



2nd Webinar

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February 25, 2025

Rules of Engagement

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

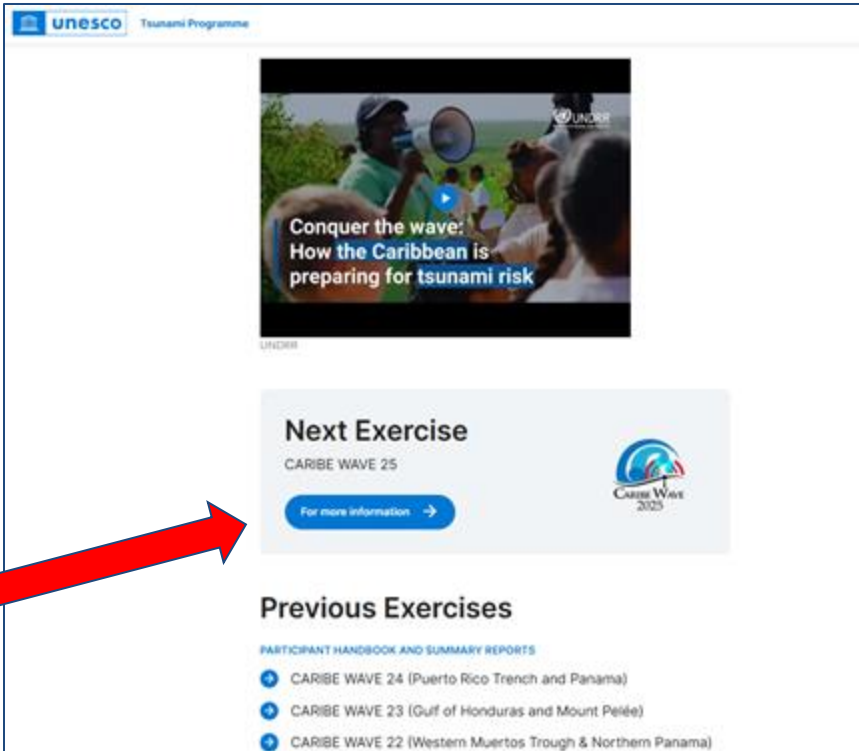
Objectives

In this webinar, the importance of the following will be emphasized:

- Exercise Updates
- Communication Methods
- Registration
- Post-exercise questionnaire
- Media (Uploading Pictures/Videos)

NOTE: The first webinar gave an overview of the simulated PTWC and CATAC products, this will not be covered. For this presentation please go to <https://oceanexpert.org/event/4657#documents> (link also available on caribewave.org).

