



CARIBE WAVE 21

1st Webinar

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CARIBE WAVE 2020

Caribe Wave 20 was held under the circumstances of a pandemic on 19 March 2020. The exercise only focused on the communication test portion to validate the issuance and receipt of the messages distributed by the PTWC.

In the Caribbean and Adjacent Regions, **44** Member States and Territories participated in this exercise with a total of **4,622** people engaged.

- The participation of MS represents a rate of **92%** (down from 100% in 2019).



Communication portion of the exercise as part of the CARIBE WAVE 20: Barbados Department of Emergency Management (a) , Puerto Rico Seismic Network (b) , and Caribbean Tsunami Warning Program (c).

Objectives for Caribe Wave 21

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.

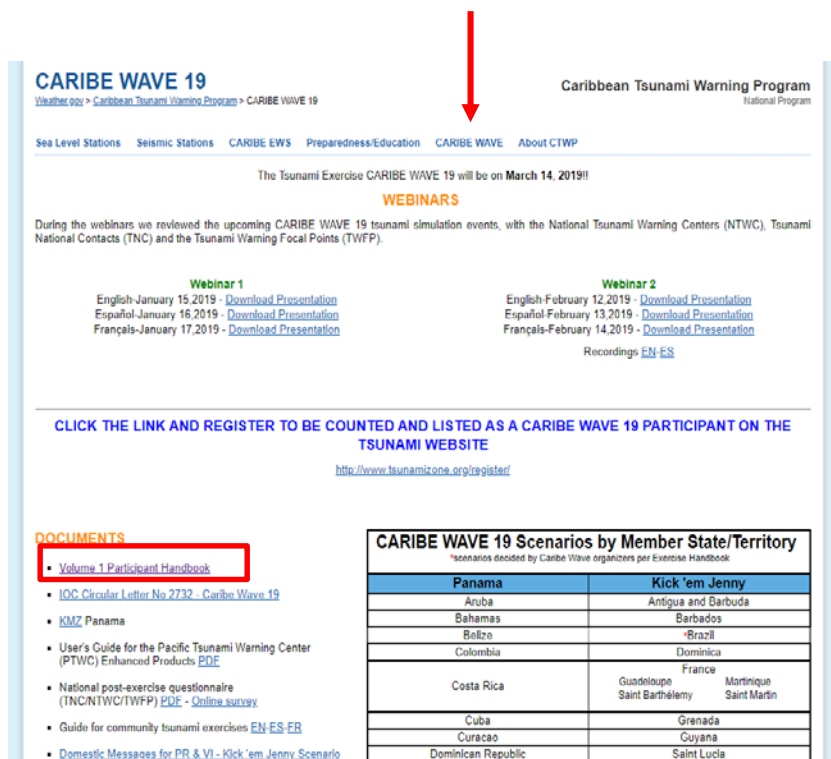
- A. Validate **readiness** to respond to a tsunami.
- B. Validate the **operational readiness** of the TWFPs/NTWCs and/or The National Disaster Management Office (NDMO).
- C. Improve **operational readiness**. Before the exercise, ensure appropriate tools and response plan(s) have been developed, including 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

Goals	2016 Results	2017 Results	2018 Results	2019 Results	2020 Metrics	2020 Results	2021 Metrics
TWFP receive the dummy message	84%	95%	100%	89%	100%	97%	100%
Participation of Member States of ICG CARIBE EWS with designated focal warning point	100%	100%	97%	100%	100%	92%	100%
Community involvement (beyond TWFP)	73%	82%	77%	66%	95%	38%	95%
Number of participants	332,812	679,985	643,403	793,353	+10%	4,622	+10% (from 2019)
Countries who participate submit exercise questionnaire	100%	100%	91%	82%	100%	92%	100%
Members State and territories are satisfied with exercise				82%	100%	76%	100%

Exercise Handbook

- The Caribe Wave 21 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 19
 Caribbean Tsunami Warning Program
 National Program

Weather 002 > Caribbean Tsunami Warning Program > CARIBE WAVE 19

Sea Level Stations Seismic Stations CARIBE EWS Preparedness-Education **CARIBE WAVE** About CTWP

The Tsunami Exercise CARIBE WAVE 19 will be on **March 14, 2019!!**

WEBINARS

During the webinars we reviewed the upcoming CARIBE WAVE 19 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 15, 2019 - [Download Presentation](#)
 Español-January 16, 2019 - [Download Presentation](#)
 Français-January 17, 2019 - [Download Presentation](#)

Webinar 2
 English-February 12, 2019 - [Download Presentation](#)
 Español-February 13, 2019 - [Download Presentation](#)
 Français-February 14, 2019 - [Download Presentation](#)

Recordings: [EN-ES](#)

CLICK THE LINK AND REGISTER TO BE COUNTED AND LISTED AS A CARIBE WAVE 19 PARTICIPANT ON THE TSUNAMI WEBSITE
<http://www.tsunamizone.org/register/>

DOCUMENTS

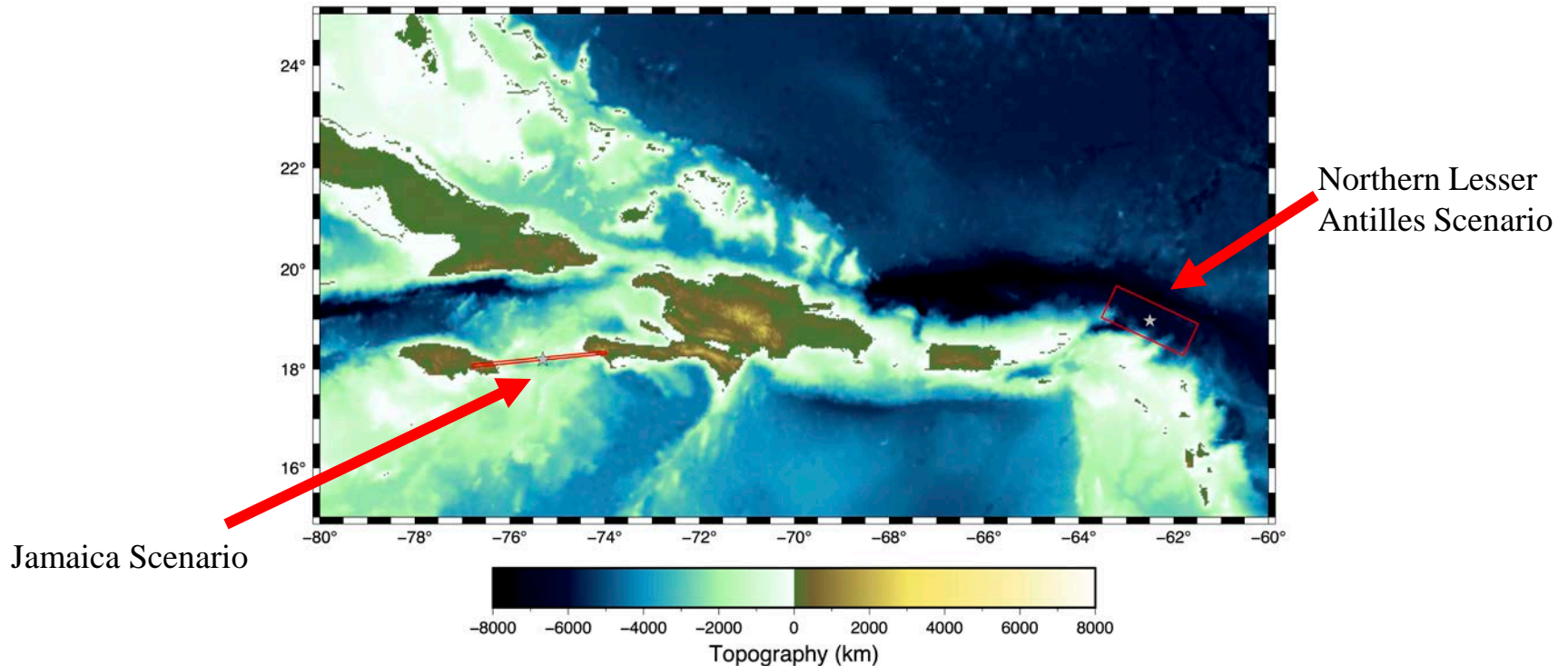
- [Volume 1 Participant Handbook](#)
- [IOC Circular Letter No.2732 - Caribe Wave 19](#)
- [KMZ Panama](#)
- [User's Guide for the Pacific Tsunami Warning Center \(PTWC\) Enhanced Products PDE](#)
- [National post-exercise questionnaire \(TNC/NTWC/TWFP\) PDF - Online survey](#)
- [Guide for community tsunami exercises EN-ES-FR](#)
- [Domestic Messages for PR & VI - Kick'em Jenny Scenario](#)

CARIBE WAVE 19 Scenarios by Member State/Territory
*scenarios decided by Caribe Wave organizers per Exercise Handbook

Panama	Kick'em Jenny
Aruba	Antigua and Barbuda
Bahamas	Barbados
Belize	Brazil
Colombia	Dominica
Costa Rica	France Guadeloupe Saint Barthelemy Martinique Saint Martin
Cuba	Grenada
Curacao	Guyana
Dominican Republic	Saint Lucia

CARIBE WAVE 21

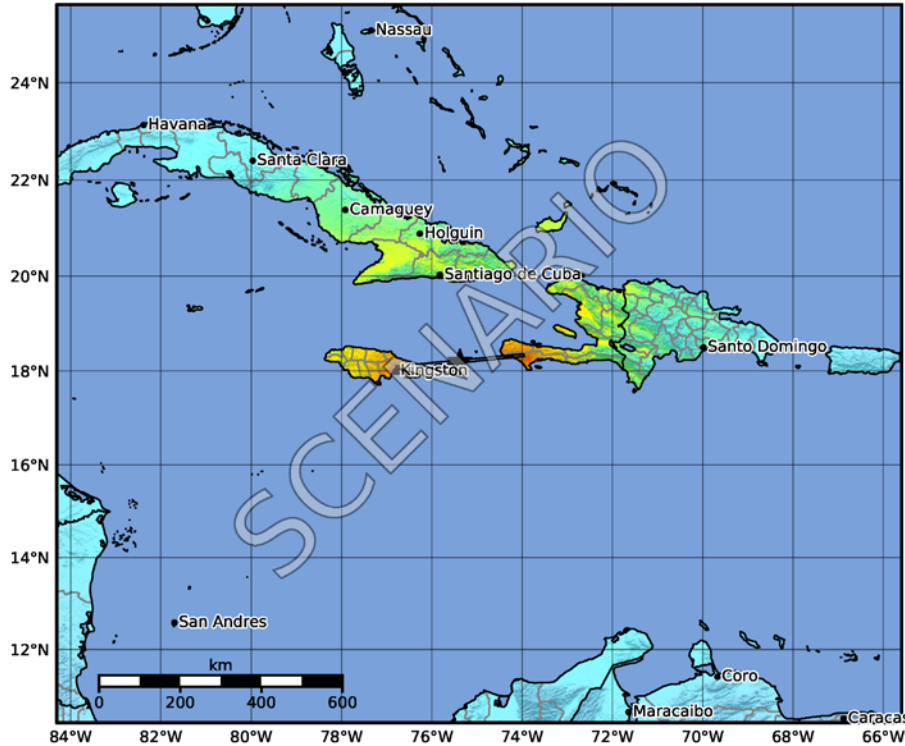
Earthquake and Tsunami Scenarios



Scenario	Origin Time	Mw	Epicenter
Jamaica	14:00:00 UTC March 11, 2021	8.0	18.2°N, 75.3°W
Northern Leser Antilles		8.5	18.9°N, 62.4°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) Version 1: Processed 2019-10-21T20:57:40Z
 Δ Seismic Instrument ○ Reported Intensity ★ Epicenter □ Rupture



