

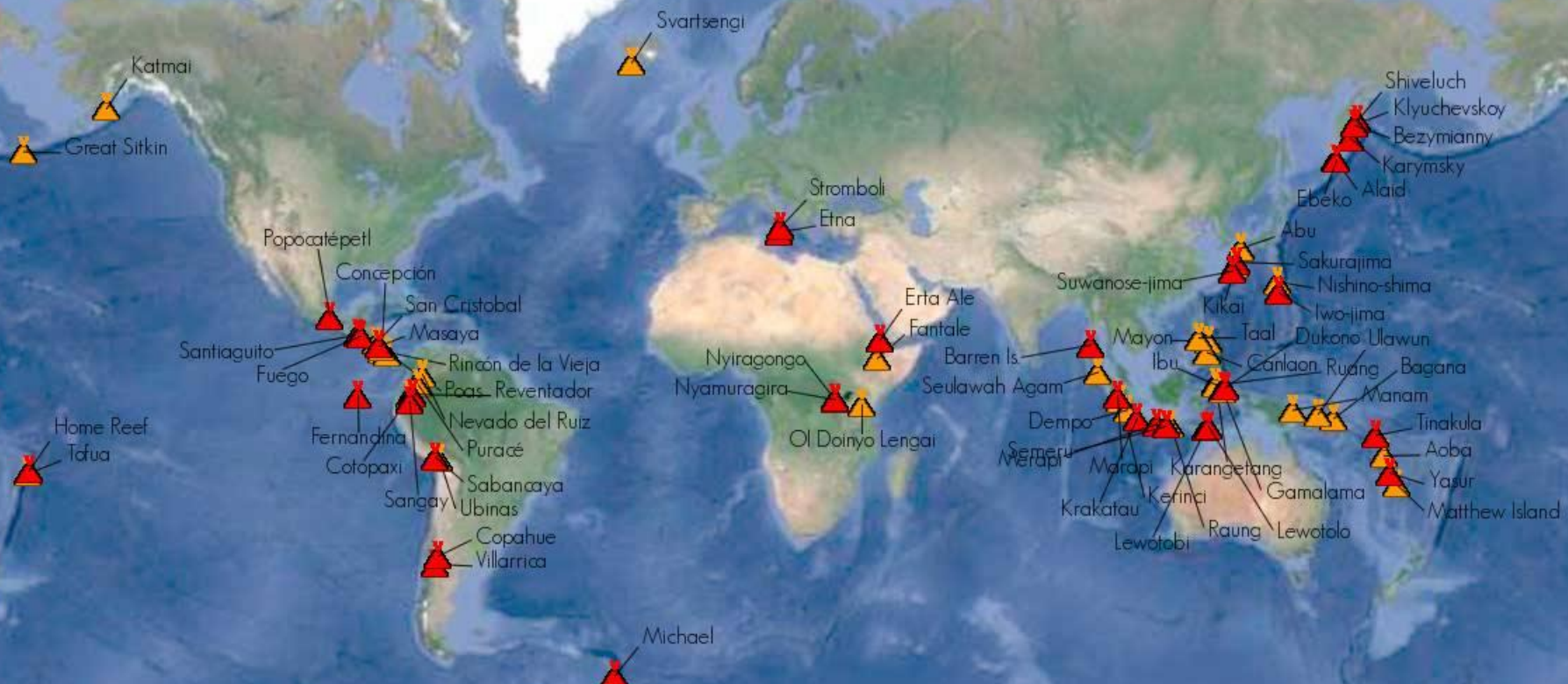


Currently erupting volcanoes

2024-11-16

www.volcanodiscovery.com

-  : in eruption
-  : minor activity



75 volcanos are active RIGHT NOW!