CARIBE WAVE website (New): caribewave.org



unesco Tsunami Programme

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

UNDRR

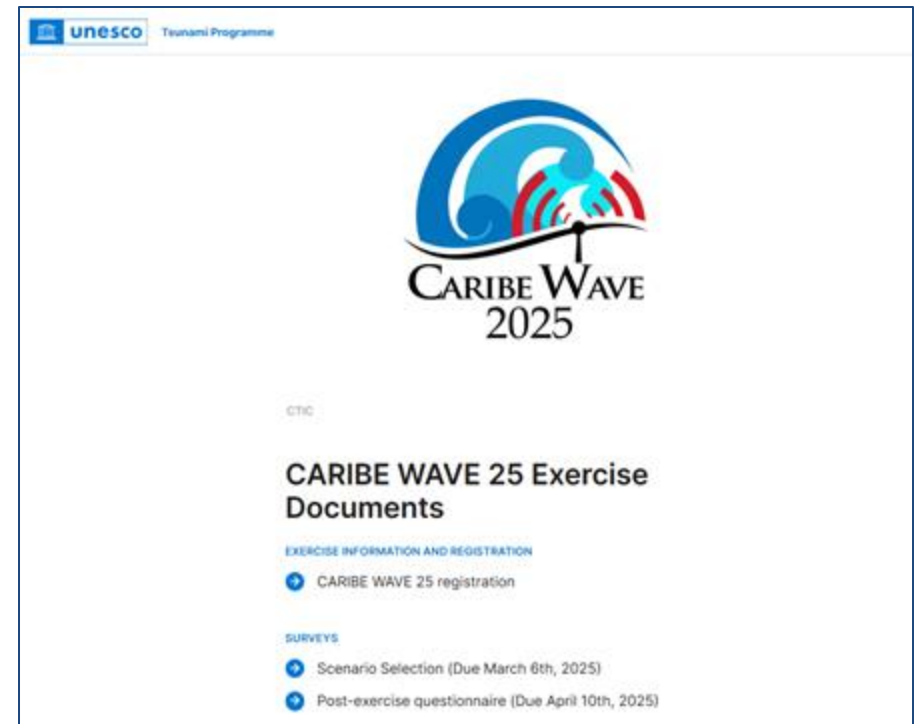
Next Exercise
CARIBE WAVE 25

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

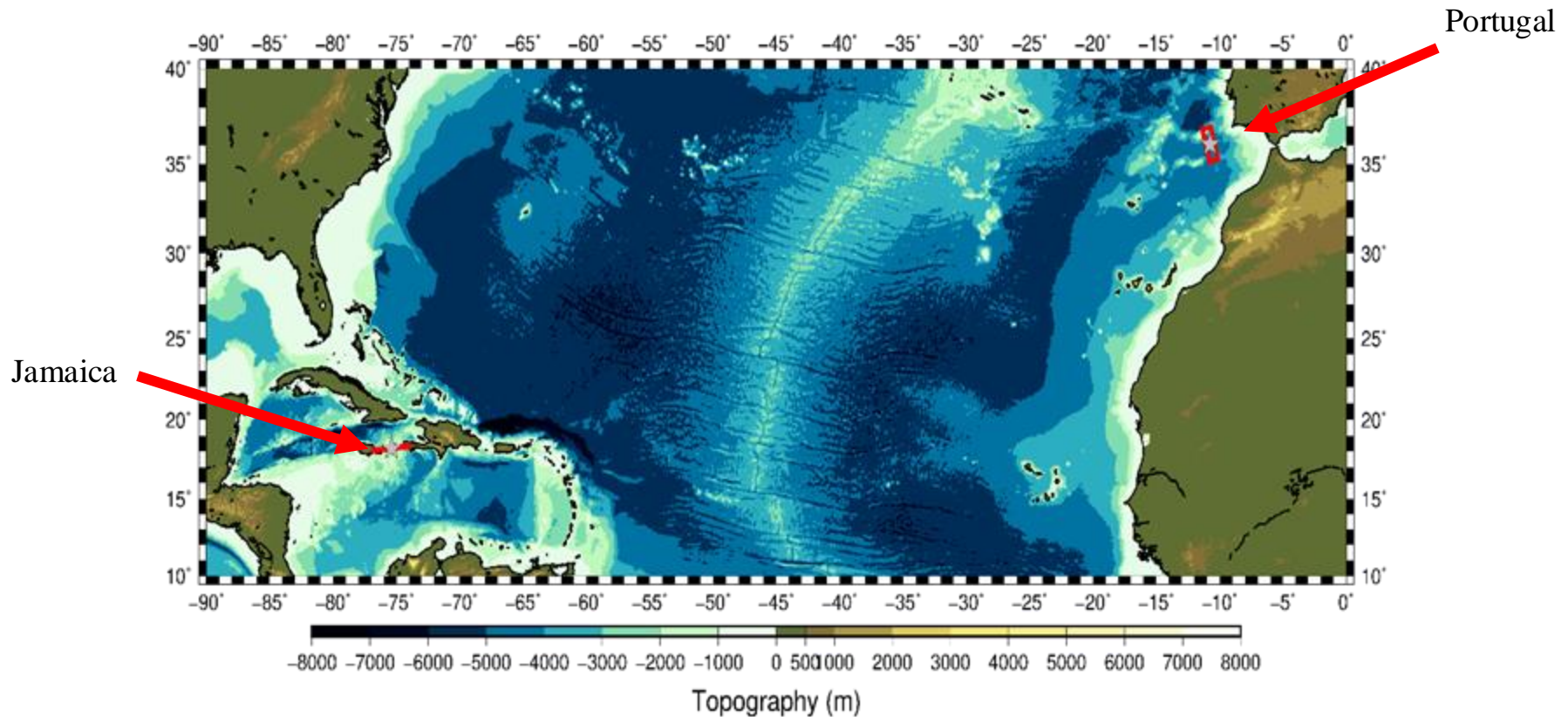
SURVEYS

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

- Reports
- General Guidelines
- Handbook

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

CARIBE WAVE 25 Scenarios by Member State/Territory

As of:

Jamaica	Portugal*
Aruba	France (Guadeloupe, Guyane, Martinique, Saint Martin, St. Barthelemy)
Barbados	Guyana
Belize	Netherlands - Bonaire, Saba, Sint Eustatius
Brazil	UK - Bermuda
Colombia	US - US Virgin Islands
Costa Rica	
Cuba	
Guatemala	
Haiti	
Honduras	
Jamaica	
Mexico	
Netherlands - Curacao	
Nicaragua	
Panama	
St. Vincent and the Grenadines	
UK - Anguilla, Cayman Islands	
Venezuela	

DEADLINE TO SELECT A SCENARIO: Thursday, 6 March 2025

Dissemination of CARIBE WAVE 25 Products
by PTWC and CATAC

PTWC Dummy Message for CARIBE WAVE 25:

On **March 20, 2025 at 1500 UTC**, the initial dummy message will be issued and disseminated over all its standard broadcast channels for the two scenarios.

Center	WMO ID	AWIPS ID	NWWS	GTS/WIS/WMO	GEONET CAST AMERICAS	HRIT/ EMWIN*	AISR	Fax**	Email
PTWC	WECA41 PHEB	TSUCAX	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Virtual Channel ID (VCID): “20” – EMWIN Priority [1 and 2 bulletins]

**This service will end on March 31, 2025 unless the country has specifically requested it to continue

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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Simulated Tsunami Messages

As of **1507 UTC**, PTWC will send via email only the simulated products to the designated CARIBE-EWS, TWFP and NTWC for one of the scenarios.

- By **6 March 2025**, each Member State must complete the following survey https://www.surveymonkey.com/r/CW25_ScenarioSelection to select the scenario their country will use for the exercise.
- Each country and 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 ITIC-CAR, the organizers will decide for which scenario the PTWC will send the products.

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 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

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	Tsunami Information Statement #1	Email
3/20/25	1515	Tsunami Information Statemen #2	Email
3/20/25	1525	Tsunami Threat Message # 1, Forecast & Graphical Products	Email
3/20/25	1600	Tsunami Threat Message #2	Email
3/20/25	1630	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	Tsunami Threat Message #8	Email
3/20/25	2200	Tsunami Threat Message #9	Email
3/20/25	2300	Tsunami Threat Message #10	Email
3/21/25	0000	Tsunami Threat Message #11	Email
3/21/25	0100	Tsunami Threat Message #12	Email
3/21/25	0200	Tsunami Threat Message #13	Email
3/21/25	0300	Tsunami Threat Message #14	Email
3/21/25	0400	Tsunami Threat Message #15	Email
3/21/25	0500	Tsunami Threat Message #16	Email
3/21/25	0600	Tsunami Threat Message #17	Email
3/21/25	0700	Tsunami Threat Message #18	Email
3/21/25	0800	Tsunami Threat Message #19	Email
3/21/25	0900	Final Tsunami Threat Message #20	Email

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

ICG/CARIBE-EWS Database

- There is a list with the designation and contact information of each country's TNC, TWFP, and NTWC
- It is managed by Dr. Ocal Necmioglu, Technical Secretary CARIBE EWS, and it is shared with the Tsunami Service Providers so that they know who to contact during an event or exercise.
- It is important to maintain this information up to date.
- To receive information on file for your country or to inform the Technical Secretary regarding any updates needed for the TNC/TWFP/NTWC contacts, please email o.necmioglu@unesco.org, keeping CTIC, ITIC-CAR and the representative of the TSP in cc.



ICG/CARIBE-EWS Database Example

NAME OF THE STATE					MEMBERSHIP STATUS
MEMBER OF		MESSAGE RECIPIENT OF			
ICG/PTWS	ICG/CARIBE EWS	CATAC	NWPTAC	PTWC	SCSTAC
MEMBER	NO	NO	NO	YES	NO

As of 17 DECEMBER 2024

VTOC (*): Validated through official channels. VDATE (**): Validation date.

