

Characteristics of damage caused by lapilli fall of the October 8, 2016 eruption of Aso Volcano, Japan

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We examined about characteristics of damage caused by lapilli fall of the October 8, 2016 eruption of Aso Volcano, Japan. Lapilli fall arrived at the remote residential area more than 4 km from the Nakadake crater of the Aso volcano, and the damage to a building or agriculture facilities occurred. In the National Aso Youth Friendship Center (from the Nakadake crater to the northeast approximately 4.5 km), one piece of windowpane and screen door was damaged by lapilli of approximately 3 cm in diameter. It is estimated that the lapilli dropped from the north, but does not agree with the direction of the Nakadake crater. At the roofed passage connecting buildings of the National Aso Youth Friendship Center, the polycarbonate board that ultraviolet rays deteriorated was damaged. The damage of solar panels was confirmed at the point of approximately 6.5 km from the Nakadake crater to the northeast. More than 1500 solar panels were damaged by lapilli fall at this point. As a future problem, it is necessary to investigate relations of collision energy of lapilli fall and strength of glass or polycarbonate board.

Keywords: lapilli fall, damage to buildings, Aso volcano