Lead: During its deadly destruction of the Martinique port city of St. Pierre, Mt. Pelée threw up an unusual form of volcanic eruption, the nuée ardente, or glowing cloud.

Tag: A Moment in Time with Dan Roberts.

Content: Volcanoes come in different forms. Their shape is determined by a variety of factors: the amount, sequence, and contents of what comes out during an eruption and the nature of the vent and land through which it pushes its volcanic product called magma. The perfectly

shaped volcanoes such as Mt. Fuji in Japan are called stratovolcanoes because in most cases, over a long period of time, they generate moderate eruptions of ash and lava which are then deposited in layers or strata. Mt. Pelée, a stratavolcano, towers 4500 feet above the northern end of the Caribbean Island of Martinique.

On the morning of May 8, 1902, in addition to its usual eruption of ash and steam, it produced another more terrible form of calamity. Out of the conical crest of the mountain came a fast moving cloud hugging the earth, violet gray in color, filled with electrical charges and rolling boulders glowing red and making a huge racket. After the cloud boiled over the port

city of St. Pierre, the town was flattened and of the 30,000 people in the town itself only a single person, a prisoner kept in a deep windowless jail cell, escaped incineration.

From all over the world scientists in the relatively new discipline of volcanology rushed to Martinique to examine Mt. Pelée which was still vomiting up these weird clouds which rushed downhill. They called them nuées ardentes, or glowing clouds, and found they had distinct boundaries, could burn through one side of a tree leaving the other unharmed, had a temperature of nearly 1500 degrees Fahrenheit, and moved at about 100 miles per hour, burning or crushing everything before it. A nuée ardente

was caused by lava backed-up in a kind of plug in the volcano crater. The lava was so thick that gases inside it could not escape and eventually, blew it to pieces. The resulting dust and gas, acting much like a fluid, mowed down St. Pierre and its people.

At the University of Richmond, this is Dan Roberts.

## Resources

Bullard, Fred M. Volcanoes of the Earth. Austin, TX: University of Texas Press, 1976.

Francis, Peter. *Volcanoes*. New York, NY: Penguin Books, Ltd., 1976.

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