

霧島・御鉢火山における2003年12月以降の噴気活動と
明治～大正時代の火山活動

筒井正明*・富田克利**・***・小林哲夫**

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Fumarolic Activity since December 2003 and Volcanic Activity
during the Meiji and Taisho Eras (1880–1923) of
Ohachi Volcano, Kirishima Volcano Group, Southern Kyushu, Japan

Masaaki TSUTSUI*, Katsutoshi TOMITA**・*** and Tetsuo KOBAYASHI**

A new fumarolic activity at Ohachi Volcano of Kirishima Volcano Group started on December 13, 2003 after about 80 years of inactivity. Two small fumarolic vents, T8 and T9, were formed on the slope within the Ohachi crater. Ejected materials were mainly fine-grained mud (altered ash), that were distributed within the southwestern sector of the crater. Small accessory lapilli, which were coated by mud, were scattered within 20 meters of T8 vent. No essential material was found. Alunite, kaolinite, 10 \AA -halloysite were present as clay minerals. The volume of ejected material was very small, probably less than 10 m^3 . At the time of this writing, the fumarolic activity at Ohachi crater is still going on.

To understand the present activity, we investigated old documents of historic eruptions of this volcano, in particular those that occurred during the Meiji and Taisho eras (1880–1923), to determine the mode of eruptions during that time. The first stage of the eruption started with a fumarolic activity, which became more active. Then magmatic activities continued for about 40 years. The early phase of magmatic activities was characterized by vulcanian eruptions generating a large volume of ash, while the latter phase was characterized by sporadic but strong vulcanian explosions accompanied by ejection of volcanic bombs and blocks.

At present, it would be difficult to judge whether the fumarolic activity will become more active, and proceed to magmatic stage. However, the results of our investigation of historical eruptions would still be useful to predict the nature of future eruption of this volcano.

Key words: Ohachi Volcano, Kirishima Volcano Group, fumarolic vent, documents of eruption, Meiji and Taisho eras

1. はじめに

平成15(2003)年12月12日15時、福岡管区気象台・鹿児島地方気象台は、霧島・御鉢火山に対して火山観測情報第2号を出した。この約7カ月半ぶりの火山観測情報によると、12日11時14分に御鉢付近が震源とみられる継続時間40分の火山性微動(平成17年2月1日から運用された微動継続時間の検測基準見直し前の値;平成

17年1月の火山活動解説資料「霧島山」)が発生したが、監視カメラによる遠望観測で噴煙はみられず、GPSによる地殻変動観測も異常なしとのことであった。

ところが、翌13日に著者らが現地に向かったところ、御鉢登山口である高千穂河原から目撃できるほど激しい噴気が上昇し、火口内に新しく形成された噴気孔から噴出物が周辺に飛散していた。そこで噴出物の飛散状況等

* 〒331-8638 さいたま市北区吉野町2-272-3
株式会社ダイヤコンサルタント 砂防・防災センター
DIA Consultant Co., Ltd., Sabo and Disaster Prevention
Center, 2-272-3 Yoshino-cho, Kita-ku, Saitama
331-8638, Japan.

** 〒890-0065 鹿児島市郡元1-21-35
鹿児島大学理学部地球環境科学科
Earth and Environmental Sciences, Faculty of Science,

Kagoshima University, 1-21-35 Korimoto, Kagoshima
890-0065, Japan.

*** 現在 〒890-0802 鹿児島市清水町7-14
Present: 7-14 Shimizu-cho, Kagoshima 890-0802, Japan.

Corresponding author: Masaaki Tsutsui
e-mail: M. Tsutsui@diaconsult. co. jp