-19 15:00 Time (UTC)

This message is being used to initiate the Caribe Wave 2026 tsunami exercise, originating near Cayman Islands.

The exercise messages are available on the web site <https://catac.ineter.gob.ni/>.

The purpose of the exercise is to provide emergency management advice. It is a scenario to test tsunami response plans in the Central American countries.

XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX

**CATAC Message #1:**

!This is just a test message sent by CATAC in support of Exercise  
CaribeWave 26!

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Central America Tsunami Advisory Center (CATAC)

XXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS IS AN EXERCISE  
XXXXXXXXXXXXXXXXXXXX

Notice: This message is published for information purposes only in  
support of Central American countries. National  
authorities  
are responsible for determining the level of alert and for  
taking appropriate measures for their country.

Tsunami Bulletin N° 01

Issued: 2026-03-19 09:03 Central American Time  
2026-03-19 10:03 Panama Time  
2026-03-19 15:03 (UTC) Time

An earthquake has occurred with the following these preliminary parameters:

Magnitude : 8.0  
Date : 19/03/2026  
Time : 09:00 Central American Time, 10:00 Panama Time, 15:00  
UTC Time  
Latitude : 17.646 N  
Longitude : 82.629 W  
Depth : 10 Km  
Location : Cayman Islands

Assessment:

There is a high possibility of tsunami considering the magnitude, depth of  
the hypocenter,  
and the location of the earthquake.

Recommended Actions:

Immediate actions are urgently needed for the protection of the population  
on the Caribbean coasts of Central America.

More information will be provided in the next few minutes.

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XXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS  
IS AN EXERCISE XXXXXXXXXXXX

**CATAC Message #2:**

!This is just a test message sent by CATAC in support of Exercise  
CaribeWave 26!

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Central America Tsunami Advisory Center (CATAC)

XXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX THIS IS AN EXERCISE  
XXXXXXXXXXXXXXXXXXXXX

Notice: This message is published for information purposes only in  
support of Central American countries. National  
authorities  
are responsible for determining the level of alert and for  
taking appropriate measures for their country.

Tsunami Bulletin N° 02

Issued: 2026-03-19 09:09 Central American Time  
2026-03-19 10:09 Panama Time  
2026-03-19 15:09 (UTC) Time

An earthquake has occurred with the following these parameters:

Magnitude : 7.8  
Date : 19/03/2026  
Time : 09:00 Central American Time, 10:00 Panama Time, 15:00  
UTC Time  
Latitude : 17.646 N  
Longitude : 82.629 W  
Depth : 10 Km  
Location : Cayman Islands

Evaluation:

According the analysis of the Moment Tensor of the earthquake there is a  
mayor possibility that a tsunami may have been produced which would affect  
with greater intensity the nearest coasts, about 100 km from the epicenter  
of the earthquake.

Authorities should take actions corresponding to their response plans.

Tsunami simulation results:

Estimated Time of Arrival (ETA) in local time and Maximum Height (AM) of  
tsunami waves, at different forecast points:

Site	Country	ETA (Local Time)	AM(m)
Isla del Cisne	HONDURAS	2026-03-19 15:09:45	2.52
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15	0.64
Colón	HONDURAS	2026-03-19 16:34:15	0.60

Updates:

More information will be provided in the next few minutes.

Countries may additionally receive messages from the Pacific Tsunami Warning Center (PTWC).

In case of differences between CATAC and PTWC results, we recommend to prefer conservatively, the estimates that correspond to a higher hazard.

Additional information:

Detailed earthquake and tsunami information can be found at the website.  
<https://catac.ineter.gob.ni>

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XXXXXXXX THIS IS AN EXERCISE XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS  
IS AN EXERCISE XXXXXXXXXXXX

**CATAC Message #3:**

!This is just a test message sent by CATAC in support of Exercise  
CaribeWave 26!

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Central America Tsunami Advisory Center (CATAC)

XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXXXXXX THIS IS AN EXERCISE  
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Notice: This message is published for information purposes only in  
support of Central American countries. National authorities  
are responsible for determining the level of alert and for  
taking appropriate measures for their country.

Tsunami Bulletin N° 03

Issued: 2026-03-19 09:30 Central American Time  
2026-03-19 10:30 Panama Time  
2026-03-19 15:30 (UTC) Time

A tsunami warning is in effect for the coastal areas of Central American  
countries.

An earthquake has occurred with the following parameters:

Magnitude : 7.6  
Date : 19/03/2026  
Time : 09:00 Central American Time, 10:00 Panama Time, 15:00  
UTC Time  
Latitude : 17.646 N  
Longitude : 82.629 W  
Depth : 10 Km  
Location : Cayman Islands

Evaluation:

According the analysis of the Moment Tensor of the earthquake there is a  
mayor possibility that a tsunami may have been produced which would affect  
with greater intensity the nearest coasts, about 100 km from the epicenter  
of the earthquake.

Authorities should take actions corresponding to their response plans.

Tsunami simulation results:

Estimated Time of Arrival (ETA) in local time and Maximum Height (AM) of  
tsunami waves,  
at different forecast points:

Site	Country	ETA (Local Time)	Status
Isla del Cisne	HONDURAS	2026-03-19 15:09:45	
		2.52	
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15	0.64
Colón	HONDURAS	2026-03-19 16:34:15	0.60

Graphical result:

Review in the attachment to this message, the color-coded forecast zones according to hazard, for the Caribbean Sea coastal areas of Central America according our numerical tsunami simulations.

Sea level station measurements:

Code (Local (Time) AM(m)	Coordinates (°)	Country	ETA
VZ.PCOR 19 17:38:45 0.57	15.84N 87.96W	Honduras	2026-03-
VZ.GEOR 15:50:15 0.42	19.30N 81.38W	Cayman Islands	2026-03-19
VZ.BDTO	9.35N 82.26W	Panama	
	2026-03-19 22:34:45	0.29	
VZ.PRBA 19 19:56:45 0.29	15.69N 88.62W	Guatemala	2026-03-
VZ.TELA	15.78N 87.45W	Honduras	
	2026-03-19 20:58:00	0.27	
VZ.CEIB	15.79N 86.76W	Honduras	
	2026-03-19 20:57:00	0.22	
VZ.CABC	16.80N 88.08W	Belize	
	2026-03-19 21:07:30	0.20	
VZ.POBE	17.47N 88.20W	Belize	
	2026-03-19 18:37:30	0.19	
VZ.RTAS	16.35N 86.54W	Honduras	
	2026-03-19 22:05:45	0.16	
VZ.PTRO	17.93N 76.85W	Jamaica	
	2026-03-19 20:30:00	0.10	
VZ.ELPO	9.56N 78.95W	Panama	
	2026-03-19 20:38:30	0.10	
VZ.COIS 19 22:32:15 0.05	12.33N 83.07W	Nicaragua	2026-03-
VZ.LIMON 19 21:12:45 0.03	9.99N 83.02W	Costa Rica	2026-03-

Updates:

More information will be provided in the next few minutes.

