

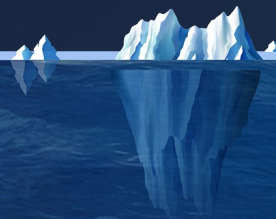


CHILEAN NAVY HYDROGRAPHIC AND OCEANOGRAPHIC SERVICE

Director - Captain Carlos Zúñiga Araya

National Tsunami Warning System Emergency response

“Petropavlovsk of Kamchatka, Russia. July 29, 2025”



PATRIOTISM

Honor - Loyalty - Courage - Integrity - Duty





Supreme Decree No. 26, January 11, 1966.

National Tsunami Warning System

- Mission: Assessment of the tsunami threat within our national area of responsibility.



- Advanced technology systems, with national scientific input.
- High level of training and education.
- Redundancy in monitoring, command/control, and communications systems.
- High maintenance and renewal costs.
- Operation under national and international protocols.

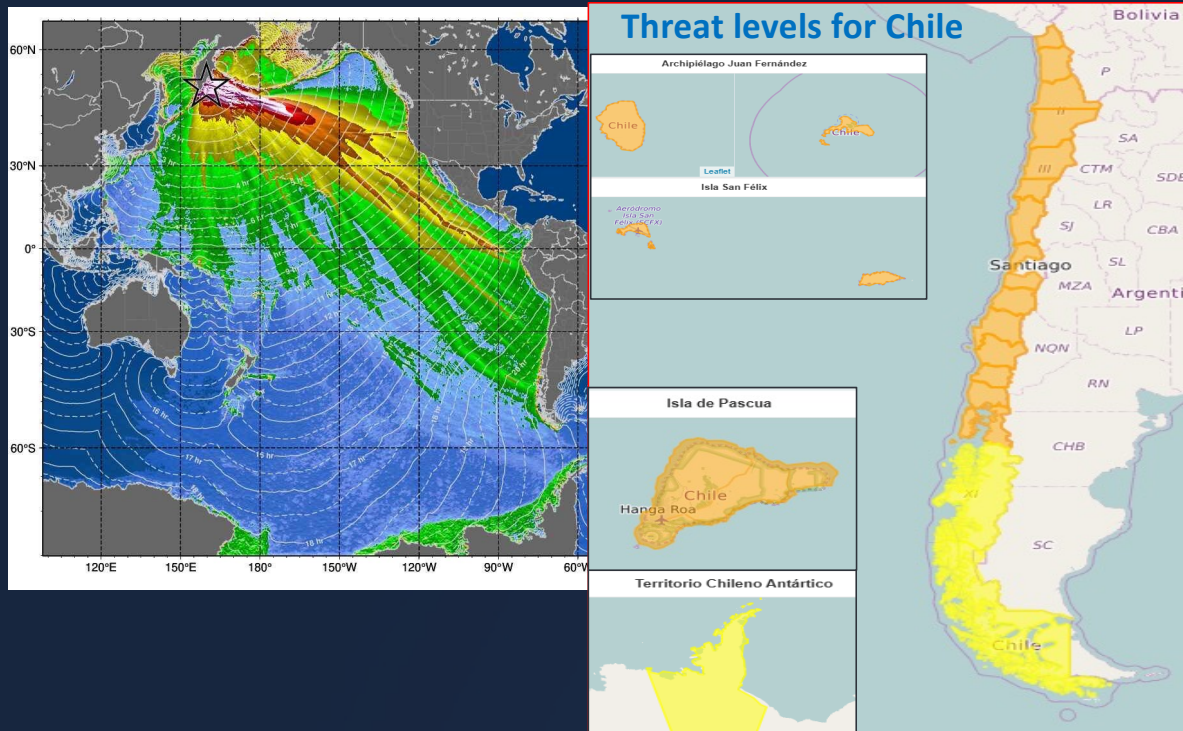




General Actions and Emergency Response

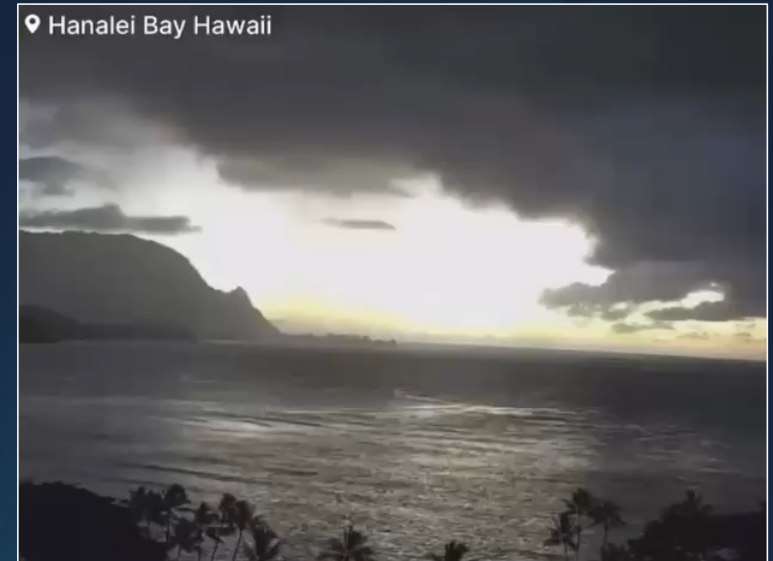
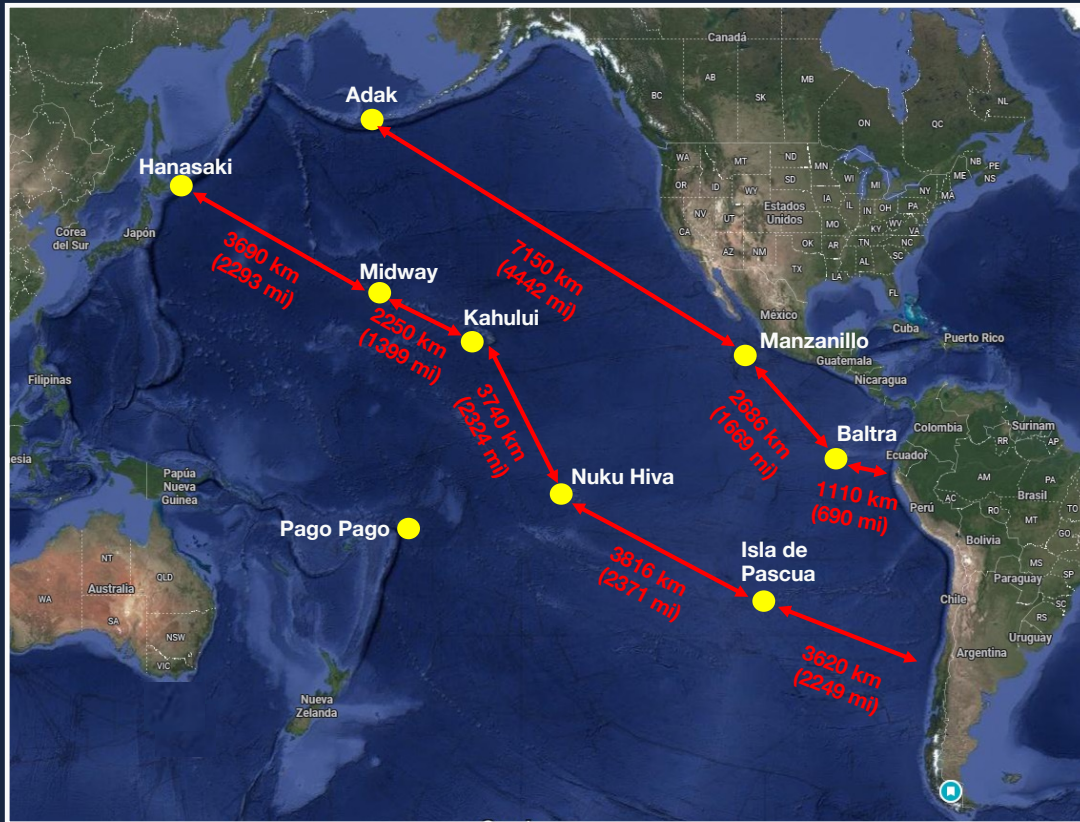
National Tsunami Warning System (SNAM acronym in Spanish)

Based on PTWC's Bulletin N°3 and N°4, Chile issued its Bulletin N°3 and N°6 with a Threat Message to the National Disaster Prevention and Response Service (SENAPRED) establishing "threats Levels" for national, insular and Antarctic territories.



