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Call to Action

**Be Aware, Be Prepared
Be Tsunami Ready !**

Dr. Laura Kong

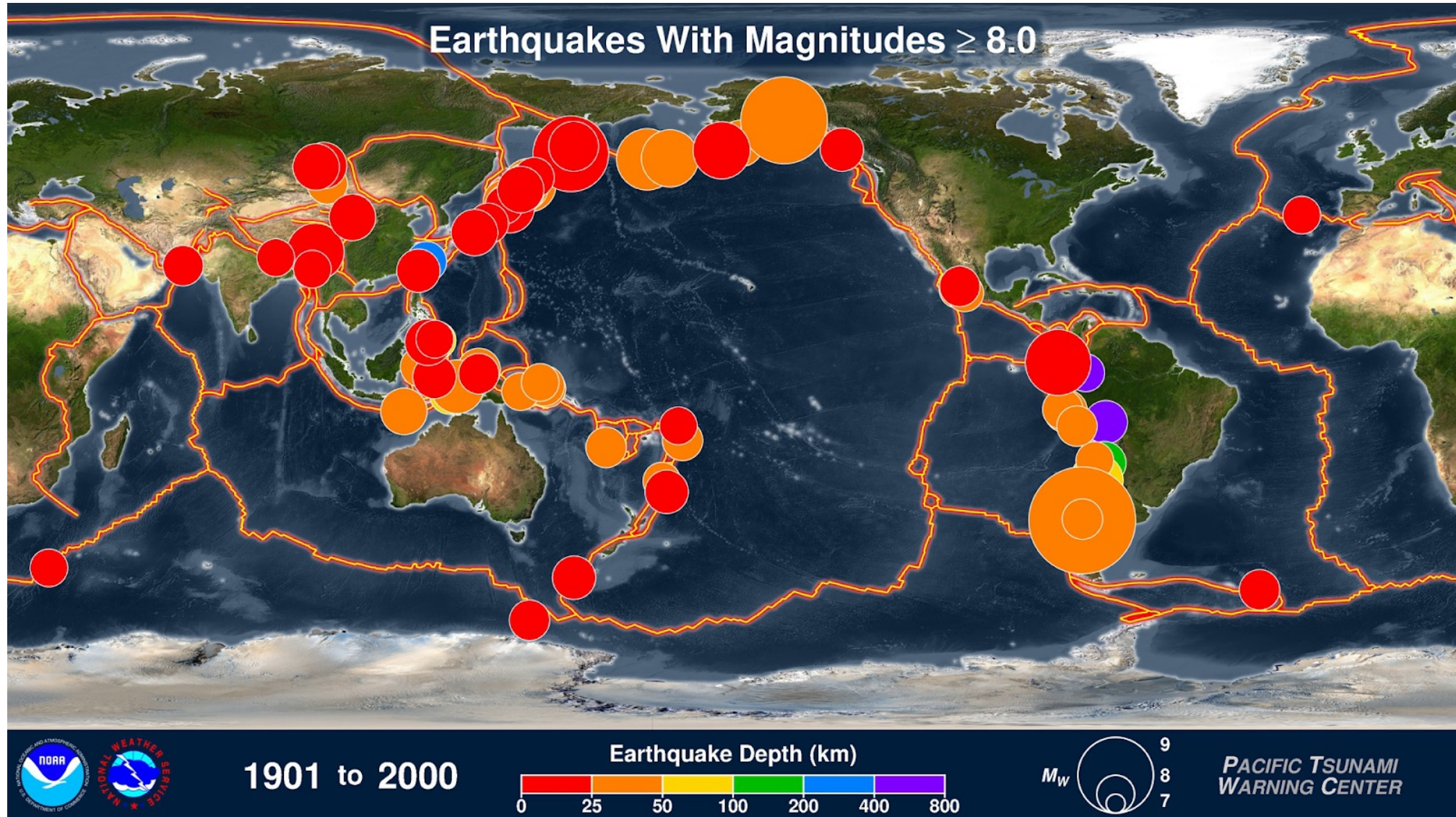
Chair, Tsunami Ready Coalition

International Tsunami Information Centre (ITIC), Honolulu

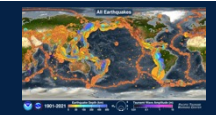
