The crustal strain rate using the active fault GIS data

# Tsuyoshi Nohara[1], Yorihide Kboriya[2], Toshifumi Imaizumi[3]


There is the remarkable regionality on distribution and activity in the active fault in the Quaternary period in Japanese Islands. Regionality considering the activity is reflected for the distribution of the horizontal strain rate by the active fault. In this paper, the horizontal and crustal strain rate by active fault was estimated mainly using GIS database (Active Fault Map Working Group, 1999).

In the Japanese Islands scale, Difference between the strain rate calculated on the basis of the new database and the strain rate which ware shown by literature was examined. The main results are shown in the following.

1) The strain rate which Kaizuka and Imaizumi (1984) required and the strain rate required from the latest active fault database are same.

2) On the region which distributes active fault in the northeast Japan, the value of strain rate by the latest active fault data and the strain rate by the geological section are nearly equal.