Countries may additionally receive messages from the Pacific Tsunami Warning Center (PTWC).

In case of differences between CATAC and PTWC results, we recommend to prefer conservatively, the estimates that correspond to a higher hazard.

Additional information:

Detailed earthquake and tsunami information can be found at the website.  
<https://catac.ineter.gob.ni>

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XXXXXXXX THIS IS AN EXERCISE XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS  
IS AN EXERCISE XXXXXXXXXXXX

**CATAC Message #4:**

!This is just a test message sent by CATAC in support of Exercise CaribeWave 26!

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Central America Tsunami Advisory Center (CATAC)

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Notice: This message is published for information purposes only in support of Central American countries. National authorities are responsible for determining the level of alert and for taking appropriate measures for their country.

Tsunami Bulletin N° 04

Issued: 2026-03-19 10:00 Central American Time  
2026-03-19 11:00 Panama Time  
2026-03-19 16:00 (UTC) Time

A tsunami warning is in effect for the coastal areas of the Caribbean Sea of the Central American countries.

An earthquake has occurred with the following parameters:

Magnitude : 7.6  
Date : 19/03/2026  
Time : 09:00 Central American Time, 10:00 Panama Time, 15:00 UTC  
Time  
Latitude : 17.646 N  
Longitude : 82.629 W  
Depth : 10 Km  
Location : Cayman Islands

Evaluation:

A tsunami has been recorded affecting the Caribbean coast of Honduras and, to a lesser extent, the rest of the Central American countries. Authorities should take actions corresponding to their response plans.

Tsunami simulation results:

Estimated Time of Arrival (ETA) in local time and Maximum Height (AM) of tsunami waves, at different forecast points:

Site	Country	ETA (Local Time)
Isla del Cisne	HONDURAS	2026-03-19 15:09:45
	2.52	
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15
	0.64	
Colón	HONDURAS	2026-03-19 16:34:15
	0.60	

Sea level station measurements obtained:

Code (Local	Coordinates (°) Time) AM(m)		Country		ETA
VZ.PCOR	15.84N 87.96W	Honduras	2026-03-19	17:38:45	0.57
VZ.GEOR	19.30N 81.38W	Cayman Islands	2026-03-19	15:50:15	0.42
VZ.BDTO	9.35N 82.26W	Panama	2026-03-19	22:34:45	0.29
VZ.PRBA	15.69N 88.62W	Guatemala	2026-03-19	19:56:45	0.29
VZ.TELA	15.78N 87.45W	Honduras	2026-03-19	20:58:00	0.27
VZ.CEIB	15.79N 86.76W	Honduras	2026-03-19	20:57:00	0.22
VZ.CABC	16.80N 88.08W	Belize	2026-03-19	21:07:30	0.20
VZ.POBE	17.47N 88.20W	Belize	2026-03-19	18:37:30	0.19
VZ.RTAS	16.35N 86.54W	Honduras	2026-03-19	22:05:45	0.16
VZ.PTRO	17.93N 76.85W	Jamaica	2026-03-19	20:30:00	0.10
VZ.ELPO	9.56N 78.95W	Panama	2026-03-19	20:38:30	0.10
VZ.COIS	12.33N 83.07W	Nicaragua	2026-03-19	22:32:15	0.05
VZ.LIMON	9.99N 83.02W	Costa Rica	2026-03-19	21:12:45	0.03

Updates:

More information will be provided in the next few minutes.

Countries may additionally receive messages from the Pacific Tsunami Warning Center (PTWC).

In case of differences between CATAc and PTWC results, we recommend to prefer conservatively, the estimates that correspond to a higher hazard.

Additional information:

Detailed earthquake and tsunami information can be found at the website.  
<https://catac.ineter.gob.ni>

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XXXXXXXX THIS IS AN EXERCISE XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS  
IS AN EXERCISE XXXXXXXXXXXX

**CATAC Message #5:**

!This is just a test message sent by CATAC in support of Exercise  
CaribeWave 26!

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Central America Tsunami Advisory Center

(CATAC)

XXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS IS AN EXERCISE  
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Notice: This message is published for information purposes only in  
support of Central American countries. National authorities  
are responsible for determining the level of alert and for  
taking appropriate measures for their country.

Tsunami Bulletin N° 05

Issued: 2026-03-19 11:00 Central American Time  
2026-03-19 12:00 Panama Time  
2026-03-19 17:00 (UTC) Time

An earthquake has occurred with the following parameters:

Magnitude : 7.6  
Date : 19/03/2026  
Time : 09:00 Central American Time, 10:00 Panama  
Time, 15:00 UTC Time  
Latitude : 17.646 N  
Longitude : 82.629 W  
Depth : 10 Km  
Location : Cayman Islands

Sea level station measurements obtained:

Code	Coordinates (°)	Country	ETA (Local
Time)	AM(m)		
VZ.PCOR	15.84N 87.96W	Honduras	2026-03-19 17:38:45 0.57
VZ.GEOR	19.30N 81.38W	Cayman Islands	2026-03-19 15:50:15 0.42
VZ.BDTO	9.35N 82.26W	Panama	2026-03-19 22:34:45 0.29
VZ.PRBA	15.69N 88.62W	Guatemala	2026-03-19 19:56:45 0.29
VZ.TELA	15.78N 87.45W	Honduras	2026-03-19 20:58:00 0.27
VZ.CEIB	15.79N 86.76W	Honduras	2026-03-19 20:57:00 0.22
VZ.CABC	16.80N 88.08W	Belize	2026-03-19 21:07:30 0.20
VZ.POBE	17.47N 88.20W	Belize	2026-03-19 18:37:30 0.19
VZ.RTAS	16.35N 86.54W	Honduras	2026-03-19 22:05:45 0.16
VZ.PTRO	17.93N 76.85W	Jamaica	2026-03-19 20:30:00 0.10
VZ.ELPO	9.56N 78.95W	Panamá	2026-03-19 20:38:30 0.10
VZ.COIS	12.33N 83.07W	Nicaragua	2026-03-19 22:32:15 0.05
VZ.LIMON	9.99N 83.02W	Costa Rica	2026-03-19 21:12:45 0.03

Assessment:

According to our simulations, higher amplitudes could occur in the next few  
hours.

the national authorities of the different countries should make the appropriate decisions, according to their response plans.