Bernardo Aliaga

Head, UNESCO/IOC/Tsunami Resilience Section, Paris

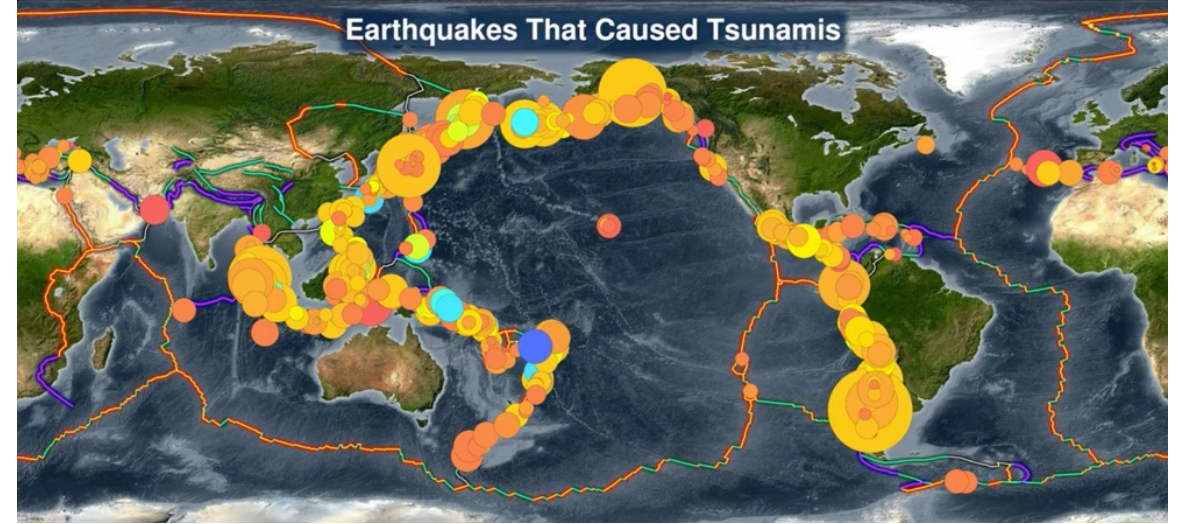
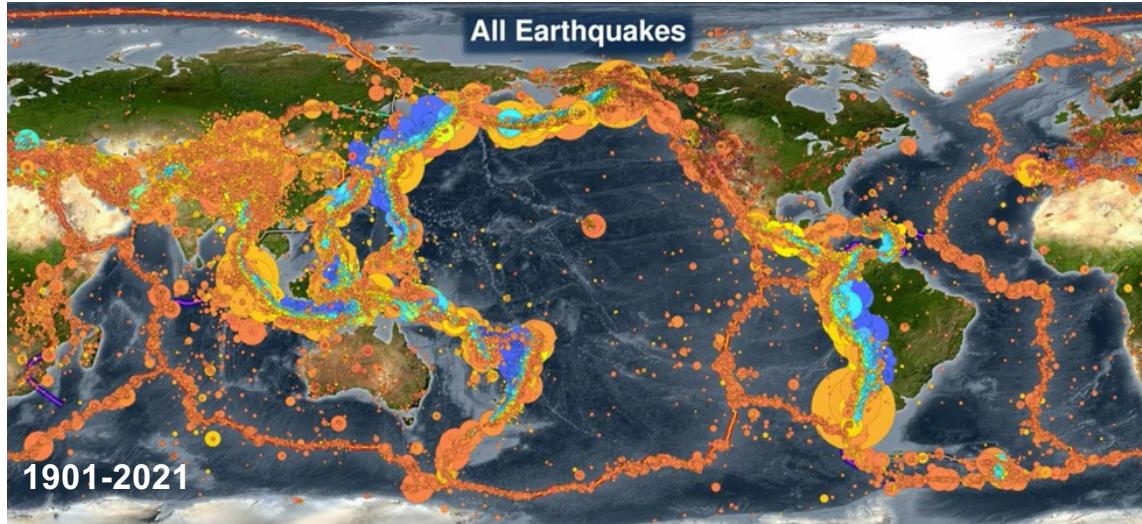
DANGEROUS EARTHQUAKES & TSUNAMIS



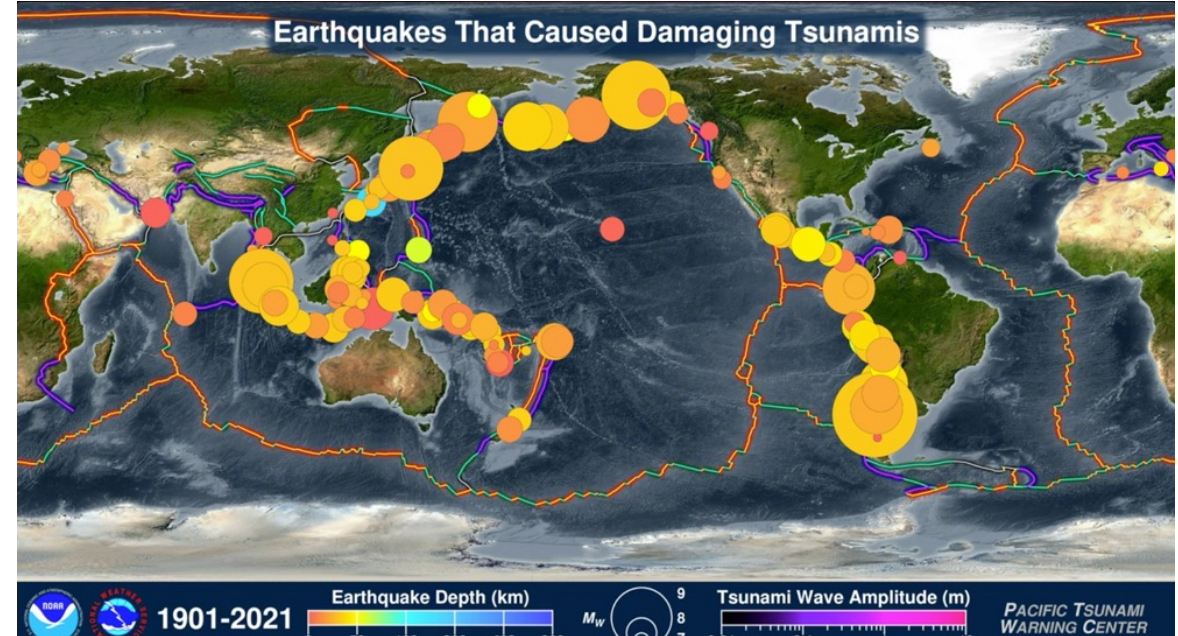
Click below
for video
EQ-Tsunami
1901-2021



