



1st Webinar

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21 January 2025

#CARIBEWAVE
#TSUNAMIREADY

Rules of Engagement

- Please keep microphone off unless requesting floor or speaking.
- Please use the raise hand symbol or just unmute and speak up if you would like to ask a question or write in the chat.

CARIBE WAVE 2024

- CARIBE WAVE 24 was held on **March 21, 2024**.
- In the Caribbean and Adjacent Regions, **45** out of 48 Member States and Territories participated in this exercise with a total of over **475,147** people engaged (12.35% increase) according to TsunamiZone.org



PTWC (a)



Turks and Caicos (b)

Feedback from CARIBE WAVE 2024

Based on Member state responses on Evaluation Survey

- **General recommendations**
 - More CARIBE WAVE workshops
 - Make text messages available online
 - Support countries with the preparation of country-specific simulations
- **Local level**
 - Start planning sooner
 - New strategies to increase participation (challenges, promotional videos, mock 'readings')
 - Support response entities with accompaniment and basic resources such as water
- **Scenario sources:**
 - Non seismic sources (landslides and volcanic eruptions)
 - *Kick 'em Jenny*
 - Remote scenarios
 - Jamaican Trench
 - Martinique scenario
 - Grove of the Dead
 - La Soufriere

Goals / Metrics

Goals	2016 Results	2017 Results	2018 Results	2019 Results	2020 Results	2021 Results	2022 Results	2023 Results	2024 Results	2025 Metrics
TWFP receive the dummy message	84%	95%	100%	89%	97%	97%	91%	97%	100%	100%
Participation of Member States of ICG/CARIBE-EWS with designated focal warning point	100%	100%	97%	100%	92%	98%	100%	94%	98%	100%
Community involvement (including agencies beyond TWFP)	73%	82%	77%	66%	38%	56%	43%	41%	76%	95%
Number of participants*	332,812	679,985	643,403	793,353	4,622	333,518	413,281	422,913	470,423**	+10%
Countries who participate submit exercise questionnaire	100%	100%	91%	82%	92%	95%	100%	93%	78%	100%
Members State and territories are satisfied with exercise				82%	76%	96%	88%	97%	100%	100%

*As reported by Member States and Territories in survey

Objectives for CARIBE WAVE 25

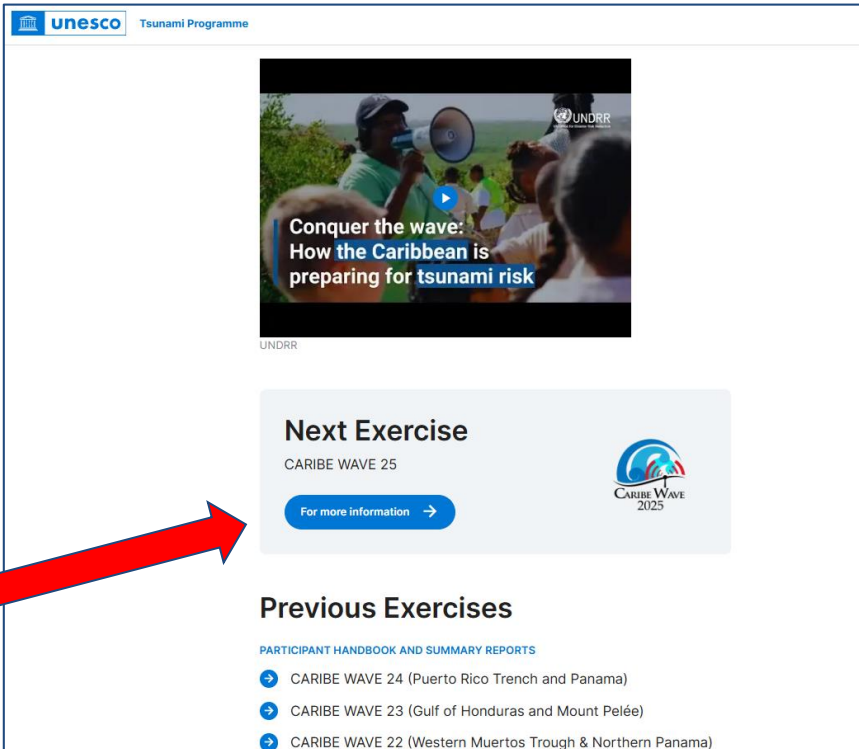
1. Exercise and evaluate communications between the Regional Tsunami Service Provider and Members States/Territories.

- 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 UNESCO/IOC **Tsunami Ready** programme.

CARIBE WAVE website (New): caribewave.org



unesco Tsunami Programme

UNDRR

Conquer the wave:
How the Caribbean is
preparing for tsunami risk

UNDRR

Next Exercise

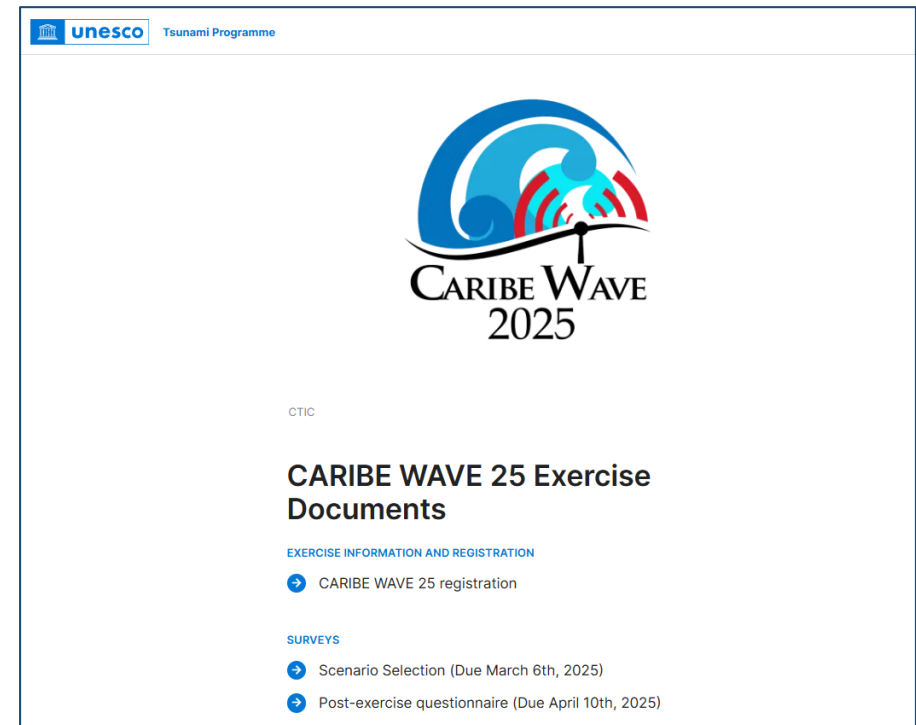
CARIBE WAVE 25

For more information →

Previous Exercises

PARTICIPANT HANDBOOK AND SUMMARY REPORTS

- CARIBE WAVE 24 (Puerto Rico Trench and Panama)
- CARIBE WAVE 23 (Gulf of Honduras and Mount Pelée)
- CARIBE WAVE 22 (Western Muertos Trough & Northern Panama)



unesco Tsunami Programme

CARIBE WAVE 2025

CTIC

CARIBE WAVE 25 Exercise Documents

EXERCISE INFORMATION AND REGISTRATION

- CARIBE WAVE 25 registration

SURVEYS

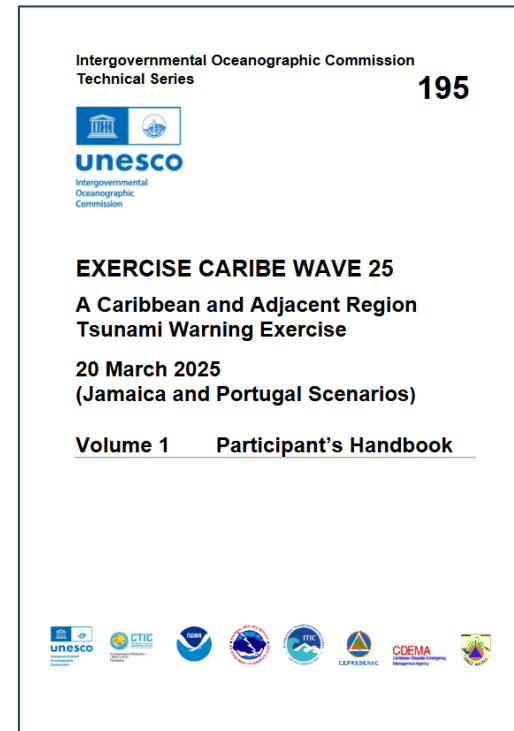
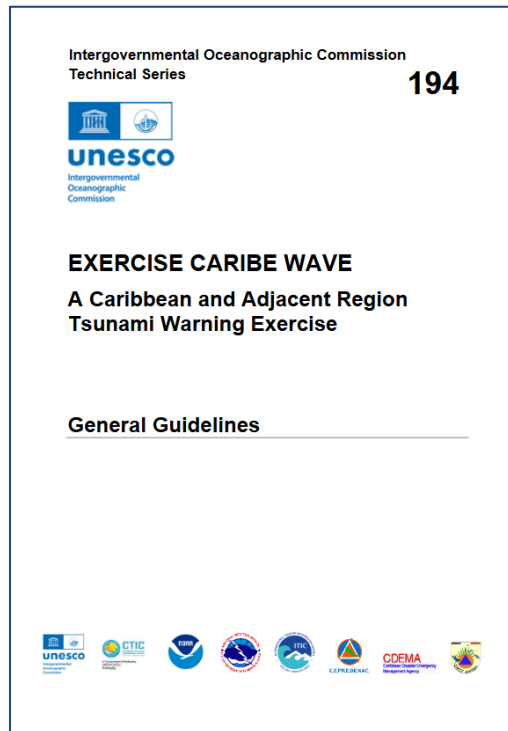
- Scenario Selection (Due March 6th, 2025)
- Post-exercise questionnaire (Due April 10th, 2025)

- Reports
- General Guidelines
- Handbook

Exercise Handbook

The CARIBE WAVE Handbook has been split into two documents available at caribewave.org:

