**Volcanic eruption**

## Introduction and facts

The Santa María volcano it’s large and still active. It is located in the mountainous area of western, Guatemala, near the city of Quetzaltenango. Its eruption in 1902 was one of the three largest eruptions of the 20th century and the three largest eruption of that year, after Mount Pelée in Martinique and La Soufrière in Saint Vicent. It was also one of the five large eruptions in the past approximately 200 and 300 years. The 1902 eruption shot most of the side of a 3,772 m high mountain. Bout 5,5 cubic km of volcanic material was expelled during the 19-day eruption, and the ash column reached a height of up to 28 km. The eruption devastated the surrounding areas. In addition, giant lahars (a lahar is a type of mud or landslide that flows along the slopes of a volcano) were produced after the eruption (some until after many years) that damaged the surrounding flora and fauna.

In 1922, a new volcanic vent formed in the huge crater a new volcano, called Santiaguito. This has always been erupting since it was created. Now it has a cone form from a few hundred meters high, reaching an elevation about 2,500 m. Today it is possible to climb to the top of the Santa María volcano and look down the attractive exotic Santiaguito’s eruptions; a situation that may be unique in the world. The Santa María volcano is the fourth highest in Guatemala. Sometimes, in the cold season, it is covered with frost or snow and its with cone can eb seen from the city of Quetzaltenango, although it is not very common, but occasionally a change in weather make a blanket of snow appear onto the volcano.

## That day

Before the eruption of the volcano called Santa Maria happened, it was in a dormant state for approximately hundreds of years. But the eruption began on October 24 and lasted for about 19 days, although the largest explosions occurred in the days after the initial explosion.

It started at 5 p.m. with a huge sound that looked like a waterfall. On one of the sides of the volcano, but the inhabitants could not see anything because there was a dense fog in the area. An hour later ash fell. When it was already 7 p.m. lightning began to be seen above the volcano and a very loud noise. Finally, when it was 8 p.m., from San Felipe you could see a huge column of smoke rising over the volcano and it was also accompanied by lightning strikes over a dark green to red light. The eruptions could be heard from 160 km away and strong winds spread the ejected material over 800 km, so the sun was not seen.

## **How everything started?**

The important eruption of this volcano, had first a process…

So, Santa Maria was inactive for many years, but on the 18th of April in 1902, Quetzaltenango’s zone (situated next to this volcano) suffered a big earthquake, it lasted around 2 minutes, but in that short time, this natural disaster killed about 900 people, prejudiced part of Quetzaltenango, so it destroyed a big number of buildings. This was almost nothing compared with what was coming after, what started to happen on the 24th of April in 1902 was much worst…

## Consequences

The eruption reached its highest point at 1 a.m. on the 25th, which was a normal day with clear blue skies, when the violence of the explosions threw medium and small rocks to a distance of 14 km. And so, all these rocks caused damages on the buildings because mostly everything was destroyed. The pumice from the eruption, fell over an area of ​​273,000 square kilometers and the ash reached San Francisco, more than 4,000 km away.

The eruption left a crater 1 km in diameter and 300 meters deep under the new 2,300 meters altitude of Santa María. In addition, the column of the eruption reached 28 km in height and covered the sun for several days, so, another consequence is that they couldn’t see the light for several days.

More or less we could say that in the eruption 5,000 people lost their lives. But the population which suffered the worst was the indigenous peoples of the area who, apart from losing family members and homes, were forced to carry out the tasks of rebuilding the cities. As if that were not enough drama, the landowners of the area took advantage of the opportunity and appropriated what had been the indigenous lands, leaving all these people at the mercy of speculation and their new owners.

## Bibliography

<http://www.volcaneshistoricos.com/erupcion-del-santa-maria-1902/>