## The Soviet Union's secret tsunami

August 4 2025, by Patrick David Sharrocks



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On July 30, one of <u>the largest earthquakes ever recorded</u> struck off the Kamchatka peninsula, in Russia's far east. Within minutes, <u>tsunami</u> <u>warnings</u> were issued in Russia, much of Asia and across the Pacific in Hawaii, New Zealand and California.

But this wasn't the first time a huge tsunami had hit Kamchatka. In 1952, an <u>even more powerful earthquake</u> hit the same fault line—but it was kept hidden from the world.

Kamchatka is no stranger to <u>seismic activity</u>, with a large earthquake occurring as recently as <u>2020</u> (the <u>fourth most powerful</u> anywhere in the world that year). However, only the biggest earthquakes can create large destructive tsunamis and cause Pacific-wide warnings like those experienced on Wednesday.

On a <u>plate boundary</u>, where two pieces of Earth's crust meet, such large earthquakes often occur on consistent timescales known as "seismic cycles." In some areas, these cycles are long: on the Cascadia boundary off the Pacific coast of North America, for instance, the last major tsunami-generating earthquake was in <u>1700</u>.

However, the plates move much faster near Kamchatka (around <u>eight</u> <u>centimeters a year</u>) and the cycle is much shorter. Large tsunamis were generated from earthquakes in 1737, 1841, 1952—and now 2025 is a continuation of this cycle.

Just after midday on November 5, 1952, <u>tsunami waves</u> of up to 8 feet (2.4 meters) hit Hawaii. This was an early test for the <u>Pacific Tsunami Warning Center</u>, which had recently been established on the islands in response to a 1946 tsunami following an earthquake in Alaska.

Earlier that day, seismologists across the world had detected signals from an earthquake pinpointed to the northwest Pacific around Kamchatka. When the wave hit Hawaii, scientists there quickly used the exact time of the wave and the known speed of tsunamis (in <u>deep water</u>, these are similar to a jet plane) to deduce it must have been created by that giant earthquake in the northwest Pacific. But from Kamchatka itself, there was silence.

There were no reports of an earthquake or tsunami in the Soviet press. Not a word was written in the state newspaper <u>Pravda</u>, which instead focused on preparations for the Great October Revolution anniversary two days later.

Days and months passed without any recognition of the tsunami and earthquake. Even an interview with a Russian volcanologist, Alexander Evgenievich Svyatlovsky, was stored as a <u>"state secret."</u> despite him merely explaining how the tsunami had originated.

Such secrecy was common at the height of the cold war, with Chernobyl and other disasters often being underreported by the Soviet authorities. It was only after the release of state archives in the early 2000s that the full picture could be told.

## The devastation at Severo-Kurilsk

The isolated fishing town of Severo-Kurilsk lies on an island just south of the Kamchatka peninsula. According to state archives, <u>6,000 people</u> lived there in 1952, spread thinly across the coastline.

On the morning of November 5, the inhabitants were woken by a major <u>earthquake</u>, the strongest anyone there had <u>ever felt</u>. Around 45 minutes later a wave arrived, slowing and steepening as it reached the shore. Soldiers on the lookout were able to warn people of the danger, and many fled to high ground.

But tsunamis are wave trains with a series of peaks and troughs. They act much like waves you'd experience on a beach—except that these waves stretch thousands of meters into the ocean, hitting the shore not every few seconds but with tens of minutes between each one.

Minutes after some residents had returned to their homes, a second,

larger wave struck. It rose some <u>12 meters high</u>—as tall as a three-story building—and hit the town from behind. A third wave soon followed, washing away much of the town that remained.

In all, the tsunami caused <u>2,336 deaths</u> out of a population of 6,000. The survivors never shared the details for fear of reprisals, and the story remained a state secret.

Today, Severo-Kurilsk sits 20 meters above sea level, rebuilt and fortified. <u>Videos</u> from the 2025 tsunami show flooding at the port, but there are no reported <u>fatalities</u>—testament to modern warning systems and urban planning.

One problem remains: the repositioning of the town has placed it in the path of deadly mudflows from the nearby volcano <u>Ebeko</u> (only 7km away). For Severo-Kurilsk, tsunamis represent only one of many threats in this corner of the Pacific.

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