



CARIBE WAVE 20

1st Webinar

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ICG CARIBE EWS Chair
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CARIBE WAVE 2019



In the Caribbean and Adjacent Regions, 48 Member States and Territories participated in this exercise with a total of 793,353 people engaged.

- This represented a MS participation rate of 100% (up from 97% in 2018).

Objectives Caribe Wave 20

1. Exercise and evaluate communications between Regional Tsunami Service Provider and Members States/Territories.

- A. Validate the **issuance** of tsunami products from the PTWC.
- B. Validate the **receipt** of tsunami products by CARIBE-EWS Tsunami Warning Focal Points (TWFPs) and/or National Tsunami Warning Centers (NTWCs).

2. Evaluate the tsunami procedures and programs within Members States/Territories.

- A. Validate **readiness** to respond to a tsunami.
- B. Validate the **operational readiness** of the TWFPs/NTWCs and/or The National Disaster Management Office (NDMO).
- C. Improve **operational readiness**. Before the exercise, ensure appropriate tools and response plan(s) have been developed, including public education materials.
- D. Validate that the **dissemination of warnings** and information/advice by TWFPs and NTWCs, to relevant in-country agencies and the public is accurate and timely.
- E. Evaluate the status of the implementation of the pilot CARIBE-EWS **TsunamiReady** recognition program.

Goals / Metrics

[illegible]

Exercise Handbook

- The Caribe Wave 20 exercise Handbook is available at,

www.caribewave.info

- This manual includes:
 - Tsunami and earthquake scenarios description
 - Timelines
 - PTWC dummy message and simulated exercise threat messages
 - Travel times and expected wave heights
 - The website link to post-exercise evaluation questionnaire

CARIBE WAVE 20

[Weather.gov](#) > [Caribbean Tsunami Warning Program](#) > CARIBE WAVE 20

Caribbean Tsunami Warning Program
National Program

[Sea Level Stations](#) [Seismic Stations](#) [CARIBE EWS](#) [Preparedness/Education](#) [CARIBE WAVE](#) [About CTWP](#)

The Tsunami Exercise CARIBE WAVE 20 will be on **March 19, 2020!!**

WEBINARS

During the webinars we will be reviewing the upcoming CARIBE WAVE 20 tsunami simulation events, with the National Tsunami Warning Centers (NTWC), Tsunami National Contacts (TNC) and the Tsunami Warning Focal Points (TWFP).

Webinar 1
[English](#) - January 21, 2020 ([presentation](#))
[Español](#) - 22 de enero de 2020 ([presentación](#))
[Français](#) - 23 janvier 2020 ([présentation](#))

Webinar 2
[English](#) - February 26, 2020
[Español](#) - 27 de febrero de 2020
[Français](#) - 28 février 2020

Information regarding the Webinars 1 & 2:

- All webinars will start at 19:00 UTC
- Webinars have a max space of 24 connections per conference. If more than 1 person in your office wants to join the webinar, please share the same connection
- Webinars do not require pre-registration
- You will be able to join the Webinar 15min before starting time.
- Download the [PDF](#) to follow the steps needed to join the Webinars (the process may take up to 30min).

CLICK THE LINK AND REGISTER TO BE COUNTED AND LISTED AS A CARIBE WAVE 20 PARTICIPANT ON THE TSUNAMI WEBSITE

<http://www.tsunamizone.org/register/>

DOCUMENTS

- Jamaica KMZ file - [Download](#)
- Portugal KMZ file - [Download](#)
- Participant Handbook - [PDF](#)**
- IOC Circular Letter - [PDF](#)

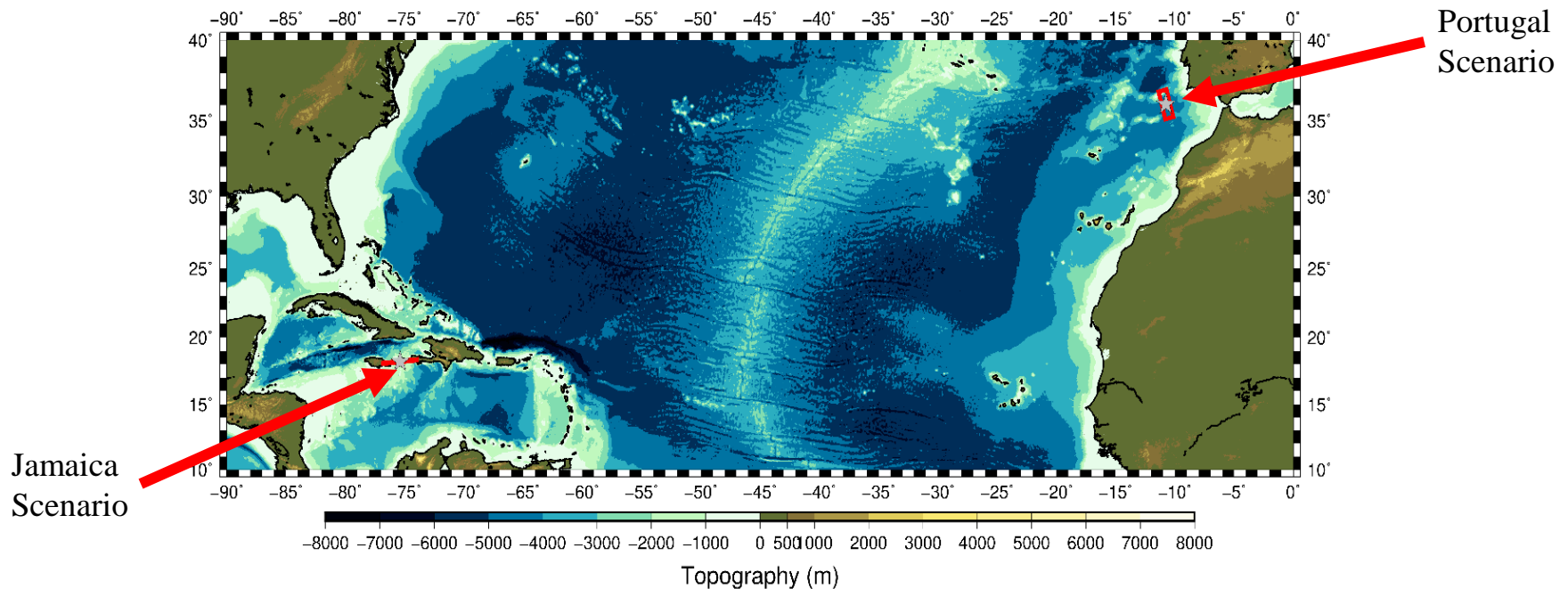
CARIBE WAVE 20 Scenarios by Member State/Territory

*scenarios decided by Caribe Wave organizers per Exercise Handbook

Jamaica	Portugal

CARIBE WAVE 20

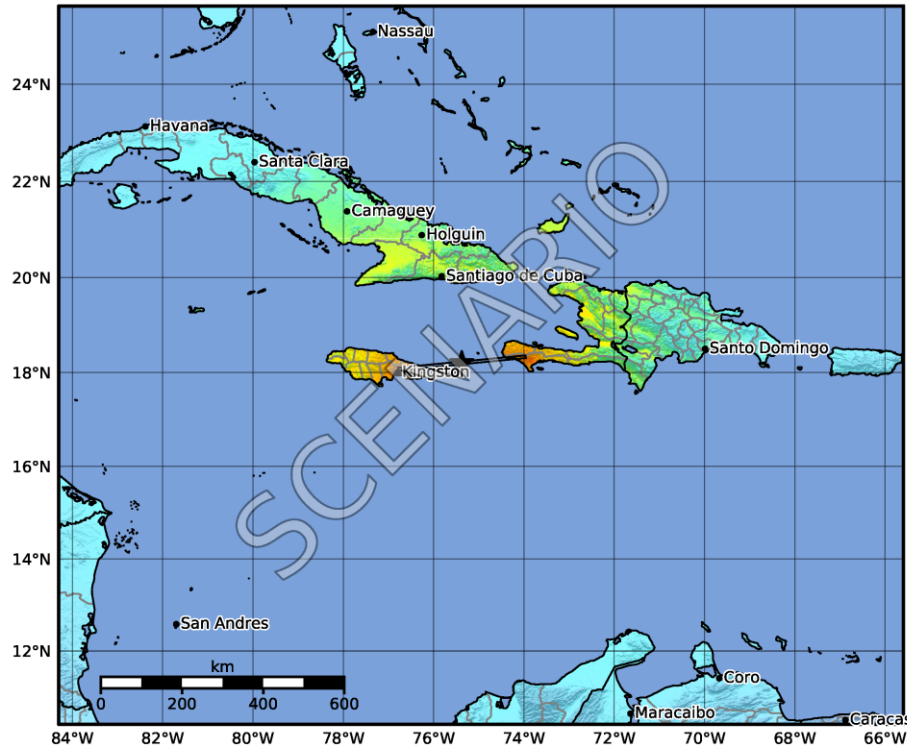
Earthquake and Tsunami Scenarios



Scenario	Origin Time	Mw	Epicenter
Jamaica	14:00:00 UTC March 19, 2020	8.0	18.2°N, 75.3°W
Portugal		8.5	36.0°N, 10.7°W

Earthquake Impact Scenario Jamaica

Macroseismic Intensity Map
USGS ShakeMap: Jamaica
Jan 31, 2019 00:00:00 UTC M8.0 N18.20 W75.38 Depth: 25.0km
ID:jamaica_CaribeWave_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)	<0.05	0.3	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV(cm/s)	<0.02	0.13	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)

△ Seismic Instrument ○ Reported Intensity

★ Epicenter □ Rupture

Version 1: Processed 2019-10-21T20:57:40Z



M 8.0, Scenario Jamaica

Origin Time: 2019-01-31 00:00:00 UTC (Wed 19:00:00 local)

Location: 18.20°N 75.376°W Depth: 25.0 km

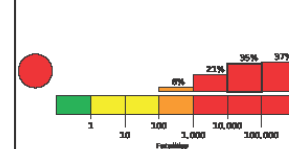
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Earthquake Shaking ● Red Alert



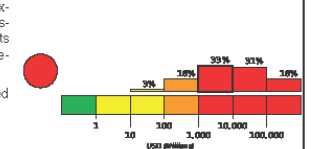
PAGER
Version 11

Estimated Fatalities



Red alert for shaking-related fatalities and economic losses. High casualties and extensive damage are probable and the disaster is likely widespread. Past red alerts have required a national or international response. Estimated economic losses may exceed the GDP of Jamaica.

Estimated Economic Losses



Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=1000)	—	11,836k*	17,632k	15,621k	6,214k	1,455k	1,934k	126k	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
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

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

Historical Earthquakes

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

Selected City Exposure

MMI	City	Population
IX	Half Way Tree	138k
VIII	Kingston	939k
VIII	New Kingston	584k
VIII	Mona Heights	3k
VIII	Constant Spring	13k
VIII	Chantel	2k
V	Santo Domingo	2,202k
IV	Barranquilla	1,380k
III	Havana	2,164k
III	Maracaibo	2,225k
III	Caracas	3,000k

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

bold cities appear on map.

Event ID: us.jamaica.CaribeWave.se

Start of Exercise Caribe Wave 20

- Regarding the Portugal scenario, the tsunami waves are expected to reach the Caribbean from 2105 UTC.
- Participating countries have the discretion to adjust the times according to their needs in the communities since PTWC messaging can run separately from the exercise.