TSP MESSAGE BY EMAIL	TSP MESSAGE BY FAX
TSP MESSAGE BY TEL	TSP MESSAGE BY GTS
TSP MESSAGE BY MOB	TSP MESSAGE BY OTHER

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
TNC			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
TNC-AL			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
TWFP			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

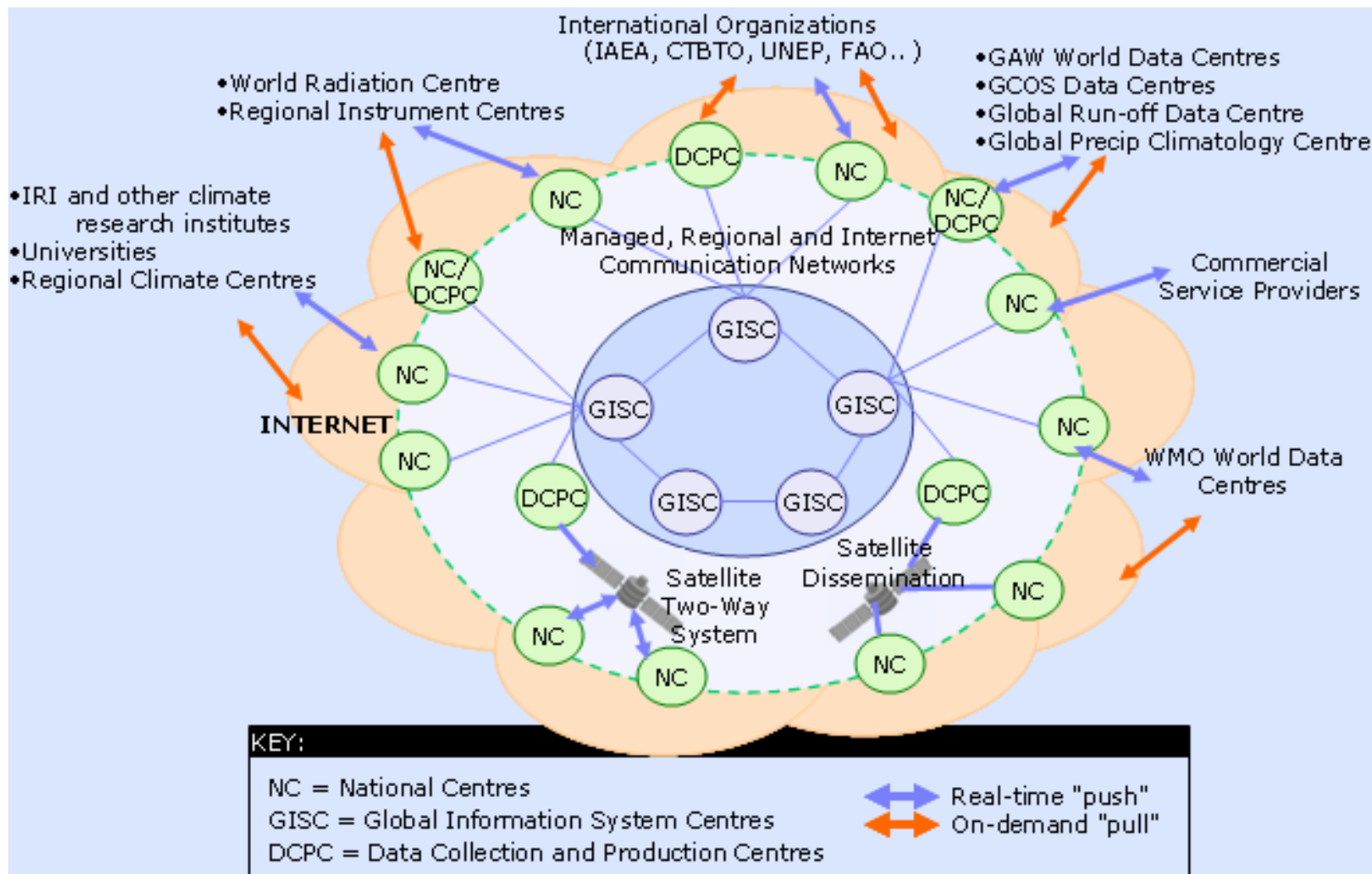
TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
TWFP-AL			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
NTWC			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
NTWC-AL			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

TYPE	VTOC (*)	VDATE (**)	NAME	EMAIL-REGULAR
TS-AD			SURNAME	TEL-REGULAR
			SALUTATION	MOB-REGULAR
			OCEAN EXPERT PL	FAX-REGULAR
				DEPARTMENT
POSITION				ADDRESS
INSTITUTE				

WMO Information System (WIS)



WMO WIS / GTS reception

- If you have direct access to GTS
 - You will receive a message with GTS header WECA41 PHEB through your GTS link.
- If you **don't** have direct access to GTS
 - You can subscribe to the reception of Tsunami Warnings through a WMO Global Information System Center (GISC).
 - You will receive a message with GTS header WECA41 PHEB on your registered FTP, SFTP server or via email.

WMO WIS / GTS reception

- If you **don't** have direct access to GTS
 - Register on <https://gisc.dwd.de>
 - When registering pick your Organization or use Public
 - After Login go to Subscriptions -> Internet subscriptions
 - Click Edit Destinations and click +
 - Enter details for delivery (ftp or sftp server, or email)
 - Click Edit Subscriptions and click +
 - Choose Tsunami_warnings from the default product package drop down
 - **Do NOT tick Copy products**
 - Click Create subscription and Save
- Now you are set to receive Tsunami Warnings from WIS

Having problems? Write to wis@wmo.int with subject: help Tsunami Warning

WMO Information System (WIS 2.0)

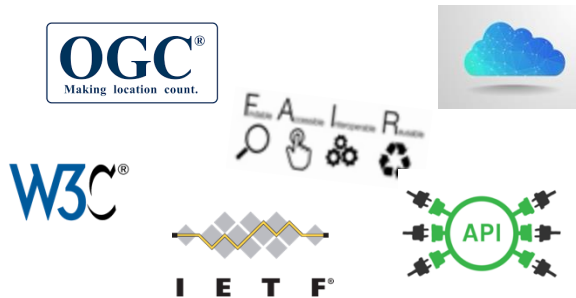
1963 World Weather Watch

1970s Global Telecommunication System

2007 WMO Information System (WIS)

2019 WMO Reform (Earth System Approach)

2021 WMO Unified Data Policy / GBON



WIS 2.0

... system of systems using Web-architecture and open standards to provide simple, timely and seamless sharing of trusted data and information ...

