



# **Report of the Working Group on Central America**

**ICG/PTWS-XXX Meeting  
Tonga, 11-15/09/2023**

**Griselda Marroquín - Chair  
Wilfried Strauch – Vice Chair**

# Tsunamis observed in CA - 2022-2023

**Hunga Tonga – Hunga Ha’apai  
- January 15, 2022**

**Max Water Height (m)= 0.33**

Costa Rica:

3 Tide Gauge

22 Eyewitness observation

El Salvador:

1 Tide Gauge

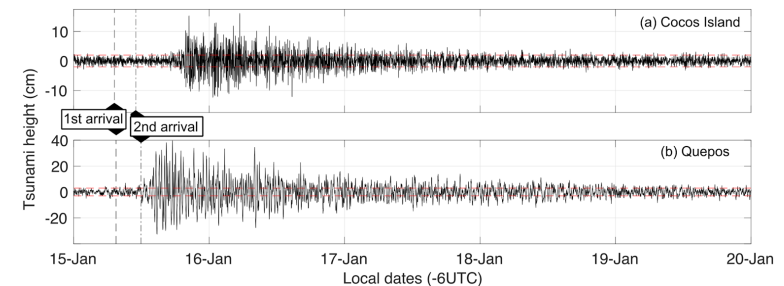
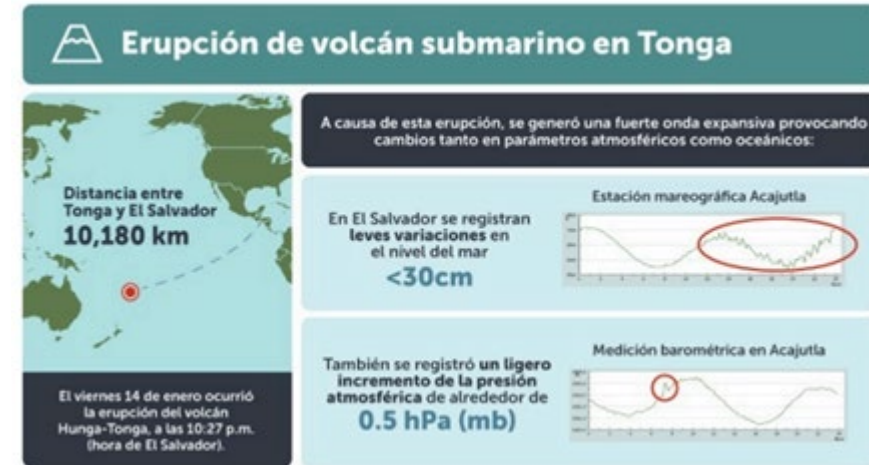
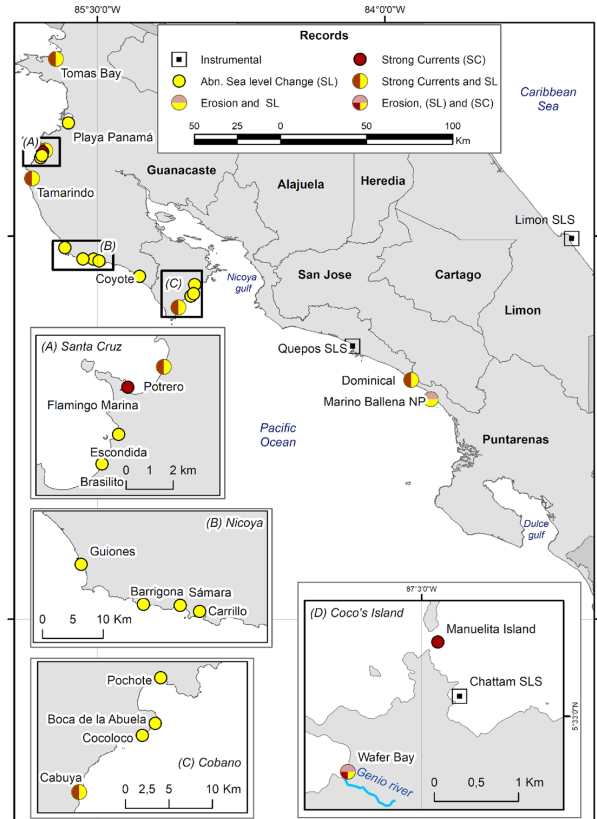
Honduras:

2 Eyewitness observation

**Mexico, September 19, 2022**

Costa Rica:

1 Eyewitness observation



# 10th anniversary commemoration

Mendez Island Tsunami - El Salvador.  
August 27, 2012.



Earthquake and tsunami in Nicoya - Costa Rica.  
September 5, 2012.