PTWC messages:

Countries may additionally receive messages from the Pacific Tsunami Warning Center (PTWC).  
In case of differences between CATAC and PTWC results, we recommend preferring conservatively, the estimates that correspond to a higher hazard.

Additional information:

This will be the last message issued by CATAC about this event.

Detailed earthquake and tsunami information can be found at the website.  
<https://catac.ineter.gob.ni>

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XXXXXXXX THIS IS AN EXERCISE XXXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS  
IS AN EXERCISE XXXXXXXXXXXX

**CATAC MESSAGES IN SPANISH**

**Mensaje Dummy:**

¡Este es sólo un mensaje de prueba enviado por CATAC en apoyo al Ejercicio CaribeWave 26!

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Centro de Asesoramiento de Tsunami para  
América Centra (CATAC)

XXXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX

Aviso: Este es un mensaje de inicio del ejercicio  
Caribe Wave 2026, para los países de América Central, como  
apoyo a la Comisión Oceanográfica Intergubernamental (COI), de  
la UNESCO y al ICG/CARIBE-EWS.

Emisión: 2026-03-19 09:00 Hora de Centroamérica  
2026-03-19 10:00 Hora de Panamá  
2026-03-19 15:00 Hora (UTC)

Este mensaje se está utilizando para iniciar el ejercicio de tsunami Caribe Wave 2026, con origen en la Región de Islas Caimán.

Los mensajes de este ejercicio están disponibles en el sitio web <https://catac.ineter.gob.ni/>

El propósito del ejercicio es proporcionar asesoría a la gestión de emergencias.

Es un escenario para poner a prueba los planes de respuesta ante tsunamis en los países de América Central

XXXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX



**Mensaje CATAAC #2:**

¡Este es sólo un mensaje de prueba enviado por CATAAC en apoyo al Ejercicio CaribeWave 26!

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Centro de Asesoramiento de Tsunami para  
América Central - CATAAC

XXXXXXXXX ESTE ES SOLO UN EJERCICIO  
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AVISO: Este mensaje se publica únicamente a  
título informativo como apoyo a los países de América Central. Las  
autoridades nacionales son responsables de determinar  
el nivel de alerta y efectuar las medidas adecuadas para su  
país, según sus protocolos de actuaciones.

Boletín sobre tsunami N° 02

Emisión: 2026-03-19 09:09 Hora de Centroamérica  
2026-03-19 10:09 Hora de Panamá  
2026-03-19 15:09 Hora (UTC)

Un terremoto ha ocurrido con los siguientes estos parámetros preliminares:

Magnitud : 7.8  
Fecha : 19/03/2026  
Hora : 09:00 Hora de Centroamérica, 10:00 Hora de Panamá, 15:00  
Hora UTC  
Latitud : 17.646 N  
Longitud : 82.629 O  
Profundidad : 10 Km  
Ubicación : Islas Caimán

Evaluación:

Por magnitud, profundidad y ubicación del terremoto existe la posibilidad de que se haya producido un tsunami que afectaría con mayor intensidad a las costas más cercanas, a unos cien kilómetros del epicentro del terremoto, degradando su afectación a mayores distancias. Las autoridades deben tomar acciones correspondientes, de acuerdo a sus planes de respuestas.

Resultados estimados de la simulación de tsunami:

Estimados de Tiempos de Arribo (ETA) en hora local y Altura Máxima (AM) de olas del tsunami, en diferentes puntos de pronóstico:

Sitio	País	ETA (Hora local)
Isla del Cisne	HONDURAS	2026-03-19 15:09:45
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15

AM(m) 2.52 0.64



**Mensaje CATAAC #3:**

¡Este es sólo un mensaje de prueba enviado por CATAAC en apoyo al Ejercicio CaribeWave 26!

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Centro de Asesoramiento de Tsunami para  
América Central - CATAAC

XXXXXXXXX ESTE ES SOLO UN EJERCICIO  
XX

AVISO: Este mensaje se publica únicamente a  
título informativo como apoyo a los países de América Central. Las  
autoridades nacionales son responsables de determinar  
el nivel de alerta y efectuar las medidas adecuadas para su  
país, según sus protocolos de actuaciones.

Boletín sobre tsunami N° 03

Emisión: 2026-03-19 09:30 Hora de Centroamérica  
2026-03-19 10:30 Hora de Panamá  
2026-03-19 15:30 Hora (UTC)

Un terremoto ha ocurrido con los siguientes estos parámetros preliminares:

Magnitud : 7.6  
Fecha : 19/03/2026  
Hora : 09:00 Hora de Centroamérica, 10:00 Hora de Panamá, 15:00  
Hora UTC  
Latitud : 17.646 N  
Longitud : 82.629 O  
Profundidad : 10 Km  
Ubicación : Islas Caimán

Evaluación:

Según el análisis del momento tensor del terremoto, existe una gran posibilidad de que se haya producido un tsunami que afectaría con mayor intensidad a las costas más cercanas, a unos 100 km del epicentro del terremoto. Las autoridades nacionales deben tomar las medidas correspondientes a sus planes de respuesta.

Resultados de la simulación de tsunami:

Estimados de Tiempos de Arribo (ETA) en hora local y Altura Máxima (AM) de olas del tsunami, en diferentes puntos de pronóstico:

Sitio	País	ETA (Hora local)
Isla del Cisne	HONDURAS	2026-03-19 15:09:45
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15 0.64
Colón	HONDURAS	2026-03-19 16:34:15
		0.60



**Mensaje CATAAC #4:**

¡Este es sólo un mensaje de prueba enviado por CATAAC en apoyo al Ejercicio CaribeWave 26!

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América Central - CATAAC Centro de Asesoramiento de Tsunami para

XXXXXXXXX ESTE ES SOLO UN EJERCICIO  
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AVISO: Este mensaje se publica únicamente a  
título informativo como apoyo a los países de América Central. Las  
autoridades nacionales son responsables de determinar  
el nivel de alerta y efectuar las medidas adecuadas para su  
país, según sus protocolos de actuaciones.