- **Open Standards (OGC, W3C, IETF, ...)**
- **Open Source (use off the shelf tools)**
- Data sharing through Web and publication/subscription (pub/sub) protocols
- Cloud ready (turn-key solutions)
- Web APIs (Application Programming Interface)

NOAA Satellite Broadcast Overview

GEONETCast Americas (GNC-A)

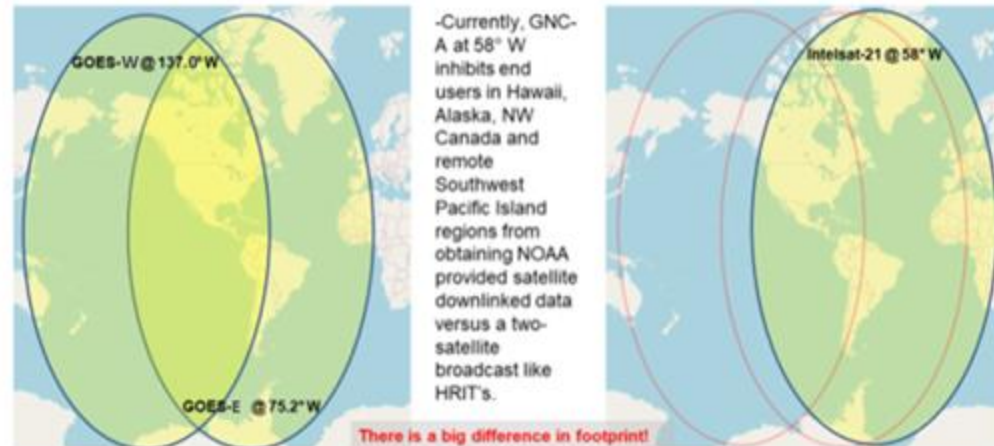
- GNC-A is a NOAA-funded commercial satellite broadcast to cover the Americas.
- We are part of a global network of satellite broadcasts to distribute data to remote communities
- Data is provided for transmission from multiple countries/organizations.
- GNC-A transmits satellite images and other weather products.
- Tsunami and other weather warning products take priority and are broadcast first.
- The system does not rely on the Internet or commercial power.

High Rate Information Transmission/Emergency Managers Weather Information Network (HRIT/EMWIN)

- HRIT/EMWIN is a NOAA-provided broadcast available from either GOES-R series East/West satellites. Both satellite broadcasts are limited in bandwidth, thus image products are lower cadence or in lower resolution compared to GNC-A.

	High Rate Information Transmission/Emergency Managers Weather Information Network	GEONETCast Americas
Satellite	GOES @75.2° and 137.0° W	Intelsat 21 @ 58° W
Center Downlink Frequency	1694.1 MHz (L band)	4080.0 MHz (C band)
Data Rate	400 Kbps	20 Mbps
Modulation	BPSK	QPSK
Polarization	Vertical	Vertical
Data Format	CCSDS/CGMS LRIT	DVB-S2

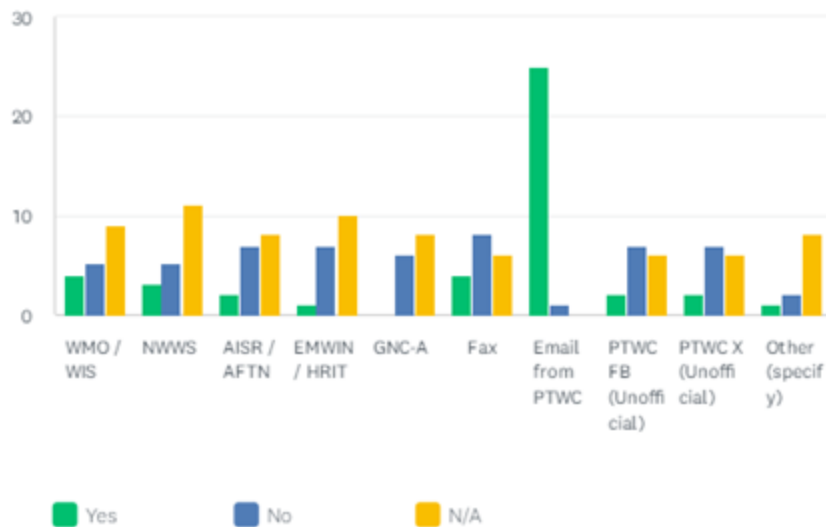
HRIT East & West versus GNC-A Footprint



Results of Communication Portion of CARIBE WAVE 24

Q5 The PTWC issued the CARIBE WAVE 24 Dummy Message by several methods. Please check all methods through which the message was received by the TWFP/NTWC.

Answered: 26 Skipped: 0



**GNC-A
Training:
Friday,
March 7th**

Note the lack of TWFP/NTWCs using GNC-A – it is important to verify with the Met Services that they are using these systems for the receipt of tsunami messages.

GNC-A Known User Receivers

in red are CARIBE EWS NTWC/TWFP

Antigua and Barbuda

Barbados CIMH

Belize NMS-Belize

Costa Rica AEROPUERTO-JSM

Costa Rica IMN Costa Rica

Costa Rica AEROPUERTO-
LIBERIA

Cuba INSMET

Dominica

El Salvador MARN-Aeropuerto
Llopango

El Salvador MARN-Puerto
Acajutla

El Salvador MARN-Puert
Corsain

El Salvador MARN-Universidad
de El Salvador

El Salvador MARN-Las Mercedes

Grenada

USA - GNC-A Broadcast Manager

Guatemala INSIVUMEH

Honduras COPECO

Haiti UHM

Panama SERVIR-CATHALAC

Dominican Republic ONAMET

Mexico CONAGUA-SMN

Mexico CONAGUA-Ciudad de

Mexico CONAGUA-Chiapas

Mexico CONAGUA-Yucatán

Mexico CONAGUA-Veracruz

Mexico UNAM-ICML

Mexico CENAPRED

Mexico UABC

Mexico INEGI

Mexico AEM-CICESE

Mexico UNAM

Puerto Rico PRSN

Saint Kitts and Nevis

Saint Vincent and the Grenadines



Where to Find Tsunami Warning on GNC-A

—In addition to the RF antenna equipment, GNC-A users must have FAZZT Kencast client software in order ingest the broadcast

—Requires a one-time licensing fee

—Within the GNC-A broadcast, there are twelve International Services Communication Systems (ISCS) folders/channels for various product transmissions.

—Users will find all tsunami warnings, watches and advisories (WWA) within the folder labeled: **“ISCS-WARN”**

—ISCS-WARN has the highest broadcast priority

—All Tsunami WWA’s will arrive as text (TXT) files

—GNC-A users must activate this channel to receive warnings within FAZZT configuration settings.