# Pacwave 2022 - evacuation drills – Costa Rica

September



November



# Pacwave 2022 - evacuation drills – El Salvador

2022-11-22:

- ❑ 280 people evacuated to safe areas from the El Majahual/La Libertad community and beach and employees of the mayor's office
- ❑ To evacuate visitors, the tsunami flag was used (pilot test)



# Caribe wave 2023 - evacuation drills – Panamá

- ❑ 28 educational centers in Bocas del Toro participated in the Drill,
- ❑ More than 1,000 teachers were part of the instruction sessions,
- ❑ Between 10 and 15 thousand people participated in the tsunami drill in Bocas del Toro.



<https://www.meduca.gob.pa/index.php/node/4989>  
<https://unesdoc.unesco.org/ark:/48223/pf0000386605>

# National drills

Country	Threat	Amount per year	Date
Guatemala	Earthquake	1	February*
Honduras			A drill is planned for this year**
El Salvador	Earthquake	1	October***
Nicaragua	Multi-threat	4	Different dates
Costa Rica	Earthquake	1	August
Panamá	Earthquake		A drill is planned for this year****

\* It is carried out to commemorate the earthquake of February 4, 1976

\*\* Personal communication with Juan José Reyes

\*\*\* It is carried out to commemorate the earthquake of October 10, 1986.

\*\*\*\* [https://www.tvn-2.com/nacionales/panama-realizara-segundo-simulacro-nacional\\_1\\_2075215.html](https://www.tvn-2.com/nacionales/panama-realizara-segundo-simulacro-nacional_1_2075215.html)

In national earthquake drills, tsunami drills are promoted in some communities.



# Tsunami Ready - CA

#	Country	Community	Date	Renewal
1	Honduras	Cedeño	2017	2021
2	Costa Rica	Ostional	2017	2021
3	El Salvador	La Libertad	2019	2023
4	El Salvador	Tamanique	2019	2023
5	Guatemala	San José	2019	2023
6	Guatemala	Sicapate	2019	2023
7	Honduras	Omoa	2019	2023
8	Honduras	Tornabe/Tesla	2019	2023
9	Nicaragua	Corn Island	2019	2023
10	Nicaragua	Bluefields	2019	2023

#	Country	Community	Date	Renewal
11	Costa Rica	El Coco	2021	2025
12	Costa Rica	Tamarindo	2021	2025
13	Costa Rica	Sámara	2021	2025
14	Costa Rica	Uvita-Bahía	2021	2025
15	Costa Rica	Playa Hermosa	2022	2026
16	Costa Rica	Tivives	2022	2026
17	Costa Rica	Quepos	2022	2026
18	Costa Rica	Dominica-Dominicalito-Barú	2022	2026
19	Costa Rica	Puerto Jiménez	2022	2026

- 19 communities recognized as tsunami ready.
- 2 with recognition already expired (2017)
- 8 require renewal this year

- There are some doubts about the requirements to renew. For example, the community must demonstrate the completion of at least 2 drills and 12 outreach activities during the 4 years?



# App - earthquakes early warning

- For Android operating system.
- Using firebase cloud messaging
- For public use in Nicaragua and Costa Rica.
- On trial in El Salvador and Guatemala.
- Earthquake Early Warning Project for Central America (ATTAC).
- With the participation of the seismological centers of: INETER, Nicaragua. OVSICORI-UNA, Costa Rica. MARN, El Salvador. INSIVUMEH, Guatemala.
- Coordinated by the Swiss Seismological Service at ETH Zurich.
- Funded by the Swiss Agency for Development and Cooperation (COSUDE).



# Sixth Meeting WG-CA

- ❑ April 24, 2023 in Heredia Costa Rica
- ❑ 10 delegates from 5 countries.
- ❑ 2 UNESCO representatives
- ❑ **The Working Group recognised** the efforts and progress made by Nicaragua to strengthen the capabilities of the Central American Tsunami Advisory Center (CATAC), as a Tsunami Service Provider (TSP), by increasing and training its staff, improving its processes, and improving its capacity to process earthquakes and tsunamis in general. **The Group also recognised** that CATAC has gained experience with the processing of earthquakes that have occurred in the region,



## Sixth Meeting WG-CA

- ❑ **The Group recommended** that CATAC carry out new communication tests as soon as possible, sending a series of messages to its users to verify that the delivery of the messages is consistent with their sequential numbering, given that there have been challenges in the past,
- ❑ **The Group decided** to support the request that CATAC will present at the ICG/CARIBE-EWS-XVI meeting to enter interim and full functionality in the short term for the Caribbean coast of Central America,
- ❑ **The Group recommended** that countries ensure the generation and strengthening of national personnel and institutional capacities in early warning systems,
- ❑ **The Group instructed** the Technical Secretary of the ICG/PTWS to forward this recommendation to the ICG/PTWS and ICG/CARIBE-EWS and transfer it to CEPREDENAC for their attention.

# **Thank you**

**Griselda Marroquín – Chair**  
**Wilfried Strauch – Vice Chair**