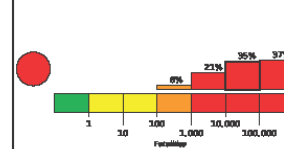
Earthquake Shaking ● Red Alert



M 8.0, Scenario Jamaica

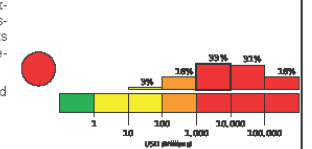
Origin Time: 2019-01-31 00:00:00 UTC (Wed 19:00:00 local)
 Location: 18.2030° N 75.3760° W Depth: 25.0 km
 FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Estimated 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=x1000)	-*	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	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

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

Historical Earthquakes

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

Selected City Exposure

MMI	City	Population
IX	Half Way Tree	138k
VIII	Kingston	930k
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

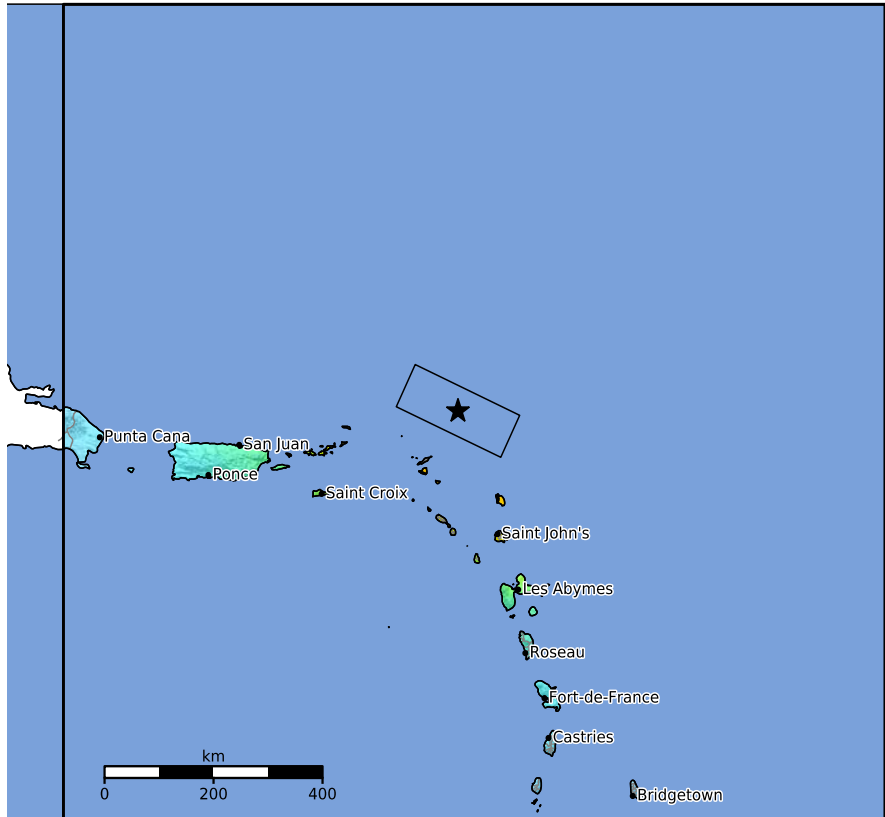
PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. <http://earthquake.usgs.gov/data/pager/>

bold cities appear on map. (k=x1000)

Earthquake Impact Scenario

Northern Lesser Antilles

Macroseismic Intensity Map USGS
 ShakeMap: Jamaica
 Apr 01, 2021 00:00:00 UTC M8.5 N18.98 W62.50 Depth: 25.0km
 ID:CaribeWave2021_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	21.7	40.1	74.7	>139
PGV(cm/s)	<0.0215	0.135	1.41	4.65	16.4	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 2020-08-13T20:11:29Z
 Δ Seismic Instrument ○ Reported Intensity ★ Epicenter □ Rupture



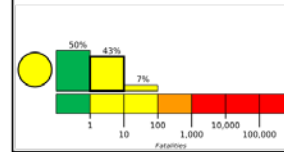
Earthquake Shaking ● Yellow Alert



PAGER Version 1

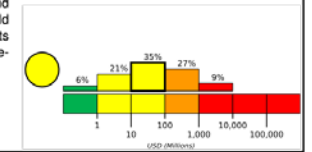
M 8.5, Scenario Jamaica
 Origin Time: 2021-04-01 00:00:00 UTC (Wed 20:00:00 local)
 Location: 18.9767° N 62.4988° W Depth: 25.0 km
 FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Estimated Fatalities



Yellow alert for shaking-related fatalities and economic losses. Some casualties and damage are possible and the impact should be relatively localized. Past yellow alerts have required a local or regional level response.

Estimated Economic Losses

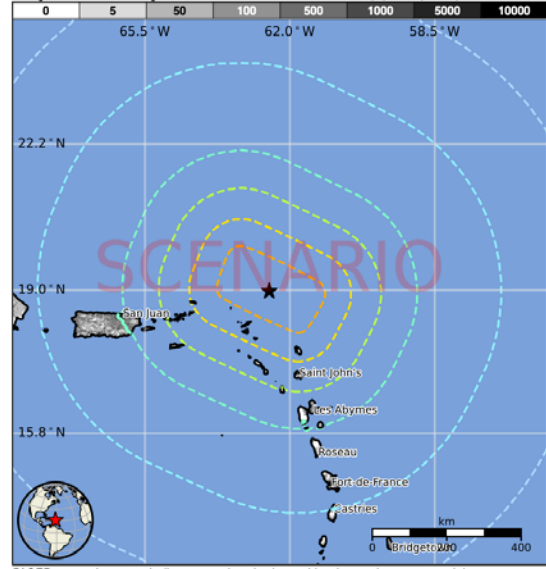


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=1x1000)	—*	1,038k*	2,525k	1,769k	248k	105k	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
	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 a mix of vulnerable and earthquake resistant construction. 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
1985-03-16	221	6.4	VII(6k)	0
1974-10-08	189	7.5	IX(45k)	0
2004-11-21	377	6.3	VII(3k)	1

Recent earthquakes in this area have caused secondary hazards such as tsunamis that might have contributed to losses.

Selected City Exposure

MMI City	Population
VII North Side	<1k
VII Stoney Ground	<1k
VII The Valley	2k
VII Island Harbour	<1k
VII East End Village	<1k
VII North Hill Village	<1k
V Carolina	170k
V San Juan	418k
IV Bayamon	203k
IV Ponce	153k
III La Romana	208k

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. (k = x1000)

Event ID: usCaribeWave2021_se

PTWC PRODUCTS

For Caribe Wave 21, PTWC will issue the following products:

- On **March 11, 2021 at 1400 UTC**, the initial dummy message will be issued and disseminated over all its standard broadcast channels for the two scenarios.
- 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 **26 February 2021**, each Member State is requested to complete the following survey (<https://forms.gle/NptfCm4xRMw4Bgrw6>) to select the scenario their country will use for the exercise.
 - Each country/territory will choose one scenario and decide if and how to disseminate messages within its area of responsibility.
 - **If the Member State does not inform the PTWC and CTWP, the organizers will decide for which scenario the PTWC will send the products.**
 - 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 21 Scenarios by Member State/Territory

Jamaica	Northern Lesser Antilles
Cayman Islands	Aruba
Colombia	Brazil
Costa Rica	British Virgin Islands*
Guyana	Puerto Rico*
Jamaica	US Virgin Islands*
Mexico	
Nicaragua	

* PTWC has prepared the corresponding simulated domestic products

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 CARIBEWAVE21 tsunami exercise
#CaribeWave”

(Will be issued at 14h00 UTC to NWS_PTWC and NWS_CTWP
accounts/subscribers)

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 11 MAR 2021

...TEST...CARIBE WAVE 21 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 21 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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Jamaica Scenario

Message Chronology issued by the PTWC Jamaica

Date	Time (UTC)	PTWC	
		Type of Product	Transmission Method
3/11/21	1400	----- Earthquake Occurs -----	
3/11/21	1400	Dummy	NWWS, GTS, EMWIN, AISR, Fax, Email
3/11/21	1407	Tsunami Threat Message #1	Email
3/11/21	1415	Tsunami Threat Message #2	Email
3/11/21	1425	Tsunami Threat Message #3 and Graphic Enhanced Products	Email
3/11/21	1500	Tsunami Threat Message #4	Email
3/11/21	1600	Tsunami Threat Message #5	Email
3/11/21	1700	Tsunami Threat Message #6	Email
3/11/21	1800	Tsunami Threat Message #7	Email
3/11/21	1900	Tsunami Threat Message #8	Email
3/11/21	2000	Tsunami Threat Message #9	Email
3/11/21	2100	Tsunami Threat Message #10	Email
3/11/21	2200	Tsunami Threat Message #11	Email
3/11/21	2300	Final Tsunami Threat Message #12	Email

PTWC Message #1

ZCZC
WECA41 PHEB 111407 **WMO ID**
TSUCAX **AWIPS ID**

TEST...TSUNAMI MESSAGE NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1407 UTC THU MAR 11 2021

...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 11 2021
* 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 11 2021.

* 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 03/11
JEREMIE	HAITI	18.6N 74.1W	1424 03/11
JACAMEL	HAITI	18.1N 72.5W	1433 03/11
BARACOA	CUBA	20.4N 74.5W	1442 03/11
CAYMAN BRAC	CAYMAN ISLANDS	19.7N 79.9W	1446 03/11

GREAT INAGUA	BAHAMAS	20.9N	73.7W	1448	03/11
KINGSTON	JAMAICA	17.9N	76.9W	1451	03/11
CAP HAITEN	HAITI	19.8N	72.2W	1454	03/11
MONTEGO BAY	JAMAICA	18.5N	77.9W	1454	03/11
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1458	03/11
GIBARA	CUBA	21.1N	76.1W	1502	03/11
MAYAGUANA	BAHAMAS	22.3N	73.0W	1502	03/11
GRAND CAYMAN	CAYMAN ISLANDS	19.3N	81.3W	1502	03/11
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	1505	03/11
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	1510	03/11
CIENFUEGOS	CUBA	22.0N	80.5W	1511	03/11
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1513	03/11
LONG ISLAND	BAHAMAS	23.3N	75.1W	1522	03/11
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1522	03/11
SANTA MARTA	COLOMBIA	11.2N	74.2W	1526	03/11
PORT AU PRINCE	HAITI	18.5N	72.4W	1527	03/11
ORANJESTAD	ARUBA	12.5N	70.0W	1529	03/11
EXUMA	BAHAMAS	23.6N	75.9W	1532	03/11
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1532	03/11
ONIMA	BONAIRE	12.3N	68.3W	1535	03/11
CARTAGENA	COLOMBIA	10.4N	75.6W	1535	03/11
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1537	03/11
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1538	03/11
CAT ISLAND	BAHAMAS	24.4N	75.5W	1541	03/11
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1541	03/11
SAN ANDRES	SAN ANDRES PROVI	13.4N	81.4W	1544	03/11
SAN JUAN	PUERTO RICO	18.5N	66.1W	1544	03/11
PROVIDENCIA	SAN ANDRES PROVI	12.6N	81.7W	1547	03/11
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1548	03/11
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1549	03/11
ALIGANDI	PANAMA	9.2N	78.0W	1550	03/11
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1558	03/11
PUERTO CARRETO	PANAMA	8.8N	77.6W	1558	03/11
COZUMEL	MEXICO	20.5N	87.0W	1600	03/11
RIOHACHA	COLOMBIA	11.6N	72.9W	1602	03/11
WILLEMSTAD	CURACAO	12.1N	68.9W	1602	03/11
SABA	SABA	17.6N	63.2W	1603	03/11
PUERTO CORTES	HONDURAS	15.9N	88.0W	1603	03/11
BASSETERRE	SAINT KITTS	17.3N	62.7W	1608	03/11
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1609	03/11
NASSAU	BAHAMAS	25.1N	77.4W	1610	03/11
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1610	03/11
SINT EUSTATIUS	SINT EUSTATIUS	17.5N	63.0W	1611	03/11
MAIQUETIA	VENEZUELA	10.6N	67.0W	1611	03/11
PLYMOUTH	MONTSERRAT	16.7N	62.2W	1612	03/11
SIMPSON BAAI	SINT MAARTEN	18.0N	63.1W	1612	03/11
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1615	03/11
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1616	03/11