Name

- EUMETSAT
- GOES-R-RGB-Composites
- ISCS-GRIB2
- ISCS-SURFACE
- ISCS-UA
- ISCS-FCAST
- INPE
- **ISCS-WARN**
- ISCS-BUFR
- ISCS-RADAR
- GOES-R-GLM-Products
- USEPA
- ISCS-PIC
- ISCS-ADMIN
- RANET
- NOAA-NESDIS
- ISCS-SAT
- ISCS-ANLZ-CLIMATE
- IMN-CostaRica
- CONAE
- ISCS-GRIB1
- MARN-El Salvador
- NADM
- CIMSS

- T_WSLG31BGSF091718_C_KWBC_20210209172112_24248564-4908
- T_SECA42DSJ091716RRA_C_KWBC_20210209171711_24248564-4907-TMASJU
- T_WEXX20PAAQ091714_C_KWBC_20210209171518_15991038-5544
- T_WEXX20PAAQ091714_C_KWBC_20210209171518_15991038-5545-TSUAT1
- T_WEXX30PAAQ091714_C_KWBC_20210209171518_15991038-5546-TSUATE
- T_WEXX20PAAQ091714_C_KWBC_20210209171511_24248564-4905-TSUAT1
- T_WSMC31GMMC091713_C_KWBC_20210209171511_24248564-4906
- T_WWFJ40NFFN091700_C_KWBC_20210209171218_15991038-5543
- T_WWFJ40NFFN091700_C_KWBC_20210209171211_24248564-4904

U.S. Atlantic, Gulf of Mexico, Canada	Example: WEXX20 PAAQ Example: WEXX20 PAAQ Example: WEXX20 PAAQ	TSUAT1	NTWC	Segmented Tsunami Warnings, Watches, and Advisories
	Example: WEXX30 PAAQ Example: WEXX30 PAAQ Example: WEXX30 PAAQ	TSUATE	NTWC	Tsunami Warnings, Watches, and Advisories
	Example: WEXX40 PAAQ Example: WEXX40 PAAQ Example: WEXX40 PAAQ	TSUSPA	NTWC	Spanish Tsunami Warnings, Watches, and Advisories
	Example: WEXX32 PAAQ	TIBATE	NTWC	Tsunami Information Statements
	Example: WEXX42 PAAQ	TIBSPA	NTWC	Spanish Tsunami Information Statements

Example from NTWC Tsunami Routine Communications Test US East & Gulf Coast received via GNC-A on February 9th, 2021 at 17:15 UTC

Where to Find Tsunami Warning on HRIT/EMWIN

- In addition to the RF antenna equipment, users must have software available to ingest/visualize the data
- Within the HRIT/EMWIN broadcast, there are a total of three National Weather Service provided EMWIN channels (VCID 20 -22)
- Users will find all tsunami warnings, watches and advisories (WWA) within VCID 20, as a priority 1 message
- VCID 20 priority 1 and 2 data have the highest broadcast priority
 - All Tsunami WWA's will arrive as text (TXT) files wrapped within a .Irit file extension
 - Will need to be unwrapped to visualize

VCID #	Product Name
0	Admin Text
1	Mesoscale Imagery
2	CMI Band 2
7	CMI Band 7
8	CMI Band 8
9	CMI Band 9
13	CMI Band 13
14	CMI Band 14
15	CMI Band 15
17	G18 CMI Band 13
20	EMWIN – High Priority
21	EMWIN - Graphics
22	EMWIN – Low Priority
24	NHC Maritime Graphics Products
25	GOES-16 Level II Products
30	DCS Admin
32	DCS Data New Format

A_SNAU01AMMC091700_C_KWIN_20210209171517_738012-2-OBSU01AU.Irit
 A_FTPA32KWBC091715_C_KWIN_20210209171504_737995-2-TAFWBCFJ.Irit
 A_UBCA90KWBC091715_C_KWIN_20210209171503_737990-2-UABA90CA.Irit
 A_FTUS80KWBC091715_C_KWIN_20210209171506_737999-2-TAFALLUS.Irit
 A_NWUS51KALY091714_C_KWIN_20210209171501_737988-2-LSRALYNY.Irit
 A_NWUS55KBYZ091714_C_KWIN_20210209171455_737979-2-LSRBYZMT.Irit
 A_FNUS76KHNX091714_C_KWIN_20210209171441_737970-2-FWSHNXCA.Irit
 A_SXMS50KWAL091714_C_KWIN_20210209171446_737972-2-MISDCPSV.Irit
A_WEXX30PAAQ091714_C_KWIN_20210209171454_737978-1-TSUATEUS.Irit
A_WEXX20PAAQ091714_C_KWIN_20210209171454_737977-1-TSUAT1US.Irit
A_WEXX20PAAQ091714_C_KWIN_20210209171449_737974-1-TSUAT1US.Irit
 A_SXMS50KWAL091714_C_KWIN_20210209171436_737964-2-MISDCPSV.Irit
 A_FTFJ31NFFN091700_C_KWIN_20210209171433_737957-2-TAFJ31FJ.Irit
 A_SXMS50KWAL091713_C_KWIN_20210209171432_737954-2-MISDCPSV.Irit
 A_NWUS51KALY091714_C_KWIN_20210209171429_737949-2-LSRALYNY.Irit
 A_SXMS50KWAL091714_C_KWIN_20210209171432_737955-2-MISDCPSV.Irit
 A_SAU580KWBC091714_C_KWIN_20210209171428_737945-2-SAHOURLY.Irit
 A_SAU570KWBC091700_C_KWIN_20210209171427_737943-2-SAHOURLY.Irit
 A_SPUS80KWBC091714_C_KWIN_20210209171428_737946-2-MISS80US.Irit
 A_SAU570KWBC091714_C_KWIN_20210209171427_737942-2-SAHOURLY.Irit
 A_SPUS70KWBC091714_C_KWIN_20210209171427_737944-2-MISS70US.Irit
 A_SXPA50KWAL091713_C_KWIN_20210209171425_737937-2-MISA50US.Irit
 A_SXMS50KWAL091713_C_KWIN_20210209171425_737936-2-MISDCPSV.Irit

Example from a NTWC Tsunami Routine Communications Test US East & Gulf Coast received via HRIT/EMWIN on February 9th, 2021 at 17:15 UTC



Helpful Web Links and Contact Information

More GEONETCast America Broadcast Information

– <https://geonetcast.wordpress.com/>

More HRIT/EMWIN Broadcast Information

– <https://www.noaasis.noaa.gov/>

– <https://www.weather.gov/emwin/>

More information about GNC-A and EMWIN NWS product baseline

– <https://www.weather.gov/iscs/baseline>

More about Tsunami WMO Headers, AWIPS ID's and Origin

– https://ntwc.ncep.noaa.gov/?page=product_list

– <https://www.tsunami.gov>

GNC-A and HRIT/EMWIN Broadcast POC

HRIT/EMWIN Program Manager

Primary Email PoC: hrit.manager@noaa.gov

or

Ian Avruch: ian.avruch@noaa.gov

GEONETCast Americas Program Manager

John Cornicelli: john.cornicelli@noaa.gov

EMWIN and ISCS

Primary Email: nws.emwin.support@noaa.gov

CATAC Dummy Message

On March 20, the initial dummy message will be issued and disseminated over its standard broadcast channels.