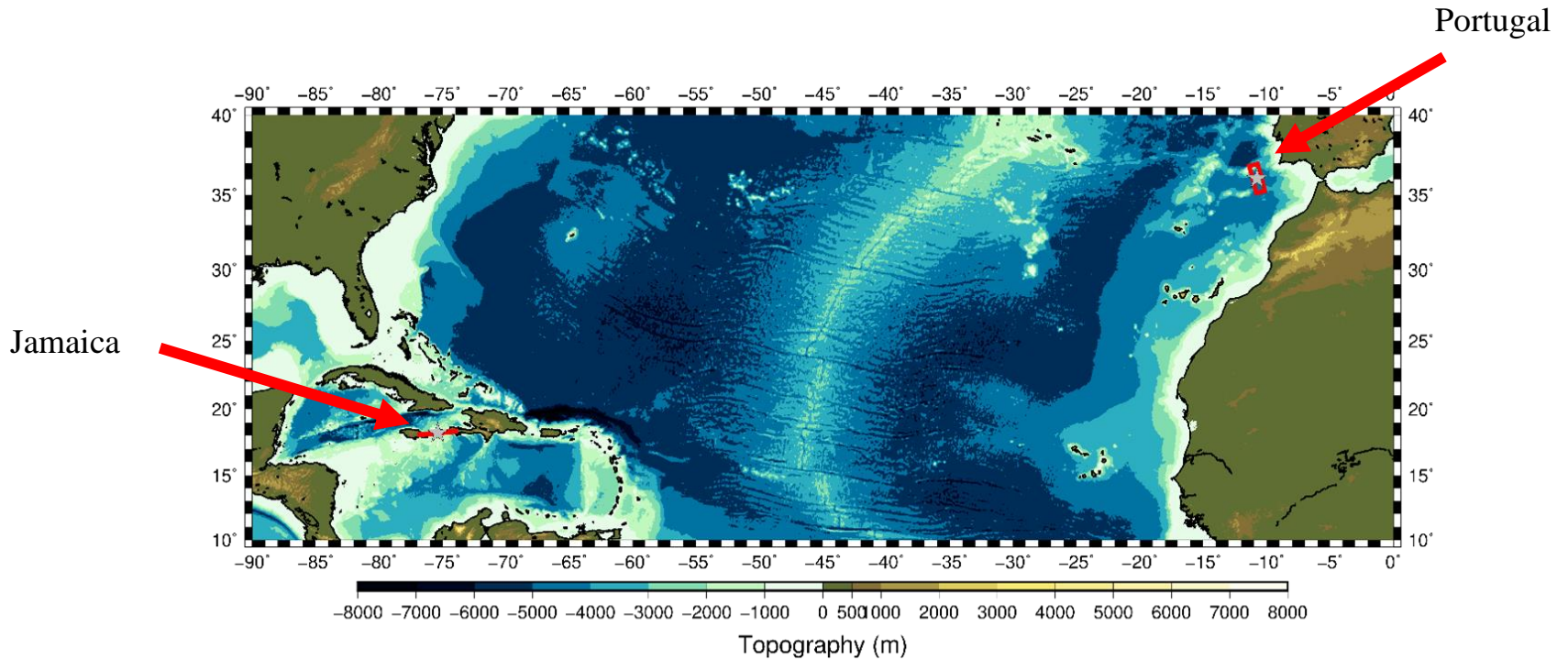
- One containing the general guidelines of the exercise for use over several years.
- Another one containing the details of each exercise every year, including:
 - Tsunami and earthquake scenarios description
 - Timeline
 - PTWC dummy message and simulated exercise threat messages
 - Travel times and expected wave heights
 - The website link to post-exercise evaluation questionnaire



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#TSUNAMIREADY

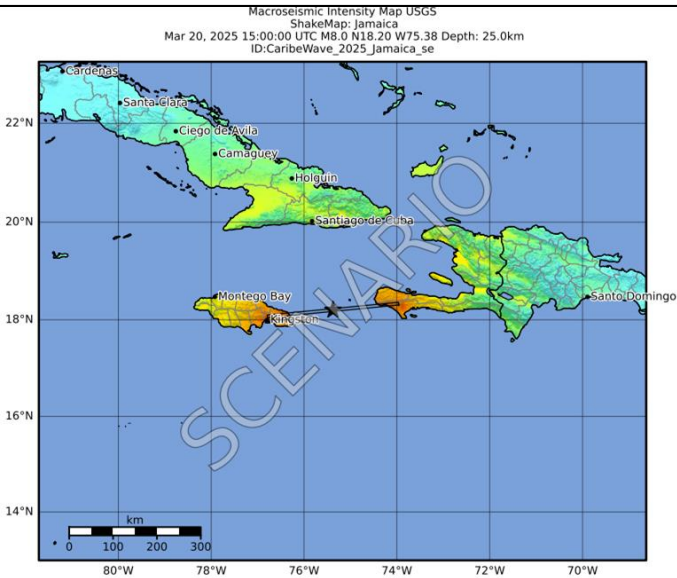
CARIBE WAVE 25

Earthquake and Tsunami Scenarios



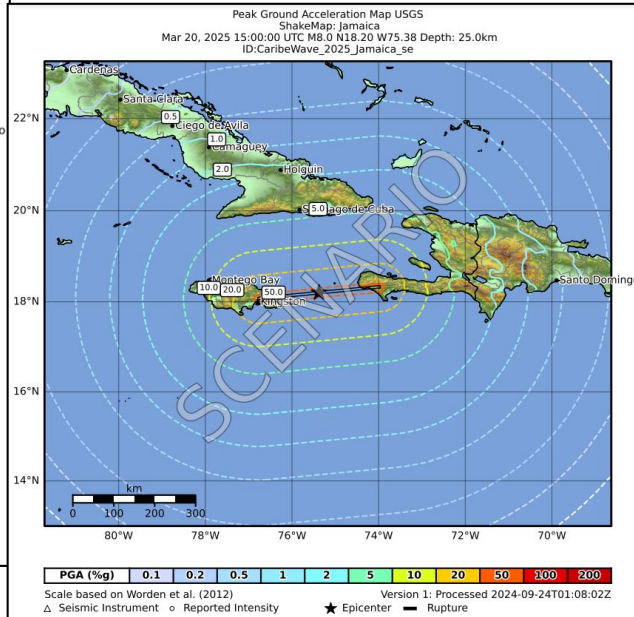
Scenario	Origin Time	Mw	Epicenter
Jamaica	15:00:00 UTC	8.0	18.203°N, 75.376°W
Portugal	20 March 2025	8.6	36.0°N, 10.7°W

Earthquake Impact Scenario - Jamaica



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)	<0.046	0.297	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV(cm/s)	<0.0215	0.135	1.41	4.65	9.64	20	41.4	85.6	>178
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based on Worden et al. (2012) Version 1: Processed 2024-09-24T01:08:02Z
 Δ Seismic Instrument ○ Reported Intensity ★ Epicenter □ Rupture



PGA (%g)	0.1	0.2	0.5	1	2	5	10	20	50	100	200
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Scale based on Worden et al. (2012) Version 1: Processed 2024-09-24T01:08:02Z
 Δ Seismic Instrument ○ Reported Intensity ★ Epicenter — Rupture

M 8.0, Scenario Jamaica
 Origin Time: 2025-03-20 15:00:00 UTC (Thu 10:00:00 local)
 Location: 18.2020° N 75.3700° W Depth: 25.0 km
 FOR TSUNAMI INFORMATION SEE: tsunami.gov

Earthquake Shaking ● **Red Alert**

Estimated Fatalities

Estimated Economic Losses

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 Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSED (per 1000)	-	105k*	6,418k*	15,855k*	7,423k	1,579k	2,004k	137k	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	Resistant Structures: None	Resistant Structures: None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures: None	Vulnerable Structures: None	Vulnerable Structures: 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 mud wall and adobe block construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max. MMI(±)	Shaking	Deaths
1988-05-08	118	4.5	VI (10k)		0
1976-02-19	243	5.9	VIII(S)		1
1994-03-02	331	5.4	VII(47k)		4

Selected City Exposure

MMI City	Population
VIII Mill Way Tree	19K
VIII Kingston	928K
VIII New Kingston	584K
VIII Les Anglaises	8K
VIII Mona Heights	3K
VIII Constant Spring	13K
VIII Spanish Town	145K
VIII Portmore	103K
VIII Les Cayes	126K
VII Jeremie	99K
VI Looptane	134K

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

Event ID: uscaribeWave_2025_jamaica_se

Note: For the Portugal scenario, it is a teleseismic event and does not require ShakeMaps or Pager

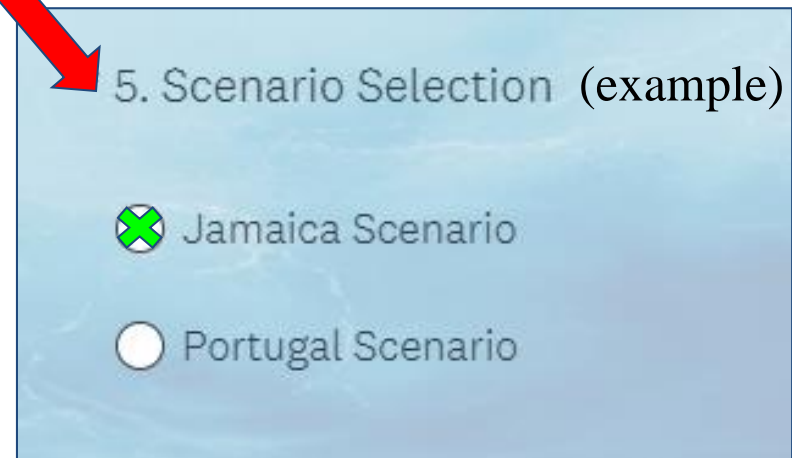
1755 Scenario

Would you like a webinar on 1755 deposits and other observations in the Caribbean?

Dr. Brian Atwater (retired from USGS) has offered to share his findings from Anegada, British Virgin Islands and other localities

Products and Messages

- On **20 March 2025, at 1500 UTC**, the initial dummy message will be issued by the PTWC over all its standard broadcast channels for the two scenarios.
- As of **1507 UTC**, PTWC emails will be sent with all the simulated enhanced products to the designated CARIBE-EWS, TWFP and NTWC for one of the scenarios.
 - By **6 March 2025**, each Member State is requested to select the scenario their country will use for the exercise by completing the following survey
https://www.surveymonkey.com/r/CW25_ScenarioSelection.
 - If the Member State does not inform the PTWC and ITIC-CAR, the organizers will decide for which scenario the PTWC will send the products.



5. Scenario Selection (example)

Jamaica Scenario

Portugal Scenario

Video on PTWC Graphical Tsunami Forecast Products for the CARIBE-EWS



UNESCO IOC / NOAA
International Tsunami Information Center
Tsunami Training Video, September 2021

Pacific Tsunami Warning Center (PTWC) Graphical Tsunami Forecast Products for the CARIBE-EWS

Dr. Charles “Chip” McCreery
Director, PTWC



Video link: <https://vimeo.com/showcase/8956022>

Password: training

PTWC PRODUCTS

Appendix IV. TWC Dummy (Start of Exercise) Messages

PTWC ← **Center**
WECA41 PHEB 201500 ← **WMO ID**
TSUCAX ← **AWIPS ID**

TEST...INITIAL DUMMY START OF EXERCISE MESSAGE...TEST
NWS PACIFIC TSUNAMI WARNING CENTER/NOAA/NWS
ISSUED AT 1500Z 20 MAR 2025

...TEST... CARIBE WAVE 25 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 25
TSUNAMI EXERCISE AND TEST COMMUNICATIONS WITH UNESCO IOC CARIBE
EWS NTWCS AND TWFPS. THIS WILL BE THE ONLY EXERCISE MESSAGE
BROADCAST FROM THE PACIFIC TSUNAMI WARNING CENTER EXCLUDING
SPECIAL EMAIL MESSAGES DISCUSSED IN THE HANDBOOK. THE HANDBOOK
IS AVAILABLE AT THE WEBSITE CARIBEWAVE.ORG. THE EXERCISE
PURPOSE IS TO EXERCISE AND EVALUATE THE CARIBE EWS TSUNAMI
WARNING SYSTEM.
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Message Chronology issued by the PTWC Jamaica

Date	Time (UTC)	PTWC	
		PTWC	
		Type of Product	Transmission Method
3/20/25	1500	---- Earthquake Occurs ----	
3/20/25	1500	Dummy	NWWS, GTS, EMWIN, AISR, Fax, Email
3/20/25	1507	Initial Tsunami Threat Message #1	Email
3/20/25	1530	Tsunami Threat Message #2 with Forecast and Graphical Enhanced Products	Email
3/20/25	1600	Tsunami Threat Message #3	Email
3/20/25	1700	Tsunami Threat Message #4	Email
3/20/25	1800	Tsunami Threat Message #5	Email
3/20/25	1900	Tsunami Threat Message #6	Email
3/20/25	2000	Tsunami Threat Message #7	Email
3/20/25	2100	Final Tsunami Threat Message #8	Email

PTWC Message #1

ZCZC
WECA41 PHEB 201507
TSUCAX

WMO ID

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER HONOLULU HI
1507 UTC THU MAR 20 2025

...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 1500 UTC MAR 20 2025
* 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 1500 UTC ON THURSDAY MARCH 20 2025.