Boletín sobre tsunami N° 04

Emisión: 2026-03-19 10:00 Hora de Centroamérica  
2026-03-19 11:00 Hora de Panamá  
2026-03-19 16:00 Hora (UTC)

Un terremoto ha ocurrido en el Mar Caribe, con los siguientes parámetros preliminares:

Magnitud : 7.6  
Fecha : 19/03/2026  
Hora : 09:00 Hora de Centroamérica, 10:00 Hora de Panamá, 15:00  
Hora UTC  
Latitud : 17.646 N  
Longitud : 82.629 O  
Profundidad : 10 Km  
Ubicación : Islas Caimán

Evaluación:

Se ha registrado un tsunami que afecta a las costas del Mar Caribe de los países de Honduras y en menor medida al resto de países de América Central. Las autoridades nacionales, deben tomar acciones correspondientes a sus planes de respuestas.

Resultados de la simulación de tsunami:

Estimados de Tiempos de Arribo (ETA) en hora local y Altura Máxima (AM) de olas del tsunami, en diferentes puntos de pronóstico:

Sitio	País	ETA (Hora local)
Isla del Cisne	HONDURAS	2026-03-19 15:09:45 2.52
Cabo Gracias a Dios	HONDURAS	2026-03-19 16:05:15 0.64
Colón	HONDURAS	2026-03-19 16:34:15
		0.60

Mediciones en estaciones del nivel del mar:



**Mensaje CATAAC #5:**

¡Este es sólo un mensaje de prueba enviado por CATAAC en apoyo al Ejercicio CaribeWave 26!

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Centro de Asesoramiento de Tsunami para  
América Central - CATAAC

XXXXXXXXX ESTE ES SOLO UN EJERCICIO  
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AVISO: Este mensaje se publica únicamente a  
título informativo como apoyo a los países de América Central. Las  
autoridades nacionales son responsables de determinar  
el nivel de alerta y efectuar las medidas adecuadas para su  
país, según sus protocolos de actuaciones.

Boletín sobre tsunami N° 05

Emisión: 2026-03-19 11:00 Hora de Centroamérica  
2026-03-19 12:00 Hora de Panamá  
2026-03-19 17:00 Hora (UTC)

Una advertencia de tsunami, está en efecto para las zonas costeras del Mar Caribe, de los países de América Central, debido a terremoto ocurrido, con los siguientes parámetros:

Magnitud : 7.6  
Fecha : 19/03/2026  
Hora : 09:00 Hora de Centroamérica, 10:00 Hora de Panamá, 15:00 Hora UTC  
Latitud : 17.646 N  
Longitud : 82.629 O  
Profundidad : 10 Km  
Ubicación : Islas Caimán

Mediciones en estaciones del nivel del mar:

Código		Coordenadas (°)	País	ETA (hora
UTC)	AM(m)			
VZ.PCOR		15.84N 87.96O 2026-03-19 17:38:45	Honduras	0.57
VZ.GEOR		19.30N 81.38O 2026-03-19 15:50:15	Islas Caimán	0.42
VZ.BDTO		9.35N 82.26O 2026-03-19 22:34:45	Panamá	0.29
VZ.PRBA		15.69N 88.62O	Guatemala	2026-03-
19 19:56:45	0.29			
VZ.TELA		15.78N 87.45O 2026-03-19 20:58:00	Honduras	0.27
VZ.CEIB		15.79N 86.76O 2026-03-19 20:57:00	Honduras	0.22
VZ.CABC		16.80N 88.08O 2026-03-19 21:07:30	Belize	0.20



## ANNEX VI. SRC EXERCISE MESSAGES

### **Kick 'em Jenny Scenario – Seismic Research Center VONUT products**

The following are VONUT messages created for the CARIBE WAVE 26 tsunami exercise by the Seismic Research Centre (SRC) for a flank collapse of the Kick 'em Jenny volcano and subsequent tsunami. During a real event, the messages prepared by the SRC are provided only for the PTWC, CATAC, and ICG-CARIBE EWS officers and institutions. Based on these products, the PTWC issues corresponding messages.

#### **VONUT Message #1**

TEST...VONUT NUMBER 1...TEST

...THIS MESSAGE IS FOR THE CARIBEWAVE26 EXERCISE ONLY...

TEST...VOLCANO OBSERVATORY NOTICE FOR TSUNAMI THREAT ...TEST  
TEST...VONUT...TEST

(2) TEST... Issued: 20260319/1130Z

(3) TEST... Volcano: Kick'em Jenny 360160

(4) TEST... Current Aviation Colour Code: Orange

(5) TEST... Previous Aviation Colour Code: Yellow

(6) TEST... Source: SRC

(7) TEST... Notice Number: 2026-01

(8) TEST... Volcano Location: 1218N 6138W

(9) TEST... Area: Offshore north Grenada, Lesser Antilles

(10) TEST... Summit Elevation: -607 FT (-185 M)

(11) TEST... Volcanic Activity Summary:

**Increase in seismicity, including tremor and several M>3 earthquakes at shallow depths, over the past 6 hours**

(12) TEST... Sea sector of the impact (North, South, East, West)  
Most probably western flanks of Kick'em Jenny

(13) TEST... Name of the sea (Caribbean, Atlantic, Dominique Channel)  
Caribbean Sea

(14) TEST... Closest tide gauges

pric: <https://www.ioc-sealevelmonitoring.org/station.php?code=pric>

calq: <https://www.ioc-sealevelmonitoring.org/station.php?code=calq>

chat: <https://www.ioc-sealevelmonitoring.org/station.php?code=chat>

ftfr2: <https://www.ioc-sealevelmonitoring.org/station.php?code=ftfr2>

(15) TEST... Remarks:

The possibility of submarine eruption with or without destabilisation of the volcano's western flank is high within the next few hours.

(16) TEST... Contacts:

Dr. Erouscilla Joseph

tel: + 1 868 763 7203

Email: [erouscilla.joseph@uwi.edu](mailto:erouscilla.joseph@uwi.edu)

(17) TEST... Next Notice:

A new VONUT will be issued if conditions change significantly. Volcanic information can be found at:

<https://uwiseismic.com/volcanoes/kick-em-jenny/>

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

**VONUT Message #2**

TEST...VONUT NUMBER 2...TEST

...THIS MESSAGE IS FOR THE CARIBEWAVE26 EXERCISE ONLY...

