

Discovery and meaning of the Scoriaflow deposit about 5000 years before on Northwestern slope of the Ontake volcano.

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Ontake volcano is an active volcano in Central Japan. We collect the geological data of the Ontake volcano, to make for volcanic disaster map and disaster prevention. Airborne LIDAR (Light Detection And Ranging) was executed, and the detailed geographical features data was acquired until 2005 and 2006. A Red Relief Image Map (RRIM) was made from this data, and the locale on the northwestern slope of the Ontake volcano was surveyed. As a result, because the following deposits were confirmed, it reports.

Scoriaflow deposit

We discovered scoria-flow deposit that was not described at past research. The Scoria-flow deposit is located in valley Nigorigo, it is 6km northwest from the top of the Mt.Ontake.

We measured the soil that located under the scoria-flow deposit in Radiocarbon dating methods. After the analysis, we can get the age of soil, it show 5,205+-21yrBP. We consider the magma of the scoria-flow was supplied for Gonoike crater.

In the past research, the last magma of Ontake Volcano was supplied for Gonoike crater that is covered San-noike lava (20,000 years ago eruption). But the age of Gonoike magma is unknown.

After present research, we can predict the age of Gonoike magma (5,205+-21yrBP).

Deposit of Phreatic eruption

We discovered ash deposit of unknown phreatic eruption at near the Nigorigo-onsen(H1,520m). The color of this deposit is gray and particle size of this deposit is fine. The deposit of unknown phreatic eruption spread out about 150m for the center of the site. There is no volcanic landform around the deposit of unknown phreatic eruption. Geothermal activity around Nigorigo-onsen area is active. So, we can consider about deposit of unknown phreatic eruption cause by landslide etc.