

Heat flow distribution in Kanto area

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We investigated on the heat flow distribution in Kanto area by the thermal gradients of Hi-net's borehole.

National Research Institute for Earth Science and Disaster Prevention (NIED) deploys the high sensitivity seismograph (Hi-net) across the all of Japan, as part of the activities of the Headquarters for Earthquake Research Promotion.

Because Kanto district was covered with the thick layer of sediment which exceeds 3000 m, we could not get high quality data of heat flow.

NIED constructed 14 observation sites of the 2,000m class with the Kanto district in the first half of the 1990s.

In 2002, we measured geothermal profiles of these sites which reached temperature equilibrium state by equal to or more than 7 years' passing after constructed.

It got about 70 heat flow data newly this time.

The characteristic is as follows.

1. In the Kanto district southern part to Boso-Peninsula, an area with the low heat flow of 30-40mW/m² is seen .
2. Near the Tokyo and Kanagawa Prefecture border, ' a ridge ' with the crust heat flow rate which is extended from the west side is seen.
3. There is a heat flow boundary near 36 degrees of north latitude in the east part of Kanto district.