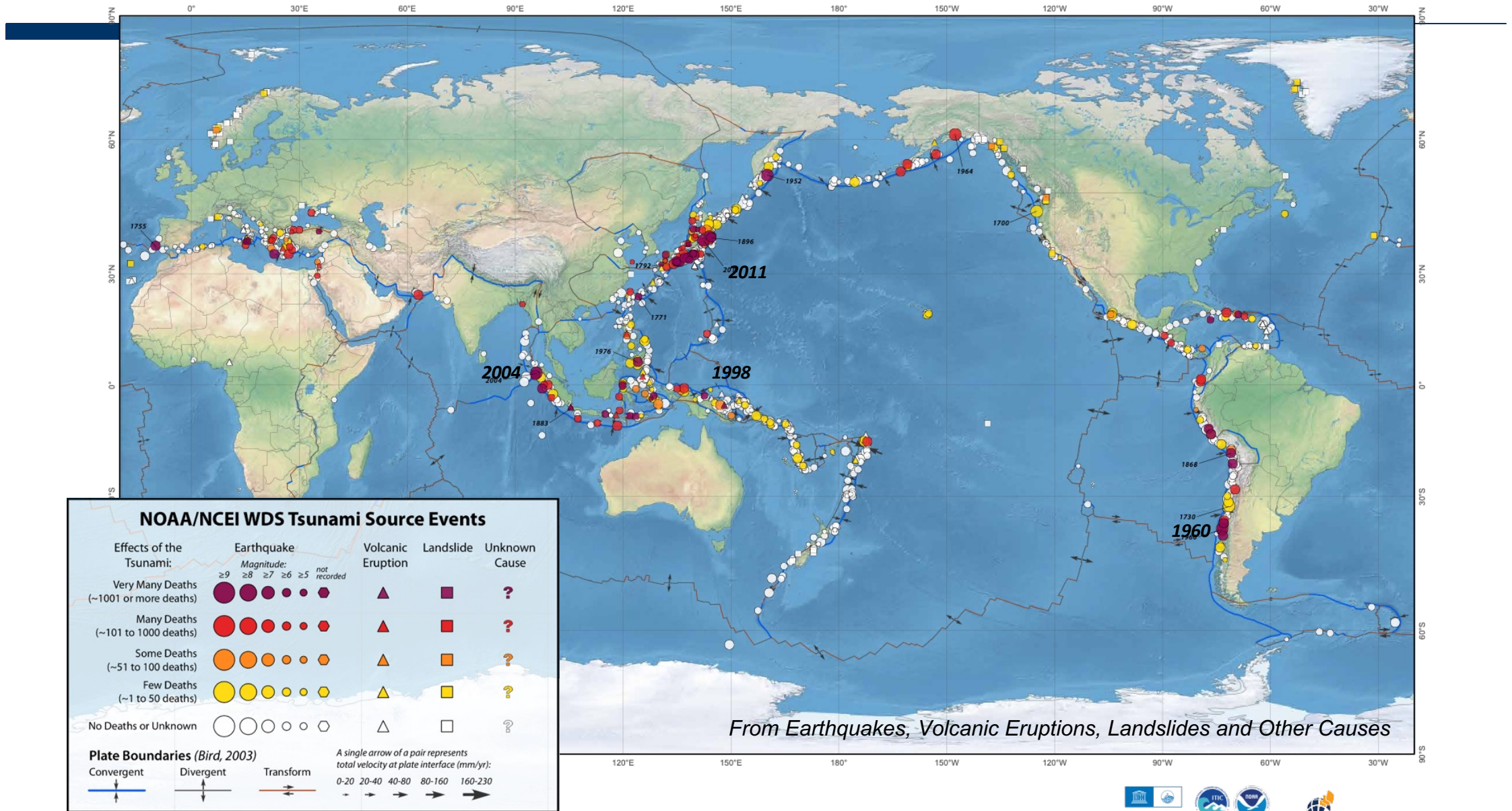
DANGEROUS EARTHQUAKES & TSUNAMIS



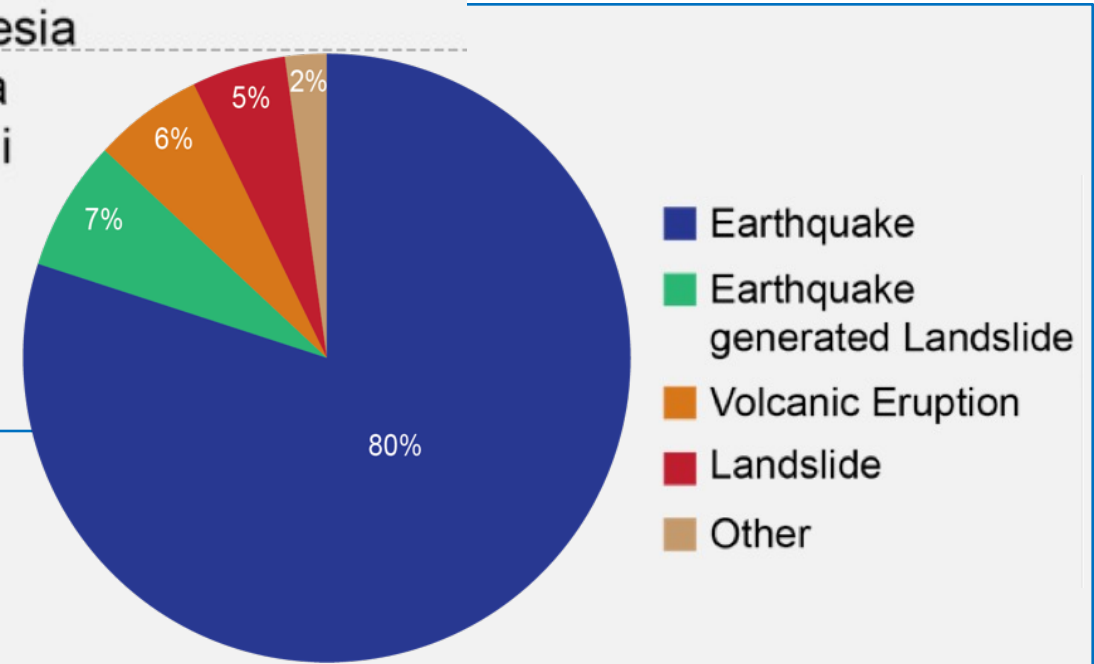
