



## CARIBE WAVE 18 Evaluation

### Introduction and Background

ONLINE QUESTIONNAIRE AVAILABLE UNTIL 2 April 2018.

Dear CARIBE WAVE 18 Participant,

Thank you for participating in Exercise CARIBE WAVE 18.

Every officially designated National Contact or Tsunami Warning Focal Point for the Member States and Territories within the UNESCO ICG CARIBE EWS framework should complete this form.

This CARIBE WAVE 18 Evaluation Form should be submitted online using this URL no later than 2 April 2018.

If you have any questions or problems, please contact Exercise Chair!

Thank you for your participation,

Christa von Hillebrandt-Andrade, CTWP Manager ([christa.vonh@noaa.gov](mailto:christa.vonh@noaa.gov))



## CARIBE WAVE 18 Evaluation

### Instructions and Member State/Territory Contact Information

Tsunami National Contacts(TNC)/Tsunami Warning Focal Points(TWFP)/National Tsunami Warning Center(NTWC) are requested to:

- Answer each statement with Yes, No, or Not Applicable by selecting the relevant box.
- If needed, please add comments to explain/expand Yes, No, or Not Applicable answers.

#### Contact Information.

Member State/Territory

-

Agency

Organisation

-  
Name (First, Last)

Position or Job Title

Telephone

Mobile

Email address

Did your Member State/Territory participate in CARIBE WAVE 18?

Yes

No

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 1, SUB-OBJECTIVE 1B

#### OBJECTIVE 1

To exercise and evaluate operations of the current Tsunami Warning System and in particular, the CARIBE EWS.

#### SUB OBJECTIVE 1B

Validate the receipt of tsunami products by the PTWC.

#### 1B.1:

The PTWC CARIBE WAVE 18 initial Dummy (Start of Exercise) Message was received by your country's Tsunami Warning Focal Point / National Tsunami Warning Center.

- Yes
- No
- Not Applicable

Comments:

**1B.2:**

The PTWC issued the CARIBE WAVE 18 initial 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 Process (e.g., GTS, WIS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NWWS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AISR/AFTN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EMWIN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GEONETCast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Email from PTWC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

**1B.3:**

The PTWC issued the CARIBE WAVE 18 initial Dummy Message by several methods. Please indicate the time at which the message was received by the TWFP/NTWC (UTC, Coordinated Universal Time).

	Hour	Minutes	Time Zone
WMO Information Process (e.g., GTS, WIS)	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
AISR/AFTN	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
EMWIN	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
GEONETCast	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Fax	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Email from PTWC	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Social Media	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

**1B.4:**

Were there any problems with the receipt of PTWC CARIBE WAVE 18 initial Dummy (Start of Exercise) Message?

- Yes
- No
- Not Applicable

Comments:

**1B.5:**

Did your TWFP/NTWC receive by email from PTWC the simulated exercise messages at the times specified in the Exercise Manual?

- Yes
- No
- Not Applicable

Comments:

**1B.6:**

Did the Tsunami Warning Focal Point / National Tsunami Warning Center receive any message from an organisation other than the PTWC (e.g., Hydro/Met Office)? If yes, please use the comment box to indicate the agencies that received and communicated the products from PTWC during the exercise.

- Yes
- No

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 2

2. To evaluate the use of PTWC CARIBE EWS products.

#### 2.1:

Rate each product on its usefulness in decision making from 1 (less) to 5 (most).

	1	2	3	4	5
Text Message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polygons Map of Forecast Threat Levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forecast Deep-Ocean Amplitudes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forecast Coastal Amplitudes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
KMZ File of Coastal Amplitudes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Table of Statistics for Each Polygon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2.2:**

The information provided in the PTWC exercise products assisted with decision making, e.g., tsunami threats, earthquake parameters, estimated arrival times, forecast wave heights, etc.

- Yes
- No
- Not Applicable

Comments:

**2.3:**

Content: The forecast locations in the text messages are appropriate? If not, please suggest better locations.

- Yes
- No
- Not Applicable

Comments:

**2.4:**

Existing in-country event information/local (local seismic network, oceanographic instance, etc.) data were utilized to complement the PTWC exercise messages.

- Yes
- No
- Not Applicable

Comments:



2.5:

Additional in-country local/regional expert consultation was utilized for analyzing the PTWC exercise messages?

