

Active Structures in Hypocentral Region of the Mid Niigata prefecture Earthquake in 2004

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The Mid Niigata prefecture Earthquake was occurred in October 23rd, 2004. Suzuki et al (2004) and National Institute of Advanced Industrial Science and Technology (2004) found small earthquake fault at Obirou and Aoshima. They also indicated that the Mid Niigata prefecture Earthquake was caused by Obirou Fault and by the northern part of the Western marginal Fault of Muikamachi Basin.

The Objective of this report is to examine the active structures in Hypocentral Region of the Mid Niigata prefecture Earthquake. We carried out aerial-photo interpretation, geological survey, and topography by airborne laser scanner.

As a result of our survey, Suwatouge Flexure is found for an active structure inside the Mid Niigata prefecture Earthquake Hypocentral Region, together with Obirou Fault and the Western marginal Fault of Muikamachi Basin.

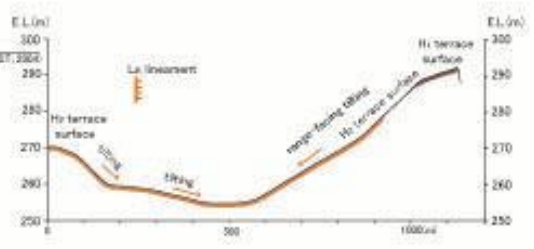
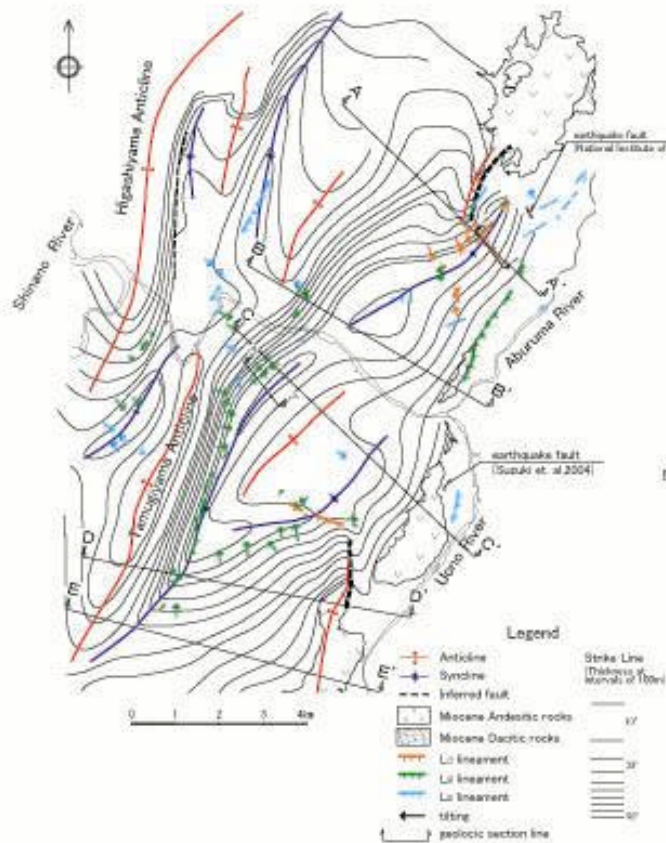


Fig.3 Topographic profile on the line(1-1') near Ueharakogen, Hirogamimura

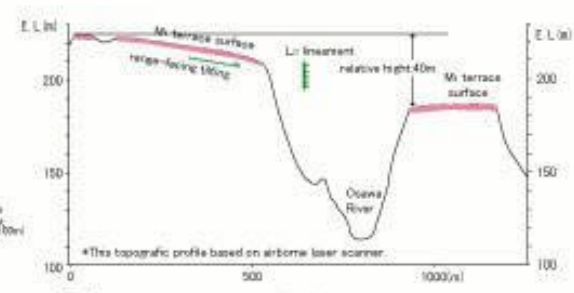


Fig.4 Topographic profile on the line(2-2') near Shimajima, Horinouchi-Machi

Fig.1 Strike line map in the southern part of Hypocentral region of the Mid-Niigata prefecture Earthquake

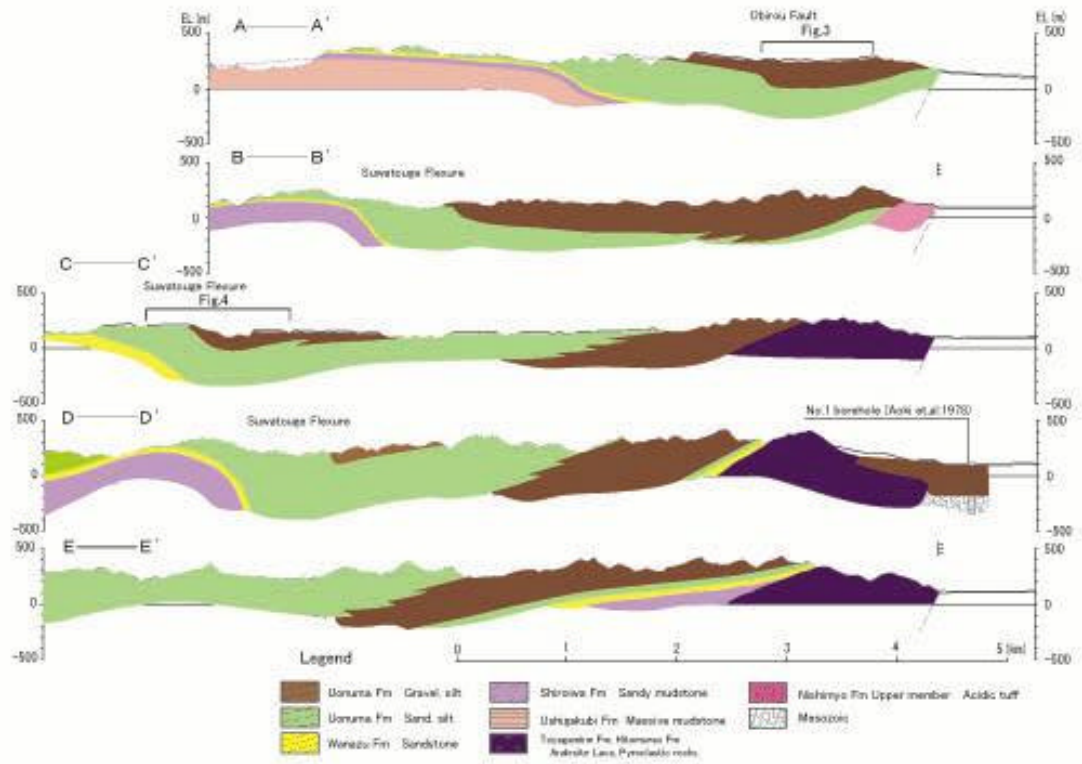


Fig.2 Geologic cross section on the lines(A-A'~E-E') in the southern part of Hypocentral region of the Mid-Niigata prefecture Earthquake