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Intergovernmental  
Oceanographic  
Commission



Thirtieth Session  
Intergovernmental Coordination Group for the  
Pacific Tsunami Warning Mitigation System (ICG/PTWS-XXX)  
12-15 September 2023  
Nuku'alofa, Tonga

## Agenda 6

# International Tsunami Information Center (ITIC) Report



<https://vimeo.com/192771669>

Dr. Laura Kong  
Director, ITIC, USA NOAA

Lcdr. Matias Sifon  
Associate Director, ITIC, Chile SHOA

Christa von Hillebrandt  
Deputy Director, ITIC, USA NOAA  
Manager, ITIC Caribbean Office



# ITIC – Who we are



- ❑ **ITIC - established 1965 (IOC-IV.6), USA agreed to host**
- ❑ **Support Member States** (Technical improve TW (timely accurate), Capacity Building, Awareness, Event / Post-Tsunami data coll)

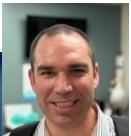


## OFFICE - US NOAA NWS

- ❑ Director – Dr. Laura Kong
- ❑ Deputy Director, ITIC Caribbean Office - Christa von Hillebrandt-Andrade  
Support CTIC, CARIBE-EWS (eff Sept 1 2021, former Caribbean Tsunami Warning Prog, est. 2010)
- ❑ Scientist (Oceanographer) - [vacant](#)
- ❑ Technical Information Specialist - [vacant](#)
- ❑ Information Technology Specialist – Tammy Fukuji
- ❑ Admin Support Assistant – [vacant](#)
- ❑ Student interns (part, full-time): 1-2 year-round, 2-4 Summer

## ASSOCIATE DIRECTOR – established 1974 (IOC/ITSU-IV.1, non-USA)

- ❑ Lcdr. Matias Sifon (Chile, SHOA Navy), 2023 (Chile since 1998)



# ITIC Mandate (1977) – Intersessional Activities

[www.tsunamiwave.org](http://www.tsunamiwave.org)

<http://itic.ioc-unesco.org/index.php>

- **Monitor, recommend improvements**
  - Events – improving warning and response
  - Tsunami Warning Decision Support Tools
- **Assist in establish/strengthen national, regional systems**
  - Capacity Building, Training
  - IOC Wave Exercises
  - UN Decade for Ocean Science for Sustainable Development
- **Information resource - preparedness / education (create, compile, share)**
  - Guides, Manuals, Best Practices, Awareness materials
- **Information resource - historical tsunamis (collect, compile, share)**
  - Database, global and regional hazard, post-event surveys



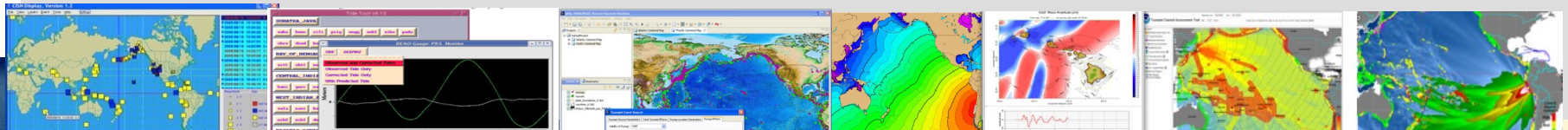


# Tsunami Warning Decision Support Tools



ITIC-distributed, supported

- ❑ **Tsunami Bull Board Listserv (ITIC, 1995) 464 science/tsu/govt (Aug 2024)**  
ADDR FOR POSTING: [tsunami\\_bb@list.woc.noaa.gov](mailto:tsunami_bb@list.woc.noaa.gov)
- ❑ **Real time EQ Display (CISN, USGS / NTHMP, 2005), 346+ v3.13.227 (Aug 2024)**  
**NO PTWS EQ Observatory message. NO registration code required so cannot track nbr users**
- ❑ **Real-time Sea Level monitoring**
  - Tide Tool – TWC operations monitoring (PTWC, 2005) **v10.71**
  - IOC Sea Level Monitoring web site (IOC, 2008)
- ❑ **Tsunami Travel Time Software (ITIC, NGDC, 2007) – SDK4.0.1, with GUI for PC**
- ❑ **Tsunami Historical Database Online (WDS-NCEI), Offline (TsuDig, NCEI, ITIC, 2009)**
- ❑ **Tsunami Hazard Assessment Tools (2017) – PMEL, ITIC**
  - ❑ **ComMIT/MOST inundation modeling => OTGA TEMPP hybrid late 2025**
  - ❑ **Tsu Coastal Assessment Tool (TsuCAT v4.4, Aug 2024) => PTWC messages from multiple countries, with community exercise injects, near-real time USGS earthquake ingest**