PTWC PRODUCTS

For Caribe Wave 20, PTWC will issue the following products:

- The initial dummy message for the two scenarios will be issued on March 19, 2020 at 1400 UTC and disseminated over all its standard broadcast channels.
- PTWC will issue a start of exercise message through its Twitter account at 1400 UTC.
- As of 1407 UTC, PTWC emails will be sent with all the simulated enhanced products (text and graphical) to the designated CARIBE-EWS, TWFP and NTWC for one of the scenarios.
 - By March 6, 2020, each Member State needs to select one scenario and must complete the following survey (<https://forms.gle/7iEBp187x1UXaXYy6>) to select the scenario their country will use for the exercise. If the Member State does not inform the PTWC and CTWP, the organizers will decide for which scenario the PTWC will send the products.
 - Each country and territory will choose one scenario and decide if and how to disseminate messages within its area of responsibility.
 - To verify the current list of officially designated UNESCO IOC CARIBE-EWS TWFP and NTWC check out:

http://www.ioc-tsunami.org/index.php?option=com_content&view=article&id=6&Itemid=22&lang=en

Username: tsunami Password: bigwave

CARIBE WAVE 20 Scenarios by Member State/Territory

*scenarios decided by Caribe Wave organizers per Exercise Handbook

Jamaica	Portugal

Appendix V. TWC Dummy (Start of Exercise) Messages

PTWC ← **Center**
WECA41 PHEB 191400 ← **WMO ID**
TSUCAX ← **AWIPS ID**

TEST...INITIAL DUMMY START OF EXERCISE MESSAGE...TEST
NWS PACIFIC TSUNAMI WARNING CENTER/NOAA/NWS
ISSUED AT 1400Z 19 MAR 2020

...TEST...CARIBE WAVE 20 TSUNAMI EXERCISE DUMMY MESSAGE.
REFER TO THE EXERCISE HANDBOOK. THIS IS AN EXERCISE ONLY...TEST...

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

THIS IS ONLY AN EXERCISE.

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Dummy (Start of Exercise) Message

Start of exercise message will also be sent out by PTWC twitter accounts.

“This is a test message for the CARIBEWAVE20 tsunami exercise
#CaribeWave”
(Will be issued at 14h00 UTC to NWS_PTWC and NWS_CTWP
accounts/subscribers)

Jamaica Scenario

Message Chronology issued by the PTWC Jamaica

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

PTWC Message #1

ZCZC
WECA41 PHEB 191407 WMO ID
TSUCAX AWIPS ID

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

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

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

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

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

TEST... TSUNAMI THREAT FORECAST ...TEST

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

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

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

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

LOCATION	REGION	COORDINATES		ETA (UTC)	

SANTIAGO D CUBA	CUBA	19.9N	75.8W	1422	03/19
JEREMIE	HAITI	18.6N	74.1W	1424	03/19
JACAMEL	HAITI	18.1N	72.5W	1433	03/19
BARACOA	CUBA	20.4N	74.5W	1442	03/19
CAYMAN BRAC	CAYMAN ISLANDS	19.7N	79.9W	1446	03/19

GREAT INAGUA	BAHAMAS	20.9N	73.7W	1448	03/19	BASSE TERRE	GUADELOUPE	16.0N	61.7W	1617	03/19
KINGSTON	JAMAICA	17.9N	76.9W	1451	03/19	THE VALLEY	ANGUILLA	18.3N	63.1W	1620	03/19
CAP HAITEN	HAITI	19.8N	72.2W	1454	03/19	CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1621	03/19
MONTEGO BAY	JAMAICA	18.5N	77.9W	1454	03/19	ROSEAU	DOMINICA	15.3N	61.4W	1621	03/19
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1458	03/19	FREEPORT	BAHAMAS	26.5N	78.8W	1622	03/19
GIBARA	CUBA	21.1N	76.1W	1502	03/19	COLON	PANAMA	9.4N	79.9W	1622	03/19
MAYAGUANA	BAHAMAS	22.3N	73.0W	1502	03/19	LA HABANA	CUBA	23.2N	82.4W	1624	03/19
GRAND CAYMAN	CAYMAN ISLANDS	19.3N	81.3W	1502	03/19	ABACO ISLAND	BAHAMAS	26.6N	77.1W	1627	03/19
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	1505	03/19	CASTRIES	SAINT LUCIA	14.0N	61.0W	1627	03/19
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	1510	03/19	FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1630	03/19
CIENFUEGOS	CUBA	22.0N	80.5W	1511	03/19	BOCAS DEL TORO	PANAMA	9.4N	82.2W	1633	03/19
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1513	03/19	KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1633	03/19
LONG ISLAND	BAHAMAS	23.3N	75.1W	1522	03/19	BAIE LUCAS	SAINT MARTIN	18.1N	63.0W	1634	03/19
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1522	03/19	BIMINI	BAHAMAS	25.8N	79.3W	1635	03/19
SANTA MARTA	COLOMBIA	11.2N	74.2W	1526	03/19	BAIE GRAND CASE	SAINT MARTIN	18.1N	63.1W	1638	03/19
PORT AU PRINCE	HAITI	18.5N	72.4W	1527	03/19	SAINT BARTHELEM	SAINT BARTHELEMY	17.9N	62.8W	1639	03/19
ORANJESTAD	ARUBA	12.5N	70.0W	1529	03/19	CUMANA	VENEZUELA	10.5N	64.2W	1643	03/19
EXUMA	BAHAMAS	23.6N	75.9W	1532	03/19	PALMETTO POINT	BARBUDA	17.6N	61.9W	1644	03/19
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1532	03/19	SAINT GEORGES	GRENADA	12.0N	61.8W	1645	03/19
ONIMA	BONAIRE	12.3N	68.3W	1535	03/19	SAINT JOHNS	ANTIGUA	17.1N	61.9W	1650	03/19
CARTAGENA	COLOMBIA	10.4N	75.6W	1535	03/19	TRUJILLO	HONDURAS	15.9N	86.0W	1650	03/19
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1537	03/19	ESSO PIER	BERMUDA	32.4N	64.7W	1650	03/19
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1538	03/19	BAIE BLANCHE	SAINT MARTIN	18.1N	63.0W	1653	03/19
CAT ISLAND	BAHAMAS	24.4N	75.5W	1541	03/19	BRIDGETOWN	BARBADOS	13.1N	59.6W	1656	03/19
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1541	03/19	PUNTA GORDA	NICARAGUA	11.4N	83.8W	1706	03/19
SAN ANDRES	SAN ANDRES PROVI	13.4N	81.4W	1544	03/19	TEST... POTENTIAL IMPACTS ...TEST					
SAN JUAN	PUERTO RICO	18.5N	66.1W	1544	03/19	-----					
PROVIDENCIA	SAN ANDRES PROVI	12.6N	81.7W	1547	03/19	* THIS IS A TEST MESSAGE. A TSUNAMI IS A SERIES OF WAVES. THE					
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1548	03/19	TIME BETWEEN WAVE CRESTS CAN VARY FROM 5 MINUTES TO AN HOUR.					
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1549	03/19	THE HAZARD MAY PERSIST FOR MANY HOURS OR LONGER AFTER THE					
ALIGANDI	PANAMA	9.2N	78.0W	1550	03/19	INITIAL WAVE.					
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1558	03/19	* THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM					
PUERTO CARRETO	PANAMA	8.8N	77.6W	1558	03/19	ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND					
COZUMEL	MEXICO	20.5N	87.0W	1600	03/19	THE SHAPE AND ELEVATION OF THE SHORELINE.					
RIOHACHA	COLOMBIA	11.6N	72.9W	1602	03/19	* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON					
WILLEMSTAD	CURACAO	12.1N	68.9W	1602	03/19	THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI					
SABA	SABA	17.6N	63.2W	1603	03/19	WAVES.					
PUERTO CORTES	HONDURAS	15.9N	88.0W	1603	03/19	* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A					
BASSETERRE	SAINT KITTS	17.3N	62.7W	1608	03/19	TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR					
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1609	03/19	BE SWEEPED OUT TO SEA.					
NASSAU	BAHAMAS	25.1N	77.4W	1610	03/19						
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1610	03/19						
SINT EUSTATIUS	SINT EUSTATIUS	17.5N	63.0W	1611	03/19						
MAIQUETIA	VENEZUELA	10.6N	67.0W	1611	03/19						
PLYMOUTH	MONTSERRAT	16.7N	62.2W	1612	03/19						
SIMPSON BAAI	SINT MAARTEN	18.0N	63.1W	1612	03/19						
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1615	03/19						
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1616	03/19						

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

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

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

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

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

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

\$\$

NNNN

ZCZC
WECA41 PHEB 191425
TSUCAX

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

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

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

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

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

FORECAST TSUNAMI AMPLITUDES ARE PROVIDED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

- * THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.
- * THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... HAZARDOUS TSUNAMI WAVES ARE FORECAST FOR SOME COASTS.

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

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

CUBA... HAITI... AND JAMAICA.

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

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

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

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

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

INSTRUCTIONS FROM NATIONAL AND LOCAL AUTHORITIES.

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

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

LOCATION	REGION	COORDINATES		ETA (UTC)

SANTIAGO D CUBA	CUBA	19.9N	75.8W	1422 03/19
JEREMIE	HAITI	18.6N	74.1W	1424 03/19
JACAMEL	HAITI	18.1N	72.5W	1433 03/19
BARACOA	CUBA	20.4N	74.5W	1442 03/19
CAYMAN BRAC	CAYMAN ISLANDS	19.7N	79.9W	1446 03/19
GREAT INAGUA	BAHAMAS	20.9N	73.7W	1448 03/19
KINGSTON	JAMAICA	17.9N	76.9W	1451 03/19
CAP HAITEN	HAITI	19.8N	72.2W	1454 03/19
MONTEGO BAY	JAMAICA	18.5N	77.9W	1454 03/19
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1458 03/19
GIBARA	CUBA	21.1N	76.1W	1502 03/19
MAYAGUANA	BAHAMAS	22.3N	73.0W	1502 03/19
GRAND CAYMAN	CAYMAN ISLANDS	19.3N	81.3W	1502 03/19
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	1505 03/19
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	1510 03/19
CIENFUEGOS	CUBA	22.0N	80.5W	1511 03/19
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1513 03/19
LONG ISLAND	BAHAMAS	23.3N	75.1W	1522 03/19
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1522 03/19
SANTA MARTA	COLOMBIA	11.2N	74.2W	1526 03/19
PORT AU PRINCE	HAITI	18.5N	72.4W	1527 03/19
ORANJESTAD	ARUBA	12.5N	70.0W	1529 03/19
EXUMA	BAHAMAS	23.6N	75.9W	1532 03/19
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1532 03/19
ONIMA	BONAIRE	12.3N	68.3W	1535 03/19
CARTAGENA	COLOMBIA	10.4N	75.6W	1535 03/19
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1537 03/19
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1538 03/19
CAT ISLAND	BAHAMAS	24.4N	75.5W	1541 03/19
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1541 03/19
SAN ANDRES	SAN ANDRES PROVI	13.4N	81.4W	1544 03/19
SAN JUAN	PUERTO RICO	18.5N	66.1W	1544 03/19
PROVIDENCIA	SAN ANDRES PROVI	12.6N	81.7W	1547 03/19

