

The Kego Fault and subsurface structure in the Fukuoka Plain analyzed based on borehole data

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The borehole database including about 2,438 digital borehole data have been build up for constructing the subsurface structure of the Fukuoka Plain, in corporation with local government offices and the Kyushu Ground Information Association.

The 3D geologic model of the Fukuoka Plain based on the borehole database offers a good example to display the strike-slip basin structure bounded by the Kego active fault on its southwest side. The basin is characterized by west to southwestward tilting of the basement covered by the Middle Pleistocene to Holocene deposits. The basement rocks consist of Paleogene sedimentary rocks and Cretaceous granite. The basin fills are divided into four stratigraphic units, that is, and the Nakabaru gravel member, the Suzaki member, the Aso-4 pyroclastic flow deposits, the Otsubo sand-gravel member, and the Holocene incised-valley fills (called the Chuseki-so), in ascending order.

Keywords: Kego Fault, Fukuoka Plain, borehole data, subsurface structure