Distribution of ballistic ejecta of the phreatic eruption at Kusatsu-Shirane volcano, on 23 Jan, 2018, part 2

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Moto-Shirane volcano, which is part of Kusatsu-Shirane volcano, erupted on 23 January 2018 after 1500 years dormancy. One parson died and 11 other people were injured by the ballistic ejecta of this phreatic eruption. We report the results of a survey on the distribution of ballistic rocks around the crater and climbing trails and ski courses on May 10 - 12, 2018 and October 23 - 25, 2018.The maximum size of the ballistic rocks was measured at a total of 191 sites and the number density of the rocks (>64mm) was measured at a total of 64 sites. Ballistic rocks of the eruption are distributed within 500 meters around the main crater and is mainly distributed from north to northeast. The maximum size of ballistic rock was 4.8 m which fell to the western crater rim, and near the main crater was 3.4 m. The flight-distance of ballistic rocks with a major axis of about 20 cm, 50 cm, 100 cm, 200 cm are 400 to 650 m, 400 m, 350 m, 150 m, respectively. It suggests that the initial velocity of ballistic rocks of each size is different.

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