Research on experiments and analysis to evaluate the impact of fault displacement under structure

Takuo MUROYAMA, Takahiro FUNATSU and Isao SHIOZAKI

It is important to examine engineering countermeasures for fault displacement in order to grasp in advance the degree of effect generated in the structure, when displacement by a sub-fault which was not assumed is generated directly under an important structure, and to examine countermeasures as necessary. I evaluated the effect on the structure by the fault displacement which assumed a sub fault directly under the structure using model experiment and numerical analysis, and by reproducing the model experiment result by the individual element method, it was possible to qualitatively and quantitatively evaluate various effects of the fault displacement under the structure.