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

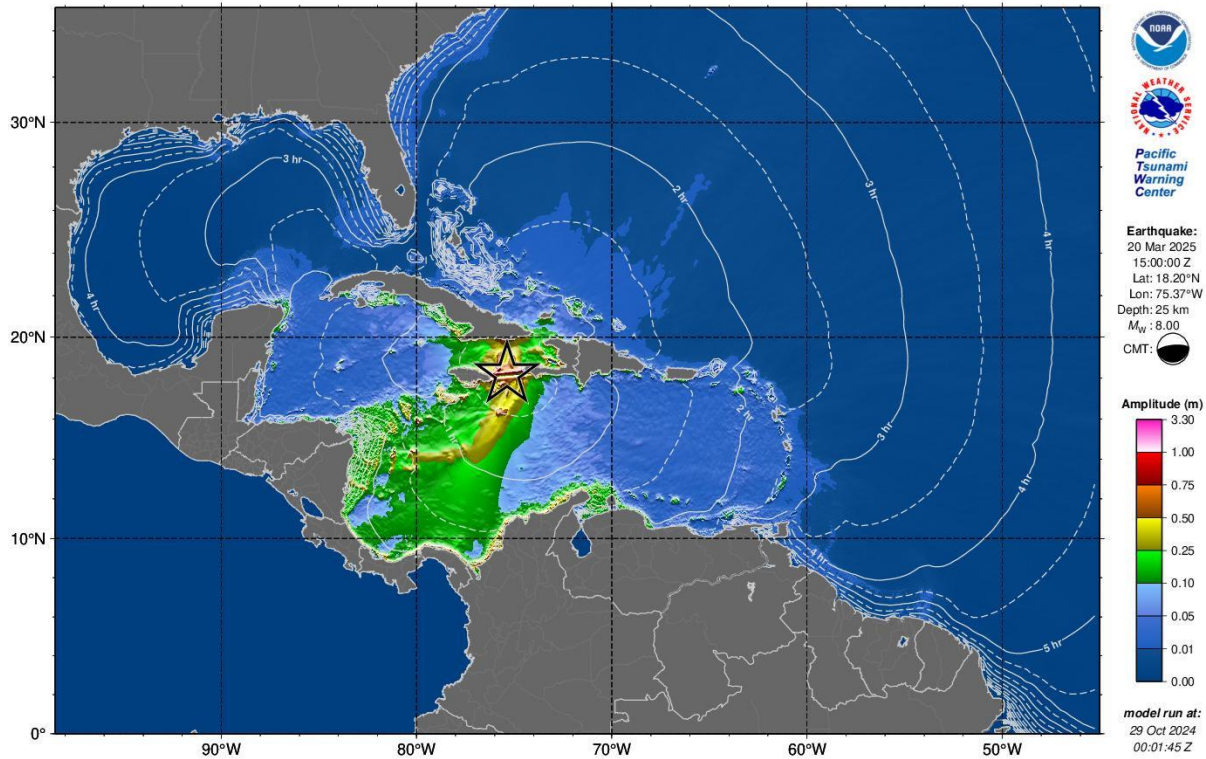
TEST... TSUNAMI THREAT FORECAST ...TEST

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

GRAND TURK	TURKS N CAICOS	21.5N	71.1W	1613	03/20
LONG ISLAND	BAHAMAS	23.3N	75.1W	1622	03/20
SAN SALVADOR	BAHAMAS	24.1N	74.5W	1622	03/20
SANTA MARTA	COLOMBIA	11.2N	74.2W	1625	03/20
PORT AU PRINCE	HAITI	18.5N	72.4W	1626	03/20
ORANJESTAD	ARUBA	12.5N	70.0W	1628	03/20
MAYAGUEZ	PUERTO RICO	18.2N	67.2W	1631	03/20
EXUMA	BAHAMAS	23.6N	75.9W	1632	03/20
ONIMA	BONAIRE	12.3N	68.3W	1634	03/20
CARTAGENA	COLOMBIA	10.4N	75.6W	1635	03/20
CABO ENGANO	DOMINICAN REP	18.6N	68.3W	1637	03/20
CROOKED ISLAND	BAHAMAS	22.7N	74.1W	1637	03/20
CHRISTIANSTED	US VIRGIN IS	17.7N	64.7W	1640	03/20
CAT ISLAND	BAHAMAS	24.4N	75.5W	1641	03/20
SAN ANDRES	SAN ANDRES PROVI	13.4N	81.4W	1644	03/20
SAN JUAN	PUERTO RICO	18.5N	66.1W	1644	03/20
BARRANQUILLA	COLOMBIA	11.1N	74.9W	1647	03/20
PROVIDENCIA	SAN ANDRES PROVI	12.6N	81.7W	1647	03/20
ELEUTHERA ISLAN	BAHAMAS	25.2N	76.1W	1649	03/20
ALIGANDI	PANAMA	9.2N	78.0W	1649	03/20
PUERTO CARRETO	PANAMA	8.8N	77.6W	1658	03/20
ANDROS ISLAND	BAHAMAS	25.0N	77.9W	1658	03/20
COZUMEL	MEXICO	20.5N	87.0W	1701	03/20
WILLEMSTAD	CURACAO	12.1N	68.9W	1701	03/20
RIOHACHA	COLOMBIA	11.6N	72.9W	1701	03/20
SABA	SABA	17.6N	63.2W	1702	03/20
PUERTO CORTES	HONDURAS	15.9N	88.0W	1705	03/20
BASSETERRE	SAINT KITTS	17.3N	62.7W	1707	03/20
ANEGADA	BR VIRGIN IS	18.8N	64.3W	1709	03/20
SINT EUSTATIUS	SINT EUSTATIUS	17.5N	63.0W	1710	03/20
PUERTO OBALDIA	PANAMA	8.7N	77.4W	1710	03/20
NASSAU	BAHAMAS	25.1N	77.4W	1710	03/20
MAIQUETIA	VENEZUELA	10.6N	67.0W	1710	03/20
PLYMOUTH	MONTSERRAT	16.7N	62.2W	1711	03/20
SIMPSON BAAI	SINT MAARTEN	18.0N	63.1W	1711	03/20
PUNTA CARIBANA	COLOMBIA	8.6N	76.9W	1714	03/20
BASSE TERRE	GUADELOUPE	16.0N	61.7W	1716	03/20
PUERTO LIMON	COSTA RICA	10.0N	83.0W	1716	03/20
THE VALLEY	ANGUILLA	18.3N	63.1W	1719	03/20
CHARLOTTE AMALI	US VIRGIN IS	18.3N	64.9W	1720	03/20
ROSEAU	DOMINICA	15.3N	61.4W	1720	03/20
COLON	PANAMA	9.4N	79.9W	1722	03/20
FREEPORT	BAHAMAS	26.5N	78.8W	1722	03/20
LA HABANA	CUBA	23.2N	82.4W	1725	03/20
CASTRIES	SAINT LUCIA	14.0N	61.0W	1726	03/20
ABACO ISLAND	BAHAMAS	26.6N	77.1W	1727	03/20
FORT DE FRANCE	MARTINIQUE	14.6N	61.1W	1729	03/20
KINGSTOWN	SAINT VINCENT	13.1N	61.2W	1732	03/20
BOCAS DEL TORO	PANAMA	9.4N	82.2W	1733	03/20
BAIE LUCAS	SAINT MARTIN	18.1N	63.0W	1733	03/20
BIMINI	BAHAMAS	25.8N	79.3W	1735	03/20

Energy Forecast for Tsunami Wave Heights Jamaica

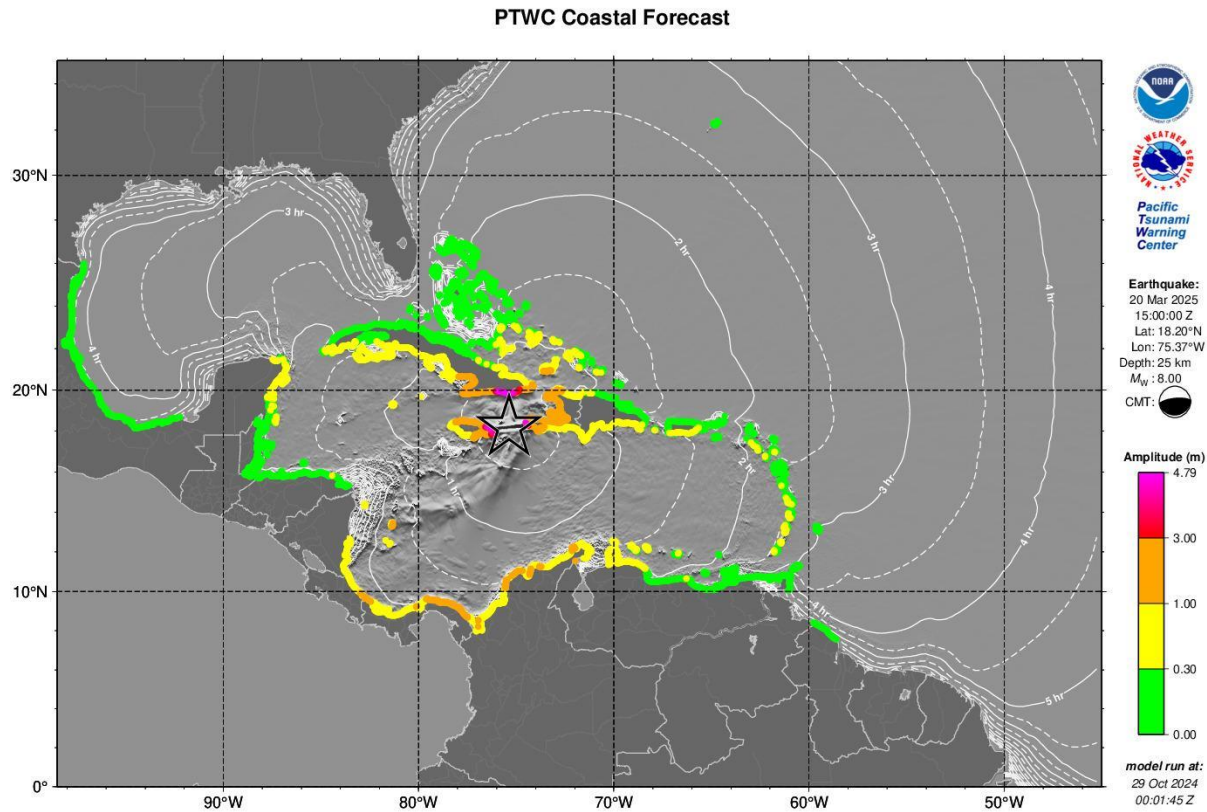
PTWC Energy Forecast



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.