BASSE TERRE	GUADELOUPE	16.0N	61.7W	1617	03/11
THE VALLEY	ANGUILLA	18.3N	63.1W	1620	03/11
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1621	03/11
ROSEAU	DOMINICA	15.3N	61.4W	1621	03/11
FREEPORT	BAHAMAS	26.5N	78.8W	1622	03/11
COLON	PANAMA	9.4N	79.9W	1622	03/11
LA HABANA	CUBA	23.2N	82.4W	1624	03/11
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1627	03/11
CASTRIES	SAINT LUCIA	14.0N	61.0W	1627	03/11
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1630	03/11
BOCAS DEL TORO	PANAMA	9.4N	82.2W	1633	03/11
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1633	03/11
BAIE LUCAS	SAINT MARTIN	18.1N	63.0W	1634	03/11
BIMINI	BAHAMAS	25.8N	79.3W	1635	03/11
BAIE GRAND CASE	SAINT MARTIN	18.1N	63.1W	1638	03/11
SAINT BARTHELEM	SAINT BARTHELEMY	17.9N	62.8W	1639	03/11
CUMANA	VENEZUELA	10.5N	64.2W	1643	03/11
PALMETTO POINT	BARBUDA	17.6N	61.9W	1644	03/11
SAINT GEORGES	GRENADA	12.0N	61.8W	1645	03/11
SAINT JOHNS	ANTIGUA	17.1N	61.9W	1650	03/11
TRUJILLO	HONDURAS	15.9N	86.0W	1650	03/11
ESSO PIER	BERMUDA	32.4N	64.7W	1650	03/11
BAIE BLANCHE	SAINT MARTIN	18.1N	63.0W	1653	03/11
BRIDGETOWN	BARBADOS	13.1N	59.6W	1656	03/11
PUNTA GORDA	NICARAGUA	11.4N	83.8W	1706	03/11

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

ZCZC

WECA41 PHEB 111425

WMO ID

TSUCAX

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 3...TEST

NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI

1425 UTC THU MAR 11 2021

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

...TEST TSUNAMI THREAT MESSAGE TEST...

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

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

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

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

FORECAST TSUNAMI AMPLITUDES ARE PROVIDED IN THIS MESSAGE.

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

- * MAGNITUDE 8.0
- * ORIGIN TIME 1400 UTC MAR 11 2021
- * 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 11 2021.

* 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 03/11
JEREMIE	HAITI	18.6N	74.1W	1424 03/11
JACAMEL	HAITI	18.1N	72.5W	1433 03/11
BARACOA	CUBA	20.4N	74.5W	1442 03/11
CAYMAN BRAC	CAYMAN ISLANDS	19.7N	79.9W	1446 03/11
GREAT INAGUA	BAHAMAS	20.9N	73.7W	1448 03/11
KINGSTON	JAMAICA	17.9N	76.9W	1451 03/11
CAP HAITEN	HAITI	19.8N	72.2W	1454 03/11
MONTEGO BAY	JAMAICA	18.5N	77.9W	1454 03/11
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1458 03/11
GIBARA	CUBA	21.1N	76.1W	1502 03/11
MAYAGUANA	BAHAMAS	22.3N	73.0W	1502 03/11
GRAND CAYMAN	CAYMAN ISLANDS	19.3N	81.3W	1502 03/11
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	1505 03/11
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	1510 03/11
CIENFUEGOS	CUBA	22.0N	80.5W	1511 03/11
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1513 03/11
LONG ISLAND	BAHAMAS	23.3N	75.1W	1522 03/11
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1522 03/11
SANTA MARTA	COLOMBIA	11.2N	74.2W	1526 03/11
PORT AU PRINCE	HAITI	18.5N	72.4W	1527 03/11
ORANJESTAD	ARUBA	12.5N	70.0W	1529 03/11
EXUMA	BAHAMAS	23.6N	75.9W	1532 03/11
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1532 03/11
ONIMA	BONAIRE	12.3N	68.3W	1535 03/11
CARTAGENA	COLOMBIA	10.4N	75.6W	1535 03/11
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1537 03/11
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1538 03/11
CAT ISLAND	BAHAMAS	24.4N	75.5W	1541 03/11
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1541 03/11
SAN ANDRES	SAN ANDRES PROVI	13.4N	81.4W	1544 03/11
SAN JUAN	PUERTO RICO	18.5N	66.1W	1544 03/11
PROVIDENCIA	SAN ANDRES PROVI	12.6N	81.7W	1547 03/11
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1548 03/11
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1549 03/11

ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1549 03/11
ALIGANDI	PANAMA	9.2N	78.0W	1550 03/11
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1558 03/11
PUERTO CARRETO	PANAMA	8.8N	77.6W	1558 03/11
COZUMEL	MEXICO	20.5N	87.0W	1600 03/11
RIOHACHA	COLOMBIA	11.6N	72.9W	1602 03/11
WILLEMSTAD	CURACAO	12.1N	68.9W	1602 03/11
BASSETERRE	SAINT KITTS	17.3N	62.7W	1608 03/11
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1609 03/11
NASSAU	BAHAMAS	25.1N	77.4W	1610 03/11
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1610 03/11
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1615 03/11
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1616 03/11
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1621 03/11
ROSEAU	DOMINICA	15.3N	61.4W	1621 03/11
FREEPORT	BAHAMAS	26.5N	78.8W	1622 03/11
COLON	PANAMA	9.4N	79.9W	1622 03/11
LA HABANA	CUBA	23.2N	82.4W	1624 03/11
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1627 03/11
CASTRIES	SAINT LUCIA	14.0N	61.0W	1627 03/11
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1630 03/11
BOCAS DEL TORO	PANAMA	9.4N	82.2W	1633 03/11
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1633 03/11
BIMINI	BAHAMAS	25.8N	79.3W	1635 03/11
PUNTA GORDA	NICARAGUA	11.4N	83.8W	1706 03/11
ROADTOWN	BR VIRGIN IS	18.4N	64.6W	1707 03/11
SANTA CRZ D SUR	CUBA	20.7N	78.0W	1735 03/11
PUNTO FIJO	VENEZUELA	11.7N	70.2W	1751 03/11
GOLFO VENEZUELA	VENEZUELA	11.4N	71.2W	1850 03/11
NUEVA GERONA	CUBA	21.9N	82.8W	1910 03/11
PUERTO CABEZAS	NICARAGUA	14.0N	83.4W	2032 03/11

TEST... POTENTIAL IMPACTS ...TEST

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TSUNAMI MAY DROWN... BE CRUSHED BY DEBRIS IN THE WATER... OR
BE SWEEPED OUT TO SEA.

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

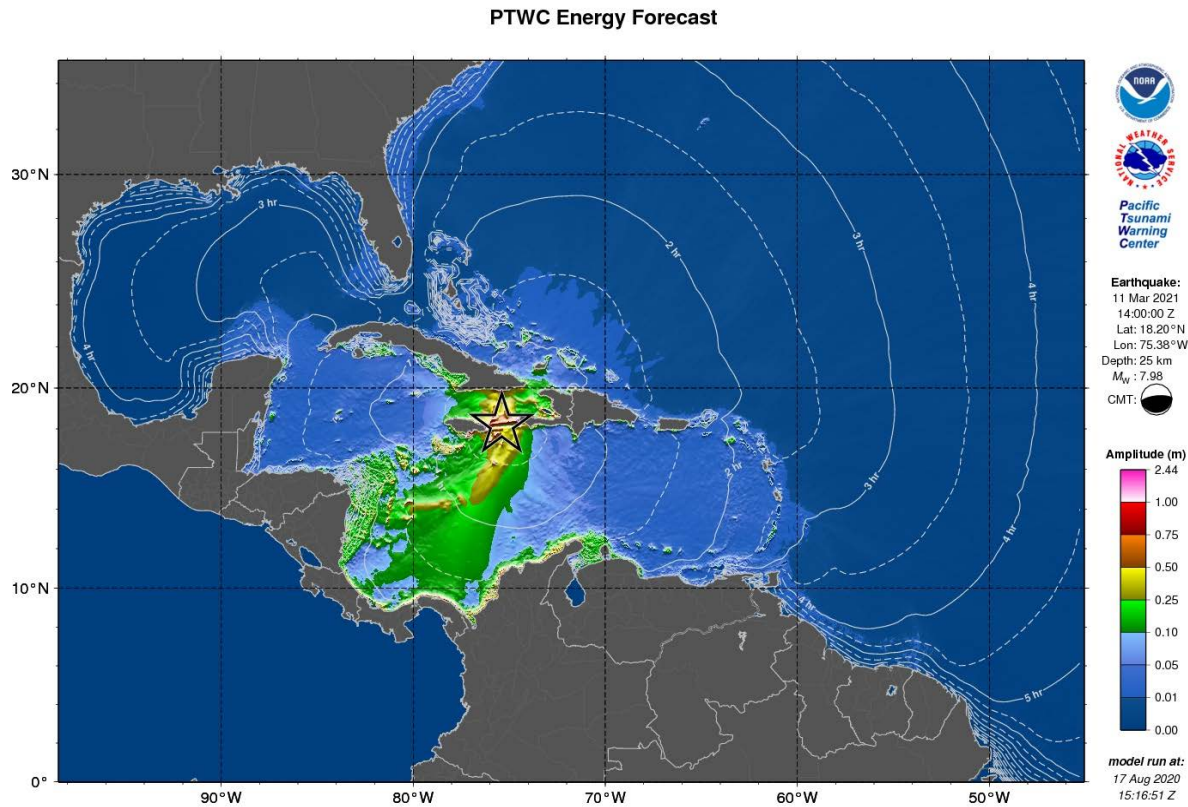
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- * THIS IS A TEST MESSAGE. AUTHORITATIVE INFORMATION ABOUT THE
EARTHQUAKE FROM THE U.S. GEOLOGICAL SURVEY CAN BE FOUND ON
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MESSAGES THAT CAN BE FOUND AT WWW.TSUNAMI.GOV.

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MESSAGE.

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Energy Forecast for Tsunami Wave Heights Jamaica

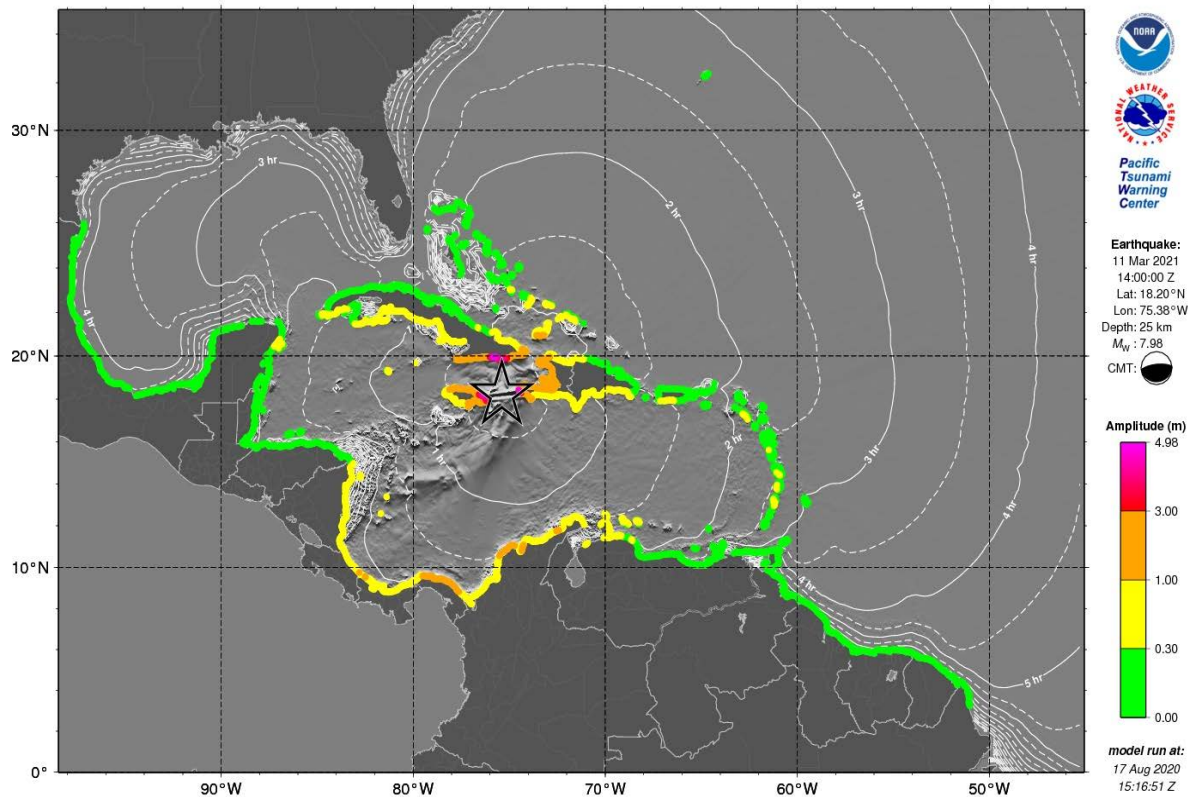


RIFT maximum amplitude map based on the scenario for Jamaica.

