

The spread of volcanic products estimated from the caldera model experiment

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We made explosive caldera models with materials of sawdust, PET bottles, and balloons to search for conditions to blow sawdust as far as possible. In addition, we hypothesized the behavior of grains of real volcanic eruptions from the results of experiments. We found that if we use longer PET bottles for the equipment, the mass of blown sawdust can increase. From this result, we predict that certain sized grains from real volcanoes can be blown in proportion to the mass of water vapor, if we regard the length of PET bottles as the mass.

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