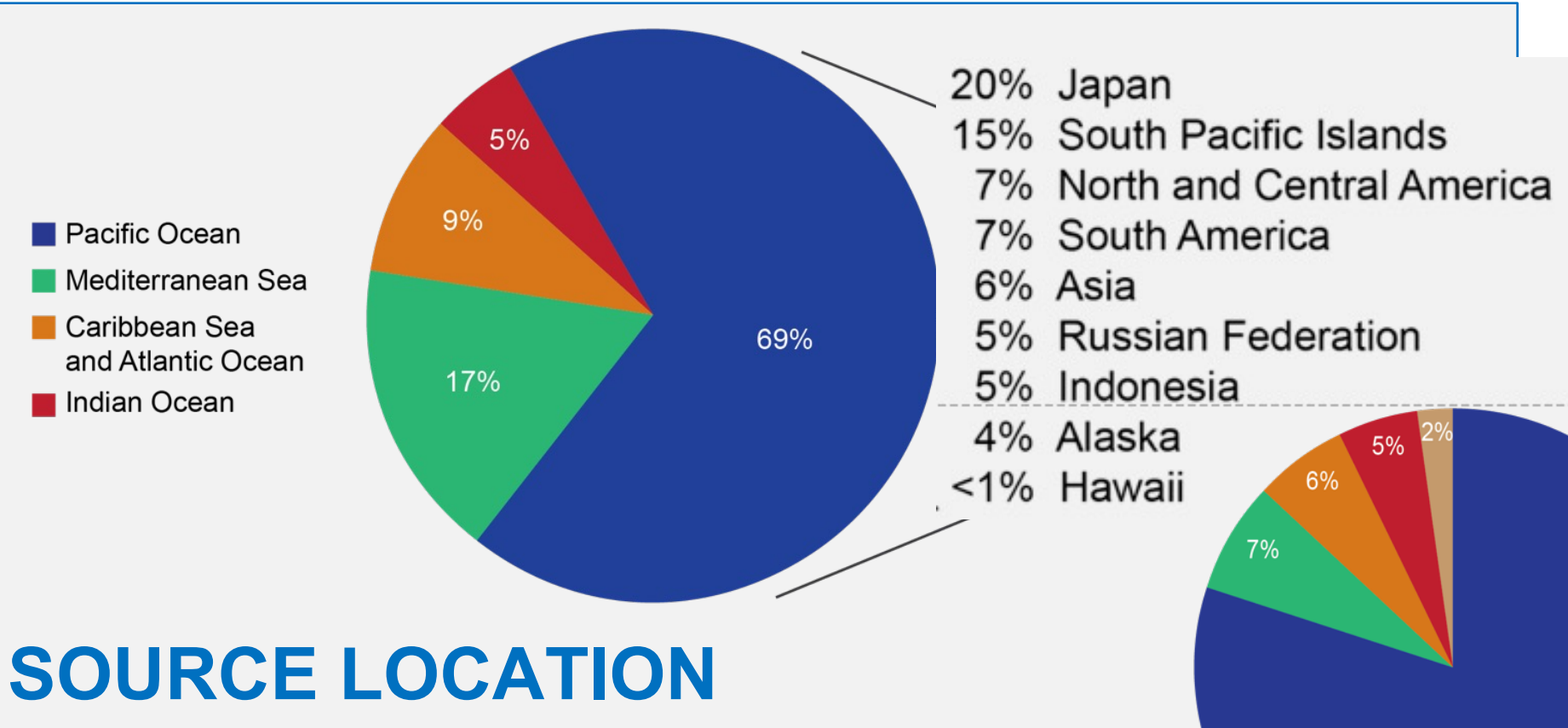
- ❑ 80% caused by earthquakes
- ❑ Shallow, undersea/near coast
- ❑ Magnitude 8+ (M7+)



