

## Fluctuation of the Eruption Column Height at Miyakejima Volcano

# Akihiko Terada[1], Yoshiaki Ida[2], Takao Ohminato[3], Yasushi Chigira[4]

[1] ERI, Univ. Tokyo, [2] Earthq. Res. Inst., Univ. of Tokyo, [3] ERI, [4] Mikurajima Elementary School

The eruption column at Miyakejima volcano has been continuously observed using an image recording system that was developed for this study. The observed daily mean of the eruption column height fluctuated between 1000 and 2500 m above sea level. This fluctuation is attributed to probable variation of the heat discharge ratio, ambient air density and the entrainment ratio depending on the wind speed. To analyze the data, we have formulated motion of the ascending gas that consists of vapor and sulfur dioxide and entrains ambient air successively.