- Yes
- No
- Not Applicable

Comments:

2.6:

Currently only the text messages are available to the public. Indicate which of the others PTWC products that are currently sent via email to only TWFP/NTWC should be made available to the general public (for example: through PTWC, web, media and etc.).

	Yes	No
Text Message	<input type="checkbox"/>	<input type="checkbox"/>
Polygons Map of Forecast Threat Levels	<input type="checkbox"/>	<input type="checkbox"/>
Forecast Deep-Ocean Amplitudes	<input type="checkbox"/>	<input type="checkbox"/>
Forecast Coastal Amplitudes	<input type="checkbox"/>	<input type="checkbox"/>
KMZ File of Coastal Amplitudes	<input type="checkbox"/>	<input type="checkbox"/>
Table of Statistics for Each Polygon	<input type="checkbox"/>	<input type="checkbox"/>

2.7:

Do you required additional training on PTWC products.

- Yes
- No
- Not applicable

2.8:

What type of training?

In person

Webinars

Online Course

Other (please specify)



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3A

#### OBJECTIVE 3

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3A

Validate the operational readiness of the TWFPs/NTWCs and/or the National Disaster Management Office (NDMO).

#### 3A.1:

The TWFP/NTWC/NDMO has standard operating procedures in place for the receipt and dissemination of tsunami products.

- Yes
- No
- Not Applicable

Comments:

**3A.2:**

The TWFP/NTWC/NDMO has undertaken activity to increase its capacity and capability to received and disseminate tsunami products (e.g. training, exercise, etc.). Note activities in Comments section.

- Yes
- No
- Not Applicable

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3B

#### OBJECTIVE

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3B

To improve operational readiness. Before the exercise, ensure appropriate tools and response plans have been developed, including public education materials.

#### 3B.1:

A country tsunami emergency response plan for tele/regional/local tsunamis exists.

	Yes	No	Not Applicable
Local (less 1 hour arrival time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional (1-3 hours estimated arrival time)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distant (Greater than 3 hours)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**3B.2:**

The NDMO has a tsunami mass coastal evacuation plan.

- Yes
- No
- Not Applicable

Comments:

**3B.3:**

Arrangements exist to assemble the in-country disaster management group (Emergency Operations Center) relevant to decision-making on tsunami warning and response.

- Yes
- No
- Not Applicable

Comments:

**3B.4:**

The response plan includes processes to issue Safe-to-Return (All-Clear) notices.

- Yes
- No
- Not Applicable

Comments:

**3B.5:**

Public education materials have been developed and/or disseminated.

- Yes
- No
- Not Applicable

Comments:

**3B.6:**

Tsunami-related curriculum programmes are in place for different levels of education. Note which levels in Comments section.

- Yes
- No
- Not Applicable

Comments:

**3B.7:**

Are there other preparedness/education tools and products utilised in your country/territory? Please list in comments section.

- Yes
- No
- Not Applicable

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3C

#### OBJECTIVE

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3C

Validate that dissemination of warnings and information/advice by TWFPs, and NTWC to relevant in-country agencies.

##### 3C.1:

The response activation process was followed when the Dummy message from PTWC for CARIBE WAVE 18 exercise was received.

- Yes
- No
- Not Applicable

Comments:

##### 3C.2:

Did the TWFP/NTWC issue the messages for CARIBE WAVE 18?

- Yes
- No
- Not Applicable

Comments:



**3C.3:**

**CARIBE WAVE 18 messages were issued to:**

	<b>Yes</b>	<b>No</b>	<b>Not Applicable</b>
Emergency services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other national/state government agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government: provincial/regional level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government: city/district level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science agencies/universities involved in assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

**3C.4:**

What methods were used by the TWFP/NTWC/NDMO to disseminate the CARIBE WAVE 18 messages?

	Yes	No	Not Applicable
EMWIN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FAX	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SMS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telephone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amateur Radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RSS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
EAS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NOAA or Other Emergency Alert Radio	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sirens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other

**3C.5:**

How soon after start of exercise were the CARIBE WAVE 18 exercise messages sent from TWFP/NTWC to the corresponding agency or agencies (listed before)?

- 1-5 minutes
- 6-10 minutes
- 11-15 minutes
- > 15 minutes

Comments:

**3C.6:**

Based on feedback from agencies were the communication methods timely and appropriate?