BARRANQUILLA	COLOMBIA	11.1N	74.9W	1548 03/19
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1549 03/19
ALIGANDI	PANAMA	9.2N	78.0W	1550 03/19
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1558 03/19
PUERTO CARRETO	PANAMA	8.8N	77.6W	1558 03/19
COZUMEL	MEXICO	20.5N	87.0W	1600 03/19
RIOHACHA	COLOMBIA	11.6N	72.9W	1602 03/19
WILLEMSTAD	CURACAO	12.1N	68.9W	1602 03/19
BASSETERRE	SAINT KITTS	17.3N	62.7W	1608 03/19
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1609 03/19
NASSAU	BAHAMAS	25.1N	77.4W	1610 03/19
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1610 03/19
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1615 03/19
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1616 03/19
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1621 03/19
ROSEAU	DOMINICA	15.3N	61.4W	1621 03/19
FREEPORT	BAHAMAS	26.5N	78.8W	1622 03/19
COLON	PANAMA	9.4N	79.9W	1622 03/19
LA HABANA	CUBA	23.2N	82.4W	1624 03/19
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1627 03/19
CASTRIES	SAINT LUCIA	14.0N	61.0W	1627 03/19
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1630 03/19
BOCAS DEL TORO	PANAMA	9.4N	82.2W	1633 03/19
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1633 03/19
BIMINI	BAHAMAS	25.8N	79.3W	1635 03/19
PUNTA GORDA	NICARAGUA	11.4N	83.8W	1706 03/19
ROADTOWN	BR VIRGIN IS	18.4N	64.6W	1707 03/19
SANTA CRZ D SUR	CUBA	20.7N	78.0W	1735 03/19
PUNTO FIJO	VENEZUELA	11.7N	70.2W	1751 03/19
GOLFO VENEZUELA	VENEZUELA	11.4N	71.2W	1850 03/19
NUEVA GERONA	CUBA	21.9N	82.8W	1910 03/19
PUERTO CABEZAS	NICARAGUA	14.0N	83.4W	2032 03/19

TEST... POTENTIAL IMPACTS ...TEST

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

* THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

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

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

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

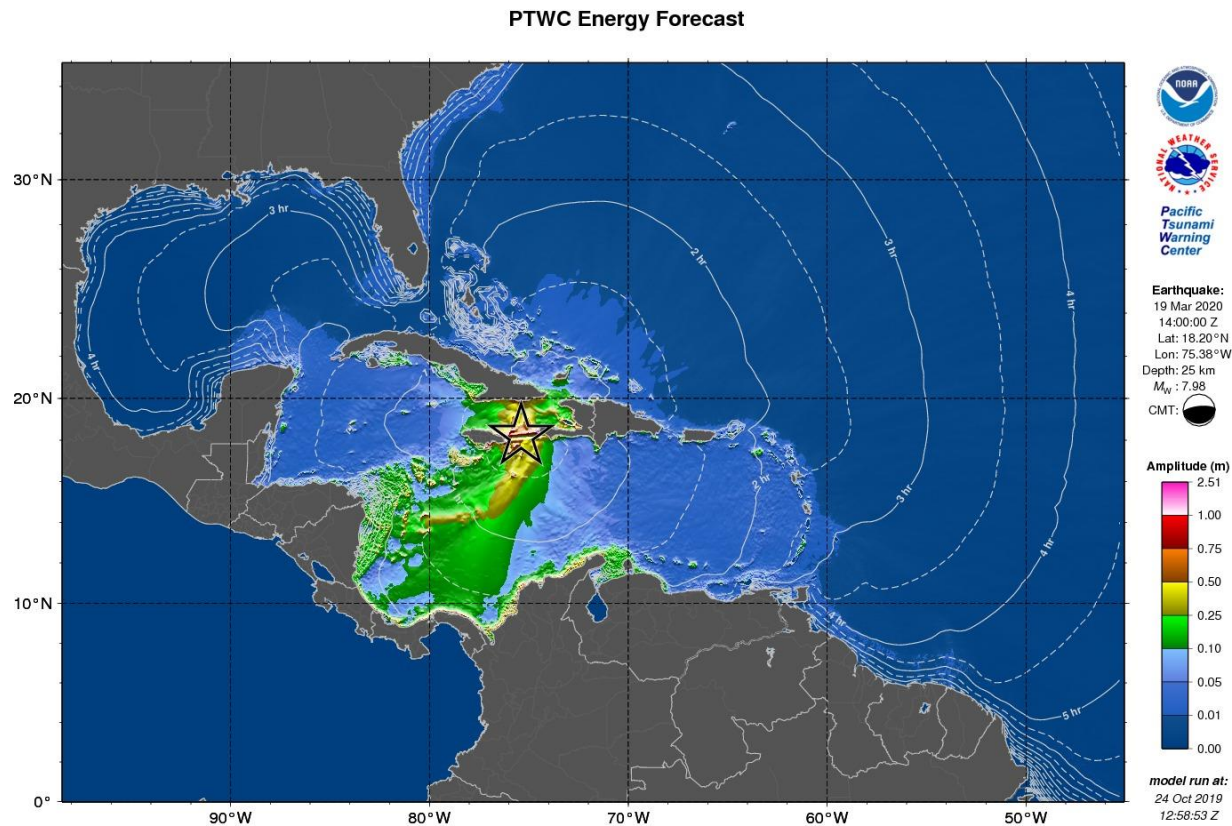
- * THIS IS A TEST MESSAGE. THE NEXT MESSAGE WILL BE ISSUED IN
ONE HOUR... OR SOONER IF THE SITUATION WARRANTS.
- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE
EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON
THE INTERNET AT EARTHQUAKE.USGS.GOV/EARTHQUAKES -ALL IN
LOWERCASE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

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

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NNNN

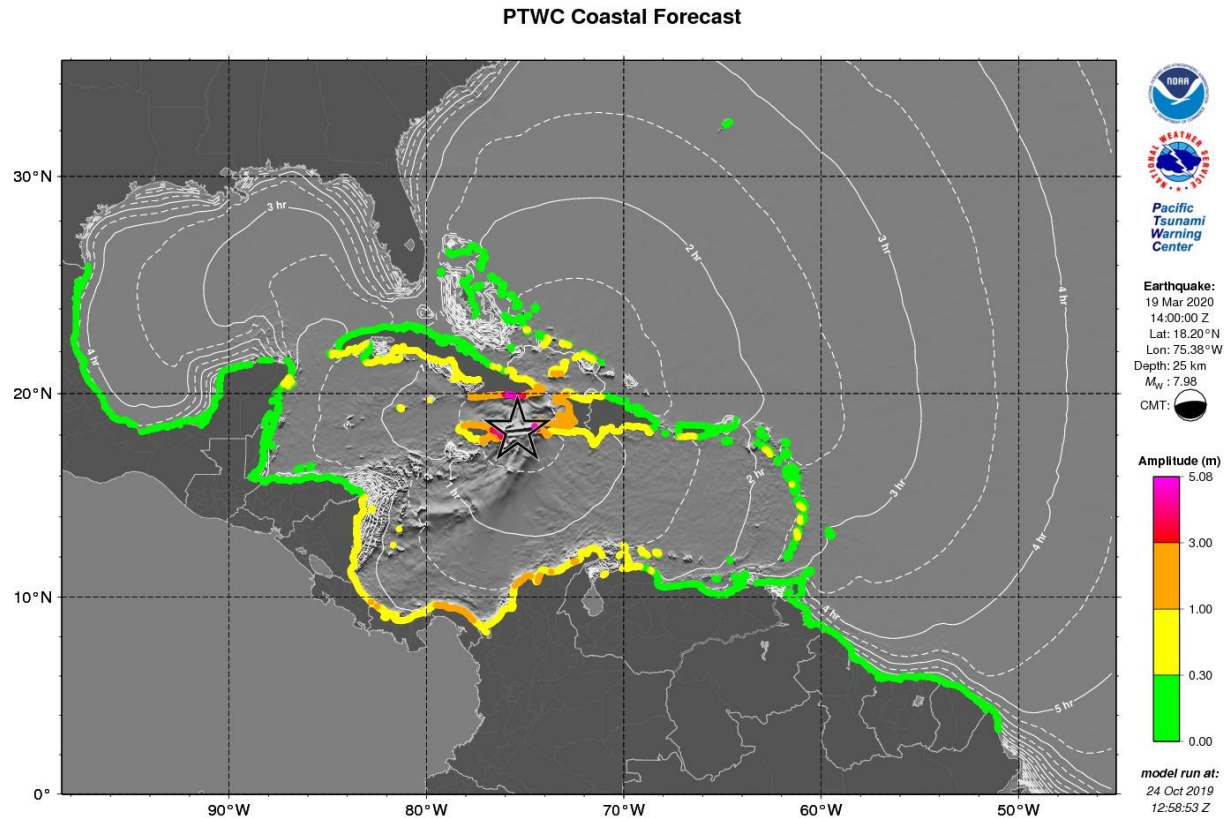
Energy Forecast for Tsunami Wave Heights Jamaica



RIFT maximum amplitude map based on the scenario for Jamaica.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

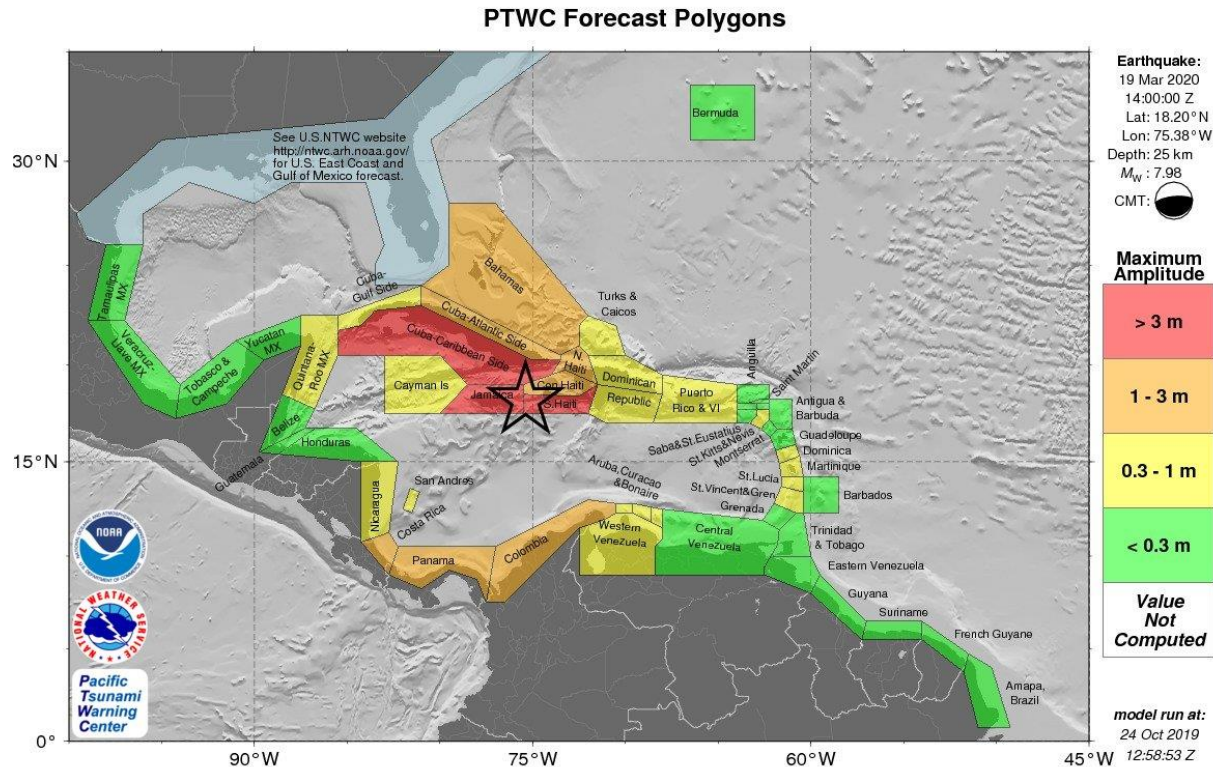
Coastal Forecast for Tsunami Wave Heights Jamaica