DEADLY TSUNAMIS (1620 B.C to A.D. 2023)

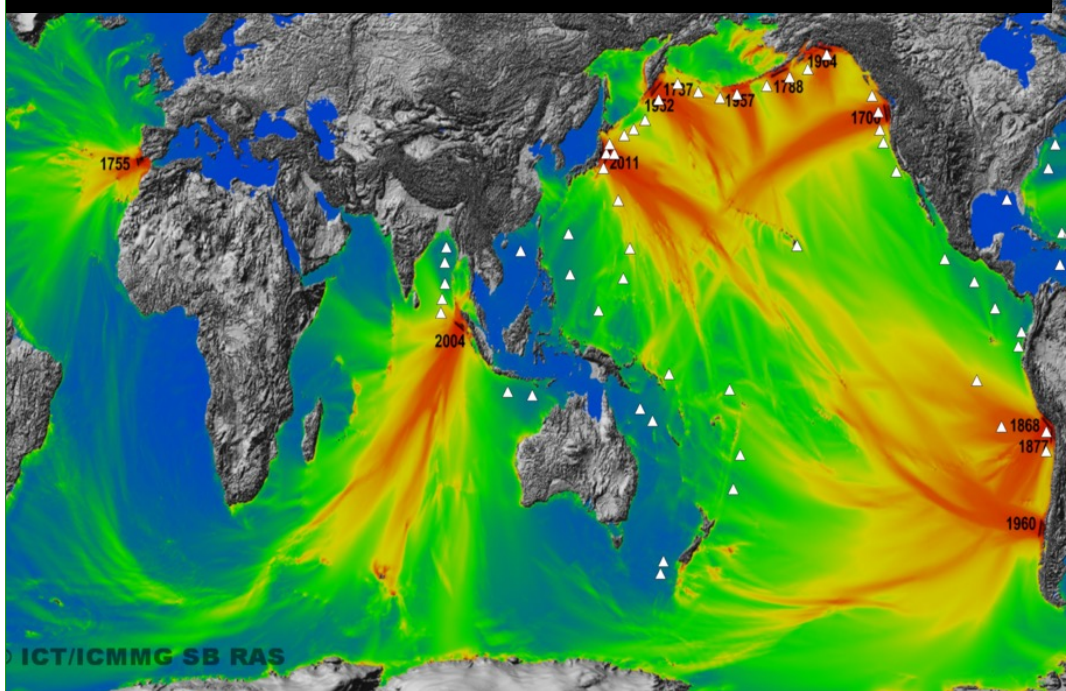


DEADLY TSUNAMIS (1620 B.C to A.D. 2023)

