

FEM modeling and GNSS observation around Mount Ontake volcano

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On September 27, 2014, Mount Ontake volcano was erupted. The eruption took 63 lives and represented the worst volcanic disaster in post-World War II Japanese history. Before this eruption, the GNSS observations are a few around Mount Ontake volcano. Especially, the number of GNSS observation within 4km from the summit of Mount Ontake volcano is only one, which belongs to JMA. After the eruption, we established GNSS observation network around Mount Ontake volcano. New GNSS observation network around Mount Ontake volcano consists of six continuous GNSS sites. Two and four continuous GNSS sites started in 2014 and 2015, respectively. We also made seven campaign GNSS sites which are located at the eastern side of Mount Ontake volcano. These campaign GNSS sites were observed in July 2015.

In order to explain the observed crustal deformation, we made a FEM model considering topography, such as the shape of Mount Ontake volcano. In this poster, we introduce the new GNSS observation and FEM model for Mount Ontake volcano.

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