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

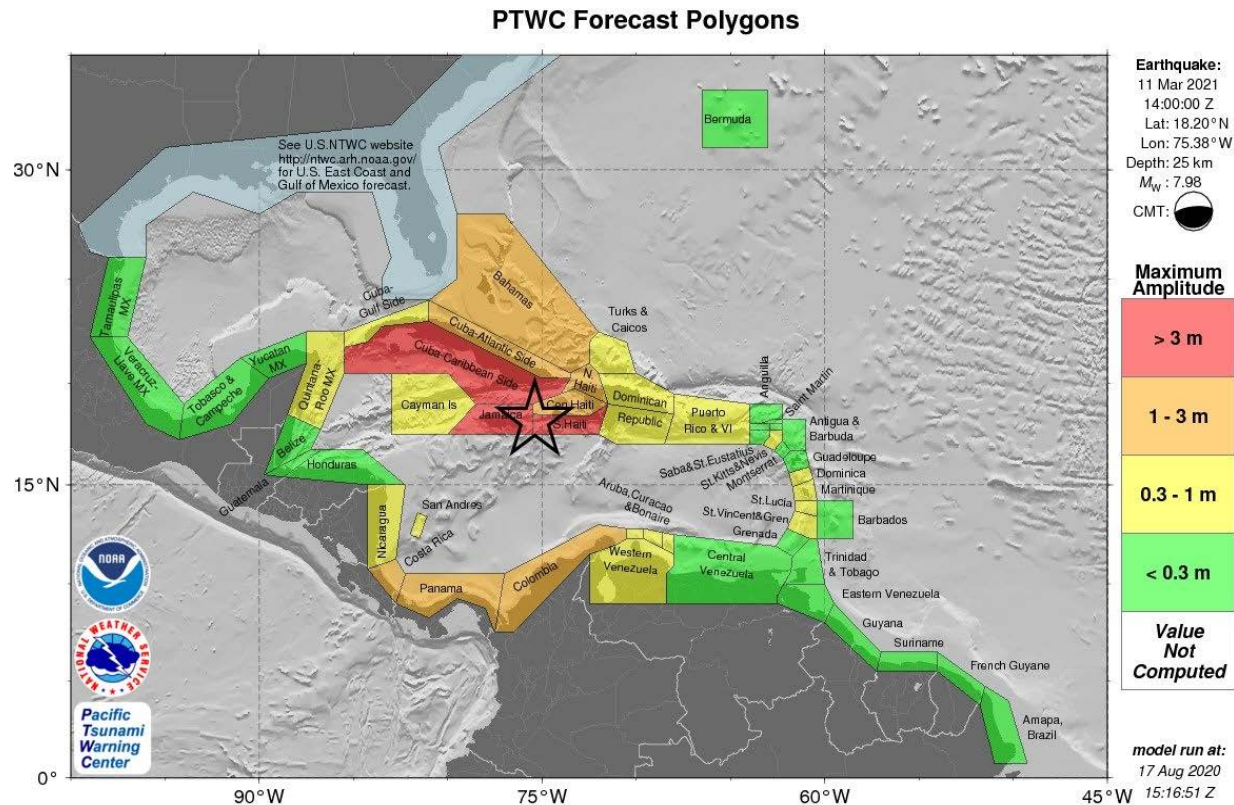
PTWC Coastal Forecast



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.

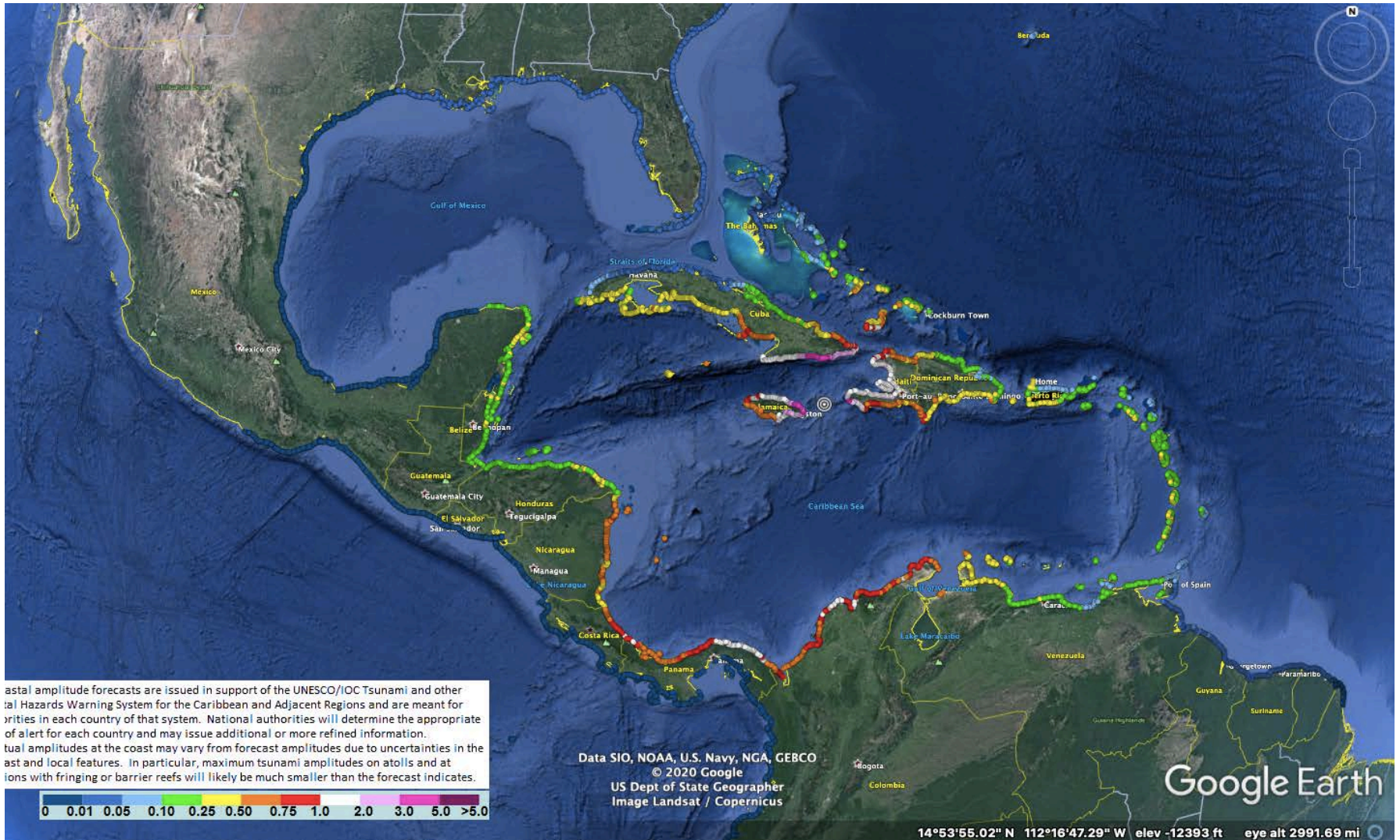
Polygons Forecast for Tsunami Wave Heights Jamaica



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	Coastal Forecast (meters)				Offshore Forecast (meters)				Total Points
	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	
Caribbean_Coast_of_Cuba	5.0	0.94	0.42	1.00	2.3	0.29	0.17	0.29	423
Caribbean_Coast_of_Haiti	4.8	1.10	0.71	0.91	2.0	0.43	0.33	0.37	89
Jamaica	4.5	1.50	1.30	0.91	2.4	0.65	0.53	0.39	146
Gulf_of_Gonave_Coast_of_Haiti	2.3	1.60	1.60	0.26	1.9	0.68	0.61	0.36	140
Atlantic_Coast_of_Haiti	1.8	0.82	0.71	0.29	0.86	0.33	0.30	0.13	66
Caribbean_Coast_of_Panama	1.4	0.87	0.81	0.27	1.1	0.50	0.49	0.19	179
Bahamas	1.3	0.18	0.06	0.25	1.0	0.10	0.03	0.16	443
Caribbean_Coast_of_Colombia	1.3	0.81	0.81	0.15	1.1	0.49	0.48	0.17	255
Atlantic_Coast_of_Cuba	1.1	0.23	0.16	0.24	0.57	0.10	0.06	0.12	259
Caribbean_Coast_of_Costa_Rica	1.0	0.76	0.80	0.15	0.79	0.45	0.44	0.10	48
Caribbean_Coast_of_Dominican_Republic	0.82	0.42	0.40	0.14	0.58	0.21	0.18	0.10	148
Caribbean_Coast_of_Nicaragua	0.78	0.57	0.53	0.11	0.50	0.20	0.20	0.08	138
San_Andres_and_Providencia	0.70	0.64	0.64	0.05	0.35	0.34	0.34	0.01	4
Atlantic_Coast_of_Dominican_Republic	0.67	0.19	0.15	0.12	0.71	0.11	0.07	0.11	129
Western_Coast_of_Venezuela	0.60	0.34	0.33	0.09	0.40	0.17	0.16	0.06	100
Cayman_Islands	0.55	0.37	0.36	0.07	0.35	0.20	0.19	0.07	9
Aruba	0.55	0.48	0.46	0.06	0.29	0.21	0.18	0.05	8
Turks_and_Caicos_Islands	0.54	0.28	0.25	0.10	0.27	0.14	0.13	0.06	46
Curacao	0.44	0.32	0.31	0.05	0.21	0.13	0.12	0.04	27
Saint_Vincent_and_the_Grenadines	0.41	0.27	0.27	0.05	0.21	0.12	0.12	0.04	33
Quintana_Roo_Mexico	0.39	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	0.32	0.04	0.23	0.16	0.16	0.03	15
Puerto_Rico_and_Virgin_Islands	0.35	0.19	0.20	0.08	0.36	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	0.23	0.07	0.15	0.09	0.08	0.03	26
Dominica	0.30	0.21	0.22	0.05	0.12	0.06	0.06	0.02	31
Martinique	0.30	0.21	0.23	0.06	0.18	0.09	0.09	0.04	41
Caribbean_Coast_of_Honduras	0.29	0.19	0.19	0.04	0.27	0.10	0.10	0.04	185
Central_Coast_of_Venezuela	0.28	0.14	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	0.03	29
Montserrat	0.28	0.21	0.20	0.04	0.22	0.09	0.07	0.05	11
Guadeloupe	0.27	0.17	0.17	0.05	0.17	0.07	0.07	0.03	73
Belize	0.27	0.19	0.18	0.03	0.25	0.08	0.08	0.03	90
Anguilla	0.25	0.20	0.23	0.05	0.18	0.13	0.12	0.03	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	0.17	0.17	0.01	0.11	0.08	0.08	0.01	6
Saint_Barthelemy	0.18	0.12	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	0.01	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 112300

WMO ID

TSUCAX

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 12...TEST

NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI

2300 UTC THU MAR 11 2021

...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.