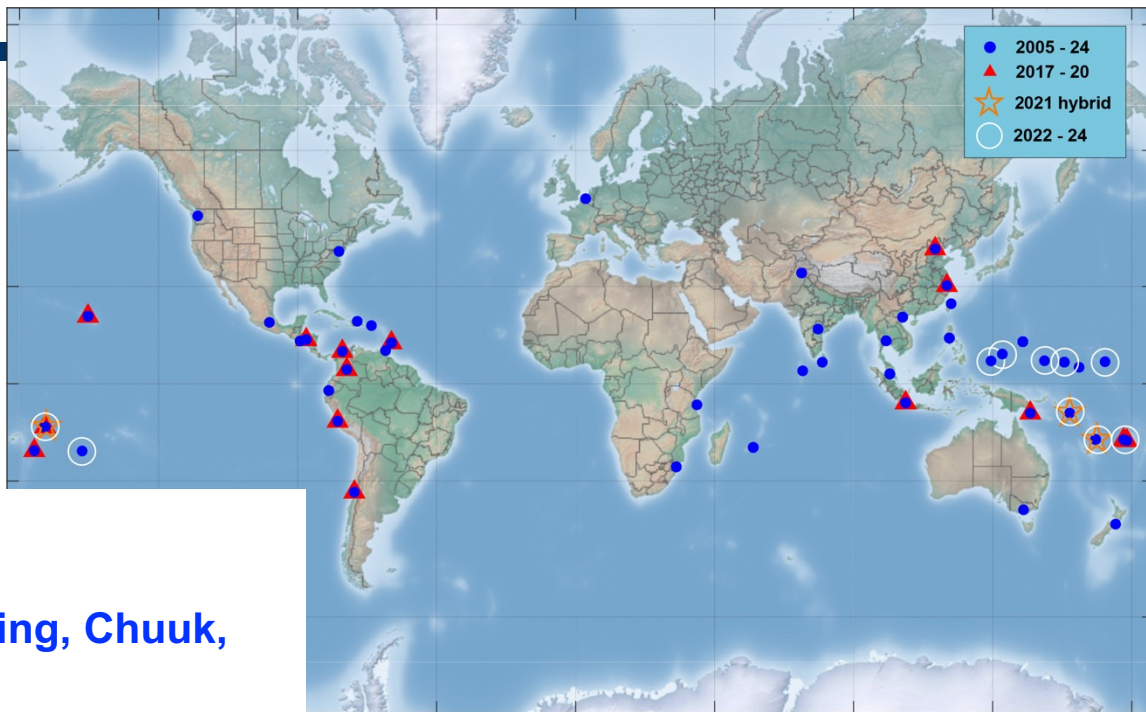
# ITIC - IOC TSUNAMI CAPACITY BUILDING (2005-2021, >130 trainings)

## 2023:

- Tsunami Ready Implementation, Fiji, Micronesia (Chuuk, Pohnpei, Yap), Marshall Islands (Majuro), Palau
- Cook Islands Review and Update of TWC and TER SOPs - Jan 2023
- PICT Regional on Tsunami Ready I - Jan 2023
- ITP-Hawaii, Tsunami Early Warning Systems, Aug 2023 – video

## 2024:

- **Tsunami Ready**
  - **FSM, RMI, Palau – ongoing, Chuuk, Pohnpei done**
  - **VN, SB kick-off – May, July**
  - **Samoa, KI planning**
- **Ocean Teacher Global Academy (OTGA) – Tsunami Awareness (June 2024)**
- **ITP-TEWS Chile, 19-30 Aug 2024**



## Courses

- Awareness (1 day)
- TEWS (1 wk)
- TWC & TER SOPs (1wk)
- TEMPP (5 1-wk)



# ITIC Activity – supporting PTWS

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## □ TWC Staff Minimum Competency

- Framework & Training Req approved ICG/PTWS-XXX.
- ITIC conduct Pilot
  - USAID funding
  - Develop training course (online, hybrid, in-person)
  - Pilot 1 small cohort Q1 of 2025
  - Report back to ICG/PTWS-XXX
  - Support from 1 IOC Ocean Training Interns – Tonga, Indonesia
  - Support from 1 Univ of Tokyo Ocean Alliance Intern
- On request, assist PIC to devise national ‘assessment’ and ‘certification’ process.

# ITIC support to PacWave24

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1. **Member TT**
2. **Enable PW24 web site** <http://www.pacwave.info/>
3. **Host Post-Exercise Eval tool (Survey Monkey)**
4. **For PW24-PICT, host 1 Communication method (Email listserv), serve as Observer**
5. **Support TT and Chair for compilation of Summary Report**



# UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME (TRRP)

54

TSUNAMI READY COMMUNITIES

11 – IOTWMS

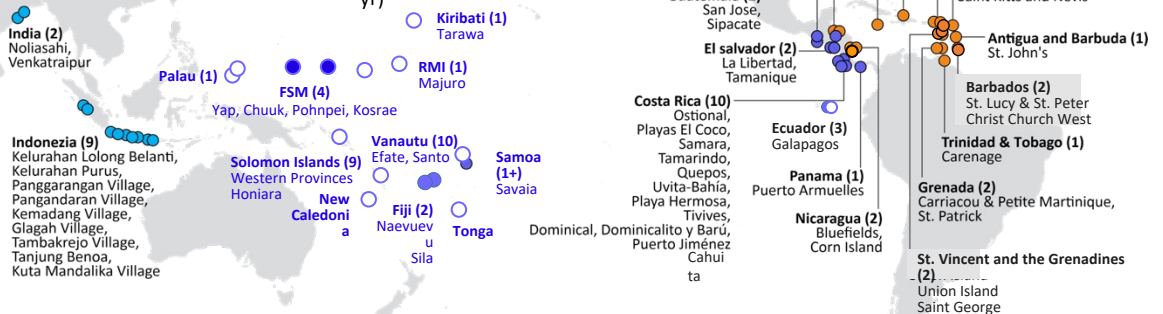
20 – PTWS (16/46 countries)