Center	WMO ID	AWIPS ID	NWWS	GTS/WIS/WMO	GEONET CAST AMERICAS	HRIT/EMWIN*	AISR	Fax	Email
CATAC	MNMG	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes

Only Central American countries and PTWC and CARIBE EWS principals will be sent the products.



CATAC – Areas of responsibility



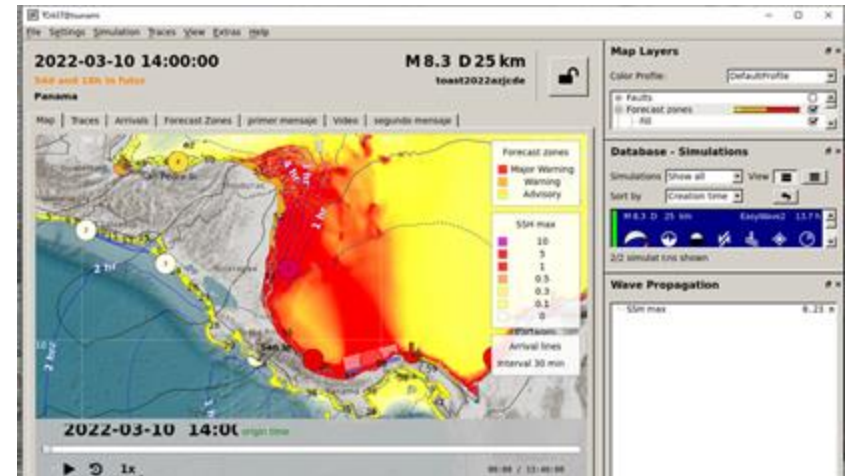
CATAC Simulated Messages

The Central America Tsunami Advisory Center (CATAC) will send the simulated products as of **1503 UTC** for the Jamaica scenario to Central American countries and regions by agreement with the center.

1. Text message in Spanish: email
2. Graphic products: email

And to the PTWC/ITIC-CAR, CTIC:

1. Text message in English: email
2. Text message by WMO/GTS
3. Graphic products: email



Graphical products:

1. Predicted amplitudes at Sea Gauges
2. Predicted amplitudes at coastal zones
3. Tsunami propagation movie

In addition, the products will be published on CATAC's website:

<http://catac.ineter.gob.ni/>

For questions, please email: wilfried.strauch@yahoo.com

Message Chronology issued by the CATAC Jamaica

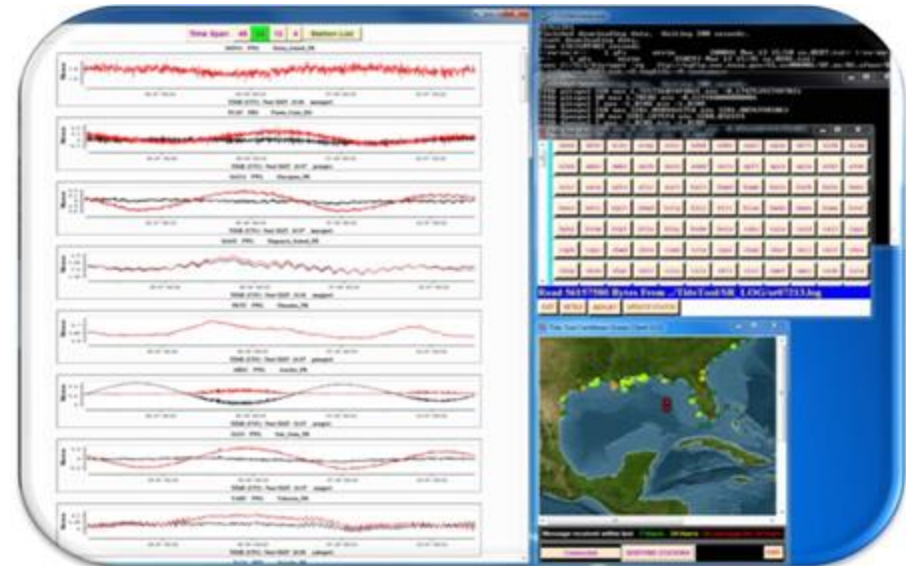
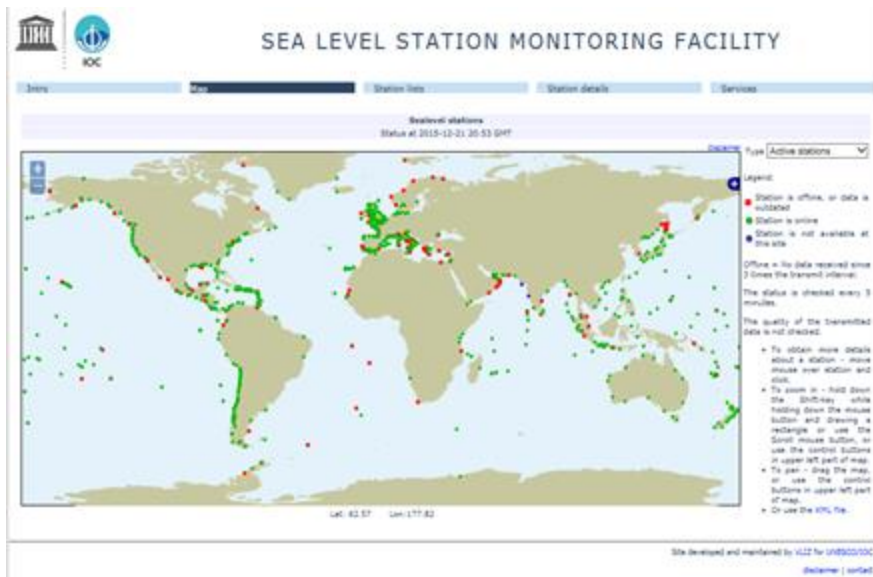
Date	Time (UTC)	CATAC	
		Type of Product	Transmission Method
3/20/25	1500	---- Earthquake Occurs ----	
3/20/25	1500	Dummy Message	Email
3/20/25	1503	Initial Tsunami Threat Message #1	Email
3/20/25	1509	Tsunami Threat Message # 2	Email
3/20/25	1530	Tsunami Threat Message #3	Email
3/20/25	1600	Tsunami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

Sea Level Monitoring

As good practice for the exercise, corresponding authorities are encouraged to check out sea level readings in real time on the IOC Sea Level Monitoring Facility and Tide Tool which can also be run with the earthquake parameters.

