Scientists warn of massive wave

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LONDON, England -- While stressing that there is no indication it could happen soon, Atlantic coastlines in Europe, Africa and the Americas are under threat from a monster wave of Hollywood -- even Biblical -- proportions, scientists have warned.

They fear that a massive landslide following a major volcanic eruption in the Canary Islands would send a 300-foot wave across the Atlantic, causing devastation to coastal towns and cities.

British and U.S. scientists who have issued the warning predict that, in the worst-case scenario, the tidal wave would destroy the coasts of Florida and Brazil.

But the Western Sahara, Portugal, Spain, France and parts of the UK would also be hit.

They fear that the mega-wave -- know as a tsunami -- could be generated by part of a mountain twice the size of Britain's Isle of Man crashing into the sea following an eruption of the Cumbre Vieja volcano on La Palma, in the Canary Islands -- part of the Spanish island chain off West Africa.

Travelling at speeds of up to 500mph, the tsunami would be an unstoppable force and would be the biggest-ever recorded in history.

Previous research by Dr Simon Day, of the Benfield Greig Hazard Research Centre at University College London predicted that a future eruption of Cumbre Vieja was likely to cause the western flank of the mountain to slide into the sea.

The energy released by the collapse would be equal to the electricity consumption of the entire U.S. in six months.

With Dr Steven Ward, from the University of California, Dr Day has produced a new model that predicts more accurately how big the tsunami will be and where it will strike.

Immediately after the landslide, a dome of water almost 900 metres (3,000 ft) high and tens of kilometres wide will form, only to collapse and rebound.

Its first target was expected to be the West Saharan coast of Morocco, where the wave would measure a devastating 330ft from crest to trough.

Propelled by a series of crests and troughs, the tsunami would travel a distance of almost 155 miles in just 10 minutes, the model predicts.

Racing at the speed of a jet aircraft, it would reach Florida and the Caribbean in eight or nine hours.

A wall of water 164ft high -- higher than Nelson's column in London's Trafalgar Square -- would smash into the coasts of Florida and the Caribbean islands, the forecast predicts.

The northern coast of Brazil would be hit by a wave more than 130ft high.

The wave would travel four or five miles inland, flattening everything in its path.

Meanwhile, a weaker, but still hugely destructive, wave was likely to travel along the western coast of the Iberian Peninsular and France and hit Britain's Atlantic coastline.

Dr Day said: "The collapse will occur during some future eruption after days or weeks of precursory deformation and

earthquakes.

"An effective earthquake monitoring system could provide advanced warning of a likely collapse and allow early emergency management organisations a valuable window of time in which to plan and respond.

"Eruptions of Cumbre Vieja occur at intervals of decades to a century orso and there may be a number of eruptions before its collapse.

"Although the year to year probability of a collapse is therefore low, the resulting tsunami would be a major disaster with indirect effects around the world.

"Cumbre Vieja needs to monitored closely for any signs of impending volcanic activity and for the deformation that would precede collapse."

Like the rest of the Canary islands, the origin of La Palma is volcanic.

La Palma is not only the steepest island in the world but has also been the most volcanically active of the Canary Isles in the past 500 years.

There have been two eruptions on the island this century alone -- in 1949 and 1971.

Other eruptions in recent history on La Palma occurred in 1470, 1585, 1646, 1677 and 1712.

Tidal waves are not common in the Atlantic, although since 1990, 10 major tsunamis in the Pacific have killed more than 4,000 people.

Scientists suspect an earthquake-triggered tsunami that killed more than 2,000 people in Papua New Guinea in 1998 was bolstered by an undersea landslide.

Hawaii's worst experience in modern times came in 1946 when the April Fool's Day tsunami, generated by an earthquake in the Aleutian Islands, sent a 25-foot-high wall of water ashore, killing 173 people, mostly in Hilo.

On May 23, 1960, a tsunami that hit Hilo killed 61 people.

One of the most famous, and most devastating, tsunamis occurred after the Krakatoa volcano blew itself to pieces in 1883 -- a wave six metres high killed 30,000 people.

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