20 – CARIBE-EWS

3 – In progress (next yr)

## MAJOR ACTIVITIES IN 2021-2024+

- Ramp-up for Tsunami Ready
- Development of a global Tsunami Ready Interactive Map Viewer
- Hosting by ITIC of the Tsunami Ready web site
- Development of a new Tsunami Ready Board Game
- Publication of the IOC Manuals and Guides 74 «Standard Guidelines for Tsunami Ready Recognition Programme»





# UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME (TRRP)

50  
TSUNAMI READY  
COMMUNITIES

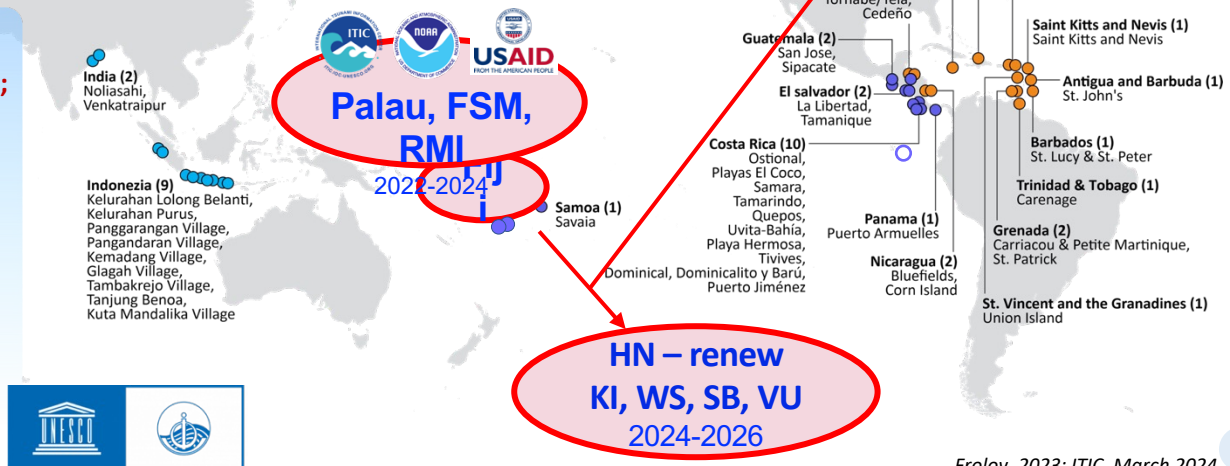
11 – IOTWMS  
19 – PTWS  
18 – CARIBE-EWS  
2 – NEAMTWS

NEAMTWS  
○ in progress



## MAJOR ACTIVITIES IN 2021-2024

- **Planned Next TR PTWS:** Ecuador Galapagos (Apr); FSM (4, Apr-Jun); RMI (1), Palau (1), Honduras
- Development of a global Tsunami Ready Interactive Map Viewer
- Hosting by ITIC of the Tsunami Ready web site
- Development of a new Tsunami Ready Board Game
- Publication of the IOC Manuals and Guides 74 «Standard Guidelines for Tsunami Ready Recognition Programme»



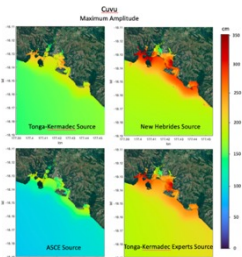
# Fiji Coral Coast: Nayevuyevu and Sila Villages



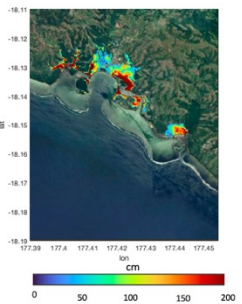
## TR Recognition Ceremony: Nov 3, 2023

Implementation Approach - Stakeholders  
 Mineral Resources Dept, National Disaster Management Office,  
 Ministry of Lands, Provincial Administrator, iTaukei Affairs, Plan  
 International, Partners in Community Development (Fiji), People  
 Living with Disability Organization

### Preparedness: Hazard and Evacuation



Maximum Composite Flow Depth



### Hazard Assessment: Tsunami Sources and Inundation

**TSUNAMI EVACUATION PROCEDURE**

If you feel an earthquake - "ground" (felt) or see:

1. Drop, cover and hold
2. After an earthquake, be aware that a tsunami may follow.
3. Move away from the beach immediately in a predetermined evacuation route through the land route.
4. After an intense and prolonged earthquake or look for other tsunamigenic sources to look for other tsunamigenic sources.
5. As a community volunteer, please follow Community Disaster Management Plan.
6. The sound of the siren is the official call for evacuation.
7. If the siren sounds, follow the evacuation procedure.
8. After the first siren sounds, more sirens are likely to come.
9. Wait for an official "All Clear" message before leaving the shelter.

