

## Collapse of Mt. Gokenzan in northeast Shikoku due to the 1707 Houei Earthquake

# Shuichi Hasegawa[1]

[1] Construction Eng., Kagawa Univ.

Two peaks of Mt Gokenzan in northeast Shikoku collapsed due to the 1707 Houei Earthquake. Historical document and distribution of collapsed rock blocks suggest that one peak collapsed eastward and another peak collapsed westward. The remnant blocks at the top of collapsed peaks indicate that the steep peaks composed of Miocene volcanic breccia had been separated from bedrocks by horizontal cracks and was toppled by strong tremor, then tumbled down the mountainside. The horizontal ground acceleration at the collapse is estimated to be over 300 gal, as judged by the restoration of collapsed peaks from ancient picture before Houei Earthquake.