

The new danger maps for the Popocatepetl are prepared based on the geological history of the volcano. Through field work and historical archives research, eruptive styles, recurrence, and extent during geological and historical periods were identified. With this information, danger scenarios were projected by means of computer simulation. These scenarios are based on eruption magnitude and probability of occurrence

Small size eruptions with eruptive columns under 10 km are more frequent, while medium size eruptions with eruptive columns of 10-20 km height are less frequent although larger. Large eruptions with eruptive columns over 20 km (yellow) are less probable, but they are highly destructive

What are they?

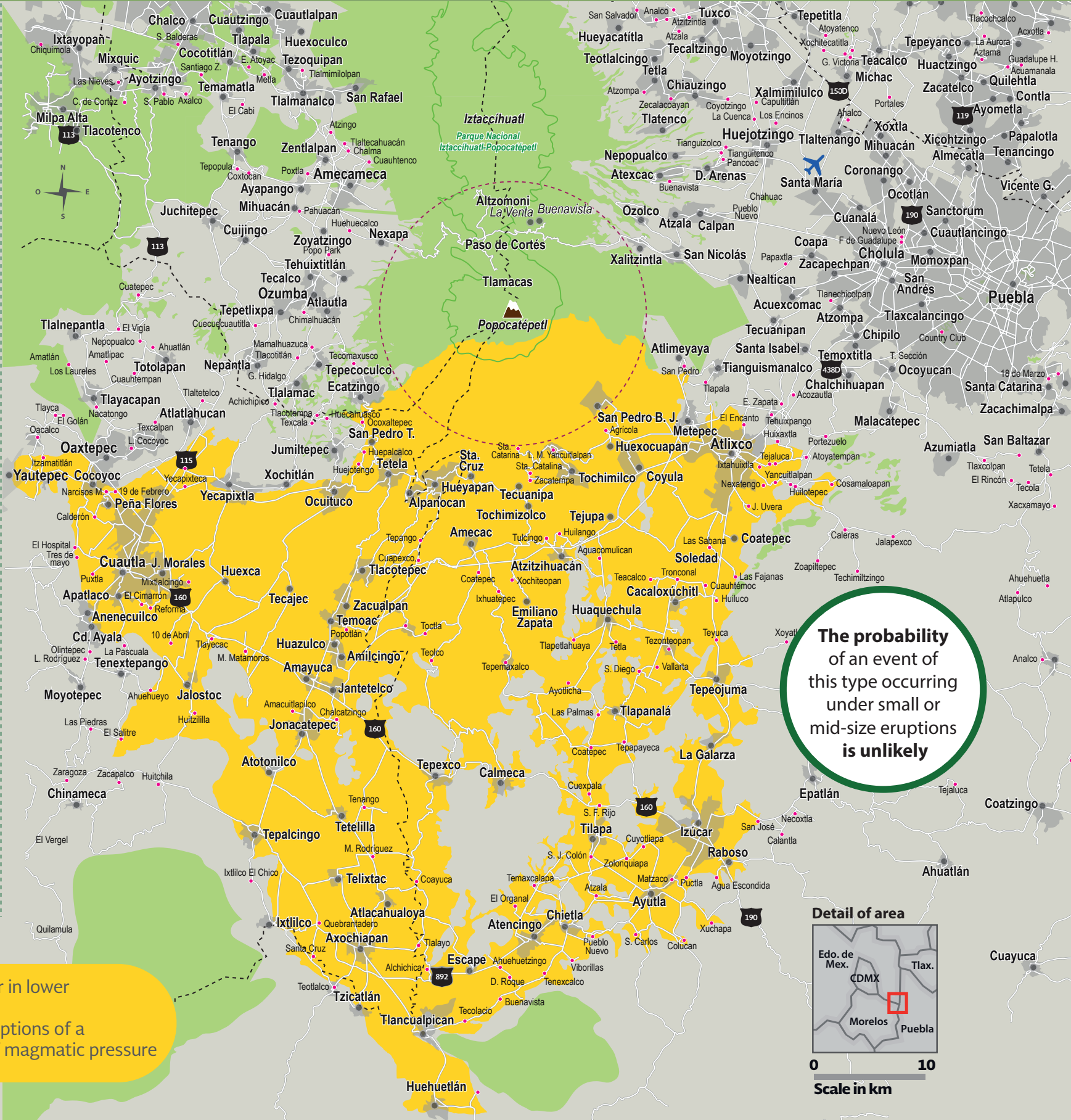
Avalanches are created by the collapse and catastrophic side detachment of a sector in the volcanic building. Because of the landslide, rock avalanches with a volume up to 10 cubic kilometers are produced; they travel at speeds close to 100 km/hour, and destroy and bury everything in their path, altering the topography and causing considerable changes in the hydrographic network