**IF IT IS LONG OR STRONG, GET HOME**

**COLA VINA!! WELCOME TO NAEVUEVU VILLAGE**

**TSUNAMI EVACUATION MAP**

**NA I VAKARO MO MURIA NI YACO NA UA LOKA**

Na i vakaro mo muria ni Yaco na ua loka. Na i vakaro mo muria ni Yaco na ua loka. Na i vakaro mo muria ni Yaco na ua loka.

**TSUNAMI HAZARD ZONES**

Evacuation (meter)

- 1. No. 1 (Tsunami Hazard Zone)
- 2. No. 2 (Tsunami Hazard Zone)
- 3. No. 3 (Tsunami Hazard Zone)
- 4. No. 4 (Tsunami Hazard Zone)

PROVINCE: NADROGA/NIVASIGA DISTRICT: CUVU

**Legend**

- 1. Signage
- 2. Evacuation Route
- 3. Evacuation Area
- 4. Evacuation Route
- 5. Village Boundaries

**TSUNAMI EVACUATION PROCEDURE**

If you feel an earthquake - "ground" (felt) or see:

1. Drop, cover and hold
2. After an earthquake, be aware that a tsunami may follow.
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7. If the siren sounds, follow the evacuation procedure.
8. After the first siren sounds, more sirens are likely to come.
9. Wait for an official "All Clear" message before leaving the shelter.

**IF IT IS LONG OR STRONG, GET HOME**

**COLA VINA!! WELCOME TO SILA VILLAGE**

**TSUNAMI EVACUATION MAP**

**NA I VAKARO MO MURIA NI YACO NA UA LOKA**

Na i vakaro mo muria ni Yaco na ua loka. Na i vakaro mo muria ni Yaco na ua loka. Na i vakaro mo muria ni Yaco na ua loka.

**TSUNAMI HAZARD ZONES**

Evacuation (meter)

- 1. No. 1 (Tsunami Hazard Zone)
- 2. No. 2 (Tsunami Hazard Zone)
- 3. No. 3 (Tsunami Hazard Zone)
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PROVINCE: NADROGA/NIVASIGA DISTRICT: CUVU

**Legend**

- 1. Signage
- 2. Evacuation Route
- 3. Evacuation Area
- 4. Evacuation Route
- 5. Village Boundaries



Community participatory training, 18-22 Sep 2023

**GEOLOGICAL SERVICES DIVISION SEISMOLOGY UNIT**

**OFFICIAL WARNINGS**

When tsunamis travel across the ocean from East, they might take more time to warn people what to do.

<b>WARNING</b>	When to higher ground or inland immediately	TSUNAMI HAZARD ZONE	Evacuation
<b>ADVISORY</b>	When to higher ground or inland immediately	TSUNAMI HAZARD ZONE	Evacuation
<b>WATCH</b>	When to higher ground or inland immediately	TSUNAMI HAZARD ZONE	Evacuation
<b>INFORMATION STATEMENT</b>	When to higher ground or inland immediately	TSUNAMI HAZARD ZONE	Evacuation

**Alerts & Warnings**

Outdoor Sirens

Social Media

Telephone Notifications

Radio

Wireless Emergency Alerts and Text Messages

Television

**GEOLOGICAL SERVICES DIVISION SEISMOLOGY UNIT**

**IF YOU FEEL AN EARTHQUAKE THAT IS LONG AND STRONG, A TSUNAMI MAY FOLLOW**

**WHAT TO DO IN CASE OF A TSUNAMI**

1. Drop, cover & hold during an earthquake
2. Move inland or to a higher ground quickly, or use local evacuation route
3. Wait for official ALL CLEAR before returning to the beach

### Warning, Response, Awareness

**Sila Village Nadroga Province, Fiji is Tsunami Ready**

**IN CASE OF STRONG OR LONG EARTHQUAKE, OR ANY OFFICIAL MESSAGE, GO TO HIGHER GROUND OR FURTHER INLAND**

The recognition does not imply approval or promise that a community can or will perform at a certain level in case of tsunami. Tsunami Ready recognition does not mean that a community is tsunami proof. UNESCO-IOC recognizes that the community have built their capacity and implemented measures in accordance to the agreed indicators of UNESCO-IOC Tsunami Ready Programme, and that they will continue to maintain and ensure the sustainability of this preparedness level.

English	iTaukei (Fijian)
• Tsunami Hazard Zone	• Na Vanua oqo e rawa ni cabeta na Ualoka
• Tsunami Evacuation Route	• Na sala mo ni muria kina i drodro ni Ualoka
• Tsunami Safe Zone	• Nai drodro ni Ualoka
• Wait for Official All Clear	• Waraka me soli nai vakaro ni veisukayaki

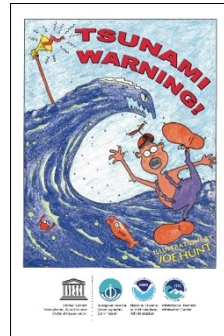
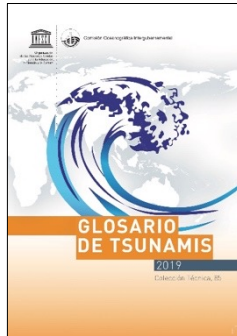
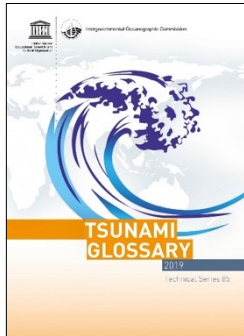


