

Restudy of the eruption history of Shin-Fuji volcano, Japan, based on new radiometric carbon ages

Takahiro Yamamoto[1], Akira Takada[2], Yoshihiro Ishizuka[3]

[1] GSJ, DGERC, [2] GSJ,AIST, [3] Geol. Surv. Japan, AIST

The eruption history of Shin-Fuji volcano has been re-examined by new 80 radiometric carbon ages. The boundary between the products of Ko-Fuji and Shin-Fuji volcanoes in the SW foot (Tsuya 1940) is corresponding to edifice collapse of the southwestern part of Ko-Fuji volcano. Resulted debris avalanche deposit is exposed at around Taniki-Ko and Motomuratama. The ^{14}C age immediately below the deposit is 17 ka. The Older stage of Shin-Fuji volcano is characterized by effusion of voluminous lava flows; the Obuchi, Aoki D-1, Mishima, Kitayama, Sohina, and Motomurayama lava flows are 14, 11, 10, 9.3, and 8.7 ka, respectively. The ejecta in the Middle stage are also basaltic lavas and pyroclastic rocks distributed in the flanks and the summit of the edifice. The ^{14}C ages of the Middle products are from 4.9 to 3.6 ka. The first half of the Younger stage is characterized by explosive basaltic sub-Plinian activities that occurred at the summit and the flank. The S-10, Osawa, Omuroyama, Zunasawa, S-18, and S-22scoria fall deposits are 3.1?, 3.1, 3.0, 3.0, 2.4, and 2.2ka, respectively. During this stage basaltic pyroclastic flows occurred on the western flank at 3.2, 3.0, 2.9, and 2.5 ka. Also, the Gotenba debris avalanche in the eastern foot took place at 3.0-2.6 ka. In the last half of the Younger stage, basaltic fissure eruptions repeated at the flanks without summit eruptions. The Futatsuzuka scoria, Akatsuka scoria, Aosawa lava, kansuyama lava, Yakeno lava, Okuniwa 1 lava, Okuniwa 2 lava, Onagare lava, S-24-6 scoria, and Fudosawa lava are 2.1, 1.9, 1.6, 1.3, 1.3, 1.3, 1.3, 1.2, 1.1, and 1.0 ka, respectively.