A Regression Model for Residual-State Creep Failure

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Abstract : In this study, a residual-state creep failure model was developed based on the residual-state creep test results of clayey soils. To develop the proposed model, the regression analyses were done by using the R. The model results of the failure time (tf) and critical displacement (δc) were compared with experimental results and found in close agreements to each others. It is expected that the proposed regression model for residual-state creep failure will be more useful for the prediction of displacement of different clayey soils in the future.
Keywords : regression model, residual-state creep failure, displacement prediction, clayey soils