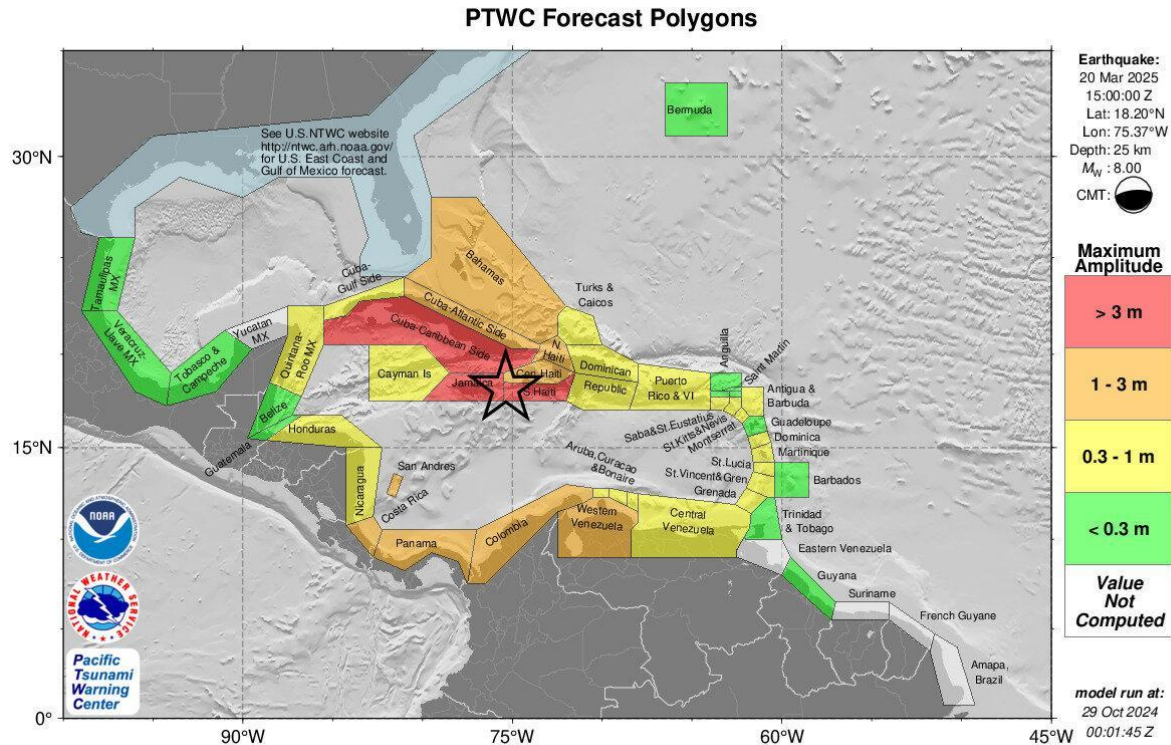
Coastal Forecast for Tsunami Wave Heights Jamaica



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.

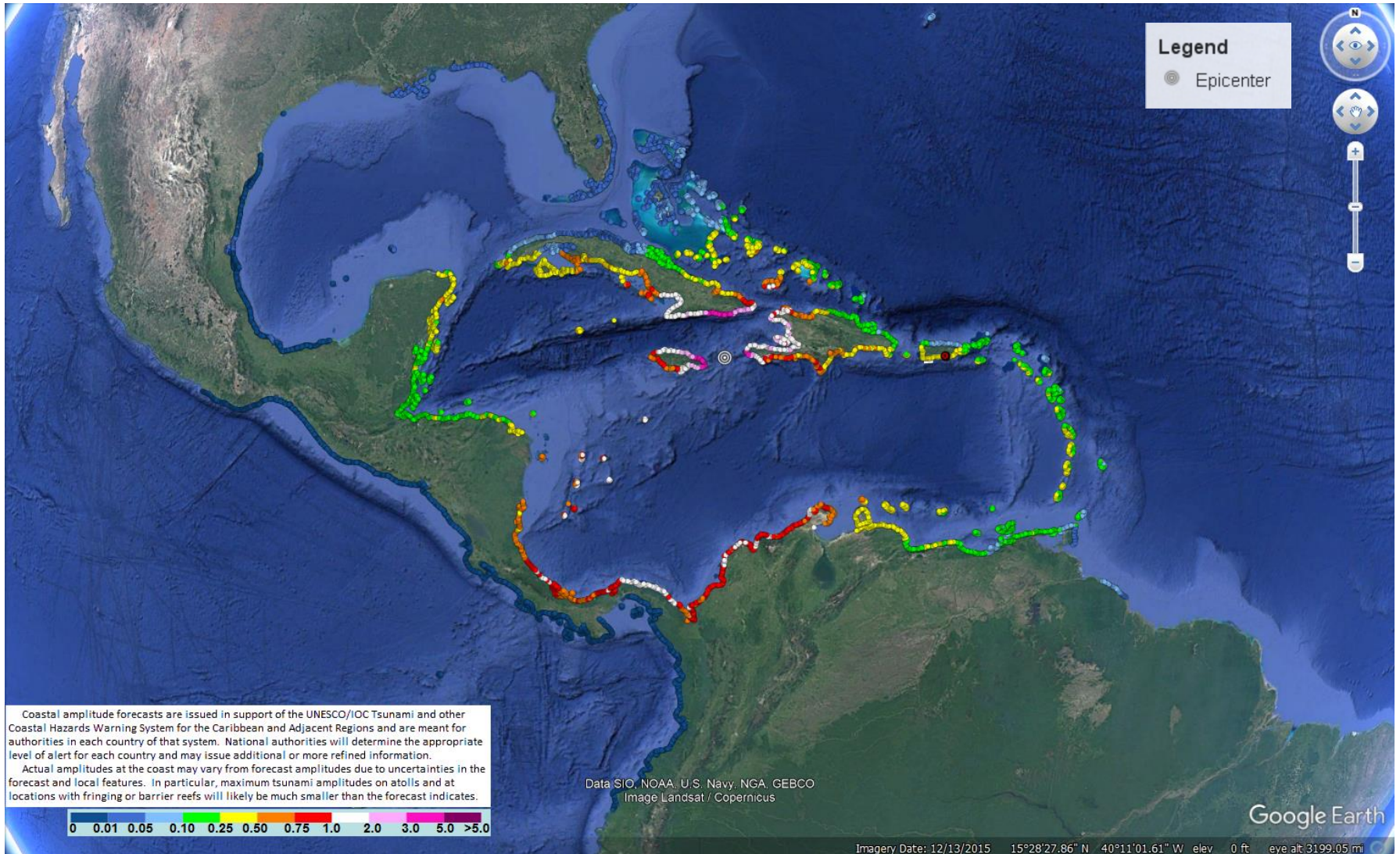
Polygons Forecast for Tsunami Wave Heights Jamaica



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.

CW 25 KMZ Jamaica Scenario



Forecast Statistics for Regional Polygons

Jamaica

PTWC TABLE OF FORECAST STATISTICS FOR REGIONAL POLYGONS - RUN ID 20241029000145
(for internal use only - not for distribution)

Earthquake - Origin: 03/20/2025 15:00:00 UTC Coordinates: 18.2N 75.4W Depth: 025km Magnitude: 8.0

This table 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. National authorities will determine the appropriate level of alert for each country and may issue additional or more refined information.

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.

Region Name	Coastal Forecast (meters)				Offshore Forecast (meters)				Total Points
	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	
Caribbean Coast of Cuba	4.8	0.85	0.48	0.95	3.3	0.26	0.17	0.30	641
Caribbean Coast of Haiti	4.7	1.20	0.80	0.91	3.0	0.45	0.32	0.44	98
Jamaica	4.7	1.70	1.70	0.99	2.2	0.66	0.58	0.38	146
Gulf of Gonave Coast of Haiti	2.2	1.70	1.70	0.27	2.3	0.66	0.59	0.33	155
Atlantic Coast of Haiti	2.0	0.90	0.81	0.35	0.84	0.34	0.32	0.14	74
San Andres and Providencia	1.7	0.96	0.76	0.38	1.0	0.37	0.31	0.22	18
Caribbean Coast of Panama	1.7	0.99	0.91	0.28	1.5	0.43	0.43	0.25	243
Bahamas	1.3	0.13	0.05	0.18	1.4	0.06	0.03	0.09	1194
Caribbean Coast of Colombia	1.3	0.86	0.87	0.13	1.1	0.47	0.47	0.20	311
Caribbean Coast of Costa Rica	1.3	0.88	0.90	0.20	0.89	0.51	0.51	0.14	48
Atlantic Coast of Cuba	1.1	0.20	0.11	0.21	0.76	0.08	0.03	0.11	436
Western Coast of Venezuela	1.0	0.38	0.35	0.11	0.35	0.16	0.17	0.07	147
Caribbean Coast of Dominican Republic	0.89	0.48	0.47	0.15	0.65	0.24	0.22	0.11	151
Caribbean Coast of Nicaragua	0.71	0.55	0.53	0.06	0.37	0.21	0.23	0.08	70
Atlantic Coast of Dominican Republic	0.66	0.18	0.14	0.10	0.42	0.09	0.06	0.07	157
Aruba	0.62	0.51	0.49	0.09	0.31	0.20	0.21	0.05	13
Turks and Caicos Islands	0.55	0.26	0.22	0.11	0.42	0.14	0.13	0.08	119
Gulf of Mexico Coast of Cuba	0.52	0.09	0.06	0.10	0.08	0.03	0.02	0.01	130
Quintana Roo Mexico	0.52	0.31	0.29	0.07	0.26	0.11	0.11	0.05	237
Cayman Islands	0.51	0.45	0.46	0.03	0.50	0.23	0.20	0.12	11
Saint Vincent and the Grenadines	0.49	0.33	0.33	0.09	0.20	0.12	0.12	0.05	25
Curacao	0.43	0.34	0.34	0.05	0.31	0.15	0.14	0.06	26
Bonaire	0.41	0.35	0.35	0.04	0.29	0.17	0.19	0.06	15
Central Coast of Venezuela	0.39	0.15	0.12	0.06	0.32	0.08	0.06	0.04	347
Puerto Rico and Virgin Islands	0.38	0.21	0.21	0.09	0.44	0.10	0.08	0.06	224
Martinique	0.37	0.24	0.25	0.07	0.27	0.11	0.10	0.05	40
Saint Kitts and Nevis	0.35	0.24	0.22	0.06	0.18	0.09	0.08	0.04	28
Grenada	0.34	0.22	0.23	0.09	0.19	0.09	0.09	0.03	28
Saint Lucia	0.34	0.25	0.25	0.06	0.19	0.11	0.09	0.04	28
Dominica	0.33	0.21	0.21	0.04	0.14	0.07	0.06	0.03	30
Antigua and Barbuda	0.31	0.16	0.16	0.07	0.17	0.09	0.09	0.03	32
Montserrat	0.31	0.24	0.23	0.04	0.09	0.07	0.07	0.01	11
Caribbean Coast of Honduras	0.31	0.23	0.23	0.04	0.27	0.11	0.10	0.04	175
Saba and Saint Eustatius	0.30	0.22	0.20	0.05	0.11	0.08	0.08	0.03	5
Guadeloupe	0.28	0.20	0.22	0.05	0.18	0.09	0.08	0.03	67
Belize	0.27	0.20	0.19	0.03	0.18	0.07	0.07	0.03	194
Anguilla	0.24	0.17	0.16	0.03	0.15	0.13	0.13	0.02	8
Sint Maarten	0.20	0.17	0.16	0.01	0.12	0.09	0.09	0.02	5
Caribbean Coast of Guatemala	0.20	0.19	0.19	0.01	0.09	0.07	0.07	0.02	35
Saint Martin	0.18	0.17	0.18	0.01	0.12	0.10	0.11	0.02	7
Barbados	0.17	0.11	0.11	0.03	0.13	0.05	0.05	0.02	20
Saint Barthelemy	0.17	0.15	0.17	0.03	0.12	0.10	0.10	0.01	6
Trinidad and Tobago	0.11	0.08	0.09	0.03	0.10	0.04	0.04	0.02	78
Guyana	0.07	0.05	0.05	0.01	0.03	0.02	0.02	0.00	38
Bermuda	0.07	0.06	0.06	0.01	0.05	0.04	0.03	0.01	15
Veracruz Mexico	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	224
Tamaulipas Mexico	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	148

PTWC Message #8

ZCZC
WECA41 PHEB 202100
TSUCAX

TEST...TSUNAMI MESSAGE NUMBER 8...TEST
NWS PACIFIC TSUNAMI WARNING CENTER HONOLULU HI
2100 UTC THU MAR 20 2025

...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 1500 UTC MAR 20 2025
* 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 1500 UTC ON THURSDAY MARCH 20 2025.

