

T154-006

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SUBSURFACE TEMPERATURE WARMING OBSERVED IN BOREHOLES: A CASE STUDY FROM JAKARTA, INDONESIA.

Rachmat Fajar Lubis[1]; Yasuo Sakura[2]; Makoto Yamano[3]; Robert Delinom[4]; Akinobu Miyakoshi[5]; Makoto Taniguchi[6]

[1] Graduate school of science and technology, Chiba University; [2] Earth Sci. Chiba Univ; [3] ERI, Univ. Tokyo; [4] Research Centre for Geotechnology, Indonesia Institute of science; [5] GSJ,AIST; [6] RIHN

Temperatures in boreholes can be an important source of information on recent climatic changes, because the normal upward heat flow from the Earth's crust and interior is perturbed by the downward propagation of heat from the surface. Subsurface temperatures in Jakarta city, where population and density increase rapidly, were analyzed to evaluate the effects. Temperature-depth profiles and groundwater levels were measured on selected observation wells in the area. As a result, the magnitude of surface warming evaluated from subsurface temperature was 1.4 0C which agreed with meteorological data during the last 100 years.