# ITIC Awareness materials – update, printed

[http://itic.ioc-unesco.org/index.php?option=com\\_content&view=category&layout=blog&id=1075&Itemid=1075](http://itic.ioc-unesco.org/index.php?option=com_content&view=category&layout=blog&id=1075&Itemid=1075)



- ❑ **Tsunami Glossary 2019 (printed En, Sp) => updated 2024 (TOWS-WG-XVI)**
- ❑ **Tsunami Warning! Comic**  
Amer Samoa (en) (IOC/INF1223) and English (update 2020)
- ❑ **Tsunami Great Waves, Surviving Tsunamis Lessons Learned (1960, 2010 Chile)**  
**Where the First Wave Arrives in Minutes (2004, 2006 Indonesia)**  
**Tsunamis on the Move, Sensing a Tsunami**
- ❑ **Tsunami Safety flyer – BRAILLE – ITIC-CAR Caribbean product - 2024**



UNESCO/IOC-NOAA

International Tsunami Information Center

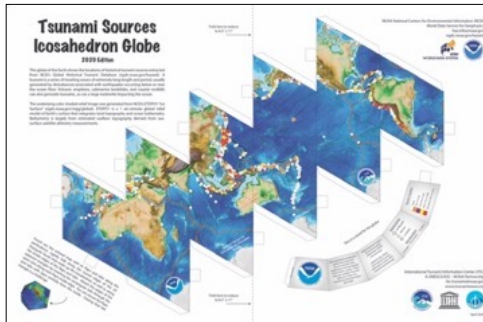
# ITIC Awareness materials – update, printed

[http://itic.ioc-unesco.org/index.php?option=com\\_content&view=category&layout=blog&id=1075&Itemid=1075](http://itic.ioc-unesco.org/index.php?option=com_content&view=category&layout=blog&id=1075&Itemid=1075)

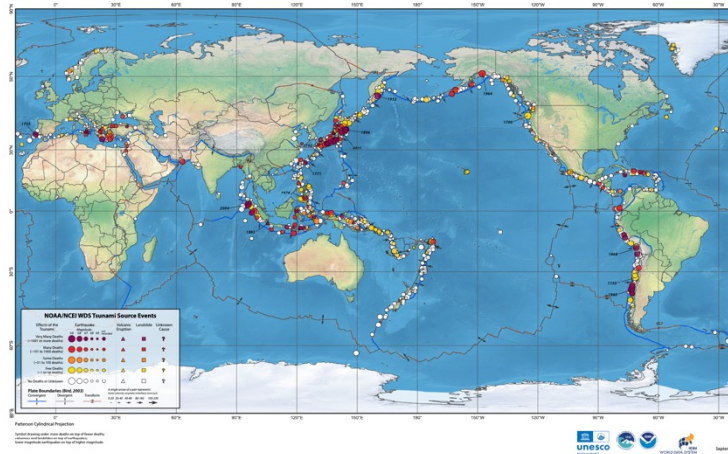


## ITIC-NCEI Hazard Posters – updated to 2023 (print 2024)

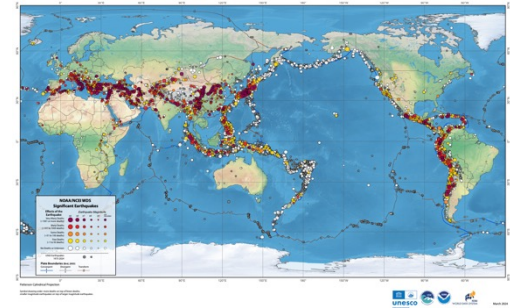
- ❑ **Global Tsunami Sources 1610 B.C. to A.D. 2023 –poster, icosahedron (2020)**
  - ❑ **Significant Earthquakes 2150 B.C. to A.D. 2023**
  - ❑ **Significant Volcanic Eruptions 4360 B.C. to A.D. 2023**
  - ❑ **2004 Historical Tsunami Effects - available Nov 2024**
- 2<sup>nd</sup> Global Tsu Symposium**



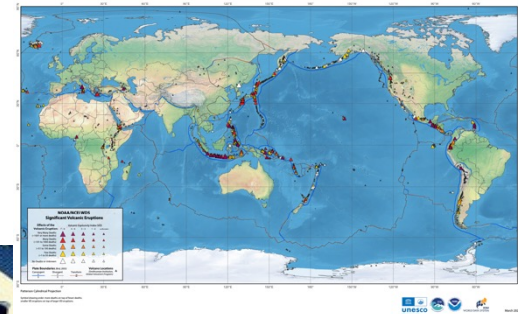
**Tsunami Sources 1610 B.C. to A.D. 2023**  
From Earthquakes, Volcanic Eruptions, Landslides, and Other Causes