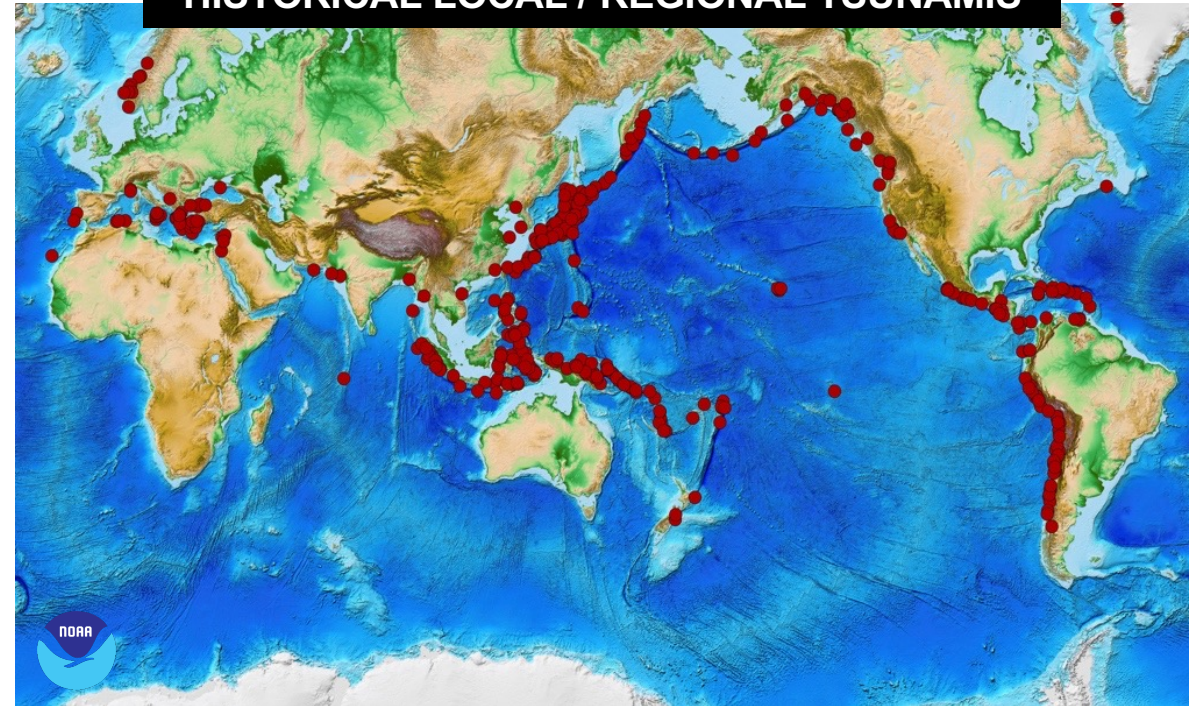


DEADLY TSUNAMIS – DISTANT to LOCAL

HISTORICAL TRANS-OCEANIC DISTANT TSUNAMIS



HISTORICAL LOCAL / REGIONAL TSUNAMIS



- ❑ Most tsunamis are local (< 1 hr) or regional (1-3 hrs)
- ❑ Globally, 90% of deaths from local or regional tsunamis (in Pacific, 99% of deaths)



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UNESCO/IOC Tsunami Ready Recognition Programme



OCEAN DECADE TSUNAMI PROGRAMME

A SAFE OCEAN

THE MAIN SOCIETAL OUTCOME

TO MAKE
100%

OF COMMUNITIES AT RISK
OF TSUNAMI PREPARED FOR
AND RESILIENT TO TSUNAMIS

BY
2030

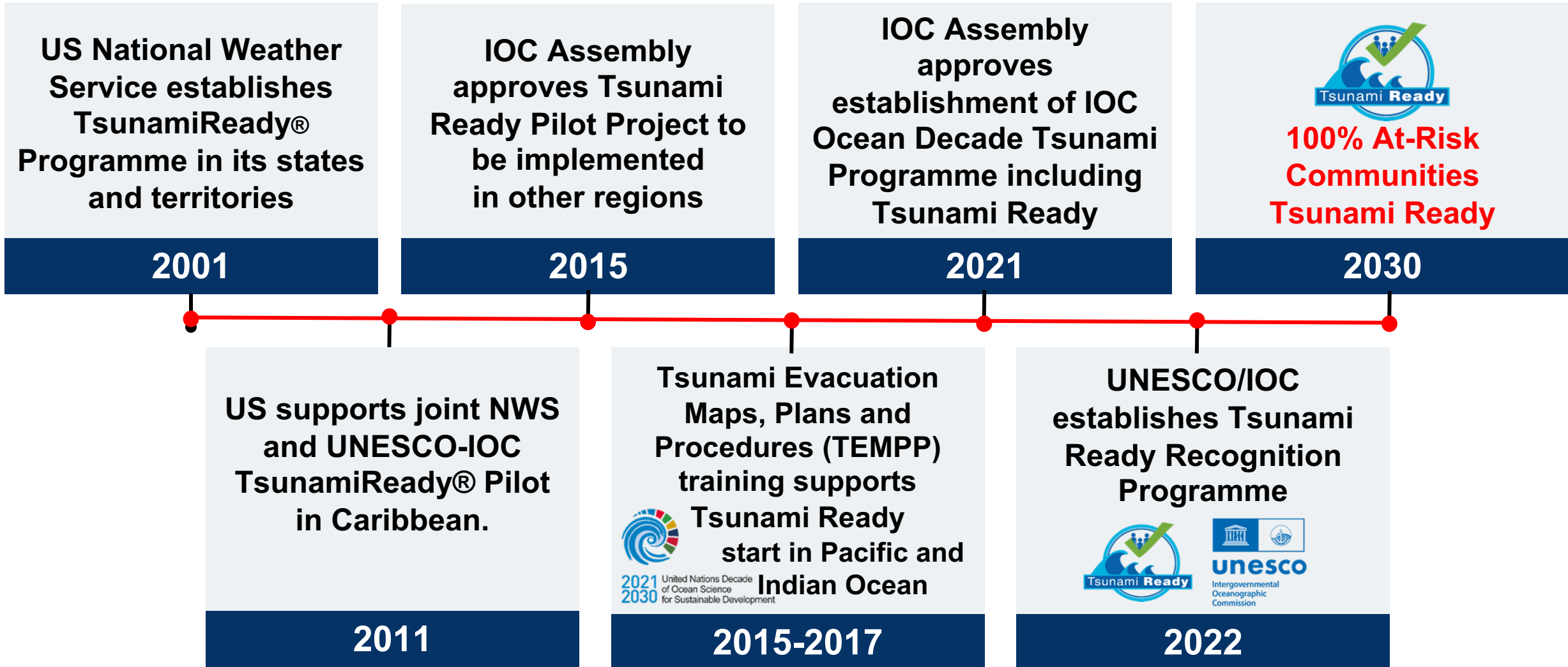
➤ *Tsunami Coalition: collaborative with critical UN stakeholders, civil protection, others ==> Raise profile. Facilitate resourcing*

