FEM modeling and GNSS observation around Mount Ontake volcano

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On September 27, 2014, Mount Ontake volcano was erupt. 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 is belong to JMA. After the eruption, we establish GNSS observation network around Mount Ontake volcano. New GNSS observation network around Mount Ontake volcano are consistent of six continues GNSS sites. Two and four continues GNSS sites stared at 2014 and 2015, respectively. We also make seven campaign GNSS sites where are located at eastern side of Mount Ontake volcano. These campaign GNSS sites are observed at July 2015.

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

Keywords: GNSS, Mount Ontake volcano, FEM