

Geology of Nakadake Volcano, Aso Caldera

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Nakadake volcano is located in east of central cones within Aso caldera, central Kyusyu, southwestern Japan. The volcano is the only active volcano in central cones, and continues its activity every few years to several years. Sometimes the activity produces volcanic disasters. For the understanding of volcanic history and characters, geological surveys have been done at distant points about few kilometers from the crater. We need, however, the geological surveys in the field near crater for the understanding of more detailed history.

In this study, we made a geological survey at the field near the crater of Nakadake youngest pyroclastic cone and topographical survey using aero-photographs. Based on these surveys, it was concluded that the Nakadake volcano had three stages; the old volcanic edifice, the young volcanic edifice and the youngest pyroclastic cone. Based on the survey, the deposits supplied from south edifice composed lower successions, on the other hand, the deposits from north edifice composed higher successions. This indicated that the southern part of Nakadake cone was formed firstly, and after that, northern edifice was formed. According to the succession of deposits, it was concluded that the volcanic activity at Nakadake kept almost the same way that of recent years.