

## Does it contribute to upheaval and sedimentation near the oblique plate of the subduction zone? -In Central Java Earthquake, 2006.

# Tsuneo Ohsumi[1]; Yujiro Ogawa[2]

[1] Nippon Koei Co., Ltd. R&D; [2] Earth Evolution, Univ. Tsukuba

<http://www.n-koei.co.jp/>

An earthquake with a magnitude of 6.3 occurred at 5:54 AM (local time) on May 27, 2006. In this segment of the arc convergence between the Indian Ocean and Asian plates, subduction trace is normal in the Java Trench with a rate of c. 7 cm/year. The subduction system comprises an accretionary complex composed of materials scraped off of the Indian Ocean floor in the Java forearc ridge. The volcanic arc, which forms the backbone of Java and the islands to the east, is constructed on continental crust in West Java. The extensively damaged areas were spread throughout the west side of the Imogiri (Opak) fault. The east side of the dislocation continues to create an upheaval while accumulation of sediment continues on the west side. It had contributed to upheaval and sedimentation near the oblique plate of a subduction zone. We carried out an analog experiment using cocoa powder as a marker on pastry flour which was used as sedimentary layer. Conducting the analog experiment changed the oblique angle. A pastry flour excels cake flour in the reproducibility of an experiment, operativity, and visibility. Moreover, cocoa powder was selected as a marker which does not affect the action of pastry flour. Moreover, the element test (a physical test, a strength test) of pastry flour was done, and it prepared for the future numeric simulation. Pastry flour excels over weak flour in the reproducibility of an experiment, operativity, and visibility. Moreover, cocoa powder was selected as a marker as it does not affect the action of pastry flour. In addition, an element test (a physical and strength test) was performed on pastry flour and prepared for future numeric simulation.