* 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. TSUNAMI AMPLITUDES ARE MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

GAUGE LOCATION	GAUGE COORDINATES		TIME OF MEASURE	MAXIMUM TSUNAMI HEIGHT	WAVE PERIOD
	LAT	LON	(UTC)		(MIN)
TURBO CO	8.1N	76.7W	1951	0.88M/ 2.9FT	18
FORT FOURCHON LA	29.1N	90.2W	1941	0.03M/ 0.1FT	26
PUERTO EL BLUFF NI	12.0N	83.7W	1906	0.53M/ 1.7FT	28
KEY WEST FL	24.6N	81.8W	1841	0.04M/ 0.1FT	16
PORT OF BELIZE BZ	17.5N	88.2W	1827	0.20M/ 0.7FT	26
TORTOLA VI UK	18.4N	64.6W	1814	0.19M/ 0.6FT	24
CORN ISLAND NI	12.3N	83.1W	1821	0.50M/ 1.6FT	28
CONSETT BAY JETTY B	13.2N	59.5W	1808	0.10M/ 0.3FT	16
BRIDGETOWN PORT BB	13.1N	59.6W	1808	0.12M/ 0.4FT	16
PORT ST CHARLES BB	13.3N	59.6W	1801	0.17M/ 0.6FT	26
SPEIGHTSTOWN JETTY	13.3N	59.6W	1803	0.17M/ 0.6FT	24
SOUFRIERE ST LUCIA	13.9N	61.1W	1803	0.32M/ 1.0FT	24
GANTERS BAY ST LUCI	14.0N	61.0W	1802	0.26M/ 0.9FT	14
BERMUDA BIO STA UK	32.4N	64.7W	1803	0.06M/ 0.2FT	20
VIEUX FORT ST LUCIA	13.7N	61.0W	1755	0.34M/ 1.1FT	18
PRICKLEY BAY GD	12.0N	61.8W	1754	0.34M/ 1.1FT	28
LE ROBERT MQ	14.7N	60.9W	1750	0.17M/ 0.6FT	28
DENNERY ST LUCIA LC	13.9N	60.9W	1749	0.15M/ 0.5FT	14
CALLIAQUA VC	13.1N	61.2W	1741	0.49M/ 1.6FT	28

Message Chronology issued by the PTWC - Portugal

Date	Time (UTC)	PTWC	
		Type of Product	Transmission Method
3/20/25	1500	---- Earthquake	Occurs----
3/20/25	1500	Dummy	NWWS, GTS, EMWIN, AISR, Fax, Email
3/20/25	1507	Initial Tsunami Information Statement #1	Email
3/20/25	1515	Tsunami Information Statement #2	Email
3/20/25	1525	Tsunami Threat Message #3	Email
3/20/25	1600	Tsunami Threat Message #4	Email
3/20/25	1600	Tsunami Threat Message #5	Email
3/20/25	1630	Tsunami Threat Message #6	Email
3/20/25	1800	Tsunami Threat Message #7	Email
3/20/25	1900	Tsunami Threat Message #8	Email
3/20/25	2000	Tsunami Threat Message #9	Email
3/20/25	2100	Tsunami Threat Message #10	Email
3/20/25	2200	Tsunami Threat Message #11	Email
3/20/25	2300	Tsunami Threat Message #12	Email
3/21/25	0000	Tsunami Threat Message #13	Email
3/21/25	0100	Tsunami Threat Message #14	Email
3/21/25	0200	Tsunami Threat Message #15	Email
3/21/25	0300	Tsunami Threat Message #16	Email
3/21/25	0400	Tsunami Threat Message #17	Email
3/21/25	0500	Tsunami Threat Message #18	Email
3/21/25	0600	Tsunami Threat Message #19	Email
3/21/25	0700	Tsunami Threat Message #20	Email
3/21/25	0800	Tsunami Threat Message #21	Email
3/21/25	0900	Final Tsunami Threat Message #22	Email

PTWC Message #1

ZCZC

WECA43 PHEB 201507

← **WMO ID**

TIBCAX ← **AWIPS ID**

TEST...TSUNAMI INFORMATION STATEMENT NUMBER 1...TEST
NWS PACIFIC TSUNAMI WARNING CENTER HONOLULU HI
1507 UTC THU MAR 20 2025

...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 8.3
* ORIGIN TIME 1500 UTC MAR 20 2025
* 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 8.3 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1500 UTC ON THURSDAY MARCH 20 2025.

* 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.

* 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.

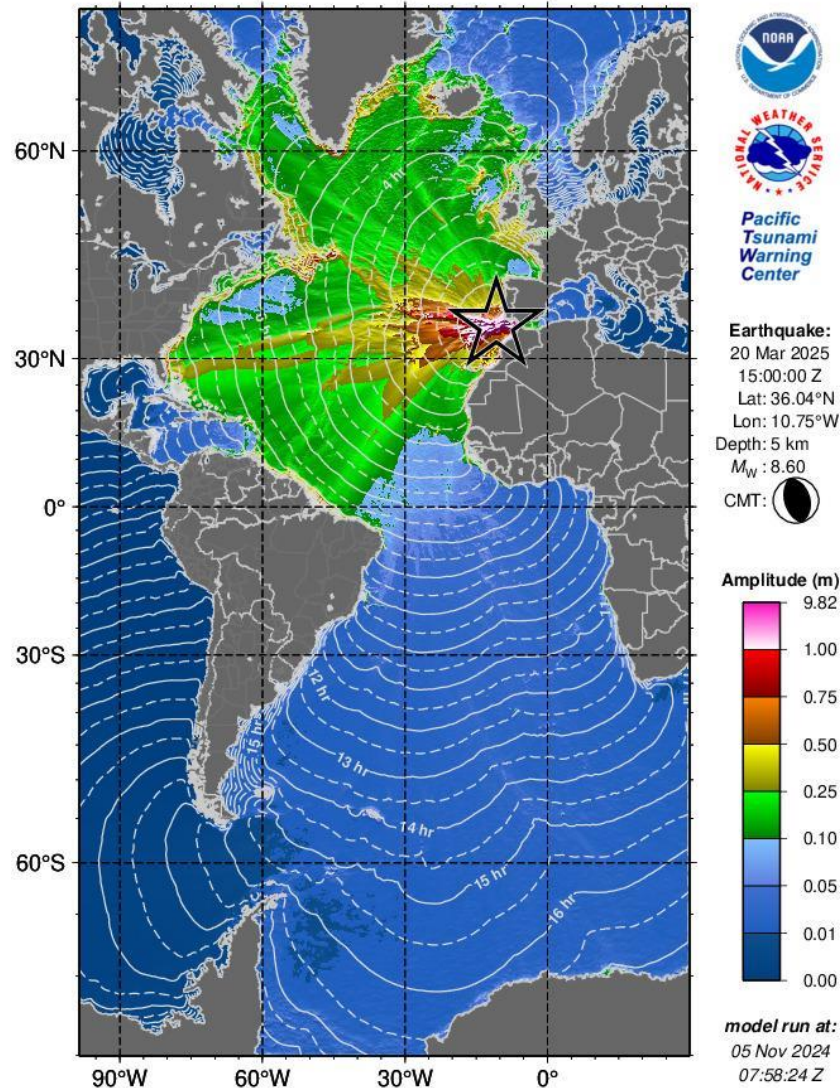
THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS TEST MESSAGE.

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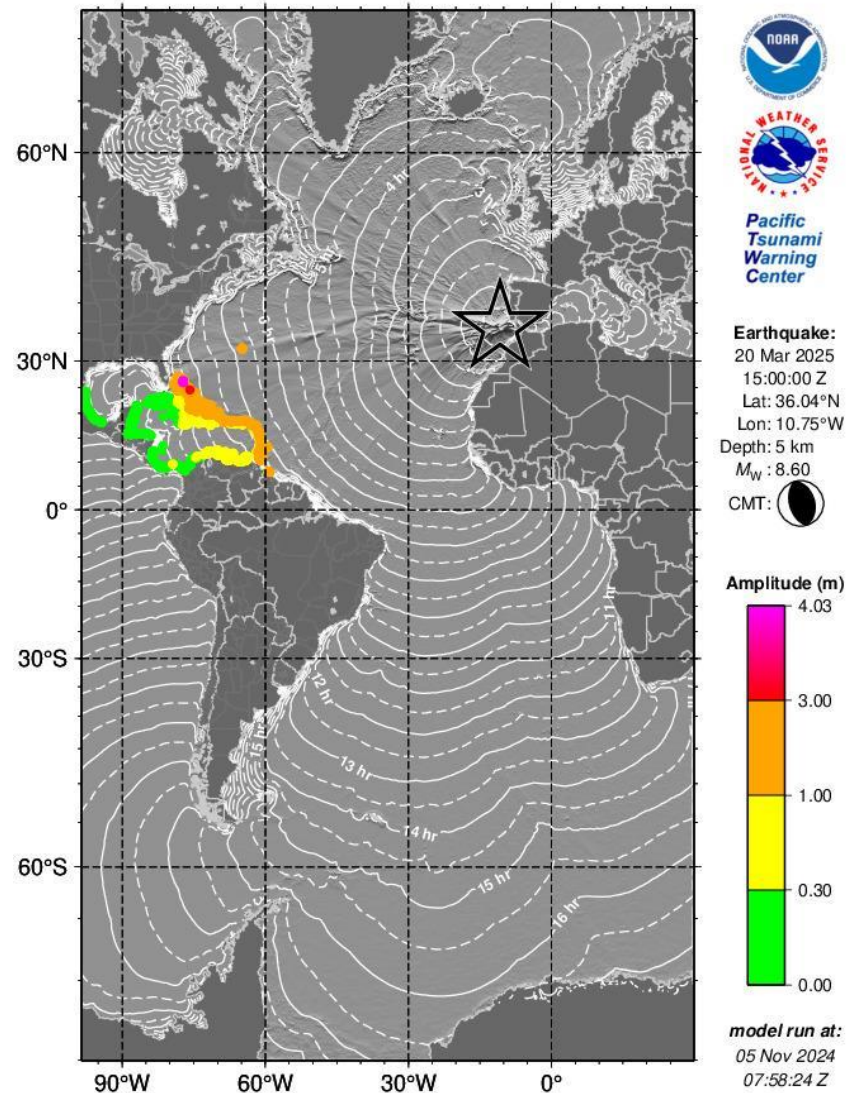
Energy/Deep Ocean Wave Height Forecast Portugal Scenario