CHAIR is LAURA KONG

➤ *Capacity Development: "Tsunami Ready" training, augmented by online IOC Ocean Teacher Global Academy (OTGA) ==> Global reach, deep curricula*

ITIC is OTGA STC

History of Tsunami Ready Programme



UN OCEAN DECADE TSUNAMI PROGRAMME: 100% AT-RISK COMMUNITIES TSUNAMI READY



UNESCO IOC TSUNAMI READY INDICATORS	
I	MITIGATION (MIT)
1	MIT-1. Tsunami hazard zones are mapped and designated
2	MIT-2. The number of people at risk in the tsunami hazard zone is estimated
3	MIT-3. Available economic, infrastructural, political, and social resources are identified
4	MIT-4. Tsunami information is publicly displayed.
II	PREPAREDNESS (PREP)
5	PREP-1. Easily understood tsunami evacuation maps are developed.
6	PREP-2. Outreach and public awareness and education resources are available and distributed.
7	PREP-3. Outreach or educational activities <u>are held at least 3 times a year.</u>
8	PREP-4. A Tsunami community exercise is conducted at least every two years
III	RESPONSE (RESP)
9	RESP-1. A community tsunami emergency operations plan (EOP) has been prepared
10	RESP-2. The capacity to manage emergency response operations during a tsunami has been established.
11	RESP-3. Redundant and reliable means to timely receive 24-hour official tsunami alerts have been identified.
12	RESP-4. Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public have been identified.

- **STRATEGY:**
Be Aware, Be Prepared
- **FRAMEWORK:**
 - Harmonized global guidelines UNESCO IOC Tsunami Ready
 - Performance-based Community Recognition
- **ACTION:**
National programs empower Communities
- **GLOBAL MEASURE**
 - 12 Indicators – Assessment, Preparedness, Response

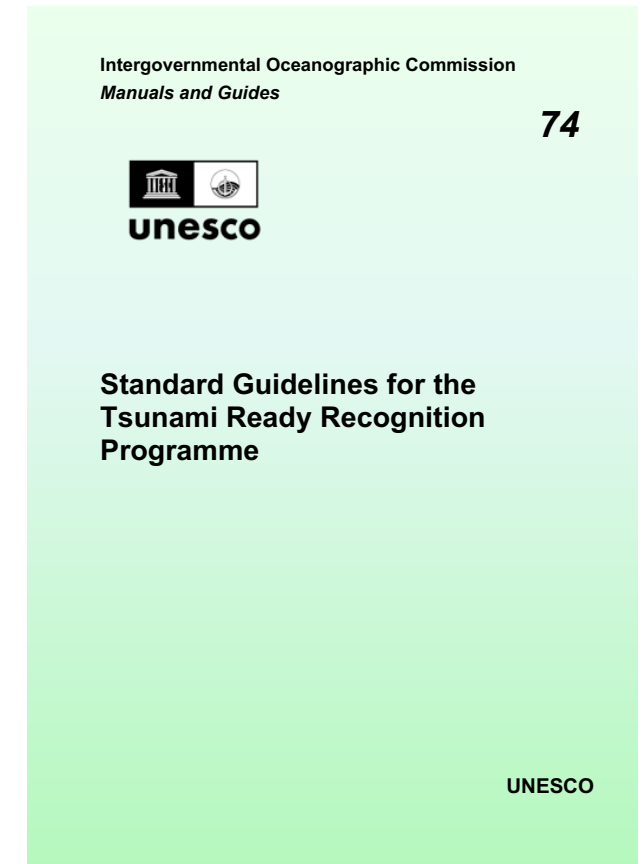
Tsunami Ready



UNESCO-IOC Tsunami Ready Recognition Programme is:

- Voluntary international performance-based community programme.
- Facilitated by UNESCO-IOC Tsunami Information Centres* (CTIC, IOTIC, ITIC, and NEAMTIC) of each region
- Formal recognition process follows standard guidelines (UNESCO-IOC Manual and Guide 74).