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

- * MAGNITUDE 8.0
- * ORIGIN TIME 1400 UTC MAR 11 2021
- * 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 11 2021.

* 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	MAXIMUM TSUNAMI HEIGHT	WAVE PERIOD
	LAT	LOX	(UTC)		(MIN)
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

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

Northern Lesser Antilles Scenario

Message Chronology issued by the PTWC

Northern Lesser Antilles

Date	Time (UTC)	PTWC	
		Type of Product	Transmission Method
3/11/21	1400	----- Earthquake Occurs -----	
3/11/21	1400	Dummy	NWWS, GTS, EMWIN, AISR, Fax, Email
3/11/21	1407	Tsunami Threat Message #1	Email
3/11/21	1415	Tsunami Threat Message #2	Email
3/11/21	1425	Tsunami Threat Message #3 and Graphic Enhanced Product	Email
3/11/21	1445	Tsunami Threat Message #4	Email
3/11/21	1500	Tsunami Threat Message #5	Email
3/11/21	1600	Tsunami Threat Message #6	Email
3/11/21	1700	Tsunami Threat Message #7	Email
3/11/21	1800	Tsunami Threat Message #8	Email
3/11/21	1900	Tsunami Threat Message #9	Email
3/11/21	2000	Tsunami Threat Message #10	Email
3/11/21	2100	Tsunami Threat Message #11	Email
3/11/21	2200	Tsunami Threat Message #12	Email
3/11/21	2300	Tsunami Threat Message #13	Email

PTWC Message #1

ZCZC
WECA41 PHEB 111407 **WMO ID**
TSUCAX **AWIPS ID**

TEST...TSUNAMI MESSAGE NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1407 UTC THU MAR 11 2021

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

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

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

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

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

TEST... PRELIMINARY EARTHQUAKE PARAMETERS ...TEST

* MAGNITUDE 8.0
* ORIGIN TIME 1400 UTC MAR 11 2021
* COORDINATES 19.0 NORTH 62.5 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION LEEWARD ISLANDS

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.0 OCCURRED IN THE LEEWARD ISLANDS AT 1400 UTC ON THURSDAY MARCH 11 2021.

* 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

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

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)
CHRISTIANSTED	US VIRGIN IS	17.7N 64.7W	1428 03/11
SABA	SABA	17.6N 63.2W	1429 03/11
SINT EUSTATIUS	SINT EUSTATIUS	17.5N 63.0W	1433 03/11
BASSETERRE	SAINT KITTS	17.3N 62.7W	1434 03/11
SAN JUAN	PUERTO RICO	18.5N 66.1W	1435 03/11
SIMPSON BAAI	SINT MAARTEN	18.0N 63.1W	1435 03/11
ANEGADA	BR VIRGIN IS	18.8N 64.3W	1437 03/11
THE VALLEY	ANGUILLA	18.3N 63.1W	1438 03/11
PALMETTO POINT	BARBUDA	17.6N 61.9W	1441 03/11
BASSE TERRE	GUADELOUPE	16.0N 61.7W	1447 03/11
PLYMOUTH	MONTSERRAT	16.7N 62.2W	1448 03/11
MAYAGUEZ	PUERTO RICO	18.2N 67.2W	1449 03/11
BAIE GRAND CASE	SAINT MARTIN	18.1N 63.1W	1451 03/11
BAIE LUCAS	SAINT MARTIN	18.1N 63.0W	1452 03/11
SAINT BARTHELEM	SAINT BARTHELEMY	17.9N 62.8W	1452 03/11
CABO ENGANO	DOMINICAN REP	18.6N 68.3W	1453 03/11
ROSEAU	DOMINICA	15.3N 61.4W	1453 03/11
FORT DE FRANCE	MARTINIQUE	14.6N 61.1W	1456 03/11
SAINT JOHNS	ANTIGUA	17.1N 61.9W	1458 03/11

BRIDGETOWN	BARBADOS	13.1N	59.6W	1510	03/11
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1512	03/11
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1514	03/11
ROADTOWN	BR VIRGIN IS	18.4N	64.6W	1515	03/11
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1518	03/11
CAP HAITEN	HAITI	19.8N	72.2W	1519	03/11
SANTO DOMINGO	DOMINICAN REP	18.5N	69.9W	1520	03/11
MAYAGUANA	BAHAMAS	22.3N	73.0W	1526	03/11
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1527	03/11
ONIMA	BONAIRE	12.3N	68.3W	1530	03/11
GREAT INAGUA	BAHAMAS	20.9N	73.7W	1532	03/11
PIRATES BAY	TRINIDAD TOBAGO	11.3N	60.6W	1532	03/11
SAINTE GEORGES	GRENADA	12.0N	61.8W	1532	03/11
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1534	03/11
WILLEMSTAD	CURACAO	12.1N	68.9W	1537	03/11
BARACOA	CUBA	20.4N	74.5W	1537	03/11
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1538	03/11
JACAMEL	HAITI	18.1N	72.5W	1542	03/11
LONG ISLAND	BAHAMAS	23.3N	75.1W	1542	03/11
ORANJESTAD	ARUBA	12.5N	70.0W	1543	03/11
SANTIAGO D CUBA	CUBA	19.9N	75.8W	1552	03/11
EXUMA	BAHAMAS	23.6N	75.9W	1554	03/11
MAIQUETIA	VENEZUELA	10.6N	67.0W	1556	03/11
CAT ISLAND	BAHAMAS	24.4N	75.5W	1558	03/11
ESSO PIER	BERMUDA	32.4N	64.7W	1559	03/11
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1605	03/11
CUMANA	VENEZUELA	10.5N	64.2W	1607	03/11
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1611	03/11
MORTEGO BAY	JAMAICA	18.5N	77.9W	1613	03/11
RIOHACHA	COLOMBIA	11.6N	72.9W	1622	03/11
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1624	03/11
CAYMAN BRAC	CAYMAN ISLANDS	19.7N	79.9W	1625	03/11
NASSAU	BAHAMAS	25.1N	77.4W	1628	03/11
KINGSTON	JAMAICA	17.9N	76.9W	1628	03/11
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1628	03/11
FREEPORT	BAHAMAS	26.5N	78.8W	1631	03/11
JEREMIE	HAITI	18.6N	74.1W	1638	03/11
GIBARA	CUBA	21.1N	76.1W	1642	03/11
CARTAGENA	COLOMBIA	10.4N	75.6W	1645	03/11
CIENFUEGOS	CUBA	22.0N	80.5W	1647	03/11
GRAND CAYMAN	CAYMAN ISLANDS	19.3N	81.3W	1652	03/11
PORT OF SPAIN	TRINIDAD TOBAGO	10.6N	61.5W	1700	03/11
ALIGANDI	PANAMA	9.2N	78.0W	1702	03/11
BIMINI	BAHAMAS	25.8N	79.3W	1703	03/11

* 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.

* 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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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.

PTWC Message #3

ZCZC
WECA41 PHEB 111425
TSUCAX

WMO ID

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 3...TEST
NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI
1425 UTC THU MAR 11 2021

...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 11 2021
* COORDINATES 19.0 NORTH 62.5 WEST
* DEPTH 25 KM / 16 MILES
* LOCATION LEEWARD ISLANDS

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED IN THE LEEWARD ISLANDS AT 1400 UTC ON THURSDAY MARCH 11 2021.

* 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

ANGUILLA... ANTIGUA AND BARBUDA... GUADELOUPE...
MONTERRAT... PUERTO RICO AND VIRGIN ISLANDS... SABA AND
SAINT EUSTATIUS... SAINT BARTHELEMY... SAINT KITTS AND
NEVIS... SINT MAARTEN... AND SAINT MARTIN.

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

DOMINICAN REPUBLIC... VENEZUELA... ARUBA... BAHAMAS...
BARBADOS... BERMUDA... BONAIRE... CURACAO... DOMINICA...
GRENADA... MARTINIQUE... 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

BRAZIL... COLOMBIA... COSTA RICA... CUBA... FRENCH
GUYANE... GUYANA... HAITI... NICARAGUA... PANAMA...
SURINAME... AND JAMAICA.

* 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)
SABA	SABA	17.6N	63.2W	1429 03/11
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1430 03/11
THE VALLEY	ANGUILLA	18.3N	63.1W	1431 03/11
SINT EUSTATIUS	SINT EUSTATIUS	17.5N	63.0W	1432 03/11
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1432 03/11
SAN JUAN	PUERTO RICO	18.5N	66.1W	1433 03/11
SIMPSON BAAI	SINT MAARTEN	18.0N	63.1W	1434 03/11
BASSETERRE	SAINT KITTS	17.3N	62.7W	1436 03/11
PLYMOUTH	MONTSERRAT	16.7N	62.2W	1442 03/11
PALMETTO POINT	BARBUDA	17.6N	61.9W	1443 03/11
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1446 03/11
BASSE TERRE	GUADELOUPE	16.0N	61.7W	1448 03/11
SAINTE JOHN	ANTIGUA	17.1N	61.9W	1448 03/11
ROSEAU	DOMINICA	15.3N	61.4W	1454 03/11
BAIE LUCAS	SAINT MARTIN	18.1N	63.0W	1457 03/11
BAIE GRAND CASE	SAINT MARTIN	18.1N	63.1W	1458 03/11
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1459 03/11
SAINTE BARTHELEMY	SAINTE BARTHELEMY	17.9N	62.8W	1500 03/11
CASTRIES	SAINTE LUCIA	14.0N	61.0W	1501 03/11
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1501 03/11
PUERTO PLATA	DOMINICAN REP	19.8N	70.7W	1501 03/11
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1507 03/11
BRIDGETOWN	BARBADOS	13.1N	59.6W	1509 03/11
GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1509 03/11
BAIE BLANCHE	SAINTE MARTIN	18.1N	63.0W	1511 03/11
KINGSTOWN	SAINTE VINCENT	13.1N	61.2W	1515 03/11
CAP HAITEN	HAITI	19.8N	72.2W	1518 03/11
SAINTE DOMINGO	DOMINICAN REP	18.5N	69.9W	1521 03/11
MAYAGUANA	BAHAMAS	22.3N	73.0W	1525 03/11
WEST CAICOS	TURKS N CAICOS	21.7N	72.5W	1527 03/11
ONIMA	BONAIRE	12.3N	68.3W	1527 03/11
BARACOA	CUBA	20.4N	74.5W	1538 03/11
JACAMEL	HAITI	18.1N	72.5W	1539 03/11
GREAT INAGUA	BAHAMAS	20.9N	73.7W	1539 03/11
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1540 03/11
ORANJESTAD	ARUBA	12.5N	70.0W	1541 03/11
SAINTE GEORGES	GRENADA	12.0N	61.8W	1542 03/11
ROADTOWN	BR VIRGIN IS	18.4N	64.6W	1543 03/11
LONG ISLAND	BAHAMAS	23.3N	75.1W	1549 03/11
JEREMIE	HAITI	18.6N	74.1W	1549 03/11
SAINTE IAGO D CUBA	CUBA	19.9N	75.8W	1552 03/11
PIRATES BAY	TRINIDAD TOBAGO	11.3N	60.6W	1553 03/11
MAIQUETIA	VENEZUELA	10.6N	67.0W	1554 03/11
GIBARA	CUBA	21.1N	76.1W	1555 03/11
EXUMA	BAHAMAS	23.6N	75.9W	1557 03/11
CAT ISLAND	BAHAMAS	24.4N	75.5W	1557 03/11