PTWC Energy Forecast



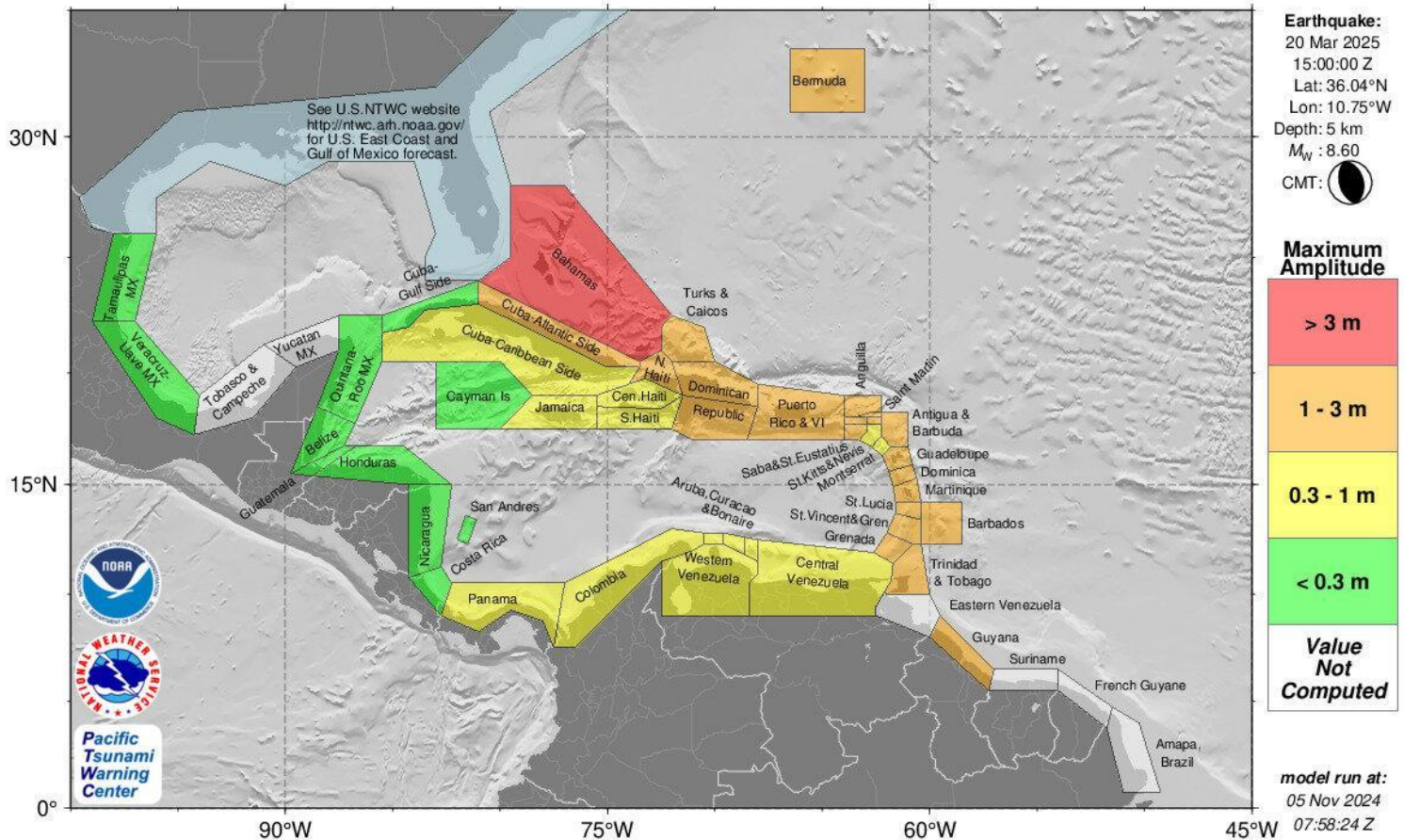
Coastal Amplitude Forecasts Portugal Scenario

PTWC Coastal Forecast



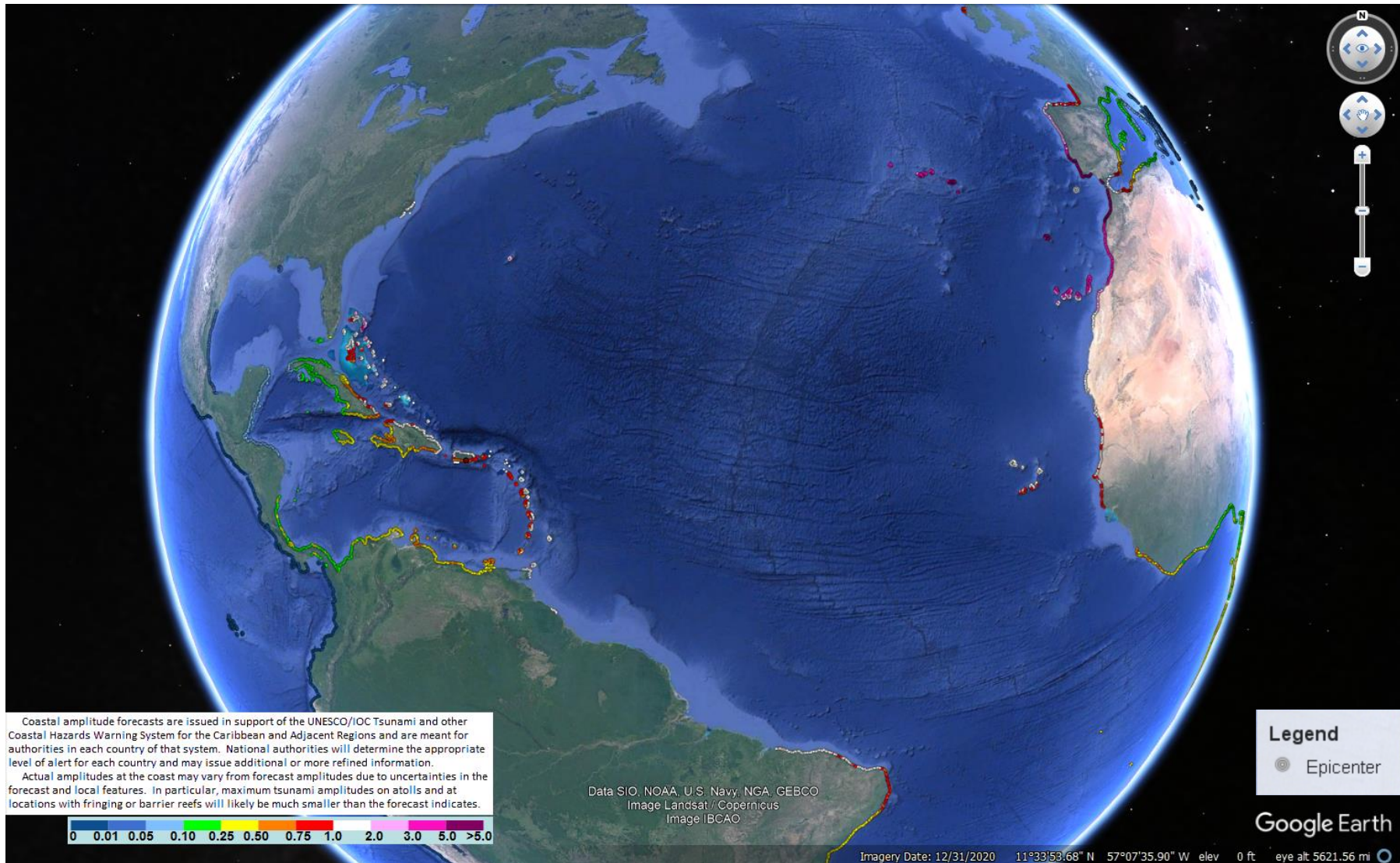
Forecast Polygons Portugal Scenario

PTWC Forecast Polygons



PTWC KMZ

Portugal Scenario



Forecast Statistics for Regional Polygons

Portugal

PTWC TABLE OF FORECAST STATISTICS FOR REGIONAL POLYGONS - RUN ID 20241105075824
(for internal use only - not for distribution)

Earthquake - Origin: 03/20/2025 15:00:00 UTC Coordinates: 36.0N 10.8W Depth: 005km Magnitude: 8.6

This table is issued for information only in support 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. National authorities will determine the appropriate level of alert for each country and may issue additional or more refined information.

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.

Region Name	Coastal Forecast (meters)				Offshore Forecast (meters)				Total Points
	Maximum	Mean	Median	STD	Maximum	Mean	Median	STD	
Bahamas	4.0	1.50	1.10	0.77	1.8	0.52	0.47	0.31	257
Bermuda	2.4	1.80	2.00	0.61	1.3	0.86	0.96	0.34	8
Puerto Rico and Virgin Islands	2.0	1.10	0.82	0.41	1.3	0.50	0.48	0.22	79
Saint Lucia	1.8	1.10	1.10	0.39	0.66	0.43	0.42	0.14	14
Guadeloupe	1.8	1.20	1.20	0.35	1.1	0.53	0.52	0.21	29
Antigua and Barbuda	1.8	1.50	1.50	0.17	1.2	0.67	0.57	0.25	13
Barbados	1.8	1.60	1.60	0.14	1.1	0.65	0.63	0.17	9
Turks and Caicos Islands	1.8	1.60	1.70	0.26	1.3	0.81	0.97	0.43	6
Saint Barthelemy	1.7	1.70	1.70	0.00	0.88	0.88	0.88	0.00	1
Trinidad and Tobago	1.6	1.20	1.20	0.15	0.76	0.48	0.50	0.09	26
Atlantic Coast of Dominican Republic	1.6	1.30	1.30	0.19	1.2	0.58	0.57	0.25	70
Anguilla	1.6	1.60	1.60	0.00	0.95	0.95	0.95	0.00	1
Atlantic Coast of Haiti	1.5	1.10	1.00	0.25	1.0	0.44	0.39	0.21	26
Martinique	1.4	1.00	0.96	0.22	0.78	0.44	0.47	0.21	19
Dominica	1.3	0.97	0.82	0.25	0.68	0.30	0.27	0.13	16
Saint Vincent and the Grenadines	1.3	0.88	0.94	0.21	0.57	0.29	0.25	0.13	10
Guyana	1.3	1.30	1.30	0.02	0.53	0.41	0.40	0.06	7
Atlantic Coast of Cuba	1.2	0.62	0.57	0.31	1.0	0.26	0.19	0.19	120
Caribbean Coast of Dominican Republic	1.2	0.62	0.57	0.25	0.71	0.28	0.26	0.13	62
Sint Maarten	1.2	1.20	1.20	0.00	0.77	0.77	0.77	0.00	1
Saint Martin	1.2	1.20	1.20	0.00	0.72	0.72	0.72	0.00	3
Grenada	1.1	0.78	0.74	0.15	0.52	0.32	0.32	0.13	11
Saba and Saint Eustatius	1.0	1.00	1.00	0.00	0.37	0.28	0.28	0.09	2
Montserrat	0.98	0.96	0.95	0.01	0.41	0.29	0.27	0.07	4
Caribbean Coast of Cuba	0.93	0.20	0.15	0.14	0.44	0.06	0.04	0.05	262
Saint Kitts and Nevis	0.85	0.83	0.85	0.03	1.2	0.45	0.35	0.27	11
Central Coast of Venezuela	0.78	0.44	0.38	0.11	0.63	0.26	0.25	0.11	120
Gulf of Gonave Coast of Haiti	0.71	0.54	0.52	0.07	0.38	0.17	0.16	0.06	73
Aruba	0.61	0.60	0.60	0.01	0.29	0.24	0.23	0.04	4
Western Coast of Venezuela	0.55	0.49	0.50	0.05	0.50	0.24	0.24	0.09	55
Curacao	0.54	0.54	0.54	0.00	0.26	0.26	0.26	0.00	1
Caribbean Coast of Colombia	0.49	0.27	0.25	0.06	0.24	0.11	0.11	0.05	139
Bonaire	0.49	0.49	0.49	0.00	0.21	0.21	0.21	0.00	1
Jamaica	0.48	0.32	0.33	0.09	0.23	0.11	0.11	0.04	70
Caribbean Coast of Haiti	0.48	0.36	0.36	0.05	0.31	0.13	0.11	0.06	43
Caribbean Coast of Panama	0.31	0.23	0.23	0.03	0.14	0.08	0.09	0.03	94
Gulf of Mexico Coast of Cuba	0.27	0.13	0.11	0.05	0.20	0.06	0.04	0.04	63
Caribbean Coast of Costa Rica	0.27	0.24	0.24	0.03	0.14	0.08	0.07	0.03	23
Caribbean Coast of Nicaragua	0.26	0.23	0.22	0.02	0.06	0.05	0.05	0.01	26
San Andres and Providencia	0.23	0.22	0.22	0.01	0.10	0.07	0.07	0.03	4
Cayman Islands	0.12	0.11	0.11	0.00	0.07	0.05	0.05	0.02	2
Caribbean Coast of Honduras	0.10	0.08	0.08	0.01	0.06	0.03	0.03	0.01	65
Quintana Roo Mexico	0.09	0.08	0.08	0.01	0.09	0.03	0.03	0.01	87
Belize	0.09	0.08	0.08	0.01	0.03	0.02	0.02	0.00	57
Caribbean Coast of Guatemala	0.07	0.07	0.07	0.00	0.04	0.02	0.01	0.01	11
Tamaulipas Mexico	0.02	0.02	0.02	0.00	0.01	0.00	0.00	0.00	32
Veracruz Mexico	0.02	0.02	0.02	0.00	0.01	0.00	0.00	0.00	81

ZCZC
WECA41 PHEB 210900
TSUCAX

WMO ID

AWIPS ID

TEST...TSUNAMI MESSAGE NUMBER 22...TEST
NWS PACIFIC TSUNAMI WARNING CENTER HONOLULU HI
0900 UTC FRI MAR 21 2025

...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 8.6
* ORIGIN TIME 1500 UTC MAR 20 2025
* 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 8.6 OCCURRED NEAR THE AZORES-CAPE SAINT VINCENT RIDGE AT 1500 UTC ON THURSDAY MARCH 20 2025.