RIFT coastal tsunami amplitude map based on the scenario for Jamaica.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

Polygons Forecast for Tsunami Wave Heights Jamaica

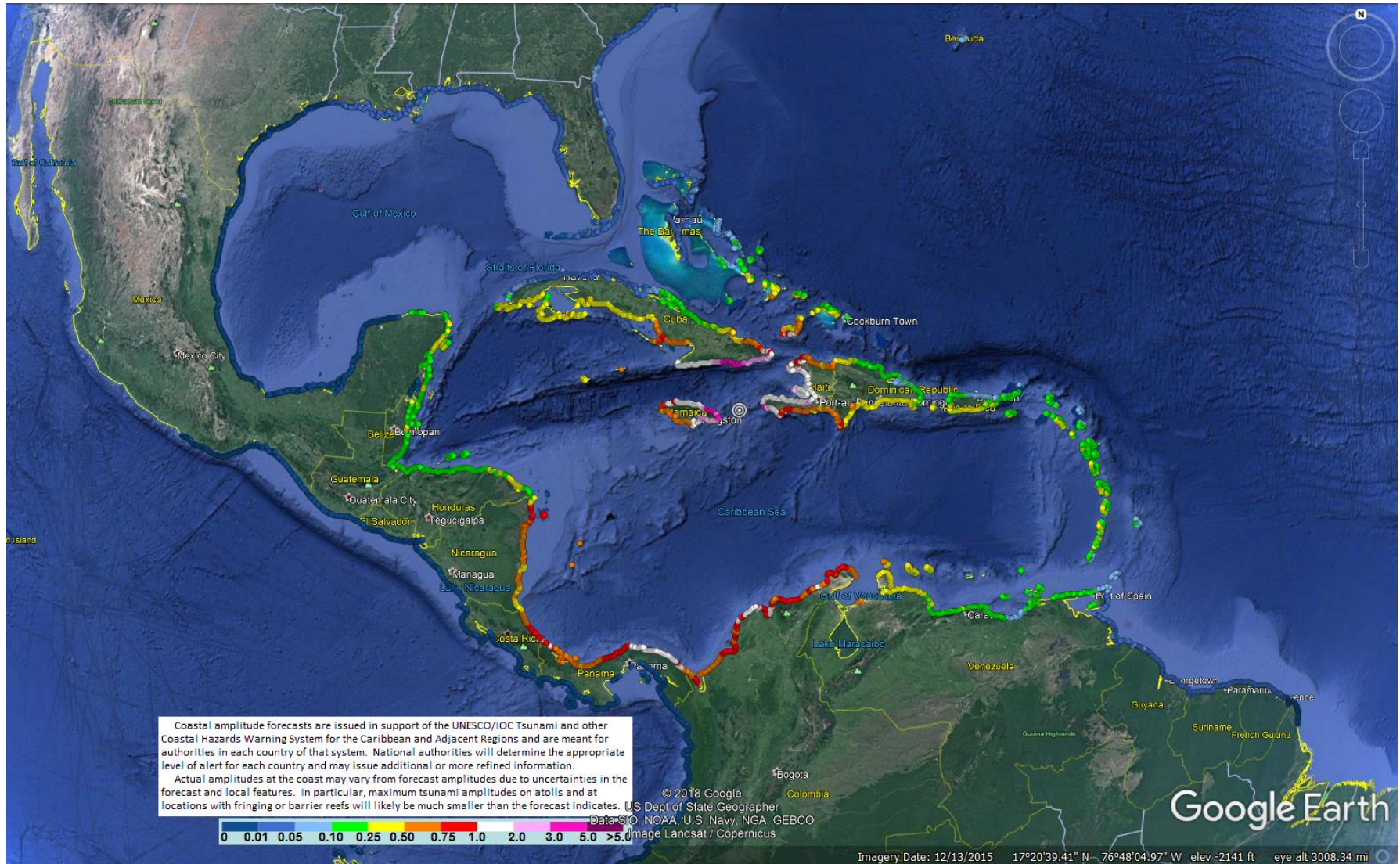


RIFT forecast polygons for the Caribbean region on the Jamaica scenario.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

KMZ

Jamaica



Forecast Statistics for Regional Polygons*

Jamaica

Region_Name	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	Points
Caribbean_Coast_of_Cuba	5.1	0.95	0.42	1.00	2.4	0.29	0.17	0.30	423
Caribbean_Coast_of_Haiti	4.8	1.10	0.71	0.94	2.0	0.44	0.34	0.38	89
Jamaica	4.5	1.50	1.30	0.94	2.5	0.66	0.55	0.40	146
Gulf_of_Gonave_Coast_of_Haiti	2.3	1.70	1.60	0.26	1.9	0.69	0.62	0.36	140
Atlantic_Coast_of_Haiti	1.8	0.82	0.71	0.30	0.87	0.34	0.31	0.13	66
Caribbean_Coast_of_Panama	1.4	0.87	0.82	0.27	1.1	0.50	0.50	0.20	179
Bahamas	1.3	0.19	0.06	0.25	1.0	0.10	0.03	0.16	443
Caribbean_Coast_of_Colombia	1.3	0.82	0.81	0.15	1.1	0.50	0.48	0.17	255
Atlantic_Coast_of_Cuba	1.1	0.24	0.16	0.25	0.58	0.11	0.06	0.12	259
Caribbean_Coast_of_Costa_Rica	1.1	0.77	0.81	0.15	0.81	0.45	0.44	0.11	48
Caribbean_Coast_of_Dominican_Republic	0.82	0.42	0.40	0.14	0.59	0.21	0.18	0.10	148
Caribbean_Coast_of_Nicaragua	0.80	0.58	0.54	0.11	0.50	0.21	0.20	0.08	138
San_Andres_and_Providencia	0.71	0.65	0.65	0.06	0.35	0.35	0.35	0.00	4
Atlantic_Coast_of_Dominican_Republic	0.67	0.20	0.15	0.12	0.71	0.12	0.07	0.11	129
Western_Coast_of_Venezuela	0.61	0.35	0.33	0.10	0.40	0.18	0.16	0.06	100
Turks_and_Caicos_Islands	0.55	0.28	0.25	0.10	0.28	0.14	0.13	0.06	46
Cayman_Islands	0.55	0.37	0.37	0.07	0.35	0.20	0.20	0.07	9
Aruba	0.54	0.48	0.46	0.06	0.29	0.21	0.19	0.05	8
Curacao	0.44	0.32	0.30	0.05	0.21	0.13	0.12	0.04	27
Saint_Vincent_and_the_Grenadines	0.42	0.27	0.27	0.05	0.21	0.12	0.13	0.04	33
Quintana_Roo_Mexico	0.40	0.20	0.23	0.11	0.62	0.10	0.10	0.07	166
Saint_Kitts_and_Nevis	0.39	0.25	0.25	0.08	0.17	0.09	0.08	0.04	29
Bonaire	0.38	0.31	0.33	0.04	0.24	0.16	0.17	0.03	15
Puerto_Rico_and_Virgin_Islands	0.35	0.20	0.20	0.08	0.37	0.09	0.08	0.06	190
Gulf_of_Mexico_Coast_of_Cuba	0.33	0.05	0.04	0.05	0.09	0.02	0.01	0.01	122
Saint_Lucia	0.33	0.22	0.24	0.07	0.15	0.09	0.08	0.03	26
Dominica	0.31	0.21	0.22	0.05	0.12	0.06	0.06	0.03	31
Martinique	0.31	0.21	0.23	0.07	0.19	0.10	0.09	0.04	41
Caribbean_Coast_of_Honduras	0.29	0.20	0.20	0.04	0.27	0.10	0.10	0.04	185
Montserrat	0.29	0.21	0.20	0.04	0.23	0.10	0.07	0.06	11
Central_Coast_of_Venezuela	0.28	0.15	0.13	0.05	0.23	0.07	0.06	0.03	238
Grenada	0.28	0.17	0.18	0.06	0.17	0.08	0.08	0.04	29
Belize	0.28	0.20	0.18	0.03	0.25	0.08	0.08	0.04	90
Guadeloupe	0.27	0.17	0.17	0.05	0.18	0.08	0.07	0.03	73
Anguilla	0.25	0.20	0.23	0.05	0.18	0.13	0.12	0.04	8
Antigua_and-Barbuda	0.23	0.12	0.08	0.06	0.14	0.08	0.08	0.03	28
Saba_and_Saint_Eustatius	0.23	0.18	0.17	0.02	0.10	0.06	0.05	0.02	8
Sint-Maarten	0.19	0.18	0.18	0.01	0.10	0.09	0.08	0.01	6
Saint_Barthelémy	0.18	0.13	0.12	0.04	0.11	0.09	0.09	0.02	4
Caribbean_Coast_of_Guatemala	0.18	0.17	0.17	0.00	0.11	0.06	0.06	0.01	13
Saint_Martin	0.17	0.17	0.17	0.00	0.13	0.12	0.11	0.01	3
Yucatan_Mexico	0.12	0.03	0.01	0.04	0.07	0.03	0.03	0.02	59
Barbados	0.12	0.09	0.09	0.02	0.08	0.04	0.04	0.02	21
Trinidad_and_Tobago	0.11	0.07	0.07	0.03	0.08	0.04	0.03	0.02	77
Bermuda	0.07	0.06	0.06	0.01	0.05	0.03	0.03	0.01	8
Atlantic_Coast_of_Venezuela	0.06	0.05	0.05	0.00	0.02	0.01	0.01	0.00	82
Guyana	0.05	0.04	0.03	0.00	0.03	0.01	0.01	0.00	101
Suriname	0.03	0.03	0.03	0.00	0.02	0.01	0.01	0.00	109
French_Guyane	0.03	0.01	0.01	0.00	0.02	0.00	0.00	0.00	84
Veracruz_Mexico	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	152
Tamaulipas_Mexico	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	126

*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 small islands will likely be much smaller than the forecast indicates.

PTWC Message #12

ZCZC
WECA41 PHEB 192300
TSUCAX

WMO ID

AWIPS ID

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

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

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

- * THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE JAMAICA REGION AT 1400 UTC ON THURSDAY MARCH 19 2020.
- * THIS IS A TEST MESSAGE. BASED ON ALL AVAILABLE DATA... THE TSUNAMI THREAT FROM THIS EARTHQUAKE HAS PASSED AND THERE IS NO FURTHER THREAT.

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

TEST... POTENTIAL IMPACTS ...TEST

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

TEST... TSUNAMI OBSERVATIONS ...TEST

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

GAUGE LOCATION	GAUGE COORDINATES		TIME OF MEASURE (UTC)	MAXIMUM TSUNAMI HEIGHT	WAVE PERIOD (MIN)
	LAT	LON			
WRIGHT BEACH NC	34.2N	77.8W	1901	0.09M/ 0.3FT	18
GANTERS BAY ST LUCI	14.0N	61.0W	1701	0.28M/ 0.9FT	28
PRICKLEY BAY GD	12.0N	61.8W	1700	0.16M/ 0.5FT	20
LE ROBERT MARTINIQU	14.7N	60.9W	1659	0.12M/ 0.4FT	22
CALLIAQUA VC	13.1N	61.2W	1648	0.33M/ 1.1FT	26
BLOWING POINT AI	18.2N	63.1W	1643	0.25M/ 0.8FT	22
POINT A PITRE GP	16.2N	61.5W	1639	0.13M/ 0.4FT	28

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

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

* THIS IS A TEST MESSAGE. THIS WILL BE THE FINAL STATEMENT

ISSUED FOR THIS EVENT UNLESS NEW INFORMATION IS RECEIVED OR
THE SITUATION CHANGES.