TEST...VOLCANO OBSERVATORY NOTICE FOR TSUNAMI THREAT ...TEST  
TEST...VONUT...TEST

(1) TEST... VOLCANO OBSERVATORY NOTICE FOR TSUNAMI THREAT - VONUT

(2) TEST... Issued: 20260319/1430Z

(3) TEST... Volcano: Kick'en Jenny 360160

(4) TEST... Current Aviation Colour Code: Red

(5) TEST... Previous Aviation Colour Code : Orange

(6) TEST... Source: SRC

(7) TEST... Notice Number: 2026-02

(8) TEST... Volcano Location: 1218N 6138W

(9) TEST... Area: Offshore north Grenada, Lesser Antilles

(10) TEST... Summit Elevation: -607 FT (-185 M)

(11) TEST... Volcanic Activity Summary:

**Highly elevated levels of shallow VT seismicity (M 3.5 – 3.8) with increased banded tremor and LP events observed in the last 30 minutes**

(12) TEST... Sea sector of the impact (North, South, East, West)  
Most probably the western flanks of Kick'em Jenny

(13) TEST... Name of the sea (Caribbean, Atlantic, Dominique Channel)  
Caribbean Sea

(14) TEST... Closest tide gauges

pric: <https://www.ioc-sealevelmonitoring.org/station.php?code=pric>

calq: <https://www.ioc-sealevelmonitoring.org/station.php?code=calq>

chat: <https://www.ioc-sealevelmonitoring.org/station.php?code=chat>

fffr2: <https://www.ioc-sealevelmonitoring.org/station.php?code=fffr2>

(15) TEST... Remarks:

Activity could transition to an underwater ex-plosion with or without destabilisation of the volcano's western flank with no further warning

(16) TEST... Contacts:

Dr. Erouscilla Joseph

tel: + 1 868 763 7203

Email: [erouscilla.joseph@uwi.edu](mailto:erouscilla.joseph@uwi.edu):

(17) TEST... Next Notice:

A new VONUT will be issued if conditions change significantly. Volcanic information can be found at:

<https://uwiseismic.com/volcanoes/kick-em-jenny/>

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

**VONUT Message #3**

TEST...VONUT NUMBER 3...TEST

...THIS MESSAGE IS FOR THE CARIBEWAVE26 EXERCISE ONLY...

TEST...VOLCANO OBSERVATORY NOTICE FOR TSUNAMI THREAT ...TEST  
TEST...VONUT...TEST

(1) TEST... VOLCANO OBSERVATORY NOTICE FOR TSUNAMI THREAT - VONUT

(2) TEST... Issued: 20260319/1500Z

(3) TEST... Volcano: Kick'en Jenny 360160

(4) TEST... Current Aviation Colour Code: Red

(5) TEST... Previous Aviation Colour Code : Red

(6) TEST... Source: SRC

(7) TEST... Notice Number: 2026-03

(8) TEST... Volcano Location: 1218N 6138W

(9) TEST... Area: Offshore north Grenada, Lesser Antilles

(10) TEST... Summit Elevation: -607 FT (-185 M)

(11) TEST... Volcanic Activity Summary:

**Highly elevated levels of shallow VT seismicity (M 3.5 – 3.8) with T-phase signal observed at 1500Z**

(12) TEST... Sea sector of the impact (North, South, East, West)  
Most probably the western flanks of Kick'em Jenny

(13) TEST... Name of the sea (Caribbean, Atlantic, Dominique Channel)  
Caribbean Sea

(14) TEST... Closest tide gauges

pric: <https://www.ioc-sealevelmonitoring.org/station.php?code=pric>

calq: <https://www.ioc-sealevelmonitoring.org/station.php?code=calq>

chat: <https://www.ioc-sealevelmonitoring.org/station.php?code=chat>

ftfr2: <https://www.ioc-sealevelmonitoring.org/station.php?code=ftfr2>

(15) TEST... Remarks:

**An underwater explosion with or without destabilization of the volcano's western flank has occurred at KeJ**

(16) TEST... Contacts:

Dr. Erouscilla Joseph  
tel: + 1 868 763 7203  
Email: erouscilla.joseph@uwi.edu:

(17) TEST... Next Notice:  
A new VONUT will be issued if conditions change significantly. Volcanic information can be found at:

<https://uwiseismic.com/volcanoes/kick-em-jenny/>

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

**IOC Technical Series**

<b>No.</b>	<b>Title</b>	<b>Languages</b>
1	Manual on International Oceanographic Data Exchange. 1965	(out of stock)
2	Intergovernmental Oceanographic Commission (Five years of work). 1966	(out of stock)
3	Radio Communication Requirements of Oceanography. 1967	(out of stock)
4	Manual on International Oceanographic Data Exchange - Second revised edition. 1967	(out of stock)
5	Legal Problems Associated with Ocean Data Acquisition Systems (ODAS). 1969	(out of stock)
6	Perspectives in Oceanography, 1968	(out of stock)
7	Comprehensive Outline of the Scope of the Long-term and Expanded Programme of Oceanic Exploration and Research. 1970	(out of stock)
8	IGOSS (Integrated Global Ocean Station System) - General Plan Implementation Programme for Phase I. 1971	(out of stock)
9	Manual on International Oceanographic Data Exchange - Third Revised Edition. 1973	(out of stock)
10	Bruun Memorial Lectures, 1971	E, F, S, R
11	Bruun Memorial Lectures, 1973	(out of stock)
12	Oceanographic Products and Methods of Analysis and Prediction. 1977	E only
13	International Decade of Ocean Exploration (IDOE), 1971-1980. 1974	(out of stock)
14	A Comprehensive Plan for the Global Investigation of Pollution in the Marine Environment and Baseline Study Guidelines. 1976	E, F, S, R
15	Bruun Memorial Lectures, 1975 - Co-operative Study of the Kuroshio and Adjacent Regions. 1976	(out of stock)
16	Integrated Ocean Global Station System (IGOSS) General Plan and Implementation Programme 1977-1982. 1977	E, F, S, R
17	Oceanographic Components of the Global Atmospheric Research Programme (GARP) . 1977	(out of stock)
18	Global Ocean Pollution: An Overview. 1977	(out of stock)
19	Bruun Memorial Lectures - The Importance and Application of Satellite and Remotely Sensed Data to Oceanography. 1977	(out of stock)
20	A Focus for Ocean Research: The Intergovernmental Oceanographic Commission - History, Functions, Achievements. 1979	(out of stock)
21	Bruun Memorial Lectures, 1979: Marine Environment and Ocean Resources. 1986	E, F, S, R
22	Scientific Report of the Intercalibration Exercise of the IOC-WMO-UNEP Pilot Project on Monitoring Background Levels of Selected Pollutants in Open Ocean Waters. 1982	(out of stock)
23	Operational Sea-Level Stations. 1983	E, F, S, R
24	Time-Series of Ocean Measurements. Vol.1. 1983	E, F, S, R
25	A Framework for the Implementation of the Comprehensive Plan for the Global Investigation of Pollution in the Marine Environment. 1984	(out of stock)
26	The Determination of Polychlorinated Biphenyls in Open-ocean Waters. 1984	E only
27	Ocean Observing System Development Programme. 1984	E, F, S, R
28	Bruun Memorial Lectures, 1982: Ocean Science for the Year 2000. 1984	E, F, S, R
29	Catalogue of Tide Gauges in the Pacific. 1985	E only
30	Time-Series of Ocean Measurements. Vol. 2. 1984	E only
31	Time-Series of Ocean Measurements. Vol. 3. 1986	E only
32	Summary of Radiometric Ages from the Pacific. 1987	E only
33	Time-Series of Ocean Measurements. Vol. 4. 1988	E only
34	Bruun Memorial Lectures, 1987: Recent Advances in Selected Areas of Ocean Sciences in the Regions of the Caribbean, Indian Ocean and the Western Pacific. 1988	Composite E, F, S
35	Global Sea-Level Observing System (GLOSS) Implementation Plan. 1990	E only