* 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. TSUNAMI AMPLITUDES ARE MEASURED WITH RESPECT TO THE NORMAL TIDE LEVEL.

GAUGE LOCATION	GAUGE COORDINATES		TIME OF MEASURE (UTC)	MAXIMUM TSUNAMI		WAVE PERIOD (MIN)
	LAT	LOH		HEIGHT		
ANTARCTICA BASE PRA	62.5S	59.7W	0726	0.07M/	0.2FT	28
KING EDWARD POINT U	54.3S	36.5W	0529	0.19M/	0.6FT	22
TUXPAN MX	21.0N	97.3W	0429	0.02M/	0.1FT	16
PUERTO EL BLUFF NI	12.0N	83.7W	0330	0.26M/	0.9FT	20
PILOTS STATION LA	28.9N	89.4W	0323	0.03M/	0.1FT	26
CORN ISLAND NI	12.3N	83.1W	0244	0.23M/	0.7FT	22
KEY WEST FL	24.6N	81.8W	0223	0.17M/	0.6FT	14
BOCAS DEL TORO PA	9.4N	82.3W	0203	0.22M/	0.7FT	24
VACA KEY FL	24.7N	81.1W	0202	0.20M/	0.6FT	28
LIMON CR	10.0N	83.0W	0145	0.27M/	0.9FT	14
CARRIE BOW CAY BZ	16.8N	88.1W	0144	0.06M/	0.2FT	16
PUERTO CORTES HN	15.8N	88.0W	0141	0.06M/	0.2FT	18
PUERTO MORELOS MX	20.9N	86.9W	0135	0.08M/	0.3FT	24
SAPZURRO CO	8.7N	77.4W	0132	0.22M/	0.7FT	18
ISLA FUERTE CO	9.4N	76.2W	0121	0.21M/	0.7FT	22
EL PORVENIR PA	9.6N	78.9W	0118	0.23M/	0.8FT	28
SAN ANDRES CO	12.6N	81.7W	0123	0.23M/	0.8FT	20
COVENAS CO	9.4N	76.2W	0119	0.21M/	0.7FT	14
ISLA NAVAL CO	10.2N	75.8W	0051	0.24M/	0.8FT	18
PORT ROYAL JM	17.9N	76.8W	0052	0.48M/	1.6FT	18
CARTEGENA CO	10.4N	75.5W	0046	0.22M/	0.7FT	26
PORT AU PRINCE HT	18.5N	72.4W	0043	0.34M/	1.1FT	26
CAYMAN BRAC KY	19.7N	79.8W	0045	0.10M/	0.3FT	18
GUN BAY KY	19.3N	81.1W	0044	0.09M/	0.3FT	20
GEORGE TOWN KY	19.3N	81.4W	0035	0.09M/	0.3FT	20
BALLENAS CO	11.7N	72.7W	0040	0.32M/	1.1FT	24
SANTA MARTA CO	11.2N	74.2W	0031	0.26M/	0.9FT	22
SANTA MARTA CO	11.2N	74.2W	0027	0.26M/	0.9FT	26
SALVADOR BR	13.0S	38.5W	0026	0.40M/	1.3FT	28
OREGON INLET NC	35.8N	75.5W	0027	1.20M/	3.9FT	24

Compressed Timeline - Portugal

- For the Portugal scenario, a distant source, it will take approximately 18 hours for all the messages to be delivered in real time.
- The PTWC will deliver the messages as indicated in the handbook, and TWFPs and NTWCs should note the reception time for the messages.
- However, member states and territories have the option to develop their own shorter timelines. For example, they may choose to:
 - Use the simulated messages from the handbook in advance, without waiting for the PTWC dissemination.
 - “Skip” a few messages instead of using the 22 total messages.
 - Trigger warning systems and alarms earlier in the schedule.
 - Conduct evacuations sooner than if it were a real event.
- It is important to educate the public (via workshops and media channels) before the exercise and explain that, during a real event, evacuation would take place much later.

Central American Tsunami Advisory Center CATAC



Participation at CW 2025 – tsunami products for the Central American countries

1. Text messages in Spanish

- Similar Format as PTWC
- Use of local times:
1) Central America; 2) Panama

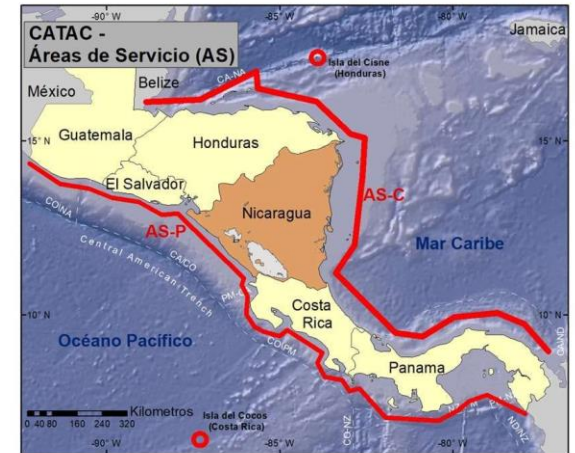
2. Text messages in English

- PTWC format
- Use of UT

3. Graphic products (SeisComP TOAST)

- Prediction of amplitudes at Sea Gauges
- Amplitudes at coastal zones

4. Tsunami propagation movie (MPG3)



CATAC – Areas of responsibility



CATAC – Areas of monitoring

Message Chronology issued by the CATAC Jamaica

Date	Time (UTC)	CATAC	
		Type of Product	Transmission Method
3/20/25	1500	---- Earthquake Occurs ----	
3/20/25	1500	Dummy Message	Email
3/20/25	1503	Initial Tsunami Threat Message #1	Email
3/20/25	1509	Tsunami Threat Message # 2	Email
3/20/25	1530	Tsunami Threat Message #3	Email
3/20/25	1600	Tsunami Threat Message #4	Email
3/20/25	1700	Final Tsunami Threat Message #5	Email

CATAC - Dummy Message

Spanish

Mensaje Dummy:

¡Este es sólo un mensaje de prueba enviado por CATAC en apoyo al
Ejercicio CaribeWave 25!

Centro de Asesoramiento de Tsunami para América Centra (CATAC)

XXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX ESTE ES UN EJERCICIO
XXXXXXXXXXXX

Aviso: Este es un mensaje de inicio del ejercicio Caribe Wave 2025
para los países de América Central, como apoyo a la Comisión
Oceanográfica Intergubernamental (COI), de la UNESCO y al
ICG/CARIBE-EWS

Emisión: 2025-03-20 09:00 Hora de Centroamérica
2025-03-20 10:00 Hora de Panamá
2025-03-20 15:00 Hora (UTC)

Este mensaje se está utilizando para iniciar el ejercicio de tsunami
Caribe Wave 2025, con origen en la Región de Jamaica.

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

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

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

XXXXXXXX ESTE ES UN EJERCICIO XXXXXXXXXXXX ESTE ES UN EJERCICIO
XXXXXXXXXXXX

CATAC - Dummy Message

English

Dummy Message:

;This is just a test message sent by CATAC in support of Exercise CaribeWave 25!

Central America Tsunami Advisory Center (CATAC)

XXXXXXX THIS IS AN EXERCISE XXXXXXXXXXXX THIS IS AN EXERCISE
XXXXXXXXXXXXXXXXXXXX

Notice: This is a kick-off message for exercise Caribe Wave 2025 for Central American countries, such as for Central American countries in support of the Intergovernmental Oceanographic Commission (IOC), of UNESCO and the ICG/CARIBE-EWS.

Issued: 2025-03-20 09:00 Central American Time:
2025-03-20 10:00 Panama Time
2025-03-20 15:00 Time (UTC)

This message is being used to initiate the Caribe Wave 2025 tsunami exercise, originating off the northern coast of Colombia.

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

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

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

CATAC - Graphical Products

Produced with SeisComp-Toast

2025-03-20 15:00:00

124d and 14h in future

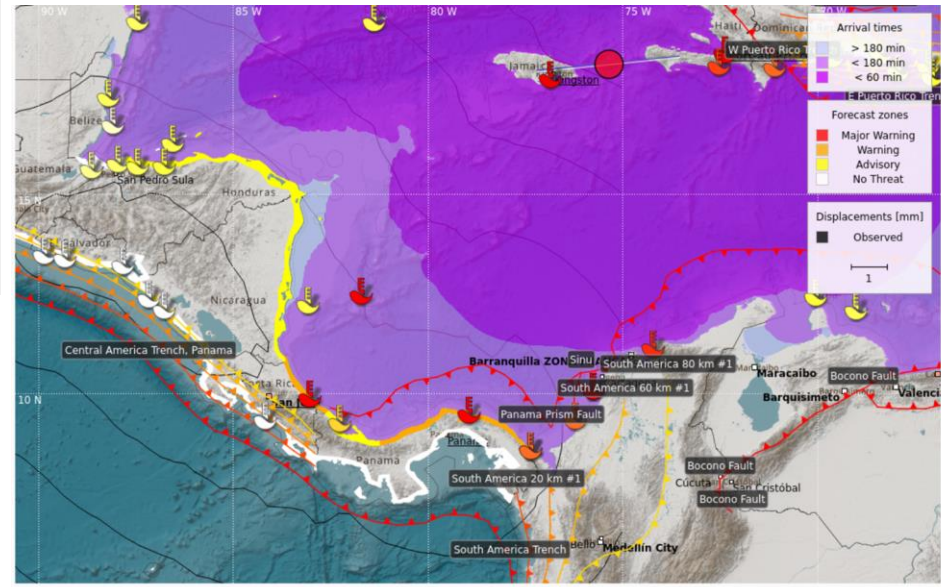
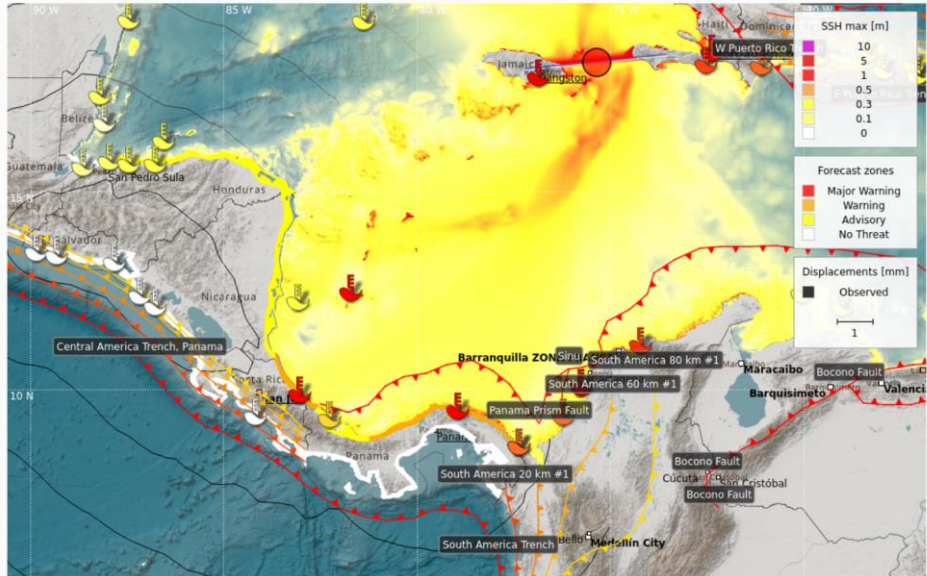
Jamaica Region

M 8.0 D 25 km

toast2024wpgssw



Map Traces Arrivals Displacements Forecast Zones Impact Reports primer mensaje Video tercer mensaje catac mensaje 2 mensaje ingles



Graphical Products:

1. Deep water forecast with sea level
2. Coastal forecasts with sea level

CATAC - Message 5 - Final

Spanish

Mensaje CATAC #5:

;Este es sólo un mensaje de prueba enviado por CATAC en apoyo al
Ejercicio CaribeWave 25!

