

## Eruption history and tephra layers of the 1907-39 and 62-63 eruptions on the Yakedake Volcano, in the Hida Mountain Range

# Teruki Oikawa[1], Makoto Kobayashi[2], Nobuyuki Ozeki[3], Kanji Wakiyama[4], Hideyuki Itoh[4]

[1] Graduate School of Science, Shinshu Univ, [2] Dia Consultant co.ltd, [3] DIA Consultants, [4] STC

The Yakedake Volcano was the most active volcano in the Norikura volcanic zone during the past 10,000 years. The youngest phreatic (steam) eruption took place 1907-39 and 1962-63 on the Yakedake Volcano. The ash fell to the Tokyo by event of July 12, 1911 eruption and often ash fell to the Matsumoto (30km from the volcano) by the 1907-39 and 62-63 Eruption.

Each total thickness of the 1907-39 deposit is 2.5m, 20cm and 3cm in each site of 10m (on the summit), 800m and 1.5km from the summit vent. The tephra layers are very poorly sorted and mainly composed of altered fine-grained ash and/or lithic fragment. The 1907-39 deposit can be divided to many layers at the proximal (near the vent) site, but at the distal (a few km from the vent) site, it can be divided to only a few layers.

On the other hand, only near the vent, the 1962-63 deposit is observed. Now, the 1962-63 deposit is observed at the proximal (near the vent) site, but at the distal (a few km from the vent) site, it cannot observe. Therefore, at a few km from the vent, class of the 1907-39 eruption deposit can be observed, but class of the 1962-63 eruption deposit cannot be observed. But topography of the volcano was changed by the 1962-63 eruption, and it made the vents that have clear topography now.

This study suggests that if vent make clear topography on the volcano, even if a tephra is not observed at the foot of the volcano, we need to be deliberate in assessment of the volcanic hazard.