**Significant Earthquakes 2150 B.C. to A.D. 2023**



**Significant Volcanic Eruptions 4360 B.C. to A.D. 2023**



# ITIC – supporting IOC TSR and PTWS

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## □ ITIC Director

- Tsunami Ready – TR Coalition Chair (TRC)
- UN Ocean Decade Scientific Comm – member TRC Chair
- UN Ocean Decade Conf – Barcelona, April 2024, TR Session
- IOTWMS and PTWS Tsunami Preparedness Capacity Assessment Workshop, Bangkok, June 2024 – ICG Chair nominated
- IOC Group of Expert for Capacity Development – member representing tsunami - IOC TSR Head nominated
- IOC OceanTeacher Global Academy – Steering Group, as ITIC is OTGA Specialized Training Center
- SMART Cable – advocate  
JTF SMART Science & Society co-chair (with/Jerome Aucan, SPC).  
NC-VN SMART, ITIC lead TWC SOP capacity bldg

# Japan Hamaguchi Award – Nov 2023

**“Hamaguchi Award” is an international award for individuals and/or organizations that have made significant scientific or pragmatic contributions to the enhancement of coastal resilience against tsunami, storm surge and other coastal disasters, which will raise people’s awareness of disaster resilience. Established in 2016 by the International Promotion Committee for Tsunami/Coastal Disaster Resilience Technology due to the designation of November 5th as “World Tsunami Awareness Day”**



Hamaguchi Award for Enhancement of Tsunami Resilience  
Kaiun Club, Wakayama, Chiyoh 5 November 2023

**Building a Tsunami Resilient Global Community**

**Dr. Laur**  
International Tsunami Information

## 2023年 濱口梧陵国際賞受賞者

**候補者博士 東京大学名誉教授/高知工科大学名誉教授**  
 候補者は、東海地震や南海トラフの発生や中東地帯の地震から1.5メートル以上の新たな沿岸浸水の解析手法を理論的に構築し、沿岸防災に関わる海洋工学の分野において優れた研究業績を多数発表して来られた。気候変動や海面上昇の最新研究に基づき沿岸浸水予測に於いて、国内外で最先端で最先端な研究に携わり、19年の国際的な「地球温暖化の沿岸影響—海面上昇・気候変動の気候・影響—」報告書（IPCC第6次評価報告書）の編纂を主導するほか、防災に関する政府機関の検討や国際的な学術会議など、特に東海・南海トラフ地震による沿岸部の被害の軽減を目的とした沿岸防災の「転り早い意識」の醸成、防災意識の浸透など、南海トラフ地震への防災・減災対策の政策立案に大きく貢献した。

**Laura S.L. Kong 博士 国際防災情報センター長 (米国)**  
 ITICは、ITICの前身である国際海洋学委員会 (IOC) と国際海況学委員会 (NOAA) により共同運営されている国際防災情報センター (ITIC) のセンター長として2001年から活動し、ITICの防災情報「減災システム」を世界的に展開する功績を挙げられている。また、ITICは国際的な防災情報センターや防災教育の目的を達成するために、国際防災情報センターの主要な連携拠点を構築し、46ヶ国の政府機関の協賛による防災情報「減災システム (ICOPSS)」を構築し、各国の防災情報や防災体制の強化に貢献して来られた。2004年のスマトラ島沖地震によるインド洋大津波の発生は、インド洋沿岸のみならず、アジア沿岸の多くの国に、海面上昇、気候変動、大規模な沿岸浸水などの、世界規模の沿岸浸水被害の軽減に大きく貢献した。

**自然災害管理総合研究センター (オーストラリア)**



別紙2

**History tells the importance of precautionary measures of TSUNAMI  
 ~ Story of Hamaguchi Goryo ~**

1828 - 1885

*"Honored as 100th birthday of the tsunami" based on a historical event Hamaguchi Goryo, during the Meiji Restoration, strongly urged that the Shinto Shinto Professor in western Japan (present Hamaguchi town, Wakayama Prefecture).*

*After joining the earthquake, Hamaguchi Goryo, a farmer who lived in the village, was regarded as a prophet's words when he predicted the earthquake on the sea and the arrival of the tsunami.*

*He pushed his fellow villagers to evacuate to higher ground by using fire as the evacuation character of this. His whole year's harvest, as a result of working.*

*From the hill top, the village was the tsunami destroyed the village. This confirmed the view of the first tsunami.*

*Hamaguchi Goryo's deeds and every concerned with his efforts to help the earthquake for coastal departments across his community and to build the individual's sense of prevention and preparedness among people in coastal areas.*

*This was a great project which saved the community, and was a key component in providing life opportunities to the people whose livelihoods were threatened by the tsunami.*

*Today, Hamaguchi Goryo's spirit of disaster preparedness is passed on to the next generation and the use of judgement and local knowledge is still used in the communities and the use of judgement and local knowledge is still used in the communities and the use of judgement and local knowledge is still used in the communities.*

**濱口梧陵国際賞  
 (国土交通大臣賞)**  
**Hamaguchi Award**  
 The Government of Japan (Minister of Land, Infrastructure, Transport and Tourism)

is presented to  
**Dr. Laura S.L. Kong**

In recognition of your outstanding achievement and contribution to tsunami/coastal disaster resilience technology, we present this award with our gratitude on the occasion of the World Tsunami Awareness Day (November 5).

