

Correlation of Kozushima Tenjo-san Tephra and its stratigraphy with lavas and pyroclastics from Fuji Volcano

Makoto Kobayashi[1]; Akira Takada[2]; Yusuke Suzuki[3]; Shun Nakano[4]; Yoshihiro Ishizuka[5]

[1] Dia Consultant co.,ltd.; [2] GSJ,AIST; [3] Asia Air Survey; [4] GSJ, AIST; [5] Geol. Surv. Japan, AIST

As a result of trench survey and outcrop observations at the foot of Fuji volcano, It became clear that Fuji volcano formed many scoria cones and spread many lava flows to the large area in almost 800-1000yBP(Takada et al., 2004). To make clear eruptive history in detail, calibration of radiocarbon dates are not sufficient. So we find a new approach to determine the history of many eruptive deposits in almost 800-1000yBP of Fuji volcano.

We have found pumice-type and low-vesicular volcanic glasses, which are contained in volcanic-ash-soil of same period around Fuji and Hakone volcanoes. This volcanic glass is thought to correspond to either Kozushima Tenjo-san Tephra (AD838) or Niiijima Mukai-yama Tephra (AD886?) (Kobayashi et al., 2004). We tried various characters to distinguish these two tephtras, and find that vesicle degree of volcanic glass is the best one.

As an analysis of vesicle degree of volcanic glass, we find that Kozushima Tenjo-san Tephra has a low vesicle. This result reveals that pumice-type and low-vesicular volcanic glass, which was found around Fuji and Hakone volcanoes, correspond to Kozushima Tenjo-san Tephra. Using Kozushima Tenjo-san Tephra as a key, we make clear eruptive history of Fuji volcano especially in almost 800-1000yBP. We will explain in detail at poster session.