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

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

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

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

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Portugal Scenario

Message Chronology issued by the PTWC Portugal

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

PTWC Message #1

ZCZC

WECA43 PHEB 191407

WMO ID

TIBCAZ

AWIPS ID

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

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

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

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

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

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

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

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

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

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PTWC Message #3

ZCZC

WECA41 PHEB 191425

TSUCAX

WMO ID

AWIPS ID

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

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

...TEST TSUNAMI THREAT MESSAGE TEST...

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

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

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

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

THE EARTHQUAKE MAGNITUDE IS REVISED IN THIS MESSAGE.

FORECAST TSUNAMI AMPLITUDES ARE PROVIDED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

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

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

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

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

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

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

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

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

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

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

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

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

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

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

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

TEST... POTENTIAL IMPACTS ...TEST

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

* THIS IS A TEST MESSAGE. IMPACTS CAN VARY SIGNIFICANTLY FROM ONE SECTION OF COAST TO THE NEXT DUE TO LOCAL BATHYMETRY AND THE SHAPE AND ELEVATION OF THE SHORELINE.

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

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

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

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

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

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

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

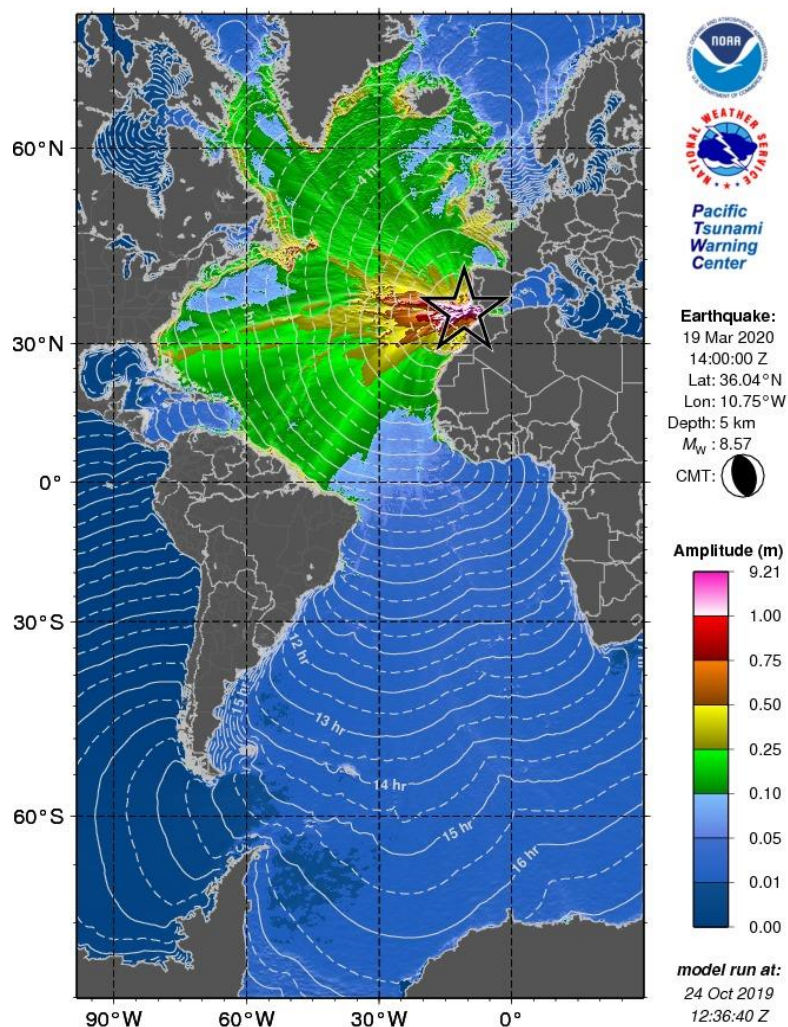
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MESSAGE.

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Energy Forecast for Tsunami Wave Heights Portugal

PTWC Energy Forecast

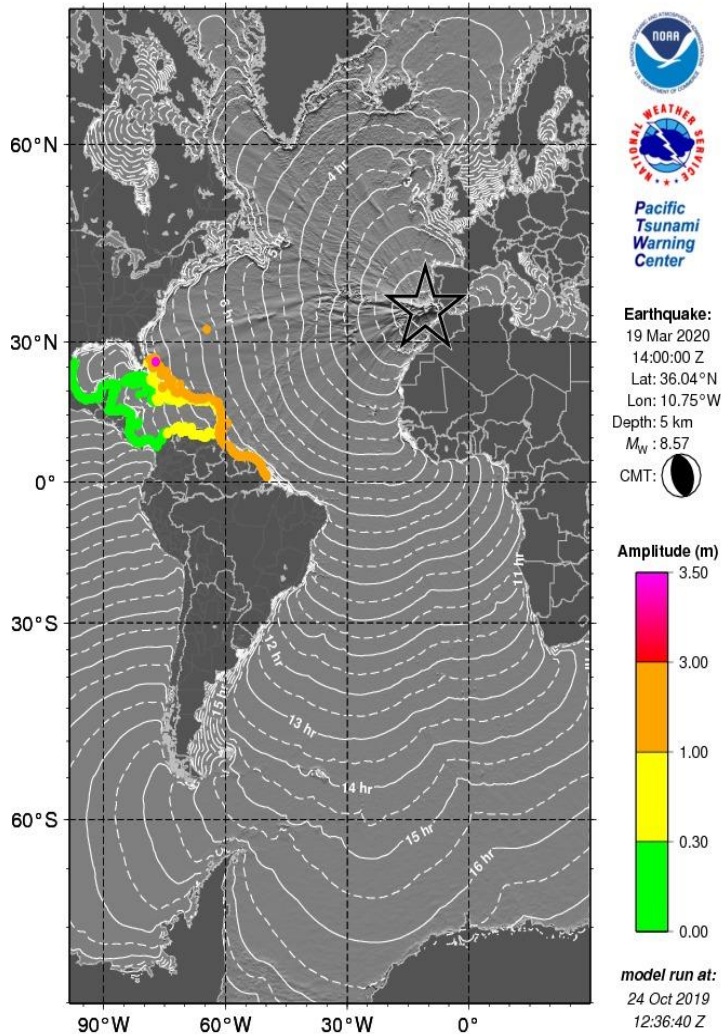


RIFT maximum amplitude map based on the scenario for Portugal.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

Coastal Forecast for Tsunami Wave Heights Portugal

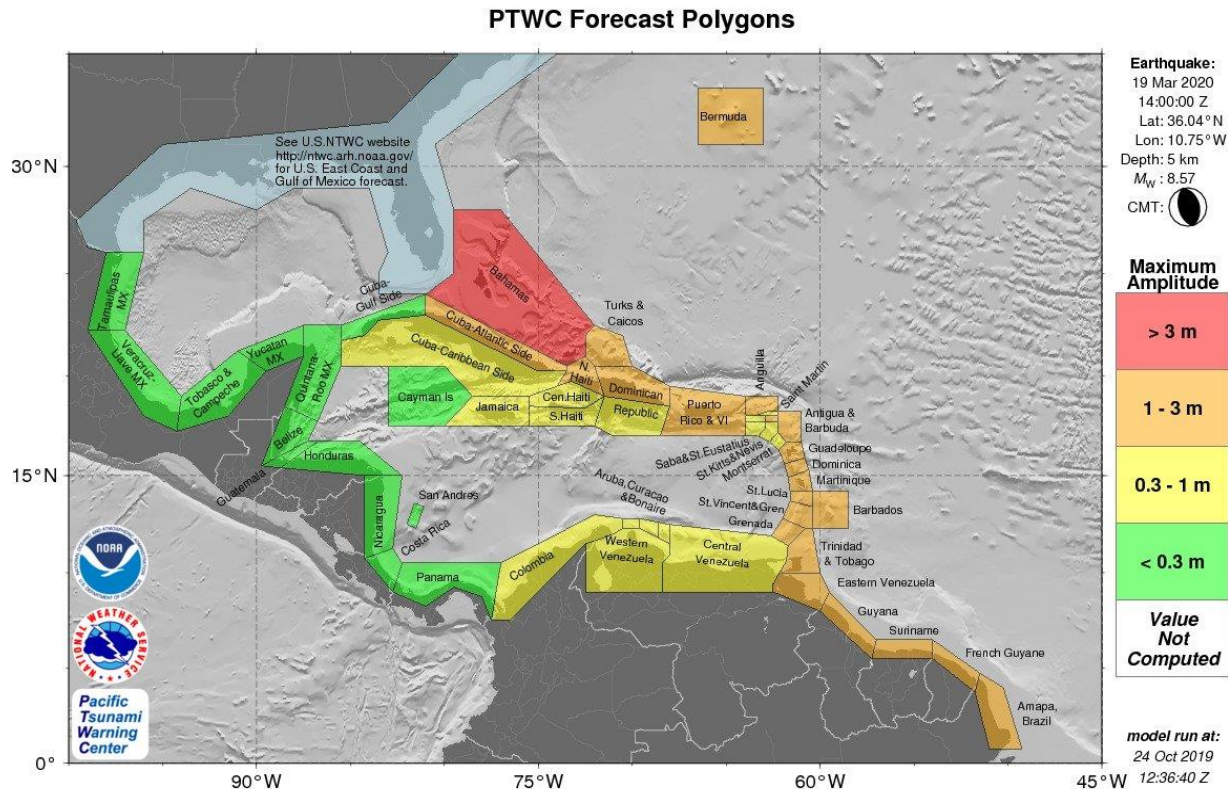
PTWC Coastal Forecast



RIFT coastal tsunami amplitude map based on the scenario for Portugal.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

