



An Integration of Geophysical methods to study The Thakhek fault in North-East, Thailand

Jetsadarat Rattanawanee and Rungroj Arjwech
Khon Kaen University, Geotechnology, Thailand (zisevernew@gmail.com)

An examination of the Thakhek fault in Northeastern Thailand is challenging due to lack of existing active fault morphology. The objectives of this study are to identify fault location in Bueng Kan province and to evaluate seismic hazard. An integration of geophysical methods was carried out using electrical resistivity tomography (ERT) and seismic refraction survey. ERT result shows horizontally discontinued electrical resistivity values, indicating the Thakhek fault. On the other hand, seismic refraction result revealed that continued seismic velocity values, couldn't be found faulting characteristic. The trenching reveal reverse fault oriented in NW-SE direction. This slip rate is 0.036 mm/year and the maximum earthquake magnitude is to be 7.2