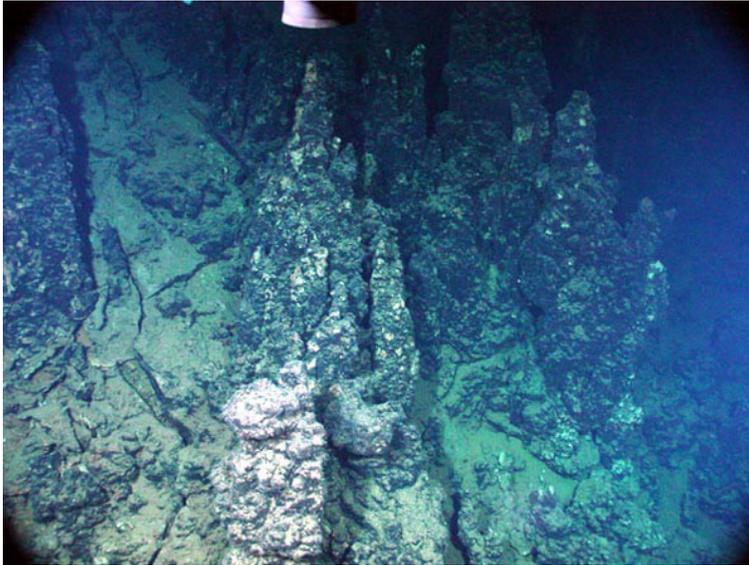


## Underwater Volcanoes



Did you know that scientists think that about 75% of the world's volcanic activity is under the oceans' water? This happens along the mountain ranges that are on the ocean floor! More and more, scientists have been able to study volcanoes under the sea.

One reason they can do this a little more easily than on land is that the pressure from the water holds back the explosion's force. In air, above ground, it is not possible to get close to a volcano. But underwater, scientists have been able to film them with a special underwater vehicle. They can get much closer than on land. They can also sample volcanic chemicals more easily. The remote vehicle they use can get as close as 10 feet away!

Scientists have seen the gases, rocks, ash, lava, and thousands of bubbles exploding out of the underwater volcanoes. The plumes of gas are very visible and are sometimes multi-colored! The smoke from one of these volcanoes made the ocean water cloudy as far as 5 miles away.

Not all volcanoes "explode" as we think they do. In some of the underwater volcanoes, the lava just flows out of the cracks in the ocean floor. Almost all of this activity, exploding or just oozing on the Earth (on ground or underwater), occurs at particular places on the Earth's surface, not just anywhere. That is, volcanoes (and earthquakes) are typically near the boundaries of the sections of the earth's crust, called "tectonic plates," which are moving and colliding.

The underwater vehicle that was used to take pictures, videos, and samples was this one – named, “JASON”:  
[http://oceanexplorer.noaa.gov/explorations/06fire/background/tech/media/jason\\_600.html](http://oceanexplorer.noaa.gov/explorations/06fire/background/tech/media/jason_600.html)