

Japan Geoscience Union Meeting 2011

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



SVC048-06

Room:301B

Time:May 22 11:00-11:15

Radiocarbon wiggle-matching for the age of the Hayakawa ignimbrite from Niigata Yakeyama Volcano

Yukio Hayakawa^{1*}, Hisashi Fujine², Shigeru Ito², Lomtatize Zaur², Hiromasa Ozaki², Koichi Kobayashi², Kentaro Nakamura², Yasuko Kuronuma², Hiroshi Miyajima³, Ko Takenouchi³

¹Gunma University, Faculty of Education, ²Paleo Labo Co., Ltd., ³Fossa Magna Museum, Itoigawa City

Two wood trunks, one charred 75-year old and another not charred more than 199-year old, were collected from the Hayakawa ignimbrite erupted from Niigata Yakeyama Volcano. They were investigated by radiocarbon wiggle-matching method to determine the age of the eruption. The result is 1223-1242 calAD (95.4%), over 200 years younger than existing interpretations. The eruption including the Hayakawa ignimbrite was the largest of the volcano since the birth of 3,000 years ago. Co-ignimbrite fallout KGc ash has been found at many archaeological sites spreading out the eastern flanks of Myoko Volcano and the Takada Plain. Age obtained here will give a useful time constraint to archaeology, as well as volcanology of this area.

Keywords: Radiocarbon wiggle-matching, Hayakawa ignimbrite, Niigata Yakeyama Volcano, age of an eruption, buried wood