.....
.....

Centro de Asesoramiento de Tsunami para América Central - CATAC

XXXXXXXXX ESTE ES SOLO UN EJERCICIO
XX

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

Boletín sobre tsunami N° 05

Emisión: 2025-03-20 11:00 Hora de Centroamérica
2025-03-20 12:00 Hora de Panamá
2025-03-20 17:00 Hora UTC

Una advertencia de tsunami está en efecto para las zonas costeras de
los países de América Central

Un terremoto ha ocurrido con los siguientes estos parámetros:

Magnitud : 8.0
Fecha : 20/03/2025
Hora : 09:00 Hora de Centroamérica,
10:00 Hora de Panamá, 15:00 Hora UTC
Latitud : 18.20 N
Longitud : 75.37 O
Profundidad : 25 Km
Ubicación : Región de Jamaica

Mediciones en estaciones del nivel del mar:

Estimados de Tiempos de Arribo (ETA) en hora local y Altura Máxima (AM)
de olas del tsunami

Código	Coordenadas (°)	País	ETA (hora local)	AM(m)
VZ..ELPO	09.56°N 78.95°O	Panamá	2025-03-20 09:21	1.50
VZ..BDTO	09.35°N 82.26°O	Panamá	2025-03-20 09:56	1.30
VZ..LIMON	09.99°N 83.02°O	Costa Rica	2025-03-20 10:21	0.80

Evaluación:

Según nuestras simulaciones, el tsunami afectará únicamente las costas
de Panamá y Costa Rica en el Mar Caribe.
las autoridades nacionales de los diferentes países deben tomar las
decisiones adecuadas, de acuerdo a sus planes de respuesta.

Mensajes del PTWC:

Los países podrán recibir adicionalmente, mensajes del Centro de Alerta
de Tsunami para el Pacífico (PTWC).

En caso de diferencias entre los resultados de CATAC y del PTWC,
recomendamos preferir de manera conservativa, las estimaciones que
corresponden a un mayor peligro.

Información adicional:

Información detallada del sismo y tsunami se encuentra en el sitio web
<http://catac.ineter.gob.ni/>

.....
.....

XXXXXXXXX ESTE ES SOLO UN EJERCICIO
XX

XXXXXXXXX Este es el último mensaje, en el marco del ejercicio CaribeWave
24, emitido por CATAC XXXXXXXXXX

CATAC - Message 5 - Final English

CATAC Message #5:

;This is just a test message sent by CATAC in support of Exercise
CaribeWave 25!

Central America Tsunami Advisory Center - CATAC

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

Tsunami Bulletin N° 05

Issued : 2025-03-20 11:00 Central American Time
2025-03-20 12:00 Panama Time
2025-03-20 17:00 UTC Time

An earthquake has occurred with the following parameters:

Magnitude : 8.0
Date : 20/03/2025
Time : 09:00 Central American Time,
10:00 Panama Time, 15:00 UTC Time
Latitude : 18.20 N
Longitude : 75.37 W
Depth : 25 Km
Location : Jamaica Region

Evaluation: A tsunami was generated which affects the Caribbean coasts
of Panama and Costa Rica.
Observed Time of Arrival (ETA) in local time and Maximum Height (AM) of
tsunami waves observed.

Code	Coordinates	Country	ETA (Local Time)	AM(m)
VZ..ELPO	09.56°N 78.95°O	Panamá	2025-03-20 09:21	1.50
VZ..BDTO	09.35°N 82.26°O	Panamá	2025-03-20 09:56	1.30
VZ..LIMON	09.99°N 83.02°O	Costa Rica	2025-03-20 10:21	0.80
VZ..COIS	12.33°N 83.02°O	Nicaragua	2025-03-20 10:45	0.15

Assessment:

According to our simulations, higher amplitudes could occur in the next
few hours.
the national authorities of the different countries should make the
appropriate decisions, according to their response plans.

PTWC messages:

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

Additional information:

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

XXXXXXXX THIS IS ONLY AN EXERCISE
XX

XXXXXXXX This is the last message, in the frame of the exercise
CaribeWave 25, sent by CATAC XXXXXXXXXXXXXXXXXXXX

GEONETCast-Americas

**Would you like training
on GNC-A?**

Member State Participation The *TsunamiZone* Registration

Home | TsunamiZone Regions | Other Languages | Contact Us | Search | Login

The *TsunamiZone*

Register Here | Know Your Zone | Who is Participating? | How to Participate? | Resources | News & Events | Partners & Sponsors

REGISTER YOUR 2025 TSUNAMI PREPAREDNESS ACTIVITIES

[ESPAÑOL](#) | [FRANÇAIS](#)

Register for the First Time

Renew or Update Registration

Other Situations
(Change contact, multiple locations, etc.)

Issues with registration? Please e-mail info@tsunamizone.org.

Benefits of Registration:

- Be **counted** as a participant on the TsunamiZone website!
- Be **listed** with other participants in your area (Optional)
- Be an **example** that motivates others to participate & prepare
- Be **updated** with TsunamiZone news and preparedness tips
- Have **peace of mind** that you, your family, your co-workers and millions of others will be **better prepared to survive and recover quickly** when a tsunami occurs.

Event Organizers: [Submit your event details](#) to the [TsunamiZone calendar](#).

Home | Register | Login | Know | Who? | How? | Resources | News & Events | Share Your Activities | Partners & Sponsors | Contact Us | Privacy | Plugins

*** Note: This is to register your participation. It is different from the scenario selection ***

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.

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

The screenshot shows the TsunamiZone website interface. The top navigation bar includes links for Home, TsunamiZone Regions, Other Languages, Contact Us, Search, and Login. Below this is a banner image of a person walking on a beach. The main navigation bar includes 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 displays the title '2025 CARIBBEAN PARTICIPATION TOTALS' and a sub-header '487 participants were registered in the 2025 TsunamiZone (as of 12/18/2024 3:25 AM PST)'. Below this is a table with four columns: Category, Participants, Participation totals for each area, and Total.

Category	Participants	Participation totals for each area	Total
Individuals/Families	0	Antigua and Barbuda	0
Childcare and Pre-Schools	0	Aruba	0
K-12 Schools and Districts	0	Bahamas	0
Colleges and Universities	0	Barbados	100
Local Government	0	Belize	0
State Government	0	Brazil	0
Federal/National Government (Including Military)	100	Colombia	0
Tribes/Indigenous Peoples	0	Costa Rica	0
Businesses	0	Cuba	0
Hotels and Other Lodgings	0	Curacao	0
Healthcare	0	Dominica	0
Senior Facilities/Communities	0	Dominican Republic	362
Disability/AFN Organizations	0	France	0
Non-Profit Organizations	0	Guadeloupe	0
Neighborhood Groups	0	Guyane	0
Preparedness Organizations	0	Martinique	0
Faith-based Organizations	0	Saint Barthelemy	0
Museums, Libraries, Parks, etc.	0	Saint Martin	0
Volunteer/Service Clubs	0	Other France	0
Youth Organizations	0		
Animal Shelter/Service Providers	0		
Agriculture/Livestock Sector	0		
Volunteer Radio Groups	25		
Science/Engineering Organizations	0		
Media Organizations	0		
Other	362		

*** Please note that the official numbers of participation come from the evaluation surveys submitted by member states, and if not provided by the country, the numbers from TsunamiZone are used. ***

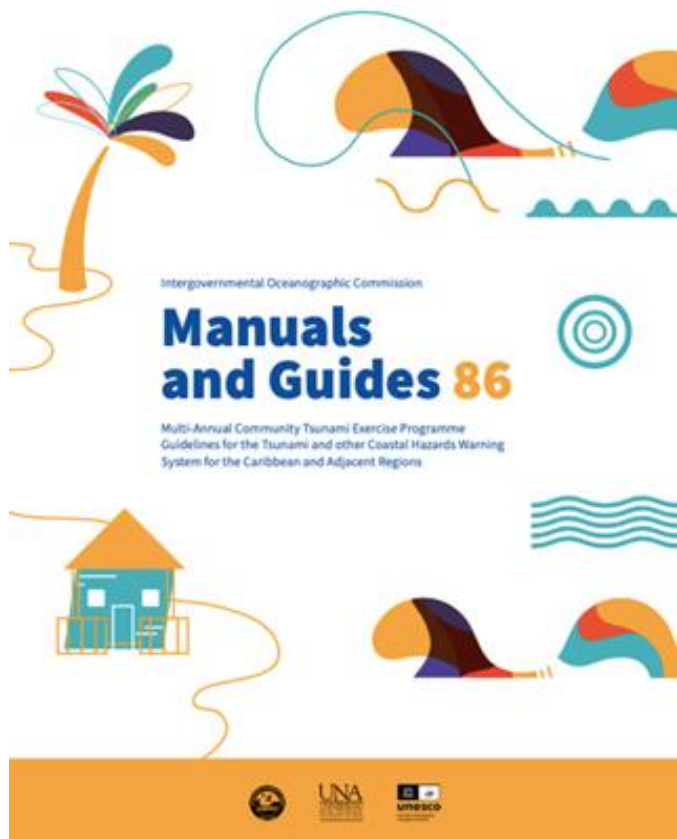
<https://www.tsunamizone.org/>

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

Resources available at caribewave.org

- Manual and Guides 86: Multi-Annual Community Tsunami Exercise Programme Guidelines for the Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions.
- PTWC Enhanced Products and Staging for the Caribbean and Pacific, English
- IOC Manuals “How to plan, conduct and evaluate tsunami exercises” and “Module on Tsunami Exercise” are useful resources.
- CARIBE WAVE 2011 - 2025 Handbook
- CARIBE WAVE 2011 - 2024 Final Reports
- PTWC Communications Plan and Users Guide for the Caribbean

Manual and Guides 86: Multi-Annual Community Tsunami Exercise Programme Guidelines for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions



- 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.
- Posted on https://unesdoc.unesco.org/ark:/48223/pf000038054_0.locale=en

Additional Info

- Additional materials will be added to ITIC-CAR (caribewave.org).
- Send links of other national pages to christa.vonh@noaa.gov to include on ITIC-CAR.
- This presentation is available on ITIC-CAR website.
- The use of the #CARIBEWAVE and #TSUNAMIREADY hashtags are encouraged to be used before and during the exercise.

#CARIBEWAVE

#TSUNAMIREADY

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Timeline

ACTION	DUE DATE
Handbook Draft Circulated among ICG CARIBE-EWS CARIBE WAVE 25 Task Team	November 2024
Deadline for Comments	November 2024
Circular Letter Issued by IOC to MS	December 2024
Exercise Handbook Available Online	December 2024
First Webinar CW	21 January 2025 – English 22 January 2025 – Spanish 23 January 2025 – French
Second Webinar CW	25 February 2025 – English 26 February 2025 – Spanish 27 February 2025 – French
Countries Indicate Selected Scenario	6 March 2025
Exercise	20 March 2025
Hot-Wash	1 April 2025
Exercise Evaluation Due	4 April 2025
Draft CARIBE WAVE 25 Report	22 April 2025

Next Webinar

- The second webinar in English will be held on **25 February 2025**
- The following will be emphasized:
 - Exercise Updates
 - Communication Methods
 - Registration
 - Post Exercise Questionnaire
 - Media (Uploading Pictures/Videos)
- Link for webinar, <https://unesco-org.zoom.us/j/89877610188?pwd=CZkhTRI8Nk10cXYa20ggaQi7sa7lmQ.1>

Questions, Comments

Thank you for participating!

christa.vonh@noaa.gov