The Impact of Volcanoes on the Environment

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Abstract

This paper investigates the impact, both the negative and positive aspects, of volcanic eruptions on the environment. Included is information regarding the effect of historically significant volcanic activity at Mt. Vesuvius, Toba, and the Siberian flood basalt lava flow province. Eruptions have played a major role in deciding which species should survive and have transitioned the Earth between major climate changes. Past volcanic eruptions still influence the current environment through lasting atmospheric effects and the re-fertilization of soil, which had been overtaken by solidified lava, over the course of several years.

Satellites and other technologies that are capable of detecting fluctuations of temperatures and components of the environment after a volcanic eruption have just been invented in the past 50 years, but scientists have used ice cores and other sources of data to learn about the effect of volcanoes that existed thousands or even millions of years ago. Some eruptions may even be responsible for ancient mass extinctions.

Volcanism is often seen as an agent of destruction, but this paper proves that volcanoes effects tend to balance each other out; creating a natural balance. Volcanoes renew the world and destroy the old so that they can create the new.