November 1, 2023  
 Minister of Land, Infrastructure, Transport and Tourism  
 Government of Japan

**森下 隆夫**  
 SATTO TOSIYUKI



# ITIC – supporting IOC TSR and PTWS

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## □ Web site

- In June all tsunami sites ‘moved’ to UNESCO server (from IODE, from 3<sup>rd</sup> party vendor)
- Now transitioning to UNESCO ‘tsunami’ – Tammy, Laura
  - ITIC responsible - General information, including awareness
  - ITIC activities – as before
  - PTWS activities – support Technical Secretary
  - Tsunami Ready – (TR community information) - support

## □ Host Tsunami Bulletin Board list serv

## □ Host PTWS, CARIBE TWFP-NTWC, TNC backup-2 email list serv





# UNESCO IOC Tsunami Ready

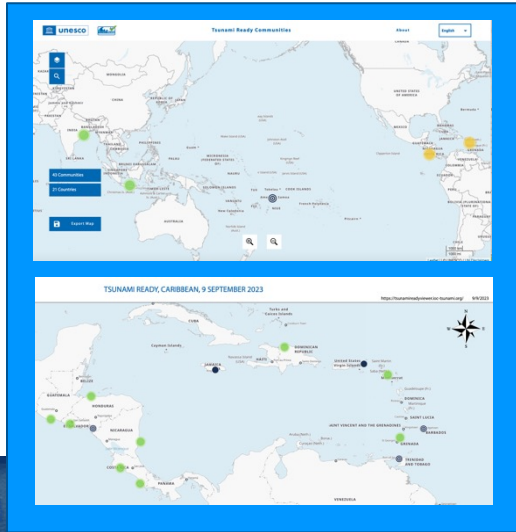


1. Facilitated by TICs

2. Web site (ITIC): PTWS, CARIBE-EWS, IOTWMS, NEAMTWS recognized communities

3. Global Tsunami Ready Interactive Map Viewer

[www.tsunamiready.org](http://www.tsunamiready.org)



UNESCO/IOC Tsunami Ready Programme - International Tsunami Information Center

International Tsunami Information Center

Home > Intergovernmental > UNESCO/IOC Tsunami Ready Programme

Home  
Contact ITIC  
General Info  
World  
Tsunami Day  
Hawaii  
Information  
American  
Samoa Info  
About  
Tsunamis  
Am I in  
Danger?  
What to Do?  
Aware, Educate  
Photo, Video, Graphic  
Quick Info - Media  
FAQs  
About ITIC  
Technical Info  
Current Warnings  
About Warnings  
Tsunami Events  
Earthquake Monitors  
Sea Level Monitors  
Research Meetings  
Tools & Products  
Library  
ITIC Tsunami Survey  
Marine Ports Guide  
Vertical Evac Guide

UNESCO/IOC Tsunami Ready Programme

- Caribbean
- Pacific
- Indian Ocean
- North Atlantic and Mediterranean
- Background
- Pilot Programme

UNESCO/IOC Tsunami Ready Recognition Programme

The Tsunami Ready Recognition Programme is an international community-based recognition programme developed by the Intergovernmental Oceanographic Commission (IOC) of UNESCO. It aims to build resilient communities through awareness and preparedness strategies that will protect life, livelihoods and property from tsunamis in different regions.

On 5 December 2017, the United Nations declared that a Decade of Ocean Science for Sustainable Development would be held from 2021 to 2030 (Ocean Decade). In June 2022, the IOC Assembly approved the establishment of the IOC Ocean Decade 'Tsunami Programme'. The implementation of the Tsunami Ready Recognition Programme will be a key contribution to achieving the societal outcome 'A Safe Ocean' of the Ocean Decade.

Safe Ocean  
with the aim of making 100% of communities at risk of tsunami prepared for and resilient to tsunamis by 2030 through the implementation of the UNESCO/IOC Tsunami Ready Programme.

Documents
<b>Fulfillment of the Indicators</b> Tsunami Ready Application
<b>Assessment Indicators</b> Inundation Map Estimated number of people at risk Resources
<b>Preparedness Indicators</b> Evacuation Map <ul style="list-style-type: none"><li>Map 1</li><li>Map 2</li><li>Map 3</li></ul> Signage Educational Materials <ul style="list-style-type: none"><li>Community Tsunami Banners</li><li>Social Media (12 PNGs)</li><li>Tsunami Ready Ad Video</li><li>Tsunami Ready Ad Audio</li><li>Get Ready for Tsunamis Brochure</li><li>Tsunami Safety Rules Flyer</li></ul> Outreach Activities Tsunami Exercise <ul style="list-style-type: none"><li>Photos (8 JPGs)</li><li>Photo (IHC)</li><li>Photo (IHC)</li></ul>
<b>Response Indicators</b> Response Plan Response Operations Systems to Receive Alerts <ul style="list-style-type: none"><li>Photo 1</li><li>Photo 2</li><li>Photo 3</li><li>Photo 4</li></ul> Systems to Disseminate Alerts

Savala, Upolu

On 20 June 2017, the village of Savala, Upolu, Samoa was recognized as Tsunami Ready. Samoa became the second country in the Pacific, and the first of the Pacific Island Countries, to join the UNESCO IOC/IOCPTWS Tsunami Ready guidelines. Samoa's Tsunami Ready application was approved by Samoa's National Tsunami Ready Board, who convened from June 14-16 to conduct a site verification visit, and then to review, evaluate, and approve their application.