IOC Sea Level Monitoring Facility
<http://www.ioc-sealevelmonitoring.org/>

Tide Tool
stuart.weinstein@noaa.gov



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.)

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.

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

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 navigation menu includes 'Home', 'TsunamiZone Regions', 'Other Languages', 'Contact Us', 'Search', and 'Login'. Below the navigation is a banner image of a person running on a beach. The 'Who is Participating?' menu item is highlighted with a red box. Below the navigation is a table titled '2025 CARIBBEAN PARTICIPATION TOTALS'.

2025 CARIBBEAN PARTICIPATION TOTALS

180,024 participants are registered in the 2025 TsunamiZone (as of 02/24/2025 3:25 AM PST).

Category	Participants	Participation totals for each area	Total
Individuals/Families	149	Antigua and Barbuda	0
Childcare and Pre-Schools	1,973	Aruba	12,950
K-12 Schools and Districts	119,177	Bahamas	0
Colleges and Universities	3,741	Barbados	485
Local Government	17,595	Belize	0
State Government	11,345	Brazil	0
Federal/National Government (Including Military)	6,054	Colombia	0
Tribes/Indigenous Peoples	24	Costa Rica	0
Businesses	1,680	Cuba	0
Hotels and Other Lodgings	648	Curacao	50
Healthcare	5,564	Dominica	0
Senior Facilities/Communities	728	Dominican Republic	370
Disability/AFN Organizations	0	France	97,904
Non-Profit Organizations	1,175	Guadeloupe	95,590
Neighborhood Groups	50	Guyane	0
Preparedness Organizations	7,971	Martinique	2,314
Faith-based Organizations	0	Saint Barthelemy	0
Museums, Libraries, Parks, etc.	100	Saint Martin	0
Volunteer/Service Clubs	50	Other France	0
Youth Organizations	0		
Animal Shelter/Service Providers	0		
Agriculture/Livestock Sector	0		
Volunteer Radio Groups	614		
Science/Engineering Organizations	161		
Media Organizations	200		
Other	1,025		

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

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

Actions in Case of a Real Event

- In the case of a significant event occurring during the exercise, PTWC and CATAC will issue the corresponding messages for that event. Such messages will be given full priority and a decision will be made by PTWC and CATAC whether to issue the CARIBE WAVE 25 dummy messages and to send email messages to corresponding recipients.
- In the case of smaller earthquakes, PTWC and CATAC will issue the corresponding Tsunami Information Statement and the exercise will not be disrupted.
- All documentation and correspondence relating to this exercise is to be clearly identified as “**CARIBE WAVE 25**” and “**Exercise.**”

Procedures for False Alarm

- Any time disaster response exercises are conducted; the potential exists for the public or media to interpret the event as real.
- Procedures should be set up by all participating entities to address public or media concerns involving this exercise in case of misinterpretation by media or the public.
- Recommended text in case of false alarm:

“There is NO TSUNAMI threat for [location]. We are aware of an erroneous tsunami [alert level] for our area. Please disregard; we have not issued a tsunami [alert level]. The annual CARIBE WAVE tsunami exercise is underway and communication systems are being tested. [Name of agency] is reviewing this incident.”

Post-Exercise Evaluation Form

- Each CARIBE-EWS member state and territory is requested to provide feedback on the exercise.
 - This feedback will assist the ICG/CARIBE-EWS in the evaluation of CARIBE WAVE 25, the development of subsequent exercises, and help response agencies document lessons learned.
 - To facilitate feedback, the online evaluation survey can be accessed at the following link: https://www.surveymonkey.com/r/CW25_Evaluation.
 - The deadline for completing the evaluation is 4 April 2025.
 - This questionnaire includes feedback on PTWC, CATAC, Risk Knowledge and SOPs, Tsunami Ready.
 - It contains 40 questions, 12 pages, and should take no more than 25 minutes.

Post-Exercise Evaluation Form

Questionnaire

5. The PTWC issued the CARIBE WAVE 25 Dummy Message by several methods. Please check all methods through which the message was received by the TWFP/NTWC.

	Yes	No	Not applicable
WMO Information System (WIS) - GTS/GISC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
US NOAA Weather Wire Service (NWWS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AISR/AFTN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EMWIN/HRIT	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GEONETCast Americas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email from PTWC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PTWC Social Media (Unofficial): Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PTWC Social Media (Unofficial): X	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other means (specify in comment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

Post-Exercise Evaluation Form

Questionnaire

24. Is your country implementing the UNESCO/IOC Tsunami Ready Recognition Programme (or TsunamiReady®)?

- Yes, one or more applications are underway, communities have been recognized or are renewing
- Yes, some municipalities have started to take steps to obtain recognition
- Yes, some municipalities want to get involved in the Programme
- Yes, the national level is organizing itself
- Yes, national institutions are discussing the programme implementation
- No

Comments:

25. Would your country be interested in implementing the UNESCO/IOC Tsunami Ready Recognition Programme?

- Yes - Please provide further information on the timeline, needs and/or support.
- No - Why are you not interested?

Comments:

Post-Exercise Evaluation Form

Questionnaire

26. Do you know the target number of the communities in your country/territory for UNESCO/IOC Tsunami Ready or TsunamiReady® recognition?

- Yes - Indicate the number and the administrative level of implementation (country/territory-wide, parish, district, municipality, etc.)
- No

Number and name of communities:

27. Was the CARIBE WAVE exercise useful for implementing the Tsunami Ready program?

- Yes - How so?
- No - Why?

