

The relationship between IC and angle of drop

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There are some ways to measure the scale of an eruption, such as using the gross volume of volcanic products or using the kinetic energy from volcanic bombs. However, the former way is difficult to measure accurately because volcanic products are in liquid or solid form. Therefore, we decided to use the latter one. We researched the falling angles of volcanic bombs from the shapes of their impact craters (IC) in order to measure their scale. We focused on the major axes to minor axes length ratios and set up the hypothesis that the closer the shape is to a circle, the larger the falling angle is. Then we carried out experiments using a steel ball as a volcanic bomb and hit it to the ground to investigate the relationship between IC made by volcanic bombs and the falling angles.

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