Savala Documents

St. Patrick

On 20 September 2018, the parish of St. Patrick, Grenada was recognized as Tsunami Ready under the first Community Performance Based Tsunami Recognition Programme being implemented by the UNESCO/IOC-led Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (CARIBE EWS). As part of the regional efforts to develop an end-to-end tsunami early warning system, Grenada agreed to transition to undertake a phased approach and fulfil the programme's guidelines at the parish level, thus empowering one of its most vulnerable coastal communities to take effective action in the event of a potential tsunami and sea level rise.

The Parish of St. Patrick was coordinated by the US Caribbean Tsunami Warning Program and the Caribbean Tsunami Information Center (CTIC), a partnership arrangement between UNESCO/IOC and the Government of Barbados. It was implemented in collaboration with the Government of Grenada and non-governmental organizations, together with other regional organizations. Funding was provided by the U.S. Agency for International Development (USAID). The Tsunami Ready programme incorporates planning, education and awareness, with recognition being granted once the satisfactory completion of a verification process confirming fulfillment of the guidelines.

St. Patrick Documents

Document Title	Format/Size
Tsunami Ready Application	PDF (2.38 MB)
Tsunami Ready Signage	



# ITIC web site

[file:///Users/laura.kong/Desktop/Downloads18/ITIC\\_web/legacy-itic-static/legacy.itic.ioc-unesco.org/index-2.html](file:///Users/laura.kong/Desktop/Downloads18/ITIC_web/legacy-itic-static/legacy.itic.ioc-unesco.org/index-2.html)

The screenshot shows the ITIC website homepage with a navigation menu on the left, a main content area with a featured article, and a sidebar with logos and quick links.

**UNESCO IOC IOCTsunami NOAA US Tsunami NOAA Ts**

International  
**Tsunami Information Center**

You are here: Home Advanced

Search...  Search

**Home**

- Contact ITIC
- General Info
- World
- Tsunami Day
- Hawaii
- Information
- American Samoa Info
- About
- Tsunamis
- Am I in Danger?
- What to Do?
- Aware, Educate
- Photo, Video, Graphic
- Quick Info - Media
- FAQs
- About ITIC
- Technical Info
- Current Warnings
- About Warnings
- Tsunami Events
- Earthquake Monitors
- Sea Level Monitors
- Research Meetings
- Tools & Products
- Library
- ITST Tsunami Survey
- Marine Ports Guide
- Vertical Evac Guide
- Intergovernme
- Global System
- Pacific (PTWS)

**Tsunamis on the move.**

Tsunamis don't drive but grow in size as they come ashore.

Tsunami Awareness Poster - English, Spanish, Chinese, Japanese, Korean, Portuguese, Singalese and French. [View Warning Signs](#)

**NEWS FEATURE**

**Tsunami Safety Flyers**

**Tsunami Safety Rules in Braille**



"Inclusive and multi-hazard early warning systems that close the 'last mile' are among the best risk reduction methods in the face of climate-related hazards and geophysical hazards such as tsunamis... it is a moral imperative as well," said Mami Mizutori, Special Representative of the Secretary-General for Disaster Risk Reduction and Head of UNDRR (2018-2024). In that spirit and upon the request of the government of Saint Lucia, the International Tsunami Information Center Caribbean Office (ITIC-CAR) has developed an English/Spanish Braille translation of the Tsunami Safety Rules flyer of the Caribbean Tsunami Information Center. This is the first time tsunami information has been made available in Braille. The priority is to distribute to the visually impaired community in the Caribbean, but also share globally. The package includes a Braille Tsunami Safety Rules 5 page booklet, a printed transcription, the original color printed flyer and ITIC-CAR contact information. Saint Lucia requested these materials as part of the implementation of the UNESCO/IOC Tsunami Ready Recognition Programme in this Small Island Developing State in the Caribbean. According to CCB Eye Care Caribbean, blindness in the Caribbean is estimated at 1% according to a 2020 population analysis (<https://www.eyecarecaribbean.com/site/ecc/education-for-all-caribbean/caribbean-situation-analysis/3/>). Mrs. Freeman of the



Ivette Lopez of Puerto Rico reading the Safety Rules Flyer in Braille (credit: Glycerol Gomez Perez, Contractor of the International Tsunami Information Center Caribbean Office).

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**IOC Tsunami Information Centres**

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- ITIC
- CTIC
- ITIC-CAR
- ITIC
- NEANTIC

**Quick Links**

- Current Warnings
- Most Recent Tsunami

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**Resources**

**Tsunami Ready**

**UNESCO IOC Tsunami Ready**  
Preparing communities to



UNESCO/IOC-NOAA

International Tsunami Information Center



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Intergovernmental  
Oceanographic  
Commission



Thirtieth Session  
Intergovernmental Coordination Group for the  
Pacific Tsunami Warning Mitigation System (ICG/PTWS-XXX)  
12-15 September 2023  
Nuku'alofa, Tonga

# Thank You

# Muchas Gracias

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