Comments:

CW Videos/Photos Sharing

Ways to share your exercise pictures/videos:

1. Tsunami Zone Website

(<https://www.tsunamizone.org/share/>)

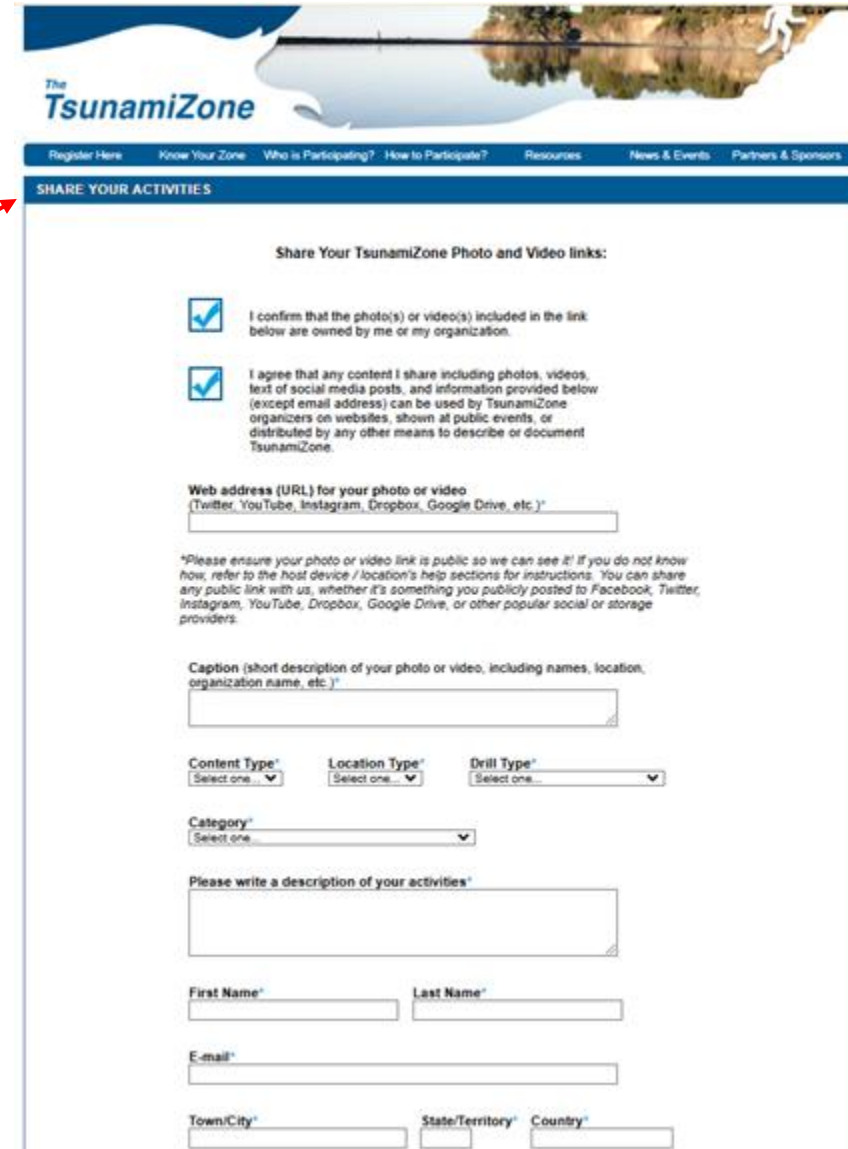
- Only accepts website or/and social media links

2. Post-Exercise Questionnaire (available after the exercise).

- Accepts website or/and social media links

3. Email

- To christa.vonh@noaa.gov



The screenshot shows the 'SHARE YOUR ACTIVITIES' form on the TsunamiZone website. The form is titled 'Share Your TsunamiZone Photo and Video links:' and contains the following fields and options:

- Two checked checkboxes with the following text:
 - 'I confirm that the photo(s) or video(s) included in the link below are owned by me or my organization.'
 - 'I agree that any content I share including photos, videos, text of social media posts, and information provided below (except email address) can be used by TsunamiZone organizers on websites, shown at public events, or distributed by any other means to describe or document TsunamiZone.'
- A text input field for 'Web address (URL) for your photo or video (Twitter, YouTube, Instagram, Dropbox, Google Drive, etc.)'.
- A note: '*Please ensure your photo or video link is public so we can see it! If you do not know how, refer to the host device / location's help sections for instructions. You can share any public link with us, whether it's something you publicly posted to Facebook, Twitter, Instagram, YouTube, Dropbox, Google Drive, or other popular social or storage providers.'
- A text input field for 'Caption (short description of your photo or video, including names, location, organization name, etc.)'.
- Three dropdown menus for 'Content Type*', 'Location Type*', and 'Drill Type*'. Each dropdown has 'Select one...' as the current selection.
- A dropdown menu for 'Category*' with 'Select one...' as the current selection.
- A text input field for 'Please write a description of your activities*'. The field is empty.
- Text input fields for 'First Name*' and 'Last Name*'. Both fields are empty.
- A text input field for 'E-mail*'. The field is empty.
- Text input fields for 'Town/City*', 'State/Territory*', and 'Country*'. All fields are empty.

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 through 2024 Final Report
- PTWC Communications Plan for the Caribbean

Questions on the exercise can be addressed to the members of the CARIBE WAVE 25 Task Team.

Participation of people with disabilities in CARIBE WAVE 25

- According to the Development Dialogue (2021), persons with disabilities make up 15 percent of the world's population.
- This group of people are disproportionately affected by disaster impacts and are often not included in prevention, response, and recovery.
- It is important to engage persons with disabilities and their representative organizations in annual exercises such as CARIBE WAVE.
- Be sure that the participation of people with disabilities is reflected in TsunamiZone registration.
- Cutting-edge technology aimed at co-creating early warning and preparedness solutions that are inclusive and accessible to people with disabilities are suggested to be tested during the tsunami exercise to address this barrier.

<https://developmentdialogues.org/>

Media

- Puerto Rico Seismic Network Tsunami Media Kit (English and Spanish) and Tsunami Program Portal:
 - <http://www.prsn.uprm.edu/mediakit/>
 - <https://redsismica.uprm.edu/english/tsunami/>
- Seismic and Other Coastal Hazards Research Unit. Information:
 - <http://www.uwiseismic.com>
- Sample press release from the manual that can be adapted as needed.
- Use of the hashtags #CARIBEWAVE and #TSUNAMIREADY is recommended before and during the exercise.

Additional Info

- Additional materials will be added to CW website (www.caribewave.org).
- Send links of other national pages to christa.vonh@noaa.gov to include on CW.
- This presentation is available on Ocean Expert website <https://oceanexpert.org/event/4657#documents> for which there is link in the caribewave.org website.
- CARIBE WAVE video in EN, SP and FR is available at caribewave.org website and can also be downloaded from YouTube channel of ITIC

CARIBE WAVE 25 Task Team

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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
Final Draft Caribe Wave 25 Report 22 April 2025	

Questions, Comments

Thank you for participating

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