*(continued)*

36	Bruun Memorial Lectures 1989: Impact of New Technology on Marine Scientific Research. 1991	Composite E, F, S
37	Tsunami Glossary - A Glossary of Terms and Acronyms Used in the Tsunami Literature. 1991	E only
38	The Oceans and Climate: A Guide to Present Needs. 1991	E only
39	Bruun Memorial Lectures, 1991: Modelling and Prediction in Marine Science. 1992	E only
40	Oceanic Interdecadal Climate Variability. 1992	E only
41	Marine Debris: Solid Waste Management Action for the Wider Caribbean. 1994	E only
42	Calculation of New Depth Equations for Expendable Bathythermographs Using a Temperature-Error-Free Method (Application to Sippican/TSK T-7, T-6 and T-4 XBTS. 1994	E only
43	IGOSS Plan and Implementation Programme 1996-2003. 1996	E, F, S, R
44	Design and Implementation of some Harmful Algal Monitoring Systems. 1996	E only
45	Use of Standards and Reference Materials in the Measurement of Chlorinated Hydrocarbon Residues. 1996	E only
46	Equatorial Segment of the Mid-Atlantic Ridge. 1996	E only
47	Peace in the Oceans: Ocean Governance and the Agenda for Peace; the Proceedings of <i>Pacem in Maribus</i> XXIII, Costa Rica, 1995. 1997	E only
48	Neotectonics and fluid flow through seafloor sediments in the Eastern Mediterranean and Black Seas - Parts I and II. 1997	E only
49	Global Temperature Salinity Profile Programme: Overview and Future. 1998	E only
50	Global Sea-Level Observing System (GLOSS) Implementation Plan-1997. 1997	E only
51	L'état actuel de l'exploitation des pêcheries maritimes au Cameroun et leur gestion intégrée dans la sous-région du Golfe de Guinée ( <i>cancelled</i> )	F only
52	Cold water carbonate mounds and sediment transport on the Northeast Atlantic Margin. 1998	E only
53	The Baltic Floating University: Training Through Research in the Baltic, Barents and White Seas - 1997. 1998	E only
54	Geological Processes on the Northeast Atlantic Margin (8 <sup>th</sup> training-through-research cruise, June-August 1998). 1999	E only
55	Bruun Memorial Lectures, 1999: Ocean Predictability. 2000	E only
56	Multidisciplinary Study of Geological Processes on the North East Atlantic and Western Mediterranean Margins (9 <sup>th</sup> training-through-research cruise, June-July 1999). 2000	E only
57	Ad hoc Benthic Indicator Group - Results of Initial Planning Meeting, Paris, France, 6-9 December 1999. 2000	E only
58	Bruun Memorial Lectures, 2001: Operational Oceanography – a perspective from the private sector. 2001	E only
59	Monitoring and Management Strategies for Harmful Algal Blooms in Coastal Waters. 2001	E only
60	Interdisciplinary Approaches to Geoscience on the North East Atlantic Margin and Mid-Atlantic Ridge (10 <sup>th</sup> training-through-research cruise, July-August 2000). 2001	E only
61	Forecasting Ocean Science? Pros and Cons, Potsdam Lecture, 1999. 2002	E only
62	Geological Processes in the Mediterranean and Black Seas and North East Atlantic (11 <sup>th</sup> training-through-research cruise, July- September 2001). 2002	E only
63	Improved Global Bathymetry – Final Report of SCOR Working Group 107. 2002	E only
64	R. Revelle Memorial Lecture, 2006: Global Sea Levels, Past, Present and Future. 2007	E only
65	Bruun Memorial Lectures, 2003: Gas Hydrates – a potential source of energy from the oceans. 2003	E only
66	Bruun Memorial Lectures, 2003: Energy from the Sea: the potential and realities of Ocean Thermal Energy Conversion (OTEC). 2003	E only

67	Interdisciplinary Geoscience Research on the North East Atlantic Margin, Mediterranean Sea and Mid-Atlantic Ridge (12 <sup>th</sup> training-through-research cruise, June-August 2002). 2003	E only
68	Interdisciplinary Studies of North Atlantic and Labrador Sea Margin Architecture and Sedimentary Processes (13 <sup>th</sup> training-through-research cruise, July-September 2003). 2004	E only
69	Biodiversity and Distribution of the Megafauna / Biodiversité et distribution de la mégafaune. 2006 Vol.1 The polymetallic nodule ecosystem of the Eastern Equatorial Pacific Ocean / Ecosystème de nodules polymétalliques de l'océan Pacifique Est équatorial Vol.2 Annotated photographic Atlas of the echinoderms of the Clarion-Clipperton fracture zone / Atlas photographique annoté des échinodermes de la zone de fractures de Clarion et de Clipperton Vol.3 Options for the management and conservation of the biodiversity — The nodule ecosystem in the Clarion Clipperton fracture zone: scientific, legal and institutional aspects	E F
70	Interdisciplinary geoscience studies of the Gulf of Cadiz and Western Mediterranean Basin (14 <sup>th</sup> training-through-research cruise, July-September 2004). 2006	E only
71	Indian Ocean Tsunami Warning and Mitigation System, IOTWS. Implementation Plan, 7–9 April 2009 (2 <sup>nd</sup> Revision). 2009	E only
72	Deep-water Cold Seeps, Sedimentary Environments and Ecosystems of the Black and Tyrrhenian Seas and the Gulf of Cadiz (15 <sup>th</sup> training-through-research cruise, June–August 2005). 2007	E only
73	Implementation Plan for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (NEAMTWS), 2007–2011. 2007 ( <i>electronic only</i> )	E only
74	Bruun Memorial Lectures, 2005: The Ecology and Oceanography of Harmful Algal Blooms – Multidisciplinary approaches to research and management. 2007	E only
75	National Ocean Policy. The Basic Texts from: Australia, Brazil, Canada, China, Colombia, Japan, Norway, Portugal, Russian Federation, United States of America. (Also Law of Sea Dossier 1). 2008	E only
76	Deep-water Depositional Systems and Cold Seeps of the Western Mediterranean, Gulf of Cadiz and Norwegian Continental margins (16 <sup>th</sup> training-through-research cruise, May–July 2006). 2008	E only
77	Indian Ocean Tsunami Warning and Mitigation System (IOTWS) – 12 September 2007 Indian Ocean Tsunami Event. Post-Event Assessment of IOTWS Performance. 2008	E only
78	Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE EWS) – Implementation Plan 2013–2017 (Version 2.0). 2013	E only
79	Filling Gaps in Large Marine Ecosystem Nitrogen Loadings Forecast for 64 LMEs – GEF/LME global project Promoting Ecosystem-based Approaches to Fisheries Conservation and Large Marine Ecosystems. 2008	E only
80	Models of the World's Large Marine Ecosystems. GEF/LME Global Project Promoting Ecosystem-based Approaches to Fisheries Conservation and Large Marine Ecosystems. 2008	E only
81	Indian Ocean Tsunami Warning and Mitigation System (IOTWS) – Implementation Plan for Regional Tsunami Watch Providers (RTWP). 2008	E only
82	Exercise Pacific Wave 08 – A Pacific-wide Tsunami Warning and Communication Exercise, 28–30 October 2008. 2008	E only
83.	<i>Cancelled</i>	
84.	Global Open Oceans and Deep Seabed (GOODS) Bio-geographic Classification. 2009	E only
85.	Tsunami Glossary	E, F, S
86	Pacific Tsunami Warning System (PTWS) Implementation Plan	<i>Electronic publication</i>