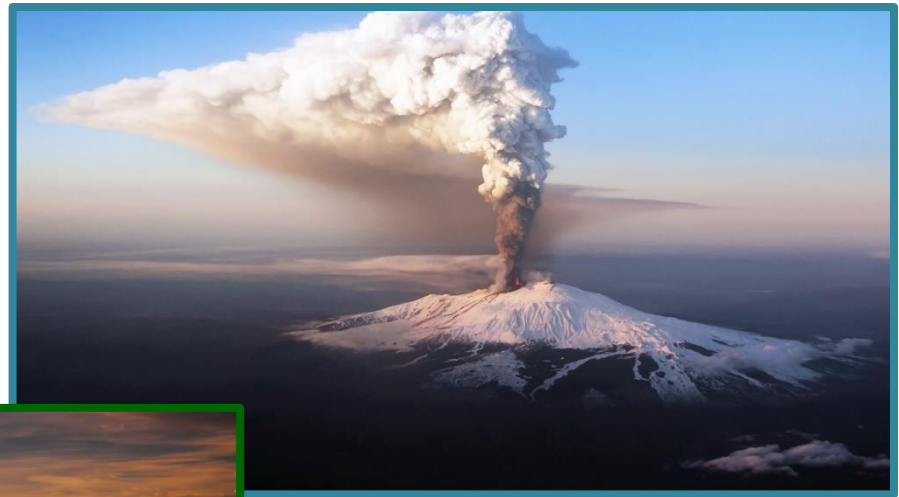
Volcanic Activity

- **Active** - activity present in the last few centuries:
 - Mauna Loa, HI (2022!)
 - Mt. St. Helens, WA (1980)
- **Dormant** - “quiet” for the last hundreds to thousands of years, but still have potential to erupt:
 - Mt. Elbrus, Russia (~2000 years ago)
- **Extinct** - no eruption in historical times, unlikely to erupt again, no longer have magma supply:
 - Castle Rock, Edinburgh, Scotland (~350 million years ago)



Notable Volcanoes

- **Mt. Etna, Italy**
Continuous eruption
for almost 110 years!



- **Mauna Loa, Hawaii**
Largest single mountain in the world

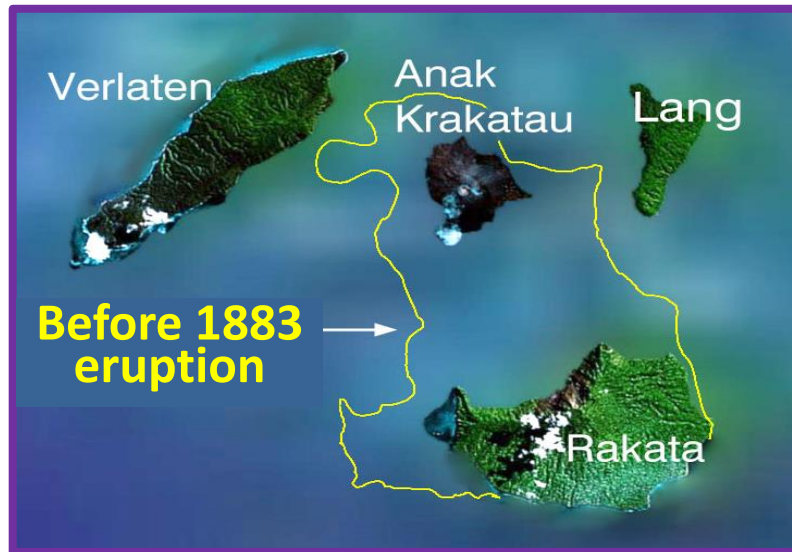
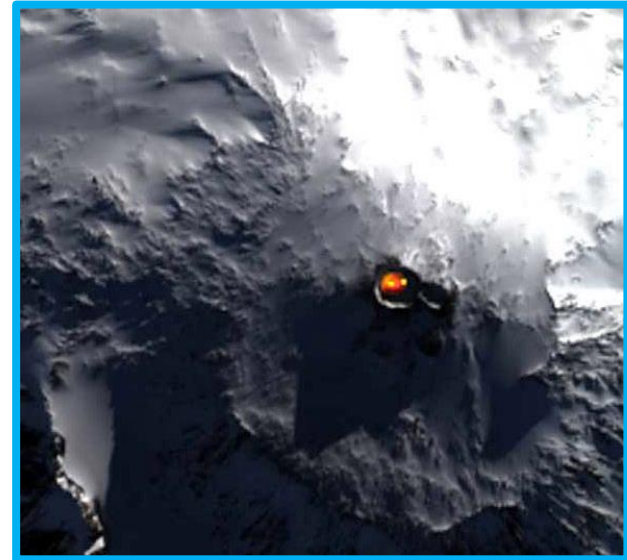
- **Kilauea, Hawaii**
Largest observed lava lake



Notable Volcanoes

Mt. Erebus, Antarctica •

Southernmost active volcano on Earth.