Signage

-  Volcano
-  Urban areas
-  Small towns
-  Roads
-  State border
-  Exclusion area
-  Airport

Area that can be **AFFECTED**

These considerable magnitude events occur in lower probability scenarios
Although infrequent, they usually cause eruptions of a significant magnitude due to sudden loss of magmatic pressure



Popocatepetl volcano: Avalanche

Did you know that...?

The **crater** has a size of 600 x 800 meters and is partially full due to lava domes

Crater level in

• **2016**

and

• **1994**

Elevation
5,452
meters above
sea level

If the **Latin American Tower** were inside the crater, it would only occupy a small area

It is **located** in the central part of the Trans-Mexican Volcanic Strip, at a distance of...

60 km

from
Mexico City

30 km

from
Puebla

50 km

from
Tlaxcala

65 km

from
Cuernavaca

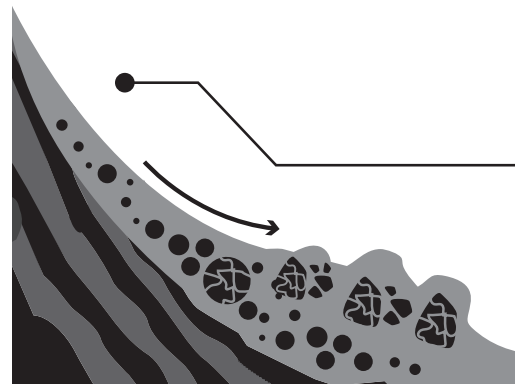
It is
one of the
most active
and high risk
volcanos in
Mexico

23 million people

reside within a
100 km radius from the volcano

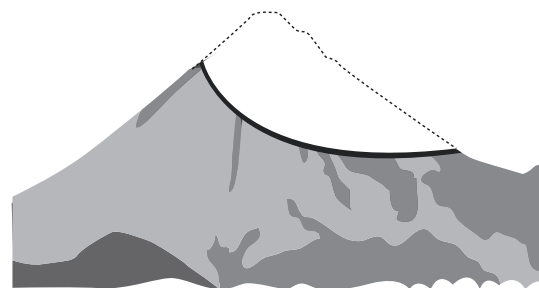
Characteristics

Rubble avalanche or partial collapse of the volcanic building



It is a high-speed descending movement of part of the volcano

How to identify them?



Evidence that a volcano has suffered an avalanche, or a giant landslide is that horseshoe craters are created during those events

Discovered in the **Popocatepetl** are rubble deposits due to **avalanches** associated to the con los **old volcanos Nexpayantla and Ventorrillo**, predecessors of the current cone

Suggestions Before



Keep informed, do not spread rumors, and follow instructions given by authorities



Prepare a civil protection family plan, and your emergency back-pack



Identify evacuation routes and temporary shelters



Learn how to protect your cattle and your pets

During



With your family, go to a safe area that has previously been identified

After



Continue staying informed, and follow instructions by authorities



Avoid areas affected by volcanic eruptions because rocks, lava, and ashes are hot for a long time



Check your home's conditions