ESSO PIER	BERMUDA	32.4N	64.7W	1558 03/11
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1559 03/11
WILLEMSTAD	CURACAO	12.1N	68.9W	1601 03/11
ELEUTHERA ISLAND	BAHAMAS	25.2N	76.1W	1603 03/11
CUMANA	VENEZUELA	10.5N	64.2W	1611 03/11
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1612 03/11
NASSAU	BAHAMAS	25.1N	77.4W	1624 03/11
SAINTE MARTA	COLOMBIA	11.2N	74.2W	1626 03/11
MONTEGO BAY	JAMAICA	18.5N	77.9W	1635 03/11
FREEMPORT	BAHAMAS	26.5N	78.8W	1636 03/11
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1639 03/11
PORT AU PRINCE	HAITI	18.5N	72.4W	1642 03/11
CARTAGENA	COLOMBIA	10.4N	75.6W	1642 03/11
CIENFUEGOS	CUBA	22.0N	80.5W	1646 03/11
BIMINI	BAHAMAS	25.8N	79.3W	1649 03/11
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1651 03/11
KINGSTON	JAMAICA	17.9N	76.9W	1651 03/11
RIOHACHA	COLOMBIA	11.6N	72.9W	1655 03/11
PORT OF SPAIN	TRINIDAD TOBAGO	10.6N	61.5W	1655 03/11
ALIGANDI	PANAMA	9.2N	78.0W	1704 03/11
PUERTO CARRETO	PANAMA	8.8N	77.6W	1710 03/11
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1722 03/11
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1726 03/11
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1742 03/11
COLON	PANAMA	9.4N	79.9W	1744 03/11
BOCAS DEL TORO	PANAMA	9.4N	82.2W	1756 03/11
PUNTO FIJO	VENEZUELA	11.7N	70.2W	1807 03/11
CAYENNE	FRENCH GUYANE	4.9N	52.3W	1820 03/11
PUNTA GORDA	NICARAGUA	11.4N	83.8W	1833 03/11
GEORGETOWN	GUYANA	6.8N	58.2W	1907 03/11
GOLFO VENEZUELA	VENEZUELA	11.4N	71.2W	1907 03/11
SAINTE CRUZ D SUR	CUBA	20.7N	78.0W	1909 03/11
PARAMARIBO	SURINAME	5.9N	55.2W	1924 03/11
PORTLAMAR	VENEZUELA	10.9N	63.8W	1927 03/11
NUEVA GERONA	CUBA	21.9N	82.8W	2047 03/11
PUERTO CABEZAS	NICARAGUA	14.0N	83.4W	2201 03/11
ILHA DE MARACA	BRAZIL	2.2N	50.5W	2206 03/11

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.

* 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.

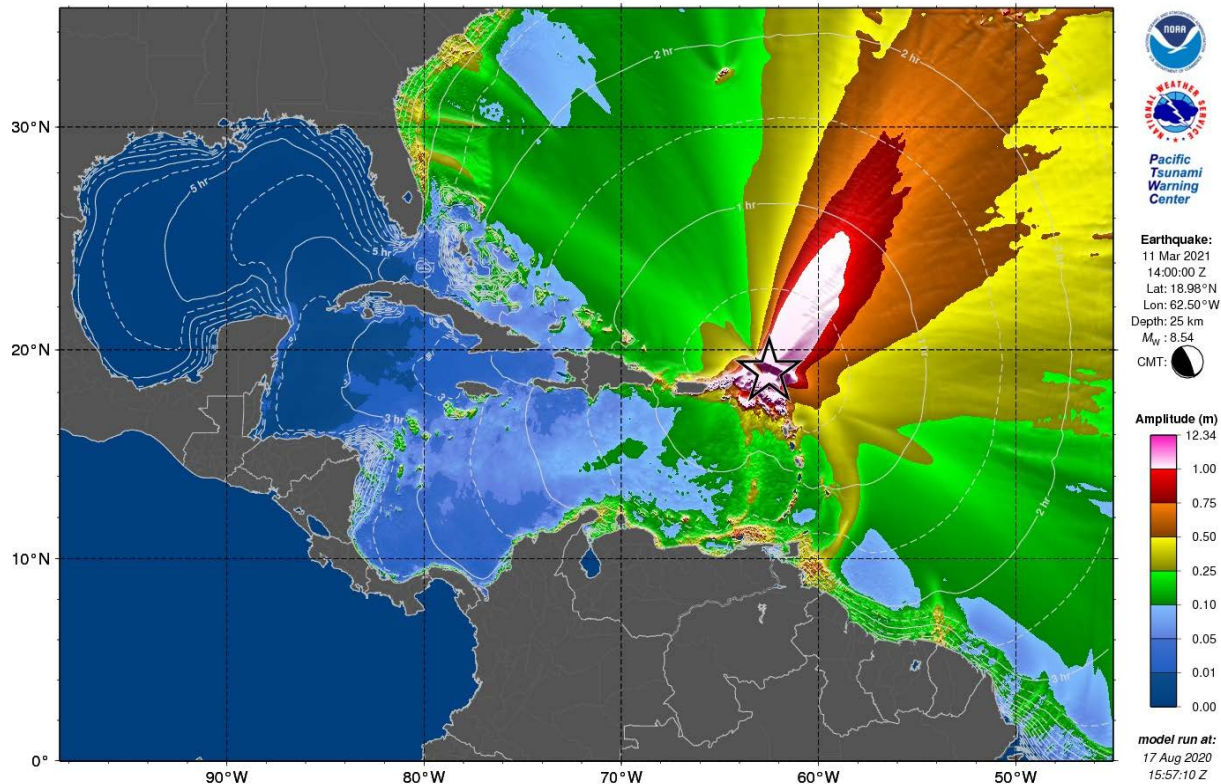
THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST
MESSAGE.

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Energy Forecast for Tsunami Wave Heights Northern Lesser Antilles

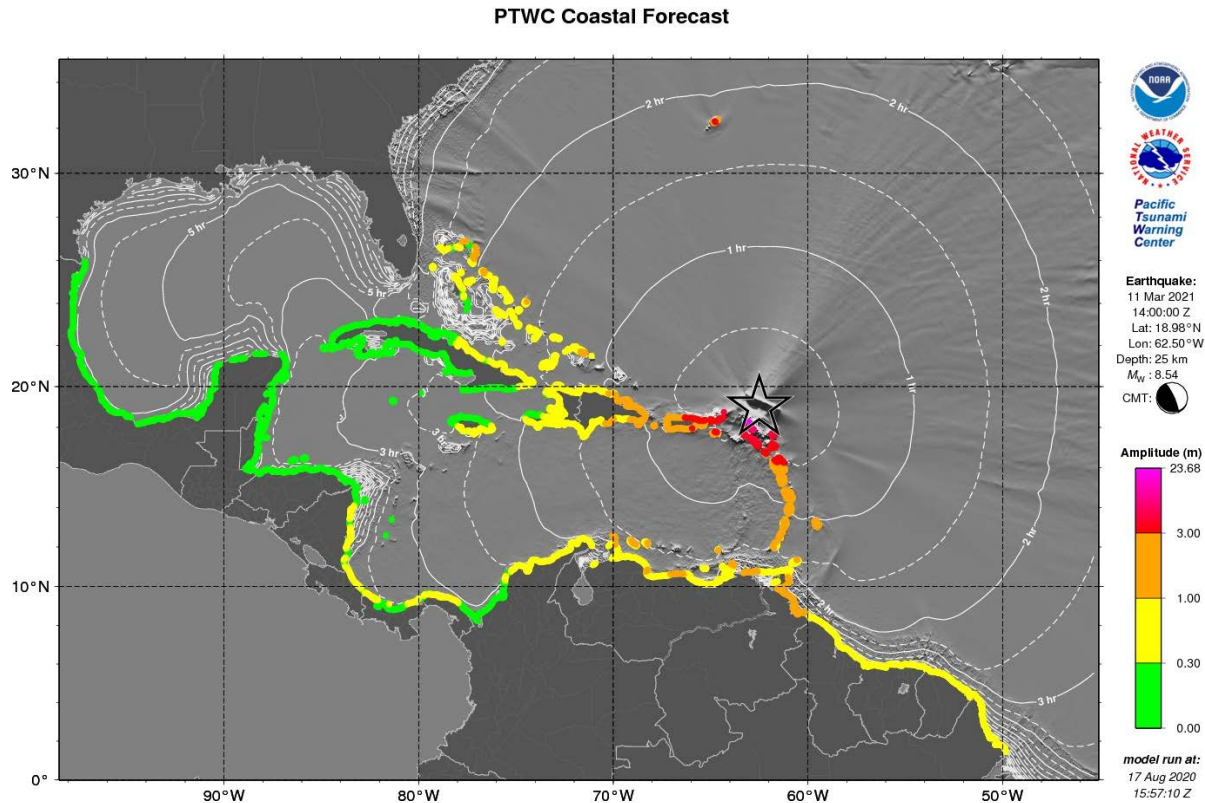
PTWC Energy Forecast



RIFT maximum amplitude map based on the scenario for Northern Lesser Antilles.

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

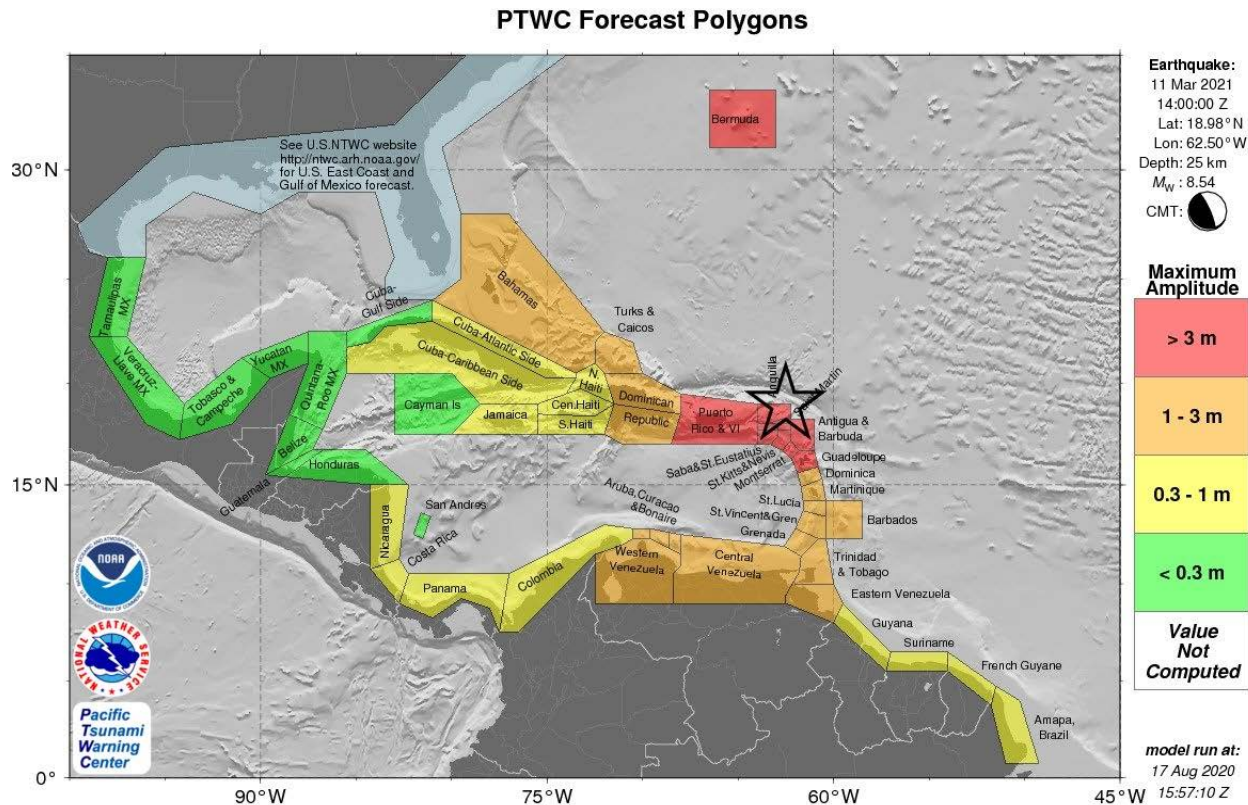
Coastal Forecast for Tsunami Wave Heights Northern Lesser Antilles



RIFT coastal tsunami amplitude map based on the scenario for Northern Lesser Antilles.