UNESCO-IOC Tsunami Information Centres



UNESCO



At-risk population - Pacific

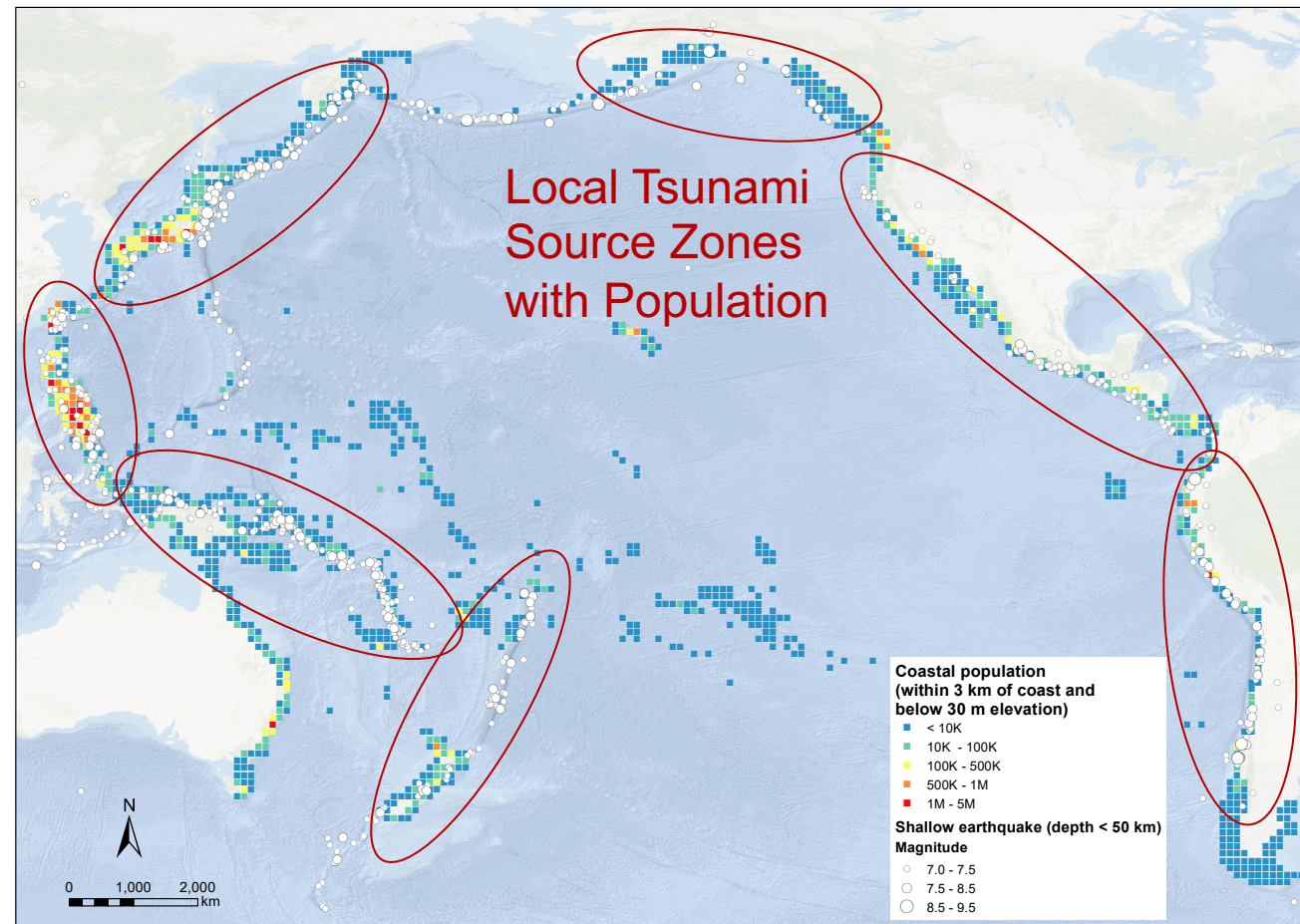


Tsunami evacuation zone

Population to evacuate

Less than 30 m elevation and within 3 km of coast

83,413,677



Coastal Population (1 deg aggregate)

- < 10K
- 10K - 100K
- 100K - 500K
- 500K - 1M
- 1M - 3M

Shallow Earthquakes Magnitude

- 7.0 - 7.5
- 7.5 - 8.5
- 8.5 - 9.5

Gridded Population of the World, Version 4 (GPWv4) (<https://sedac.ciesin.columbia.edu/binaries/web/sedac/collections/gpw-v4/gpw-v4-documentation-rev11.pdf>).
30 sec resolution aggregated to 1 deg
B. Fry, GNS Science, NZ

UNESCO/IOC TSUNAMI READY RECOGNITION PROGRAMME (TRRP)

51
TSUNAMI READY COMMUNITIES
 11 – IOTWMS
 19 – PTWS
 19 – CARIBE-EWS
 2 – NEAMTWS
 ○ – in progress (4 mo)

MAJOR ACTIVITIES IN 2021-2023

- 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»





UNDRR

UN Office for Disaster Risk Reduction



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Call to Action!

Making **100%**
of at-risk communities
Tsunami Ready by **2030.**