- Yes
- No
- Not Applicable

Comments:

**3C.7:**

Based on feedback from agencies was the message(s) disseminated from TWFP/NTWC/NDMO accurate and clear?

- Yes
- No
- Not Applicable

Comments:

**3C.8:**

Was your Country's/Territory's Emergency Operations Center activated during the exercise?

- Yes
- No
- Not Applicable

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3D

#### OBJECTIVE

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3D

Validate the organisational decision-making process (tsunami response plans) about public warnings and evacuations.

##### 3D.1:

Did the National Disaster Management Organisation (or equivalent) maintain communication with the TWFP/NTWC throughout the event?

- Yes
- No
- Not Applicable

Comments:

##### 3D.2:

Did the National Disaster Management Organisation (or equivalent) maintain communication with local/regional disaster management organisations (or equivalent)?

- Yes
- No
- No Applicable

Comments:

**3D.3:**

Were any areas evacuated as part of the CARIBE WAVE 18 Exercise?

- Yes
- No
- Not Applicable

Comments:

**3D.4:**

Are tsunami evacuation maps available for your Country/Territory?

- Yes
- No

Other (please specify)

**3D.5:**

Are tsunami inundation maps available for your Country/Territory?

	Yes	No
Local Scenario	<input type="radio"/>	<input type="radio"/>
Regional Scenario	<input type="radio"/>	<input type="radio"/>
Distant Scenario	<input type="radio"/>	<input type="radio"/>

Comments:

**3D.6:**

Did your Tsunami Warning Focal Point run any tsunami numerical models during the exercise (e.g., deep-ocean propagation and/or coastal inundation models)?

- Yes
- No
- Not Applicable

Comments:

**3D.7:**

Did your Country/Territory consult any of the following resources in order to better assess the tsunami threat during the exercise? Select from the following list.

	Yes	No	Not Applicable
National/State tsunami experts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National/State tsunami coordination committee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National/State tsunami historical database	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NOAA NGDC/WDC-MGG tsunami historical database (web)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TsuDig historical database GIS tool (NGDC/ITIC offline)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National/State pre-computed tsunami scenarios	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
National/State tsunami forecasts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
International tsunami forecasts. Note source of forecasts (PTWC, NTWC) in Comments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with outside sources (such as ITIC, media, other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review sea level data availability (IOC Sea Level Monitoring Facility, Tide Tool, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review seismic data availability (IRIS, PRSN, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Review seismic information tools (USGS, CISN, PRSN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engage with social media (Facebook, Twitter, Google Chat, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3E

#### OBJECTIVE 3

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3E

Validate that the methods used to notify and instruct the public are accurate and timely.

#### 3E.1

Was a tsunami warning and/or information issued to the public as part of the CARIBE WAVE 18 Exercise?

- Yes
- No
- Not Applicable

Comments:



**3E.2:**

Based on feedback, was the tsunami warning and/or information issued in a timely manner to the public (for example, prior to the scenario wave arrival time)?

- 1-5 minutes
- 6-10 minutes
- 11-15 minutes
- >15 minutes

Comments:

**3E.3:**

How was the warning/information communicated to the public?

Please check all that apply:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Telephone                   | <input type="checkbox"/> Twitter                     | <input type="checkbox"/> Police                        |
| <input type="checkbox"/> SMS                         | <input type="checkbox"/> Facebook                    | <input type="checkbox"/> Public Call Centre            |
| <input type="checkbox"/> Cell/mobile phone broadcast | <input type="checkbox"/> RSS                         | <input type="checkbox"/> Door-to-door announcements    |
| <input type="checkbox"/> Radio                       | <input type="checkbox"/> Websites                    | <input type="checkbox"/> Electronic billboards         |
| <input type="checkbox"/> TV                          | <input type="checkbox"/> Sirens                      | <input type="checkbox"/> Other methods (specify below) |
| <input type="checkbox"/> Email                       | <input type="checkbox"/> Public Announcement Systems |  |

Other Methods:

**3E.4:**

In addition to the TWFP/NDMO, did other government and private sector groups participate? If yes, please list in comments section.

- Yes
- No
- Not Applicable

Comments:



## CARIBE WAVE 18 Evaluation

### OBJECTIVE 3, SUB-OBJECTIVE 3F

#### OBJECTIVE 3

To validate the readiness to respond to a tsunami.

