

World's 10 most dangerous volcanoes identified

November 13 2015, by Sam Wood



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Volcano enthusiasts have enlisted the help of a University of Manchester academic to come up with a list of the top ten most dangerous volcanoes in the world.

And the Japanese island of Iwo Jima, which was invaded by the US army during the Second World War, has been identified in the number one spot.

Published as a series of blogs on the Volcano café website, the list includes volcanoes which have a realistic chance of erupting in the next 100 years and which risk causing the deaths of 1,000,000 people or more. It includes volcanoes from all over the world, including South and

Central America, Africa, Asia and Europe.

The point of the list is to try to highlight those volcanoes that are not studied very well, but which could pose a big threat to regional and world stability, should they erupt. Professor Albert Zijlstra, of The University of Manchester explains the motivation behind the list. He said: "There are parts of the world where monitoring of volcanoes is very poor, and many of these poorly watched volcanoes are close to populated areas.

"The last time such a list was made was 25 years ago and that list mainly included volcanoes that are accessible to study in developed countries. Our new list looks all over the world, including in less developed countries. We have created this list to try to highlight the need for better monitoring and preparedness in many areas of the world.

There hasn't been a [major eruption](#) for 200 years, since Tambora in 1815 ("the year without summer"), and there has never been a large [eruption](#) in a modern, developed country. There is a chance of perhaps 1 in 3 that there will such an eruption this century. "

The island of Iwo Jima is about twenty metres higher than it was in 1945 due to a growing magma chamber underneath. The beach where the American forces landed in 1945 is now 17 meters above the ocean surface. The island has been pushed up by 1 meter every 4 years since several hundred years. It is only a matter of time before the whole island explodes. Although few people live on Iwo Jima itself, a large eruption would cause a tsunami that could devastate southern Japan and coastal China including Shanghai and Hong Kong. The team estimates that in Japan the tsunami could be 25 meters high. The eruption of the similar sized Kuwae volcano in Vanatua in 1458 caused a tsunami 30 meters high in northern New Zealand, and lead to the cultural collapse of Polynesia.

After Iwo Jima the second most dangerous [volcano](#) has been named as Apoyeque in Nicaragua, which is next to its capital Managua, with a population of more than 2m. Apoyeque has the threat of an [underwater eruption](#), which could cause a large lake tsunami, as well as the danger posed by the eruption itself. It has had major eruptions every 2000 years. The last one was 2000 years ago.

In third place is Campi Flegrei near Naples in Italy, which poses even more of a threat to the city than Vesuvius. It erupts less frequently than Vesuvius, but is much closer to the city and has the potential for much larger eruptions. The western suburbs of Naples, a city of 4.4 million, are built inside its caldera. .

Other volcanoes in the list are in Indonesia, the Philippines, Mexico, and Cameroon.

Henrik Lovén, previously a major in the Swedish army and keen amateur volcanologist, helps to run the Volcano Café site and contributed to the top ten list.

He said: "We want to raise awareness that there are many volcanoes that could erupt and that are not being monitored properly. Hopefully the people who live near the volcanoes in this list will get more help to help them prepare for an eruption."

The full top ten list is:

1. Iwo Jima, Japan. Candidate for a very large eruption. Affected: Japan, Philippines, coastal China
2. [Chiltepe/Apoyeque, Nicaragua](#). At risk: Managua
3. [Campi Flegrei, Italy](#). At risk: Naples
4. [Mount Aso, Japan](#). At risk: Kumamoto, Nagasaki
5. [Trans Mexico Volcanic Belt, Mexico](#). At risk: Mexico City,

Pueblo, Toluca

6. [Gunung Agung](#), Indonesia. At risk: Bali
7. [Mount Cameroon \(or Mongo ma Ndemi\)](#), Cameroon. At risk: Buea, Douala
8. [Taal, Philippines](#). At risk: Manilla
9. [Mayon, Philippines](#). At risk: Legazpi
10. [Gunung Kelud, Indonesia](#). At risk: Malang

Provided by University of Manchester

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