

富士山南麓における新富士火山初期の火砕流堆積物の  
発見とその意義嶋野岳人\*・天野恵佑\*・安田 敦\*\*・金子隆之\*\*・  
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Discovery and its Significance of Pyroclastic Flow Deposits on the southern slope of  
Mt. Fuji at the Primary Stage of the Younger Fuji Volcano, Central JapanTaketo SHIMANO\*, Keisuke AMANO\*, Atsushi YASUDA\*\*, Takayuki KANEKO\*\*,  
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Fuji volcano is the largest stratovolcano in Japan whose edifice consists of the alternation of basaltic lava flows and pyroclastic deposits, but very few pyroclastic density current deposits have been reported. We found two deposits of basaltic composition that are interpreted to be formed by pyroclastic flow at localities farther than 10 km from the summit on the southern foot of Mt. Fuji. Each deposit is stratified with dense massive layer, well-sorted lapilli-rich layer, and fine ash layer, fundamentally in ascending order. Distribution of the three types of layers shows that the lower two layers deposited only on the bottom of valley whereas the uppermost layer deposited also on the bank. These facts indicate that generation mechanism of the deposits is pyroclastic flow but different from those reported in previous studies at Mt. Fuji. The vesicular lithology without any bombs or agglutinate blocks may imply that these flows were closely related to explosive eruption like Plinian style rather than immediate collapse of pyroclastic cone or fire fountain such that observed in Strombolian eruptions.

The results of radiocarbon age were around 8400 yBP for charcoal samples in layers just below and above one of the pyroclastic flow deposits. The other pyroclastic flow deposit is covered by a lava flow of 9 ka. These results show that the two pyroclastic flows occurred in similar age when the edifice of Mt. Fuji is thought to have grown most voluminously but moderately by effusive eruptions in its volcanic evolution history of 100 kyrs.

**Key words:** Fuji volcano, pyroclastic flow, Plinian eruption, evolution history, radiocarbon age

## 1. はじめに

玄武岩質マグマを噴出する火山では、溶岩流出のような穏やかな噴火が主要のものであり、爆発的噴火が発生することは少ないと言われている。また、爆発的噴火でも、ハワイ式噴火やストロンボリ式噴火のように、火口

近傍に火砕丘を形成する程度であるか、小規模な灰噴火に留まることが多い。このように爆発的噴火の少ないことの理由として、一般的には、玄武岩質マグマが低粘性であること、マグマの初期含水量が少量であることなどが挙げられている。しかし、プリニー式噴火のようなき

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