Polygons Forecast for Tsunami Wave Heights Portugal

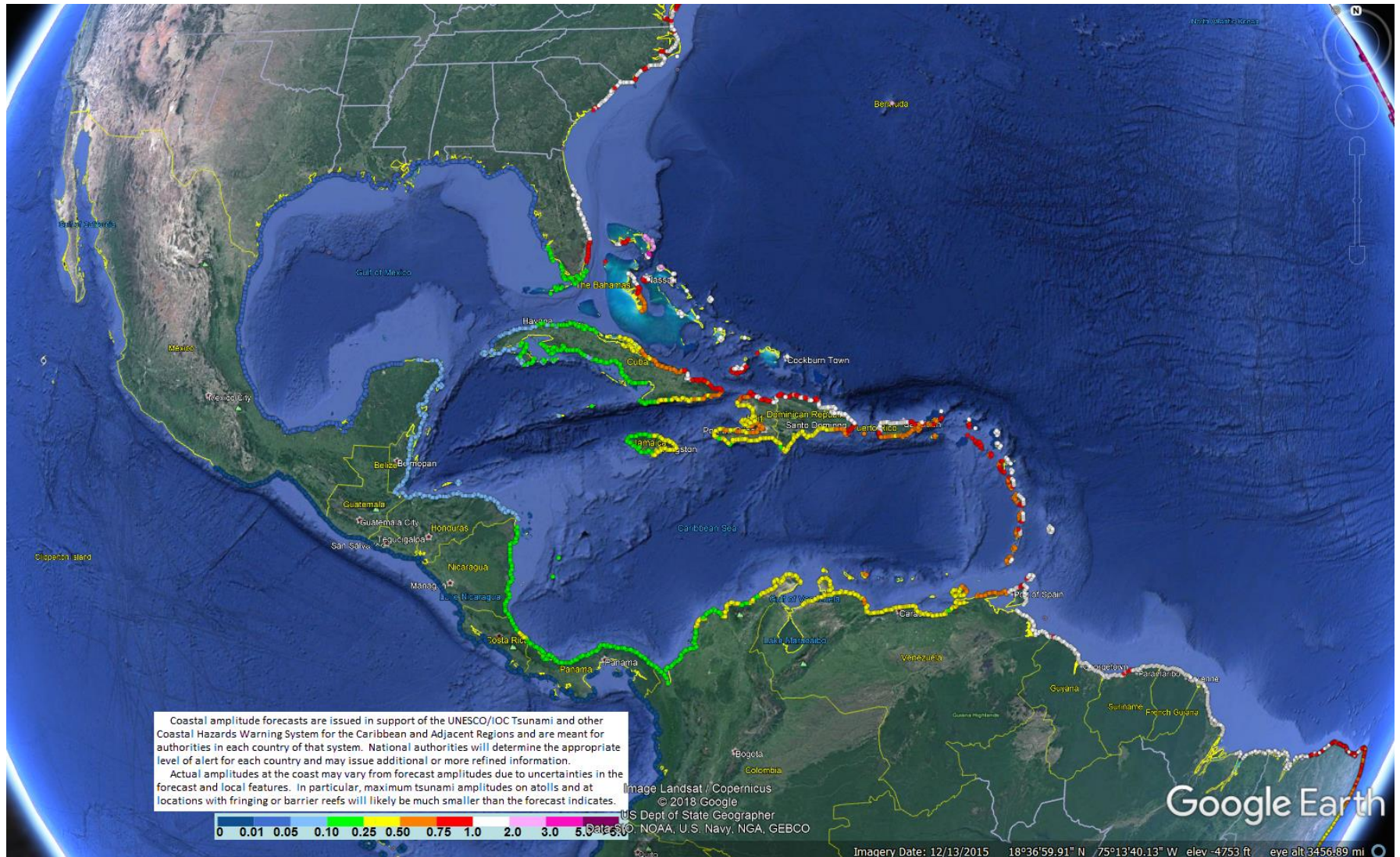


RIFT forecast polygons for the Caribbean region on the Portugal scenario.

During a real event this product will only be made available to officially designated Tsunami Warning Focal Points and National Tsunami Warning Centers.

KMZ

Portugal



Forecast Statistics for Regional Polygons*

Portugal

Region_Name	Coastal Forecast (meters)				Offshore Forecast (meters)				Total Points
	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	
Bahamas	3.5	1.40	1.10	0.70	2.0	0.60	0.53	0.33	115
Bermuda	2.1	1.90	1.90	0.11	1.0	1.00	1.00	0.00	2
Puerto_Rico_and_Virgin_Islands	1.8	0.92	0.73	0.37	0.94	0.42	0.43	0.17	83
Barbados	1.8	1.50	1.60	0.27	0.85	0.54	0.49	0.15	9
Anguilla	1.7	1.70	1.70	0.00	0.80	0.80	0.80	0.00	1
Saint_Lucia	1.6	0.99	0.89	0.37	0.64	0.40	0.41	0.15	13
Atlantic_Coast_of_Dominican_Republic	1.6	1.10	1.10	0.14	1.0	0.50	0.51	0.18	64
Amapa_Brazil	1.6	1.30	1.30	0.10	0.63	0.38	0.37	0.09	59
French_Guyane	1.6	1.40	1.30	0.11	0.68	0.38	0.37	0.08	41
Suriname	1.5	1.10	1.10	0.08	0.69	0.36	0.34	0.11	48
Saint_Barthelemy	1.5	1.50	1.50	0.00	0.67	0.67	0.67	0.00	1
Martinique	1.4	0.96	0.84	0.29	0.80	0.43	0.41	0.21	18
Trinidad_and_Tobago	1.4	1.10	1.10	0.15	0.70	0.47	0.47	0.10	35
Guadeloupe	1.3	0.99	0.87	0.22	0.79	0.40	0.39	0.15	19
Atlantic_Coast_of_Venezuela	1.3	1.10	1.00	0.11	0.68	0.41	0.40	0.08	33
Guyana	1.3	1.20	1.10	0.12	0.47	0.32	0.32	0.06	52
Antigua_and-Barbuda	1.3	1.20	1.20	0.11	1.1	0.74	0.73	0.17	10
Dominica	1.2	0.86	0.82	0.18	0.46	0.26	0.25	0.09	14
Atlantic_Coast_of_Cuba	1.1	0.57	0.55	0.28	0.79	0.23	0.21	0.15	100
Grenada	1.1	0.69	0.59	0.20	0.76	0.33	0.32	0.20	11
Saint_Vincent_and_the_Grenadines	1.1	0.75	0.61	0.23	0.80	0.36	0.27	0.21	12
Turks_and_Caicos_Islands	1.1	1.00	1.00	0.09	0.36	0.28	0.28	0.08	2
Atlantic_Coast_of_Haiti	1.0	0.84	0.85	0.15	0.64	0.35	0.36	0.12	28
Caribbean_Coast_of_Dominican_Republic	0.96	0.46	0.41	0.18	0.65	0.25	0.21	0.14	63
Montserrat	0.93	0.88	0.93	0.09	0.73	0.34	0.22	0.23	4
Sint_Maarten	0.93	0.93	0.93	0.00	0.82	0.72	0.72	0.10	2
Saint_Martin	0.93	0.93	0.93	0.00	0.84	0.84	0.84	0.00	1
Caribbean_Coast_of_Cuba	0.89	0.18	0.12	0.14	0.41	0.06	0.04	0.06	201
Saint_Kitts_and_Nevis	0.89	0.86	0.84	0.03	0.70	0.38	0.35	0.13	8
Saba_and_Saint_Eustatius	0.88	0.88	0.88	0.00	0.32	0.25	0.25	0.07	2
Gulf_of_Gonave_Coast_of_Haiti	0.66	0.46	0.44	0.09	0.38	0.15	0.14	0.06	74
Central_Coast_of_Venezuela	0.64	0.41	0.39	0.12	0.43	0.25	0.25	0.09	123
Bonaire	0.61	0.53	0.50	0.05	0.23	0.20	0.19	0.02	4
Western_Coast_of_Venezuela	0.54	0.42	0.41	0.04	0.31	0.19	0.20	0.07	62
Jamaica	0.48	0.27	0.24	0.10	0.27	0.11	0.10	0.05	73
Curacao	0.48	0.48	0.48	0.00	0.20	0.20	0.20	0.00	1
Aruba	0.45	0.45	0.45	0.00	0.16	0.16	0.16	0.00	1
Caribbean_Coast_of_Haiti	0.38	0.29	0.28	0.04	0.23	0.11	0.11	0.04	43
Caribbean_Coast_of_Colombia	0.37	0.26	0.26	0.06	0.28	0.10	0.10	0.05	131
Caribbean_Coast_of_Costa_Rica	0.28	0.22	0.22	0.04	0.11	0.06	0.06	0.02	23
Caribbean_Coast_of_Nicaragua	0.24	0.18	0.20	0.03	0.07	0.05	0.04	0.01	60
Caribbean_Coast_of_Panama	0.23	0.19	0.18	0.03	0.14	0.07	0.07	0.03	87
San_Andres_and_Providencia	0.20	0.19	0.19	0.02	0.09	0.07	0.07	0.02	4
Gulf_of_Mexico_Coast_of_Cuba	0.14	0.09	0.08	0.03	0.10	0.04	0.04	0.02	60
Cayman_Islands	0.11	0.09	0.09	0.01	0.04	0.03	0.03	0.00	2
Belize	0.09	0.07	0.07	0.01	0.03	0.02	0.02	0.00	37
Quintana_Roo_Mexico	0.08	0.07	0.06	0.01	0.05	0.03	0.03	0.01	64
Caribbean_Coast_of_Honduras	0.07	0.06	0.06	0.01	0.09	0.03	0.03	0.01	87
Yucatan_Mexico	0.07	0.02	0.01	0.02	0.03	0.01	0.01	0.00	31
Caribbean_Coast_of_Guatemala	0.06	0.06	0.06	0.00	0.03	0.02	0.02	0.00	7
Tamaulipas_Mexico	0.02	0.01	0.02	0.00	0.01	0.00	0.00	0.00	64

*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 small islands will likely be much smaller than the forecast indicates.

PTWC Message #12

ZCZC

WECA41 PHEB 192200

TSUCAX

WMO ID

AWIPS ID

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

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

...TEST TSUNAMI THREAT MESSAGE TEST...

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

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

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

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

TEST... TSUNAMI THREAT FORECAST ...TEST

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

BAHAMAS.

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

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

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

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

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

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

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

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

LOCATION	REGION	COORDINATES		ETA (UTC)	JEREMIE	HAITI	18.6N	74.1W	2241 03/19
-----					SANTIAGO D CUBA	CUBA	19.9N	75.8W	2244 03/19
ROSEAU	DOMINICA	15.3N	61.4W	2118 03/19	NASSAU	BAHAMAS	25.1N	77.4W	2247 03/19
PLYMOUTH	MONTSERRAT	16.7N	62.2W	2118 03/19	CAYENNE	FRENCH GUYANE	4.9N	52.3W	2247 03/19
BRIDGETOWN	BARBADOS	13.1N	59.6W	2118 03/19	MAIQUETIA	VENEZUELA	10.6N	67.0W	2250 03/19
CASTRIES	SAINT LUCIA	14.0N	61.0W	2119 03/19	WILLEMSTAD	CURACAO	12.1N	68.9W	2257 03/19
BASSE TERRE	GUADELOUPE	16.0N	61.7W	2122 03/19	ABACO ISLAND	BAHAMAS	26.6N	77.1W	2258 03/19
SINT EUSTATIUS	SINT EUSTATIUS	17.5N	63.0W	2123 03/19	FREEPORT	BAHAMAS	26.5N	78.8W	2259 03/19
SABA	SABA	17.6N	63.2W	2124 03/19	CUMANA	VENEZUELA	10.5N	64.2W	2303 03/19
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	2125 03/19	PORT OF SPAIN	TRINIDAD TOBAGO	10.6N	61.5W	2308 03/19
SAN JUAN	PUERTO RICO	18.5N	66.1W	2125 03/19	BIMINI	BAHAMAS	25.8N	79.3W	2312 03/19
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	2126 03/19	SANTA MARTA	COLOMBIA	11.2N	74.2W	2322 03/19
ANEGADA	BR VIRGIN IS	18.8N	64.3W	2126 03/19	MONTEGO BAY	JAMAICA	18.5N	77.9W	2326 03/19
THE VALLEY	ANGUILLA	18.3N	63.1W	2127 03/19	PORT AU PRINCE	HAITI	18.5N	72.4W	2334 03/19
SAINT JOHNS	ANTIGUA	17.1N	61.9W	2127 03/19	CIENFUEGOS	CUBA	22.0N	80.5W	2337 03/19
BASSETERRE	SAINT KITTS	17.3N	62.7W	2128 03/19	CARTAGENA	COLOMBIA	10.4N	75.6W	2338 03/19
PALMETTO POINT	BARBUDA	17.6N	61.9W	2128 03/19	KINGSTON	JAMAICA	17.9N	76.9W	2343 03/19
SIMPSON BAAI	SINT MAARTEN	18.0N	63.1W	2131 03/19	BARRANQUILLA	COLOMBIA	11.1N	74.9W	2347 03/19
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	2136 03/19	RIOHACHA	COLOMBIA	11.6N	72.9W	2351 03/19
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	2137 03/19	PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	0022 03/20
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	2151 03/19	GEORGETOWN	GUYANA	6.8N	58.2W	0033 03/20
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	2152 03/19	PARAMARIBO	SURINAME	5.9N	55.2W	0033 03/20
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	2153 03/19	PUNTO FIJO	VENEZUELA	11.7N	70.2W	0104 03/20
BAIE LUCAS	SAINT MARTIN	18.1N	63.0W	2153 03/19	PORLAMAR	VENEZUELA	10.9N	63.8W	0157 03/20
SAINT BARTHELEM	SAINT BARTHELEMY	17.9N	62.8W	2154 03/19	SANTA CRZ D SUR	CUBA	20.7N	78.0W	0201 03/20
BAIE GRAND CASE	SAINT MARTIN	18.1N	63.1W	2154 03/19	GOLFO VENEZUELA	VENEZUELA	11.4N	71.2W	0203 03/20
PIRATES BAY	TRINIDAD TOBAGO	11.3N	60.6W	2201 03/19	ILHA DE MARACA	BRAZIL	2.2N	50.5W	0210 03/20
MAYAGUANA	BAHAMAS	22.3N	73.0W	2202 03/19	NUEVA GERONA	CUBA	21.9N	82.8W	0339 03/20
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	2203 03/19	TEST... POTENTIAL IMPACTS ...TEST				
SAINT GEORGES	GRENADA	12.0N	61.8W	2203 03/19	-----				
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	2205 03/19	* 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.				
BAIE BLANCHE	SAINT MARTIN	18.1N	63.0W	2207 03/19	* 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.				
SAN SALVADOR	BAHAMAS	24.1N	74.5W	2208 03/19	* THIS IS A TEST MESSAGE. IMPACTS CAN ALSO VARY DEPENDING UPON THE STATE OF THE TIDE AT THE TIME OF THE MAXIMUM TSUNAMI WAVES.				
CAP HAITEN	HAITI	19.8N	72.2W	2209 03/19	* THIS IS A TEST MESSAGE. PERSONS CAUGHT IN THE WATER OF A TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR BE SWEEPED OUT TO SEA.				
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	2216 03/19					
LONG ISLAND	BAHAMAS	23.3N	75.1W	2221 03/19					
ONIMA	BONAIRE	12.3N	68.3W	2223 03/19					
GREAT INAGUA	BAHAMAS	20.9N	73.7W	2223 03/19					
EXUMA	BAHAMAS	23.6N	75.9W	2224 03/19					
CAT ISLAND	BAHAMAS	24.4N	75.5W	2224 03/19					
BARACOA	CUBA	20.4N	74.5W	2227 03/19					
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	2229 03/19					
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	2234 03/19					
JACAMEL	HAITI	18.1N	72.5W	2235 03/19					
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	2235 03/19					
GIBARA	CUBA	21.1N	76.1W	2237 03/19					
ORANJESTAD	ARUBA	12.5N	70.0W	2237 03/19					
ROADTOWN	BR VIRGIN IS	18.4N	64.6W	2240 03/19					