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 Northern Lesser Antilles

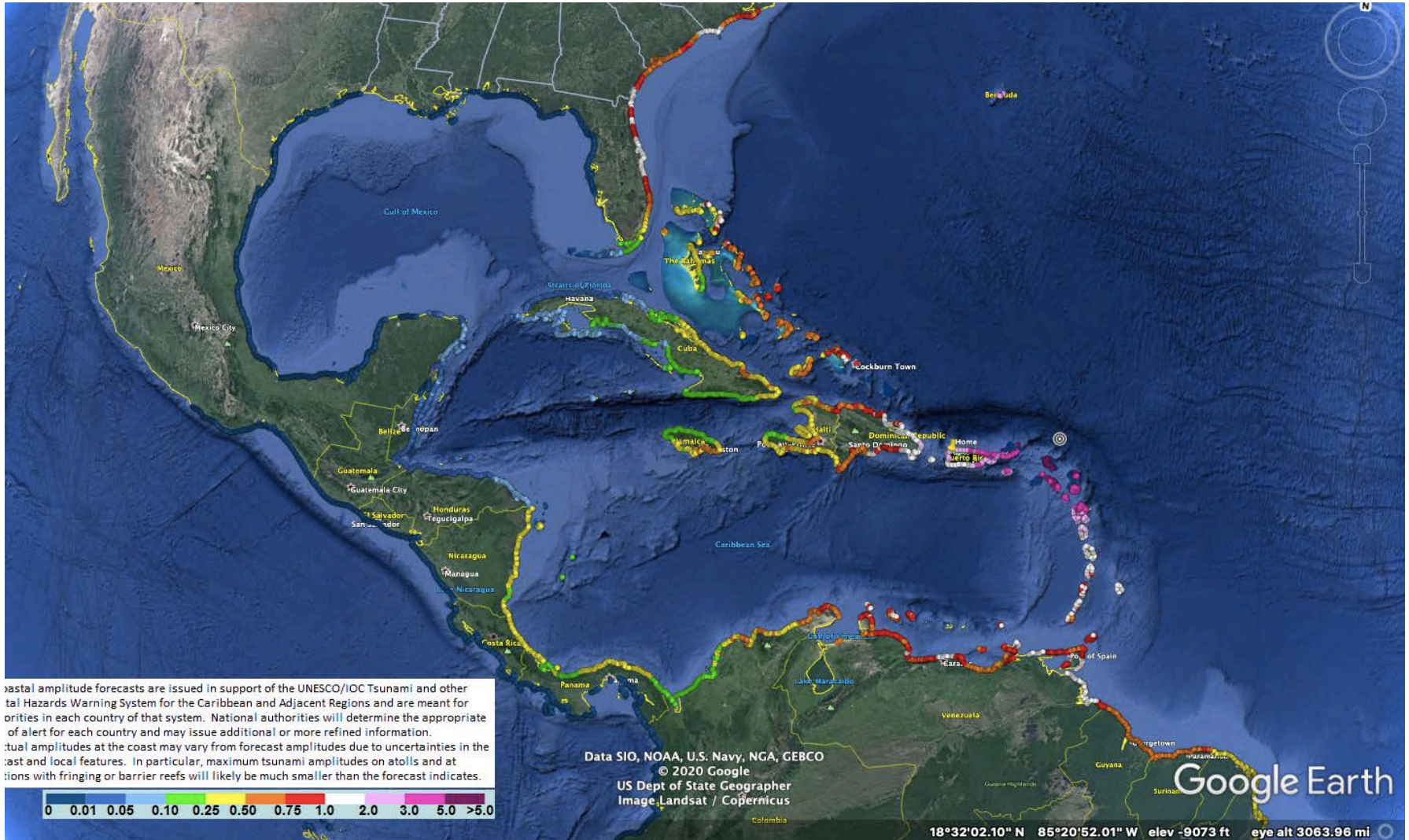


RIFT forecast polygons for the Caribbean region on the Northern Lesser Antilles scenario.

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

KMZ

Northern Lesser Antilles



Forecast Statistics for Regional Polygons*

Northern Lesser Antilles

Region Name	Coastal Forecast (meters)				Offshore Forecast (meters)				Total Points
	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	
Anguilla	24.	15.00	11.00	6.70	8.8	6.40	6.30	1.90	8
Saint_Barthelemy	12.	8.70	9.00	2.80	7.4	6.10	6.80	1.60	4
Antigua_and_Barbuda	7.8	4.50	4.20	1.30	4.0	2.50	2.60	1.10	28
Puerto_Rico_and_Virgin_Islands	7.6	2.60	2.50	0.88	3.5	1.40	1.30	0.70	190
Saint_Kitts_and_Nevis	7.2	4.60	3.90	1.30	5.9	2.10	1.70	1.30	29
Saba_and_Saint_Eustatius	6.8	5.00	4.50	0.96	3.3	1.60	1.50	0.75	8
Sint_Maarten	6.8	5.70	5.30	0.81	7.6	5.90	6.20	1.10	6
Saint_Martin	5.4	5.40	5.40	0.00	6.6	6.00	6.20	0.59	3
Guadeloupe	3.7	2.80	2.70	0.59	3.9	1.20	0.96	0.74	73
Montserrat	3.4	3.00	3.10	0.41	2.0	1.00	0.87	0.43	11
Bermuda	3.0	2.90	2.90	0.12	1.9	1.20	1.10	0.49	8
Dominica	2.3	1.80	1.90	0.30	1.8	0.55	0.47	0.30	31
Atlantic_Coast_of_Dominican_Republic	2.0	1.10	1.00	0.34	1.8	0.49	0.41	0.31	129
Barbados	2.0	1.40	1.40	0.23	1.1	0.53	0.50	0.16	21
Atlantic_Coast_of_Venezuela	2.0	1.50	1.50	0.31	0.82	0.41	0.40	0.15	82
Bahamas	1.8	0.54	0.50	0.26	0.88	0.24	0.21	0.14	443
Martinique	1.8	1.40	1.30	0.23	1.8	0.68	0.63	0.35	41
Central_Coast_of_Venezuela	1.7	0.85	0.78	0.26	1.3	0.44	0.41	0.21	238
Caribbean_Coast_of_Dominican_Republic	1.7	0.87	0.82	0.33	1.3	0.42	0.36	0.22	148
Saint_Vincent_and_the_Grenadines	1.6	1.10	1.10	0.15	0.83	0.51	0.51	0.20	33
Grenada	1.6	1.10	1.10	0.29	0.97	0.58	0.56	0.21	29
Trinidad_and_Tobago	1.5	0.94	0.95	0.19	1.2	0.40	0.38	0.16	77
Curacao	1.4	0.89	0.78	0.25	0.90	0.34	0.29	0.17	27
Bonaire	1.4	0.97	0.94	0.13	1.3	0.60	0.55	0.29	15
Saint_Lucia	1.4	1.10	1.10	0.11	0.81	0.43	0.41	0.15	26
Aruba	1.3	1.10	1.10	0.15	0.67	0.45	0.41	0.14	8
Turks_and_Caicos_Islands	1.2	0.84	0.80	0.18	1.5	0.41	0.35	0.24	46
Western_Coast_of_Venezuela	1.2	0.84	0.84	0.13	1.0	0.53	0.56	0.19	100
Atlantic_Coast_of_Haiti	0.94	0.51	0.50	0.17	0.62	0.18	0.15	0.10	66
Suriname	0.83	0.59	0.55	0.09	0.65	0.23	0.20	0.11	109
Caribbean_Coast_of_Columbia	0.79	0.40	0.40	0.17	0.73	0.26	0.23	0.14	255
Guyana	0.79	0.64	0.64	0.05	0.58	0.23	0.21	0.07	101
French_Guyane	0.75	0.42	0.42	0.04	0.76	0.21	0.17	0.13	84
Caribbean_Coast_of_Haiti	0.70	0.43	0.41	0.09	0.38	0.16	0.15	0.06	89
Jamaica	0.66	0.29	0.22	0.16	0.39	0.12	0.09	0.08	146
Atlantic_Coast_of_Cuba	0.59	0.27	0.30	0.15	0.33	0.09	0.09	0.06	259
Gulf_of_Gonave_Coast_of_Haiti	0.59	0.35	0.34	0.09	0.24	0.10	0.09	0.04	140
Caribbean_Coast_of_Costa_Rica	0.45	0.35	0.33	0.05	0.35	0.19	0.18	0.06	48
Caribbean_Coast_of_Nicaragua	0.42	0.30	0.29	0.04	0.23	0.09	0.09	0.04	130
Amapa_Brazil	0.42	0.37	0.36	0.03	0.38	0.12	0.10	0.06	116
Caribbean_Coast_of_Cuba	0.41	0.12	0.10	0.07	0.23	0.04	0.03	0.03	422
Caribbean_Coast_of_Panama	0.37	0.28	0.29	0.05	0.41	0.17	0.17	0.07	179
San_Andres_and_Providencia	0.23	0.23	0.23	0.00	0.10	0.09	0.09	0.01	4
Quintana_Roo_Mexico	0.08	0.04	0.05	0.02	0.10	0.02	0.02	0.02	166
Caribbean_Coast_of_Honduras	0.08	0.04	0.03	0.02	0.05	0.02	0.01	0.01	185
Cayman_Islands	0.07	0.06	0.06	0.01	0.08	0.04	0.02	0.02	9
Gulf_of_Mexico_Coast_of_Cuba	0.05	0.03	0.03	0.01	0.03	0.01	0.01	0.00	122
Belize	0.05	0.03	0.03	0.01	0.09	0.01	0.01	0.01	90
Yucatan_Mexico	0.03	0.01	0.00	0.01	0.01	0.00	0.00	0.00	42
Caribbean_Coast_of_Guatemala	0.03	0.02	0.02	0.00	0.02	0.01	0.01	0.00	13

*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 #13

ZCZC

WECA41 PHEB 112300

WMO ID

TSUCAX AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 13...TEST

NWS PACIFIC TSUNAMI WARNING CENTER EWA BEACH HI

2300 UTC THU MAR 11 2021

...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 11 2021
- * COORDINATES 19.0 NORTH 62.5 WEST
- * DEPTH 25 KM / 16 MILES
- * LOCATION LEEWARD ISLANDS

TEST... EVALUATION ...TEST

* THIS IS A TEST MESSAGE. AN EARTHQUAKE WITH A PRELIMINARY MAGNITUDE OF 8.5 OCCURRED IN THE LEEWARD ISLANDS AT 1400 UTC ON THURSDAY MARCH 11 2021.