(continued)

87.	Operational Users Guide for the Pacific Tsunami Warning and Mitigation System (PTWS) – Second Edition. 2011	E only
88.	Exercise Indian Ocean Wave 2009 (IOWave09) – An Indian Ocean-wide Tsunami Warning and Communication Exercise – 14 October 2009. 2009	E only
89.	Ship-based Repeat Hydrography: A Strategy for a Sustained Global Programme. 2009	E only
90.	12 January 2010 Haiti Earthquake and Tsunami Event Post-Event Assessment of CARIBE EWS Performance. 2010	E only
91.	Compendium of Definitions and Terminology on Hazards, Disasters, Vulnerability and Risks in a coastal context	<i>Under preparation</i>
92.	27 February 2010 Chile Earthquake and Tsunami Event – Post-Event Assessment of PTWS Performance (Pacific Tsunami Warning System). 2010	E only
93.	Exercise CARIBE WAVE 11 / LANTEX 11—A Caribbean Tsunami Warning Exercise, 23 March 2011	
	Vol. 1 Participant Handbook / Exercice CARIBE WAVE 11 —Exercice d’alerte au tsunami dans les Caraïbes, 23 mars 2011. Manuel du participant / Ejercicio Caribe Wave 11. Un ejercicio de alerta de tsunami en el Caribe, 23 de marzo de 2011. Manual del participante. 2010	E/F/S
	Vol. 2 Report. 2011	E only
	Vol. 3 Supplement: Media Reports. 2011	E/F/S
94.	Cold seeps, coral mounds and deep-water depositional systems of the Alboran Sea, Gulf of Cadiz and Norwegian continental margin (17th training-through-research cruise, June–July 2008)	E only
95.	International Post-Tsunami Survey for the 25 October 2010 Mentawai, Indonesia Tsunami	E only
96.	Pacific Tsunami Warning System (PTWS) 11 March 2011 Off Pacific coast of Tohoku, Japan, Earthquake and Tsunami Event. Post-Event Assessment of PTWS Performance	E only
97.	Exercise PACIFIC WAVE 11: A Pacific-wide Tsunami Warning and Communication Exercise, 9–10 November 2011	
	Vol. 1 Exercise Manual. 2011	E only
	Vol. 2 Report. 2013	E only
98.	Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and connected seas. First Enlarged Communication Test Exercise (ECTE1). Exercise Manual and Evaluation Report. 2011	E only
99.	Exercise INDIAN OCEAN WAVE 2011 – An Indian Ocean-wide Tsunami Warning and Communication Exercise, 12 October 2011	E only
	Vol. 1 Exercise Manual. 2011	
	Supplement: Bulletins from the Regional Tsunami Service Providers	
	Vol. 2 Exercise Report. 2013	
100.	Global Sea Level Observing System (GLOSS) Implementation Plan – 2012. 2012	E only
101.	Exercise Caribe Wave/Lantex 13. A Caribbean Tsunami Warning Exercise, 20 March 2013.	E only
	Volume 1: Participant Handbook. 2012	
	Volume 2: Final Report	
102.	Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas — Second Enlarged Communication Test Exercise (CTE2), 22 May 2012.	E only
	Vol. 1 Exercise Manual. 2012	
	Vol. 2 Evaluation Report. 2014	
103.	Exercise NEAMWAVE 12. A Tsunami Warning and Communication Exercise for the North-eastern Atlantic, the Mediterranean, and Connected Seas Region, 27–28 November 2012.	E only
	Vol. 1: Exercise Manual. 2012	
	Vol. 2: Evaluation Report. 2013	
104.	Seísmo y tsunami del 27 de agosto de 2012 en la costa del Pacífico frente a El Salvador, y seísmo del 5 de septiembre de 2012 en la costa del Pacífico frente a Costa Rica. Evaluación subsiguiente sobre el funcionamiento del Sistema de Alerta contra los Tsunamis y Atenuación de sus Efectos en el Pacífico. 2012	Español solamente (resumen en inglés y francés)
105.	Users Guide for the Pacific Tsunami Warning Center Enhanced Products for	E, S