TEST... TSUNAMI OBSERVATIONS ...TEST

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

GAUGE LOCATION	GAUGE COORDINATES		TIME OF MEASURE	MAXIMUM TSUNAMI	WAVE PERIOD
	LAT	LON	(UTC)	HEIGHT	(MIN)
PUERTO PLATA DO	19.8N	70.7W	2200	0.97M/ 3.2FT	16
BLOWING POINT AI	18.2N	63.1W	2157	0.93M/ 3.1FT	26
PUNTA CANA DO	18.5N	68.4W	2159	0.85M/ 2.8FT	24
MONA ISLAND PR	18.1N	67.9W	2200	0.69M/ 2.3FT	24
SAINT MARTIN FR	18.1N	63.1W	2158	0.93M/ 3.1FT	14
GANTERS BAY ST LUCI	14.0N	61.0W	2155	0.64M/ 2.1FT	20
MAYAGUEZ PR	18.2N	67.2W	2151	1.21M/ 4.0FT	20
BARBUDA AG	17.6N	61.8W	2146	1.04M/ 3.4FT	18
ESPERANZA VIEQUES P	18.1N	65.5W	2144	0.68M/ 2.2FT	28
CALLIAQUA VC	13.1N	61.2W	2146	0.56M/ 1.8FT	22
YABUCOA PR	18.1N	65.8W	2139	0.70M/ 2.3FT	28
DART 41424	33.0N	72.7W	2141	0.10M/ 0.3FT	24
ARECIBO PR	18.5N	66.7W	2139	1.57M/ 5.1FT	14
LIMETREE VI	17.7N	64.8W	2134	0.62M/ 2.0FT	28
BASSETTERE KN	17.3N	62.7W	2141	0.84M/ 2.8FT	24
ST CROIX VI	17.7N	64.7W	2138	0.73M/ 2.4FT	28
SAN JUAN PR	18.5N	66.1W	2136	1.28M/ 4.2FT	28
FORT DE FRANCE MQ	14.6N	61.1W	2135	0.73M/ 2.4FT	16
ROSEAU DM	15.3N	61.4W	2131	0.64M/ 2.1FT	18
PORTSMOUTH DM	15.6N	61.5W	2128	0.70M/ 2.3FT	28
DART 41420	23.4N	67.3W	2125	0.14M/ 0.5FT	26
LE ROBERT MARTINIQU	14.7N	60.9W	2125	1.34M/ 4.4FT	28
LE PRECHEUR MARTINI	14.8N	61.2W	2126	0.66M/ 2.2FT	26
DESHAIES GUADELOUPE	16.3N	61.8W	2128	0.73M/ 2.4FT	22
PORT ST CHARLES BB	13.3N	59.6W	2125	1.61M/ 5.3FT	28
DART 44402	39.3N	70.7W	2127	0.10M/ 0.3FT	24
SAINT PIERRE MIQUEL	46.5N	56.1W	2119	1.02M/ 3.4FT	20
PARHAM AT	17.1N	61.8W	2115	1.31M/ 4.3FT	26
DESIRADE GUADELOUPE	16.3N	61.1W	2106	1.21M/ 4.0FT	20
DART 41425	28.7N	65.7W	2110	0.25M/ 0.8FT	16
DART 41421	23.4N	63.8W	2106	0.14M/ 0.5FT	20
BERMUDA UK	32.4N	64.7W	2105	2.30M/ 7.6FT	20
SALERNO IT	40.7N	14.8E	1906	0.07M/ 0.2FT	24
SETE FR	43.4N	3.7E	1901	0.11M/ 0.4FT	28
MALIN HEAD IE	55.4N	7.3W	1854	0.71M/ 2.3FT	18
FOS-SUR-MER FR	43.4N	4.9E	1849	0.11M/ 0.3FT	20
PORT-VENDRES FR	43.0N	3.1E	1848	0.12M/ 0.4FT	22

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

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

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

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

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

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

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

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NNNN

PTWC Message #22

CZCZC

WECA41 PHEB 200800

TSUCAX

WMO ID

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 22...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
0800 UTC FRI MAR 20 2020

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

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

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

TEST... EVALUATION ...TEST

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

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

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

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

TEST... RECOMMENDED ACTIONS ...TEST

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

TEST... POTENTIAL IMPACTS ...TEST

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

TEST... TSUNAMI OBSERVATIONS ...TEST

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

GAUGE LOCATION	GAUGE COORDINATES		TIME OF MEASURE (UTC)	MAXIMUM TSUNAMI HEIGHT	WAVE PERIOD (MIN)
	LAT	LO			
PORT STANLEY UK	51.8S	57.9W	0544	0.12M/ 0.4FT	22
KING EDWARD POINT U	54.3S	36.5W	0422	0.18M/ 0.6FT	22
GOUGH ISLAND UK	40.3S	9.9W	0230	0.23M/ 0.7FT	26
TRISTAN DA CUNHA UK	37.0S	12.3W	0146	0.27M/ 0.9FT	16
WOODS HOLE MA	41.5N	70.7W	0140	0.83M/ 2.7FT	14
ARRAIAL DO CABO BR	23.0S	42.0W	0127	0.16M/ 0.5FT	18
KEY WEST FL	24.6N	81.8W	0122	0.10M/ 0.3FT	26
NEW LONDON CT	41.4N	72.1W	0119	0.89M/ 2.9FT	24
ISLA MUJERES MX	21.3N	86.7W	0109	0.06M/ 0.2FT	14
BOCAS DEL TORO PA	9.4N	82.3W	0105	0.19M/ 0.6FT	24
VACA KEY FL	24.7N	81.1W	0059	0.15M/ 0.5FT	28
CEIBA CABOTAGE HN	15.8N	86.8W	0055	0.05M/ 0.2FT	22
LIMON CR	10.0N	83.0W	0051	0.28M/ 0.9FT	14
SIAN KAN MX	19.3N	87.4W	0040	0.07M/ 0.2FT	20
PUERTO MORELOS MX	20.9N	86.9W	0032	0.07M/ 0.2FT	20
PUERTO MORELOS MX	20.9N	86.9W	0034	0.07M/ 0.2FT	24
SAPZURRO CO	8.7N	77.4W	0026	0.18M/ 0.6FT	24
EL PORVENIR PA	9.6N	78.9W	0020	0.21M/ 0.7FT	16
SAN ANDRES CO	12.6N	81.7W	0021	0.20M/ 0.7FT	22

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

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

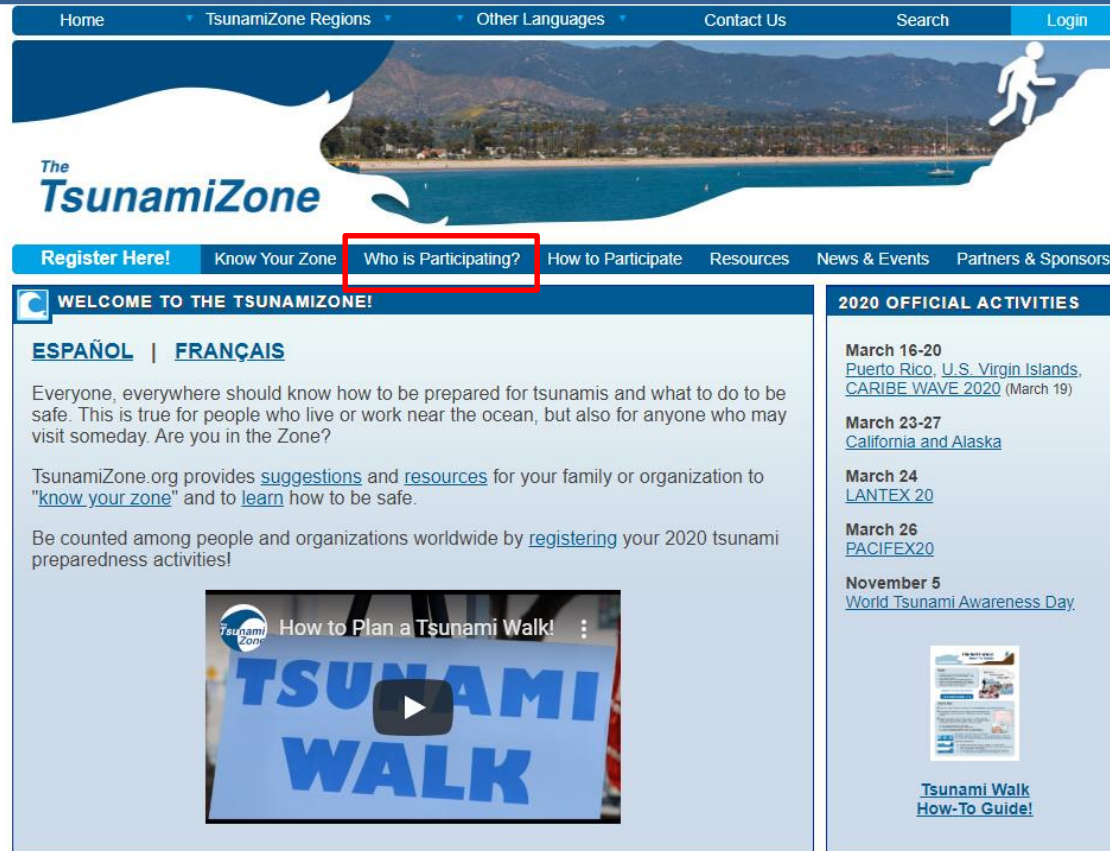
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NNNN

Member State Participation

The *TsunamiZone* Registration

TsunamiZone registration is used to track the number of people and organizations participating in the exercise.



