Seismic Response Analysis of Parallel RC Piers considering Ground

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We compute seismic response analysis of RC piers considering ground with fine solid mesh. The computational models are generated with tetrahedral elements with node connectivity only. By using tetrahedral elements, evaluation of stress in detail and precise modeling of structural shape are feasible. In addition to this, modeling of node connectively without Multiple Point Constraint is effective large scale parallel computing. After describing generating procedure of single pier and parallel piers considering ground with tetrahedral elements, we discuss seismic response analysis by K computer in Japan.

Keywords: Seismic Response Analysis, RC Pier, Tetrahedral Element, K computer