

The ash fall of Ontake Volcano 2014 eruption by the pollen sensor networks observation

OIKAWA, Teruki¹ ; FURUKAWA, Ryuta^{1*}

¹GSJ/AIST

Ash fall of Ontake volcano 2014 eruption was observed by the pollen monitoring sensor of NTT DOCOMO of environmental sensor networks. Area of the ash-fall of over 2 g/m^2 , a change in the significant sensor values was observed. Ash that could be observed in pollen sensor, with a particle size $35 \mu\text{m}$ or less, not a circular shape in order polarization from 1 to 0.2. The ash fall time is estimated from the sensor value; there was ash fall to 3 and 5 hours after the eruption, at the 30 km and 50km area of east from the crater, respectively. The Nigorigo Onsen, the foot northwest of volcano, the ash fall is estimated at 27th 21:00. Based on this example, the pollen sensor values became clear that it can be observed in a few g/m^2 ash-fall.

Keywords: Ontakesan, Ontake Volcano, 2014 eruption, Pollen sensor, volcanic ash, sensor network