

Reinterpretation on geometry of the major active fault zones for their segmentation in northern Kyushu, Japan

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Location and geometry of the Major Active Fault Zones are the most basic data for the long-term earthquake risk evaluation by the Headquarters for Earthquake Research Promotion that applies length of active fault to estimation of magnitude of future earthquakes. Since active fault zones (systems) are generally composed of several active fault segments, it is important to identify a group of segments that will move simultaneously in future. Thus, unreliable information regarding location and geometry of the active fault zone often causes inappropriate estimation in the long-term risk evaluation.

We carried out careful interpretation of large scale air photographs in northern Kyushu for more detailed mapping of active fault traces based on observation of minute tectonic landforms. Results of our interpretation provide important data to reconsider about length of the fault zones and their segmentation for more reliable risk evaluation.

This project is supported by the Ministry of Education, Culture, Sports, Science and Technology of Japan.

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