

## **Emplacement time interval and temperature estimation for the Agatsuma pyroclastic flow, Asama-Maekake volcano, central Japan.**

Tatsuo KANAMARU<sup>1</sup>, Kuniyuki FURUKAWA<sup>2</sup>, Yuki SHIMIZU<sup>1</sup>

<sup>1</sup>College of Humanities and Sciences, Nihon University, Japan, <sup>2</sup>Aichi University, Japan

E-mail: kanamaru.tatsuo@nihon-u.ac.jp

In order to estimate emplacement time interval between each flow units of Agatsuma pyroclastic flow deposits and emplacement temperature of them, rock magnetic and heating experiments for the pyroclastic flow deposits were carried out. Paleomagnetic experiment implies the pyroclastic flow were emplaced at least 580 °C. Magnetic susceptibility of natural oxidized reddish matrix of the pyroclastic flow deposit is lower than non-oxidized blackish one. The a\* value indicating reddish color of the oxidized one is higher than non-oxidized one. Based on magnetic susceptibility and color index, heating experiment for the non-oxidized material indicate that time interval between prior flow unit and subsequent flow unite of the pyroclastic flow at the site we investigated was within 30 minute and that emplacement temperature was about 600 – 700 °C.