Time Effects on One-dimensional Consolidation Analysis

by

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Abstract

Two secondary compression models are examined by analysis and one-dimensional consolidation test in clays of different drainage distances. Scale effects on one-dimensional consolidation taking account of secondary compression are influenced by the increase in effective stress during consolidation. Observed consolidation time curves agree with calculated results of the secondary compression model expressed by the function of consolidation elapsed time and the effective stress.

Keywords: One-dimensional consolidation, Constitutive model, Scale effect, Difference method, Secondary compression

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