	the Pacific Tsunami Warning System, August 2014. Revised Edition. 2014	
106.	Exercise Pacific Wave 13. A Pacific-wide Tsunami Warning and Enhanced Products Exercise, 1–14 May 2013. Vol. 1 Exercise Manual. 2013 Vol. 2 Summary Report. 2013	E only
107.	Tsunami Public Awareness and Educations Strategy for the Caribbean and Adjacent Regions. 2013	E only
108.	Pacific Tsunami Warning and Mitigation System (PTWS) Medium-Term Strategy, 2014–2021. 2013	E only
109.	Exercise Caribe Wave/Lantex 14. A Caribbean and Northwestern Atlantic Tsunami Warning Exercise, 26 March 2014. Vol. 1 Participant Handbook. 2014 Vol. 2 Evaluation Report. 2015 (English only)	E/S
110.	Directory of atmospheric, hydrographic and biological datasets for the Canary Current Large Marine Ecosystem, 3 <sup>rd</sup> edition: revised and expanded. 2017	E only
111.	Integrated Regional Assessments in support of ICZM in the Mediterranean and Black Sea Basins. 2014	E only
112.	11 April 2012 West of North Sumatra Earthquake and Tsunami Event - Post-event Assessment of IOTWS Performance	E only
113.	Exercise Indian Ocean Wave 2014: An Indian Ocean-wide Tsunami Warning and Communication Exercise. Vol.1 Manual Vol. 2 Exercise Report. 2015	E only
114.	Exercise NEAMWAVE 14. A Tsunami Warning and Communication Exercise for the North-Eastern Atlantic, the Mediterranean, and Connected Seas Region, 28–30 October 2014 Vol. 1 Manual Vol. 2 Evaluation Report – Supplement: Evaluation by Message Providers and Civil Protection Authorities	E only
115.	Oceanographic and Biological Features in the Canary Current Large Marine Ecosystem. 2015 ( <i>revised in 2016</i> )	E only
116.	Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas. Third Enlarged Communication Test Exercise (CTE3), 1st October 2013. Vol. 1 Exercise Manual Vol. 2 Evaluation Report	E only
117.	Exercise Pacific Wave 15. A Pacific-wide Tsunami Warning and Enhanced Products Exercise, 2–6 February 2015 Vol. 1: Exercise Manual; Vol. 2: Summary Report	E only
118.	Exercise Caribe Wave/Lantex 15. A Caribbean and Northwestern Atlantic Tsunami Warning Exercise, 25 March 2015 (SW Caribbean Scenario) Vol. 1: Participant Handbook Vol. 2: Summary Report	E only
119.	Transboundary Waters Assessment Programme (TWAP) Assessment of Governance Arrangements for the Ocean Vol 1: Transboundary Large Marine Ecosystems; <u>Supplement</u> : Individual Governance Architecture Assessment for Fifty Transboundary Large Marine Ecosystems Vol 2: Areas Beyond National Jurisdiction	E only
120.	Transboundary Waters Assessment Programme (TWAP) – Status and Trends in Primary Productivity and Chlorophyll from 1996 to 2014 in Large Marine Ecosystems and the Western Pacific Warm Pool, Based on Data from Satellite Ocean Colour Sensors. 2017	E only
121.	Exercise Indian Ocean Wave 14, an Indian Ocean wide Tsunami Warning and Communications Exercise, 9–10 September 2014	<i>In preparation</i>
122.	Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas. Sixth Communication Test Exercise (CTE6), 29 July 2015. Vol. 1: Exercise Manual Vol. 2: Evaluation Report	E only
123	Preparing for the next tsunami in the North-Eastern Atlantic, the Mediterranean	(see

(continued)

	and Connected Seas – Ten years of the Tsunami Warning System (NEAMTWS). 2017 — <i>Cancelled</i>	IOC/INF-1340)
124	Indicadores Marino Costeros del Pacífico Sudeste / Coastal and Marine Indicators of the Southeast Pacific (SPINCAM)	E/S
125	Exercise CARIBE WAVE 2016: A Caribbean and Adjacent Regions Tsunami Warning Exercise, 17 March 2016 (Venezuela and Northern Hispaniola Scenarios) Volume 1: Participant Handbook Volume 2: Final Report	E only
126	Exercise Pacific Wave 16. A Pacific-wide Tsunami Warning and Enhanced Products Exercise, 1-5 February 2016. Volume 1: Exercise Manual. Volume 2: Summary Report	E only
127	Experiencias locales de manejo costero integrado: casos piloto SPINCAM en el Pacífico Sudeste. (ICAM Dossier nº9)	S only
128.	Exercise Indian Ocean Wave 2016: An Indian Ocean-wide Tsunami Warning and Communications Exercise, 7–8 September 2016 Vol 1: Participant Manual Vol. 2: Exercise Report	E only
129	What are Marine Ecological Time Series telling us about the Ocean – A status report	E only
130	Tsunami Watch Operations – Global Service Definition Document (Revised version, 2025)	E only
131	Exercise Pacific Wave 2017. A Pacific-wide Tsunami Warning and Enhanced Products Exercise, 15-17 February 2017. Volume 1: Exercise Manual Volume 2: Exercise Report	E only
132.	2nd March 2016 Southwest of Sumatra Earthquake and Tsunami Event Post-Event Assessment of the Performance of the Indian Ocean Tsunami Warning and Mitigation System; <u>Supplement</u> : Tsunami Service Provider Bulletins and Maps	E only
133.	Exercise CARIBE WAVE 17. A Caribbean and Adjacent Regions Tsunami Warning Exercise, 21 March 2017 (Costa Rica, Cuba and Northeastern Antilles Scenarios). Volume 1: Participant Handbook Volume 2: Final Report	E only
134.	Tsunami Exercise NEAMWave17 – A Tsunami Warning and Communication Exercise for the North-eastern Atlantic, the Mediterranean, and Connected Seas Region, 31 October – 3 November 2017 Volume 1: Exercise Instructions. 2017 Volume 2: Evaluation Report. 2018 Supplement: Evaluation by Message Providers and Civil Protection Authorities	E only
135.	Revised 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), October 2025	E only
136.	Exercise CARIBE WAVE 18. Tsunami Warning Exercise, 15 March 2018 (Barbados, Colombia and Puerto Rico Scenarios). Volume 1: Participant Handbook. 2017 Volume 2: Final Report	E only
137.	The Ocean is losing its breath: declining oxygen in the world's ocean and coastal waters	(under preparation)
138.	Exercise Indian Ocean Wave 2018: An Indian Ocean-wide Tsunami Warning and Communication Exercise, 4–5 September 2018 Volume 1: Exercise Manual & Supplements Volume 2: Exercise Report. 2019	E only
139.	Exercise Pacific Wave 2018. A Pacific-wide Tsunami Warning and Enhanced Products Exercise, September to November 2018. Volume 1: Exercise Manual. Volume 2: Summary Report	E only
140	Analysis of transboundary Water Ecosystems and Green and Blue Infrastructures: Intercontinental Biosphere Reserve of the Mediterranean: Andalusia (Spain) – Morocco	E F S
141	Exercise Caribe Wave 2019. A Caribbean and Adjacent Region Tsunami	E only

	Warning Exercise, 14 March 2019. Volume 1: Participant handbook. Volume 2: Summary Report	
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