The screenshot shows the TsunamiZone website. The top navigation bar includes links for Home, TsunamiZone Regions, Other Languages, Contact Us, Search, and Login. Below this is a large banner image of a beach with mountains in the background and a white silhouette of a person running. The main navigation bar features links for Register Here!, Know Your Zone, Who is Participating? (highlighted with a red box), How to Participate, Resources, News & Events, and Partners & Sponsors. The main content area is divided into two columns. The left column, titled 'WELCOME TO THE TSUNAMIZONE!', includes links for ESPAÑOL and FRANÇAIS, a paragraph about the importance of tsunami preparedness, a link to suggestions and resources, and a video titled 'How to Plan a Tsunami Walk!'. The right column, titled '2020 OFFICIAL ACTIVITIES', lists several events: March 16-20 (Puerto Rico, U.S. Virgin Islands, CARIBE WAVE 2020), March 23-27 (California and Alaska), March 24 (LANTEX 20), March 26 (PACIFEX20), and November 5 (World Tsunami Awareness Day). A link to the 'Tsunami Walk How-To Guide!' is also present.

TWFP and NTWC should register on TsunamiZone to be part of the statistical count. Independent of registering, they will receive the simulated bulletins from PTWC.

The TsunamiZone

[Register Here!](#)[Know Your Zone](#)[Who is Participating?](#)[How to Participate](#)[Resources](#)[News & Events](#)[Partners & Sponsors](#)**WELCOME TO THE TSUNAMIZONE!**[ESPAÑOL](#) | [FRANÇAIS](#)

Everyone, everywhere should know how to be prepared for tsunamis and what to do to be safe. This is true for people who live or work near the ocean, but also for anyone who may visit someday. Are you in the Zone?

TsunamiZone.org provides [suggestions](#) and [resources](#) for your family or organization to "[know your zone](#)" and to [learn](#) how to be safe.

Be counted among people and organizations worldwide by [registering](#) your 2020 tsunami preparedness activities!



2020 OFFICIAL ACTIVITIES

March 16-20[Puerto Rico, U.S. Virgin Islands, CARIBE WAVE 2020](#) (March 19)**March 23-27**[California and Alaska](#)**March 24**[LANTEX 20](#)**March 26**[PACIFEX20](#)**November 5**[World Tsunami Awareness Day](#)[Tsunami Walk
How-To Guide!](#)

<https://www.tsunamizone.org/>

Countries can keep track of registration by clicking on « Who is Participating »



PARTICIPATION TOTALS

Click on a category name to see a list of who is participating. Click on a region name to see details of participation totals by area.

These totals are current as of 01/14/2020 3:25 AM PST.

Category	Participants	Participation totals for each area	Total
Total:	1,127		
Individuals/Families	73	California	22
Childcare and Pre-Schools	0	North Coast	0
K-12 Schools and Districts	0	Shasta Cascade	0
Colleges and Universities	0	Bay Area	0
Local Government	0	Delta Sierra	0
State Government	10	Inyo-Mono	0
Federal Government (Including Military)	0	Central Valley South	0
Tribes	0	Central Coast	0
Businesses	810	Southern California Coast	0
Hotels and Other Lodgings	0	Inland Southern California	0
Healthcare	0	San Diego	4
Senior Facilities/Communities	0	Caribbean	1094
Disability/AFN Organizations	0	Anguilla	0
Non-Profit Organizations	100	Antigua and Barbuda	0
Neighborhood Groups	0	Aruba	0
Preparedness Organizations	133	Bahamas	0
Faith-based Organizations	0	Barbados	1
Museums, Libraries, Parks, etc.	0	Belize	0
Volunteer/Service Clubs	1	Bermuda	0
Youth Organizations	0	Bonaire	0
Animal Shelter/Service Providers	0	Brazil	0
Agriculture/Livestock	0	British Virgin Islands	0
Volunteer Radio Groups	0	Cayman Islands	0
Science/Engineering Organizations	0	Colombia	1
Media Organizations	0	Costa Rica	0
Other	0	Cuba	0
		Curacao	12
		Dominica	0
		Dominican Republic	15
		France	0
		Grenada	0
		Guadeloupe	0
		Guatemala	0
		Guyana	0
		Guyane	0
		Haiti	0
		Honduras	0
		Jamaica	0
		Martinique	0
		Mexico	0
		Montserrat	0
		Netherlands	0
		Nicaragua	0
		Panama	0
		Puerto Rico	826

**WHO IS PARTICIPATING? (CARIBBEAN)**

Click on a category name to see a list of who is participating. Click on a region name to see details of participation totals by area.

These totals are current as of 01/14/2020 3:25 AM PST.

Category	Participants	Participation totals for each area	Total
Total:	1,094		
Individuals/Families	50	Anguilla	0
Childcare and Pre-Schools	0	Antigua and Barbuda	0
K-12 Schools and Districts	0	Aruba	0
Colleges and Universities	0	Bahamas	0
Local Government	0	Barbados	1
State Government	10	Belize	0
Federal Government (Including Military)	0	Bermuda	0
Tribes	0	Bonaire	0
Businesses	800	Brazil	0
Hotels and Other Lodgings	0	British Virgin Islands	0
Healthcare	0	Cayman Islands	0
Senior Facilities/Communities	0	Colombia	1
Disability/AFN Organizations	0	Costa Rica	0
Non-Profit Organizations	100	Cuba	0
Neighborhood Groups	0	Curacao	12
Preparedness Organizations	133	Dominica	0
Faith-based Organizations	0	Dominican Republic	15
Museums, Libraries, Parks, etc.	0	France	0
Volunteer/Service Clubs	1	Grenada	0
Youth Organizations	0	Guadeloupe	0
Animal Shelter/Service Providers	0	Guatemala	0
Agriculture/Livestock	0	Guyana	0
Volunteer Radio Groups	0	Guyane	0
Science/Engineering Organizations	0	Haiti	0
Media Organizations	0	Honduras	0
Other	0	Jamaica	0
		Martinique	0
		Mexico	0
		Montserrat	0
		Netherlands	0



WHO IS PARTICIPATING? (VENEZUELA)

Click on a category name to see a list of who is participating. Click on a region name to see details of participation totals by area.

Participation totals for each county are [listed below](#).

These totals are current as of 01/14/2020 3:25 AM PST.

Category	Participants
Total:	239
Individuals/Families	17
Childcare and Pre-Schools	0
K-12 Schools and Districts	0
Colleges and Universities	0
Local Government	0
State Government	0
Federal Government (Including Military)	0
Tribes	0
Businesses	0
Hotels and Other Lodgings	0
Healthcare	0
Senior Facilities/Communities	0
Disability/AFN Organizations	0
Non-Profit Organizations	100
Neighborhood Groups	0
Preparedness Organizations	121
Faith-based Organizations	0
Museums, Libraries, Parks, etc.	0
Volunteer/Service Clubs	1
Youth Organizations	0
Animal Shelter/Service Providers	0
Agriculture/Livestock	0
Volunteer Radio Groups	0
Science/Engineering Organizations	0
Media Organizations	0
Other	0

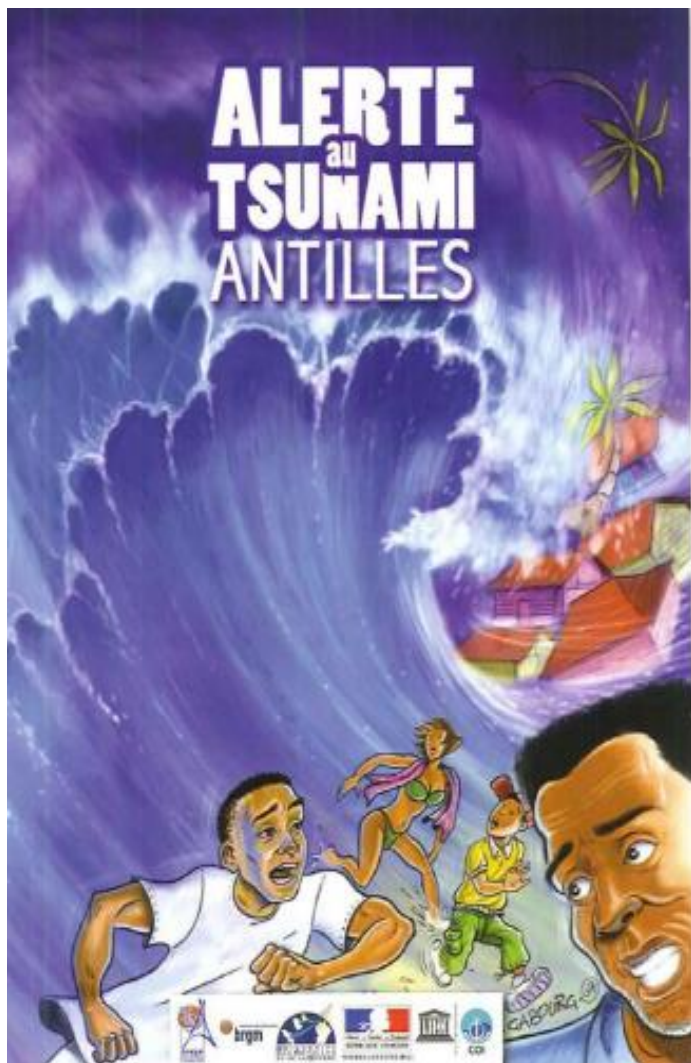
Resources

- IOC Manuals “[How to plan, conduct and evaluate tsunami exercises](#)” and “[Module on Tsunami Exercise](#)” are useful resources.
- CARIBE WAVE 2011 through 2020 Handbooks.
- CARIBE WAVE 2013 through 2019 Final and Media Report.
- PTWC Communications Plan for the Caribbean.
- Available at www.caribewave.info
- Questions on the exercise can be addressed to the members of the Caribe Wave 20 Task Team.

Additional Info

- Additional materials will be added to CTWP (www.caribewave.info).
- Send links of other national pages to christa.vonh@noaa.gov to include on CTWP.
- This presentation is available on CTWP website (<https://www.weather.gov/ctwp/caribewave20>).

Methodological Guidelines (Draft): How to prepare, conduct and evaluate a community-based tsunami response exercise



- This guide is recommended for Member States to consider Caribe Wave Exercises.
- Provides community leaders to conduct and evaluate a tsunami evacuation exercise with a methodology and tools.
- It is particularly relevant for bodies that would be directly exposed to the effects of a tsunami such as local government, schools, associations, and businesses.
- This guide aims to encourage a shared culture of exercises to develop between the municipal authorities tasked with ensuring the safety of those living in their area and community leaders – stakeholders in the social and economic life of the area.
- Guide available in English and French http://www.ioc-tsunami.org/index.php?option=com_oa&task=viewDocumentRecord&docID=19139

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Timeline

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

Questions, Comments

Thank you for participating!

christa.vonh@noaa.gov