NOW

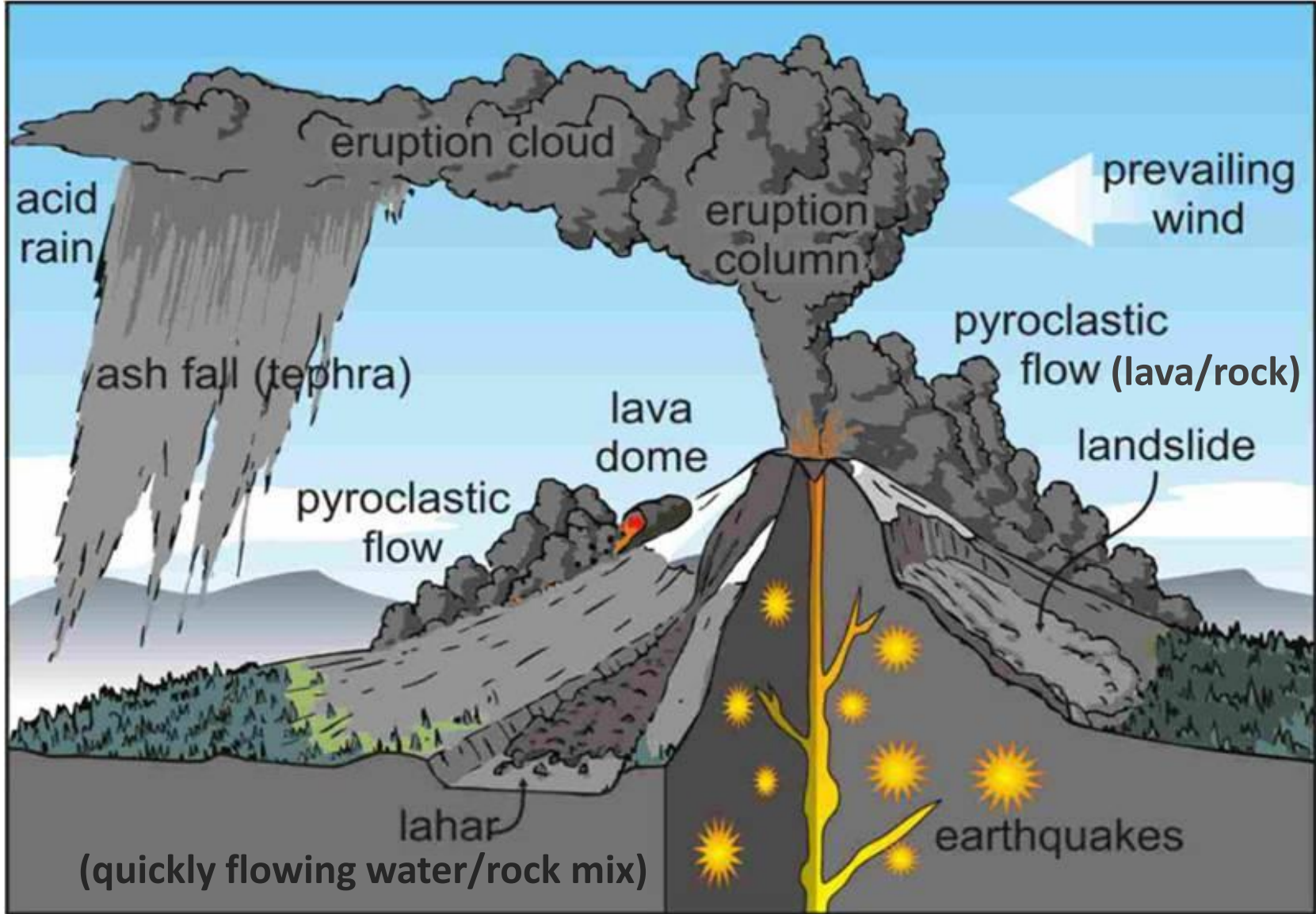
• Krakatoa, Indonesia

1883 explosive eruption produced huge tsunamis as well as loudest sound ever heard in modern history.

THEN



Explosive Eruption Diagram



Volcanic Eruption: Explosive

Very high viscosity magma prevents the release of volcanic gases; gases accumulate, and the magma pressure builds up... until it is blasted out in an explosion!



Volcanic Eruption: Non-explosive

- Most volcanoes erupt basalt, a fluid **low viscosity lava** that erupts *effusively* (quietly) and forms *flows* with occasional *fountains*.



- **Higher viscosity lava** with low gas content produces bulging lava *domes*.