The effect of the aerological wind on the travel time of infrasonic wave -in case of Sakurajima-

Yoshiaki Fujiwara[1]; Hitoshi Yamasato[2]; Takayuki Sakai[2]; Sadayuki Kitagawa[2]; Rie Tanada[1]

[1] Volcanological Division, JMA; [2] MRI

http://www.jma.go.jp/jma/index.html

In the last Fall meeting at Volcanological Society of Japan, we reported that we could estimate the location for each explosive eruption by using infrasonic travel times, and that they were divided into two clusters.

In Sakurajima, since 1995, eruptive activity at Minamidake crater has continued repeatedly. Minamidake has two craters, called A crater, and B crater, respectively. However, Some aerological surveys showed that they were mainly limited to the activity at the A-crater between 2003 and 2006. Therefore, we deduced that all infrasonic waves were excited from A-crater during this period and that they belong to northern cluster. So we showed there is a possibility we can classify the eruption crater from infrasonic data. In this presentation, we are focused on examining the effect on aerological wind as we calculate the location of air-shock sources and discussing the past volcanic activity since 1990's in Sakurajima