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"Parameter variability of undrained shear strength and strain using a database of reconstituted soil tests" by M. E. W. Beesley and P. J. Vardanega

## Online Supplement



Figure S1. Soils in the database plotted on the Casagrande Chart (A-line (orange) and U-line (grey) shown)


> Reconstituted CIU n=50 from 100 tests (17 of 50 data points from NC specimens)
> 80\% of data predicted within Factor Error $=1.3$
Mayne \& Holtz (1985)
CIU
$\mathrm{n}=14$ from 28 tests
(11 of 14 data points from NC specimens)
80\% of data predicted within Factor Error = 1.4

Reconstituted CKU $\mathrm{n}=29$ from 58 tests (14 of 29 data points from NC specimens)
80\% of data predicted within Factor Error $=1.4$
Mayne \& Holtz (1985) CKU $\mathrm{n}=56$ from 112 tests (41 of 56 data points from NC specimens)
80\% of data predicted within Factor Error = 1.6

Figure S2. Comparison of observed and predicted values of $c_{w} / \sigma_{v 0}^{\prime}$ CIUE and $c_{w} / \sigma_{v 0}^{\prime}$ CKUE predicted from a triaxial compression test: (a) CIU triaxial tests and (b) CKU triaxial tests

## Reference:

Mayne, P. W. and Holtz, R. D., 1985. "Effect of principal stress rotation on clay strength". In: Proceedings of the 11th International Conference on Soil Mechanics and Foundation Engineering, San Francisco/ 12-16 August 1985, (Publications Committee of XI ICSMFE, Eds.) A.A. Balkema, Rotterdam, Netherlands, vol. 2, pp. 579-582.


Figure S3. Comparison of observed and predicted values of $\gamma_{50}$ CIUE and $\gamma_{50}$ CKUE predicted from a triaxial compression test: (a) CIU triaxial tests and (b) CKU triaxial tests


Figure S4. Comparison of non-linearity parameter in extension and compression (a) for CIU tests and (b) for CKU tests


Figure S5. Comparison of observed and predicted values of $c_{u} / \sigma_{v 0}^{\prime}{ }_{v I U}$ (Equations 9 and 10) tested by CIUC or CIUE


Figure S6. Comparison of observed and predicted values of $c_{u} / \sigma_{v 0}^{\prime}{ }_{v K U}$ (Equations 11 and 12) tested by CKUC or CKUE


Figure S7. Comparison of observed and predicted values of $\gamma_{50}$ CIU (Equations 5 and 6) tested by CIUC or CIUE


Figure S8. Comparison of observed and predicted values of $\gamma_{50 \text { СКU }}$ (Equations 7 and 8 ) tested by CKUC or CKUE