* 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	LOE			
PUERTO BILWI NI	14.0N	83.4W	2215	0.33M/ 1.1FT	24
PUERTO EL BLUFF NI	12.0N	83.7W	1936	0.31M/ 1.0FT	20
WRIGHT BEACH NC	34.2N	77.8W	1843	0.72M/ 2.4FT	20
CORN ISLAND NI	12.3N	83.1W	1847	0.33M/ 1.1FT	16
VACA KEY FL	24.7N	81.1W	1842	0.09M/ 0.3FT	20
TRIDENT PIER FL	28.4N	80.6W	1839	1.42M/ 4.6FT	20
BEAUFORT NC	34.7N	76.7W	1822	0.78M/ 2.6FT	18
ISLA MUJERES MX	21.3N	86.7W	1818	0.08M/ 0.3FT	18
ILE ROYAL GUIANA FR	5.3N	52.6W	1759	0.40M/ 1.3FT	24
LIMON CR	10.0N	83.0W	1749	0.45M/ 1.5FT	18
PUERTO MORELOS MX	20.9N	86.9W	1747	0.06M/ 0.2FT	22
SAPZURRO CO	8.7N	77.4W	1731	0.19M/ 0.6FT	22
VIRGINIA KEY FL	25.7N	80.2W	1727	0.25M/ 0.8FT	24
EL PORVENIR PA	9.6N	78.9W	1724	0.36M/ 1.2FT	28
SAN ANDRES CO	12.6N	81.7W	1729	0.20M/ 0.7FT	18

SETTLEMENT PT BS	26.7N	79.0W	1710	0.39M/	1.3FT	14
PORT ROYAL JM	17.9N	76.8W	1657	0.59M/	1.9FT	18
ISLA NAVAL CO	10.2N	75.8W	1656	0.25M/	0.8FT	24
SANTA MARTA CO	11.2N	74.2W	1639	0.49M/	1.6FT	22
BERMUDA UK	32.4N	64.7W	1608	2.87M/	9.4FT	22
PRICKLEY BAY GD	12.0N	61.8W	1553	1.44M/	4.7FT	26
BULLEN BAY CURACAO	12.2N	69.0W	1546	1.40M/	4.6FT	16
BARAHONA DO	18.2N	71.1W	1537	0.82M/	2.7FT	22
GANTERS BAY ST LUCI	14.0N	61.0W	1532	1.14M/	3.8FT	26
DART 41425	28.7N	65.7W	1529	0.16M/	0.5FT	22
CAP HAITIEN HT	19.8N	72.2W	1525	0.48M/	1.6FT	18
CALLIAQUA VC	13.1N	61.2W	1527	1.27M/	4.2FT	28
GRAND TURK ISLAND T	21.4N	71.1W	1524	0.89M/	2.9FT	24
CULEBRA IS PR	18.3N	65.3W	1514	3.16M/10.4FT	14	
DART 42407	15.3N	68.2W	1516	0.08M/	0.3FT	26
MAGUEYES ISLAND PR	18.0N	67.0W	1512	1.14M/	3.8FT	28
PUERTO PLATA DO	19.8N	70.7W	1509	0.82M/	2.7FT	28
FORT DE FRANCE MQ	14.6N	61.1W	1507	1.27M/	4.2FT	22
PUNTA CANA DO	18.5N	68.4W	1506	1.29M/	4.2FT	16
LAMESHURBAYSTJOHNVI	18.3N	64.7W	1504	3.80M/12.5FT	28	
MONA ISLAND PR	18.1N	67.9W	1509	1.26M/	4.1FT	22
LE ROBERT MARTINIQU	14.7N	60.9W	1508	1.22M/	4.0FT	28
BLOWING POINT AI	18.2N	63.1W	1502	9.02M/29.6FT	16	
ROSEAU DM	15.3N	61.4W	1503	2.26M/	7.4FT	18
LE PRECHEUR MARTINI	14.8N	61.2W	1459	1.29M/	4.2FT	20
PORTSMOUTH DM	15.6N	61.5W	1456	2.23M/	7.3FT	24
SAINT MARTIN FR	18.1N	63.1W	1502	5.44M/17.9FT	26	
DART 41420	23.4N	67.3W	1457	0.17M/	0.6FT	18
MAYAGUEZ PR	18.2N	67.2W	1457	2.49M/	8.2FT	26
POINT A PITRE GP	16.2N	61.5W	1451	2.68M/	8.8FT	26
DESHAIES GUADELOUPE	16.3N	61.8W	1454	2.74M/	9.0FT	26
ESPERANZA VIEQUES P	18.1N	65.5W	1450	2.40M/	7.9FT	20
ARECIBO PR	18.5N	66.7W	1450	2.31M/	7.6FT	22
YABUCOA PR	18.1N	65.8W	1448	2.88M/	9.5FT	22
BASSETERRE KN	17.3N	62.7W	1445	5.15M/16.9FT	16	
DART 41421	23.4N	63.8W	1445	0.22M/	0.7FT	24
SAN JUAN PR	18.5N	66.1W	1446	2.87M/	9.4FT	14
LIMETREE VI	17.7N	64.8W	1447	2.25M/	7.4FT	20
ST CROIX VI	17.7N	64.7W	1435	3.56M/11.7FT	24	
PARHAM AT	17.1N	61.8W	1439	3.56M/11.7FT	22	
DESIRADE GUADELOUPE	16.3N	61.1W	1434	2.91M/	9.5FT	16

* 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.

* 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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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.

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 homepage of The TsunamiZone. The navigation bar includes links for Home, TsunamiZone Regions, Other Languages, Contact Us, Search, and Login. Below the navigation bar is a banner image of a coastal landscape with a white silhouette of a person running. The main navigation bar contains 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 features a 'WELCOME TO THE TSUNAMIZONE!' section with links for ESPAÑOL and FRANÇAIS, a paragraph of introductory text, and a video player titled 'How to Plan a Tsunami Walk' showing a sign that says 'TSUNAMI WALK'. The right column features a '2020 OFFICIAL ACTIVITIES' section with a list of 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 'Tsunami Walk How-To Guide!' link is also present at the bottom of the right column.

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

31 participants are registered in the 2021 TsunamiZone (as of 01/26/2021 3:25 AM PST).

Category	Participants	Participation totals for each area	Total
Individuals/Families	6		
Childcare and Pre-Schools	0	Anguilla	0
K-12 Schools and Districts	0	Antigua and Barbuda	0
Colleges and Universities	0	Aruba	0
Local Government	14	Bahamas	0
State Government	0	Barbados	0
Federal/National Government (Including Military)	0	Belize	0
Tribes/Indigenous Peoples	0	Bermuda	0
Businesses	0	Bonaire	0
Hotels and Other Lodgings	0	Brazil	0
Healthcare	0	British Virgin Islands	14
Senior Facilities/Communities	0	Cayman Islands	0
Disability/AFN Organizations	0	Colombia	0
Non-Profit Organizations	11	Costa Rica	0
Neighborhood Groups	0	Cuba	0
Preparedness Organizations	0	Curacao	0
Faith-based Organizations	0	Dominica	0
Museums, Libraries, Parks, etc.	0	Dominican Republic	0
Volunteer/Service Clubs	0	France	0
Youth Organizations	0	Grenada	0
Animal Shelter/Service Providers	0		
Agriculture/Livestock Sector	0		
Volunteer Radio Groups	0		
Science/Engineering Organizations	0		
Media Organizations	0		
Other	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	14
Adjuntas	0
Aguada	0
Aguadilla	0
Aguas Buenas	0
Aibonito	0
Anasco	0
Arecibo	0
Arroyo	0
Barceloneta	0
Barranquitas	0
Bayamon	0
Cabo Rojo	0
Camuy	0
Canovanas	0
Caguas	0
Carolina	0
Catano	0
Cayey	0
Ceiba	0
Ciales	0
Cidra	0
Coamo	0
Comerio	0
Corozal	0
Culebra	0
Dorado	0
Fajardo	0
Florida	0
Guanica	0
Guayama	0

Guaynabo	0
Guayanilla	0
Gurabo	0
Hatillo	0
Hormigueros	0
Humacao	0
Isabela	0
Jayuya	0
Juana Diaz	0
Juncos	0
Lajas	0
Lares	0
Las Marias	0
Las Piedras	0
Loiza	0
Luquillo	0
Manati	0
Maricao	0
Maunabo	0
Mayaguez	0
Moca	0
Morovis	0
Naguabo	0
Naranjito	0
Orocovis	0
Patillas	0
Penuelas	0
Ponce	0
Quebradillas	0
Rincon	0
Rio Grande	0
Sabana Grande	0
Salinas	0
San German	0
San Juan	0
San Lorenzo	0
San Sebastian	0
Santa Isabel	0
Toa Alta	0
Toa Baja	0
Trujillo Alto	0
Utuado	0
Vega Alta	0
Vega Baja	0
Vieques	0
Villalba	0
Yabucoa	0
Yauco	0
Saba	0
Saint Barthelemy	0
Saint Kitts and Nevis	0

Saint Lucia	0
Saint Martin	0
Saint Vincent and the Grenadines	0
Sint Eustatius	0
Sint Maarten	0
Suriname	0
Trinidad and Tobago	0
Turks and Caicos Islands	0
US Virgin Islands	0
Venezuela	3

Resources

- IOC Manuals “[How to plan, conduct and evaluate tsunami exercises](#)” and “[Module on Tsunami Exercise](#)” are useful resources.
- CARIBE WAVE 2011 through 2021 Handbooks.
- CARIBE WAVE 2013 through 2020 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 21 Task Team.

COVID Considerations

- Note that social/physical distancing and quarantine/lock down measure may still be in effect
- It is encouraged that MS consider on-line/virtual events or activities to engage the public
- Participation by the public does not need to be a full tsunami walk, encourage people to check their emergency plan/tsunami route/supplies and register on tsunamizone.org
- Note the CARIBE EWS guidance for Tsunamis - http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=26796

UNESCO/IOC

ICG/CARIBE EWS

Tsunami Services and Evacuation/Sheltering Considering Physical Distancing Practices

Context

The current COVID-19 response has required changes in workloads, work venues as well as physical distancing practices worldwide. This may create ambiguity or confusion with regards to warning services and tsunami response actions, like evacuation, and the implementation of national response plans. This document clarifies the status of the regional tsunami services, as well as suggests best practices for local and national actions.

Regional Tsunami Services

The Pacific Tsunami Warning Center, as the UNESCO IOC CARIBE EWS Tsunami Service Provider (TSP), continues to operate 24 x 7 to provide tsunami services to the Caribbean and Adjacent Regions according to the [CARIBE EWS Users Guide](#).

In the case that operations were affected, a communication will be issued to its stakeholders, including the CARIBE EWS Tsunami Warning Focal Points (TWFP) and National Tsunami Warning Centers (NTWC). In such circumstances alternative arrangements for regional warning services would be put in place as much as feasible.

Coordination is also maintained with the Caribbean Tsunami Warning Program (CTWP), the Caribbean Tsunami Information Center (CTIC) and the Central American Tsunami Advisory Centre (CATAC).

It is important to reiterate that each country is solely responsible for the safety of its own population from tsunami hazards. The country's NTWC or Emergency Management Agency (EMA) is the authority for issuing a tsunami warning for any or all of its coasts, as the CARIBE EWS TSP information is only advisory.

It is also important to recall that for the case of local tsunamis the natural tsunami warning signals should be the trigger for immediate self-evacuation. Persons along low-lying coasts should self-evacuate and not wait for their National Tsunami Warning Center to issue a tsunami warning.

National and Local Tsunami Services and Evacuation/Sheltering Best Practices during COVID-19

1. 24/7 arrangements of the national agencies to provide timely warnings to the local and national authorities, media and the public, when their action is required.
2. When the NTWC and/or the Emergency Management Agency issues a tsunami warning, the desired action for the public is to evacuate from at-risk locations.
3. The public needs to continue to use natural warning signs for tsunamis as cues for response, i.e. if people are near the coast and experience any of a tsunami's natural warning signs, they should quickly leave at-risk locations and move inland or to higher ground. The natural tsunami warning signs are strong or long ground shaking (from an earthquake), a sudden change of the sea level or a loud roar from the sea (from a tsunami).
4. Immediate life-safety is the priority when evacuations are directed. It is important that the public understands that AN EVACUATION ORDER TAKES PRIORITY OVER THE STAY-AT-HOME

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/caribewave21>).

Multi-Annual Community Tsunami Exercise Programme Guidelines for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions

Intergovernmental Oceanographic Commission
Manuals and Guides

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Multi-Annual Community Tsunami Exercise Programme

Guidelines for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions

(Draft 2: 06/08/2020)

- Draft 2: 06/08/2020 – major update of previous draft titled “Methodological Guidelines”
- 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.
- To be posted on CW 21 website on Caribewave.info

Caribe Wave 21 Task Team

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Timeline

ACTION	DUE DATE
Circular Letter Issued by IOC to MS	✓ September 2020
Handbook Draft Circulated among ICG CARIBE EWS TNC/TWFP and TT CARIBE WAVE 21	✓ September 2020
Deadline for Comments	✓ October 2020
Exercise Handbook Available Online	✓ November 2020
1 st Webinar CW (Overview, PTWC Products)	26 January 2021 – English 27 January 2021 – Spanish 28 January 2021 - French
2 nd Webinar CW (Update, Communication Methods, CW Questionnaire)	23 February 2021 - English 24 February 2021 - Spanish 25 February 2021 - French
Countries Indicate Selected Scenario	26 February 2021
Exercise	11 March 2021
Exercise Evaluation Due	26 March 2021
<p style="text-align: center;">Final Draft Caribe Wave 21 Report 2 April 2021</p>	

Questions, Comments

Thank you for participating!

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