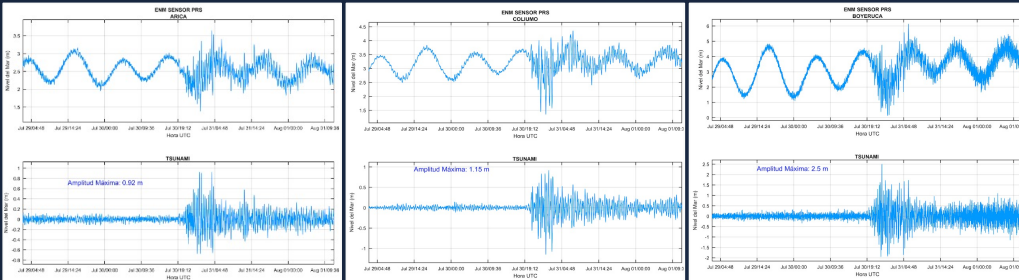
- 29/Jul 23:33 UTC, SNAM is activated by seismic information of "P-Time" message.
- A total of 46 Bulletins were issued for SNAM.
- 29/Jul 23:39 UTC, SNAM Bol. 1, reports the occurrence of a major event in the Pacific Basin, monitoring is activated.
- 30/Jul 01:23 UTC, SNAM Bol. 3, issues first bulletin **with tsunami threat levels**.
- 30/Jul 20:45 UTC, SNAM Bol. 23, first Partial Cancellation.
- 31/Jul 12:52 UTC, SNAM Bol. 46, Total Cancellation.

INTERNATIONAL MONITORING

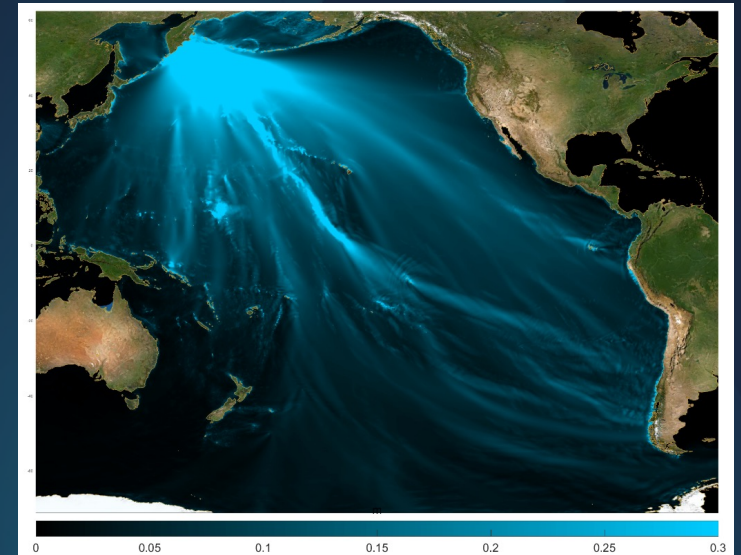


Monitoring and Maximum Tsunami Amplitudes at Sea Level Stations

Tide Gauge	Predicted Time of Arrival (TTT) (Local Time)	Observed Tsunami Arrival (Local Time)	Maximum Amplitude (m)	Time Maximum Amplitude (Local Time)
ISLA DE PASCUA	30-07-2025 11:25	30-07-2025 12:00	0.64	30-07-2025 14:35
ARICA	30-07-2025 14:51	30-07-2025 17:21	0.92	30-07-2025 20:50
PUNTA CHOROS	30-07-2025 15:31	30-07-2025 15:48	1.01	30-07-2025 20:02
COQUIMBO	30-07-2025 15:34	30-07-2025 15:48	1.34	30-07-2025 19:34
QUINTERO	30-07-2025 15:54	30-07-2025 16:00	1.12	30-07-2025 20:14
BOYERUCA	30-07-2025 15:57	30-07-2025 16:28	2.5	30-07-2025 19:06
COLIUMO	30-07-2025 16:22	30-07-2025 16:39	1.15	30-07-2025 20:39



- SNAM performed 13 tsunami modeling based on international seismic solutions and historical background of the 1952 tsunami.
- Constant analysis of sea level data (International and national).
- Tsunami records from the observing network was complemented with data from field trained observers and modeling results.





Evacuation

- The evacuations were carried out under the lead of the "National Service for Disaster Prevention and Response" (SENAPRED).
- Timely evacuation for each region. *(3 hours before arrival times estimated by SHOA)*
- Positive response from the communities.
- Maritime Authority activated its tsunami emergency plan.



TOTAL VESSELS SAILING: 2,285.
TOTAL LARGER VESSELS AFFECTED: 39.

Cancellation of the emergency

After more than 37 hours, SNAM issued the total **threat cancellation**.



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