Masses of tephra fall deposits from the 2017 Shinmoedake eruption, Kirishima Volcanoes, Kyushu, Japan.

*Teruki Oikawa¹, Fukashi Maeno², Yasuo Miyabuchi³, Masashi NAGAl⁴, Taketo Shimano⁵, Ryuta FURUKAWA⁶, Naruo Hideto⁷, Setsuya Nakada², Yuya Ikenaga², Takahiro Miwa⁴, Yu Iriyama⁴, Shun Nakano¹, Yoshihiro Ishizuka¹, Yasuhisa Tajima⁸

1. GSJ, National Institute of Advanced Industrial Science and Technology , 2. ERI, The University of Tokyo, 3. Faculty of Advanced Science and Technology, Kumamoto University, 4. National Research Institute for Earth Science and Disaster Resilience, 5. Faculty of Social and Environmental Studies, Tokoha University, 6. Japan Meteorological Agency, 7. Ijuin Senior High School, 8. NIPPON KOEI Co., Ltd.

A series of subplinian and vulcanian eruptions occurred at Shinmoedake Volcano in Kirishima volcaones, located in the boundary between Miyazaki and Kagoshima prefectures, southern Kyushu, Japan erupted the subplinian eruption in 2011. The Shinmoedake volcano started erupting again on 11th, October, 2017. The crater of this eruption was newly formed in the east side of the summit crater of Shinmoedake, and the ash-fall deposits were distributed in the area more than 2 km from the crater. This eruption is divided into two periods of 11th-12th and 14th-17th, October. The main ash fall of this eruption occurred in 4 episodes: 11th, 12th, 14th a.m., and 14th p.m.-16th. The erupted mass each episode is 10⁷-10⁸ kg order, and the total mass of this eruption is less than 10⁹ kg. More detailed values will be introduced at the presentation.

Keywords: Shinmoedake eruption, ash-fall deposits, total mass, Kirishima Volcano, volume