

Basaltic pyroclastic flows on the W-SW slopes of Fuji volcano, Japan: characteristics of the deposits and their origin

Takahiro Yamamoto[1], Akira Takada[2], Yoshihiro Ishizuka[3], Naomichi Miyaji[4]

[1] GSJ, DGERC, [2] AIST, [3] Geol. Surv. Japan, AIST, [4] NIVTS

Three basaltic pyroclastic flows were generated during the 3.2-ka, 2.9-ka, and 2.5-ka eruptions of Fuji volcano. These pyroclastic flows came down the west to southwest slopes, and generated lahar fans at the foot of the volcano. The main part of the pyroclastic flow deposits is massive and made up of matrix-supported cow-dung bombs, scoria lapilli, and lithic fragments. Thin surge deposits, consisting of coarse-grained sandy and slity ash, underlie the main part. The ages of the pyroclastic flows correspond to the stage of explosive summit eruptions. Also, the pyroclastic flows only occurred at the steep summit slopes that exceed 34 degree in angle. So, the pyroclastic flows presumably resulted from avalanching of voluminous pyroclastic materials accumulated on the steeper slopes than the angle of repose.