#### SUB OBJECTIVE 3F

Evaluate the status of the implementation of the TsunamiReady recognition program.

The CARIBE-EWS Community Performance Based Tsunami Recognition Program, Tsunami Ready, seeks to save lives and livelihoods through better community planning, education and awareness and operations. In 2015 Tsunami Ready guidelines were recommended and approved by CARIBE EWS and UNESCO IOC. A copy of the requirements can be accessed at [caribewave.info](http://caribewave.info) Some countries in the region have received TsunamiReady® recognition thru the US National Weather Service (NWS) or the US NWS/UNESCO pilot project or Tsunami Ready CARIBE EWS recognition.

As of 2016, 52 communities have received TsunamiReady® or CARIBE EWS Tsunami Ready recognition.

#### 3.F.1:

Is your country already implementing the Community Performance Based Tsunami Recognition Program (TsunamiReady or Tsunami Ready)?

Yes

No

Comments:

3.F.2:

Is your country interested in implementing the Community Performance Based Tsunami Recognition Program (TsunamiReady or Tsunami Ready)?

Yes

No

Other (please specify)

3.F.3:

How many communities in your country have already been designated as TsunamiReady® or Tsunami Ready?

Communities

3.F.4:

What is the target number of Tsunami Ready communities in your country/territory you expect will pursue Tsunami Ready recognition?

Communities



## CARIBE WAVE 18 Evaluation

### GENERAL OBSERVATIONS

#### 4.1:

Through participating in the CARIBE WAVE 18 Exercise, the agencies in the Country/Territory (TNC/TWFP/NDEMO) have a better understanding of their responsibilities and roles in tsunami emergencies.

- Yes
- No
- Not Applicable

Comments:

#### 4.2:

Gaps in capability and capacity have been identified.

- Yes
- No
- Not Applicable

Comments:

**4.3:**

The Country/Territory enhanced relationships with and among the Tsunami Warning System stakeholders as a result of the exercise.

- Yes
- No
- Not Applicable

Comments:

**4.4:**

News media participated and covered the exercise (please provide electronic links if applicable).

- Yes
- No
- Not Applicable

Comments:

**4.5:**

Overall, the exercise planning, conduct, format and style were satisfactory.

- Yes
- No
- Not Applicable

Comments:

**4.6:**

Exercise planning at the international level went well.

- Yes
- No
- Not Applicable

Comments:

4.7:

Exercise planning at the national level went well.

- Yes
- No
- Not Applicable

Comments:

4.8:

Exercise planning at the state/local level went well.

- Yes
- No
- Not Applicable

Comments:

4.9:

The CARIBE WAVE 18 Tsunami Exercise website pages (eg. caribewave.info, tsunamizone.org/caribbean) were useful.

- Yes
- No
- Not Applicable

Comments:

4.10:

How many people do you estimate participated in the exercise within your country/territory (use own statistics or tsunami.zone registration system)?

**4.11:**

The CARIBE WAVE 18 Participant Handbook provided an appropriate level of detail.

- Yes
- No
- Not Applicable

Comments:

**4.12:**

The CARIBE WAVE 18 Webinars were helpful in preparing for the exercise.

- Yes
- No
- Not Applicable

Comments:

**4.13:**

Was the IOC How to Plan, Conduct, and Evaluate Tsunami Exercises guideline (<http://www.srh.noaa.gov/srh/ctwp>) used in preparing for the exercise?

- Yes
- No
- Not Familiar with the Guideline

Comments:

4.14:

Did your country used the methodological guidelines How to Prepare, Conduct and Evaluate a Community-based Tsunami Response

Exercise ([http://www.ioc-tsunami.org/index.php?option=com\\_oe&task=viewDocumentRecord&docID=19139](http://www.ioc-tsunami.org/index.php?option=com_oe&task=viewDocumentRecord&docID=19139)) before or during CARIBE WAVE

Exercise 18?

Yes

No

Comments:

4.15:

This evaluation form is appropriate.

Yes

No

Not Applicable

Comments:



4.16:

Please provide a general statement on your CARIBE WAVE 18 Tsunami Exercise experience, about what went well, what did not go well and what could be improved, in terms of both exercise planning and exercise conduct. You may comment about international, national, provincial and/or local level aspects. Also please share recommendations for the CARIBE WAVE 19 exercise, format, scenario, etc.

