Appendix D CPT plots per geotechnical unit including properties from laboratory testing

D.1 Over-consolidation ratio

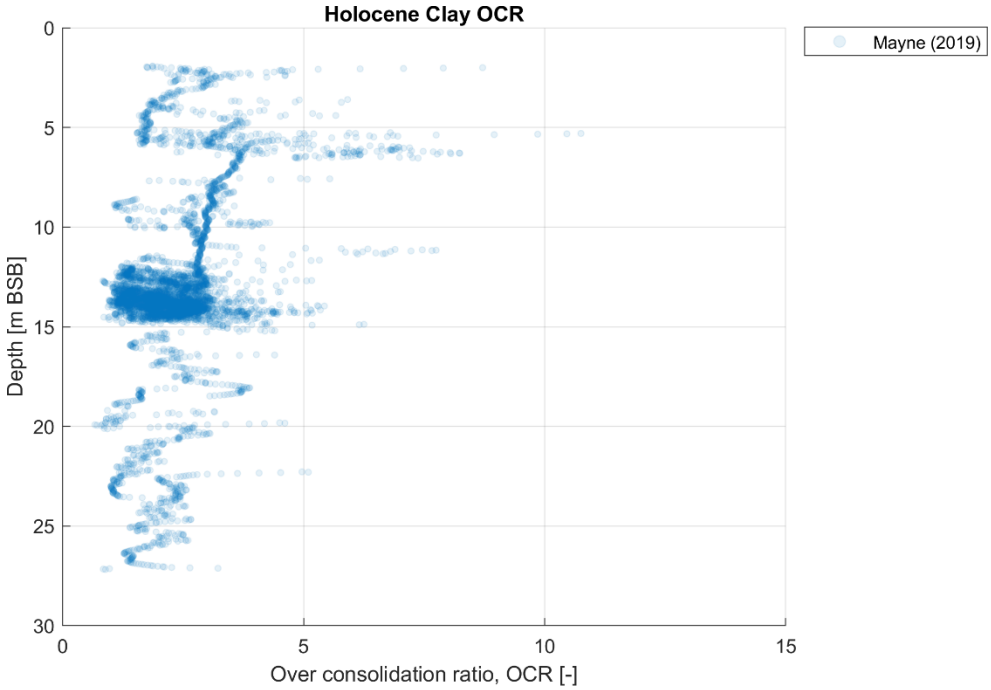

Figure D-1 Range of OCR for geotechnical unit Holocene clay.

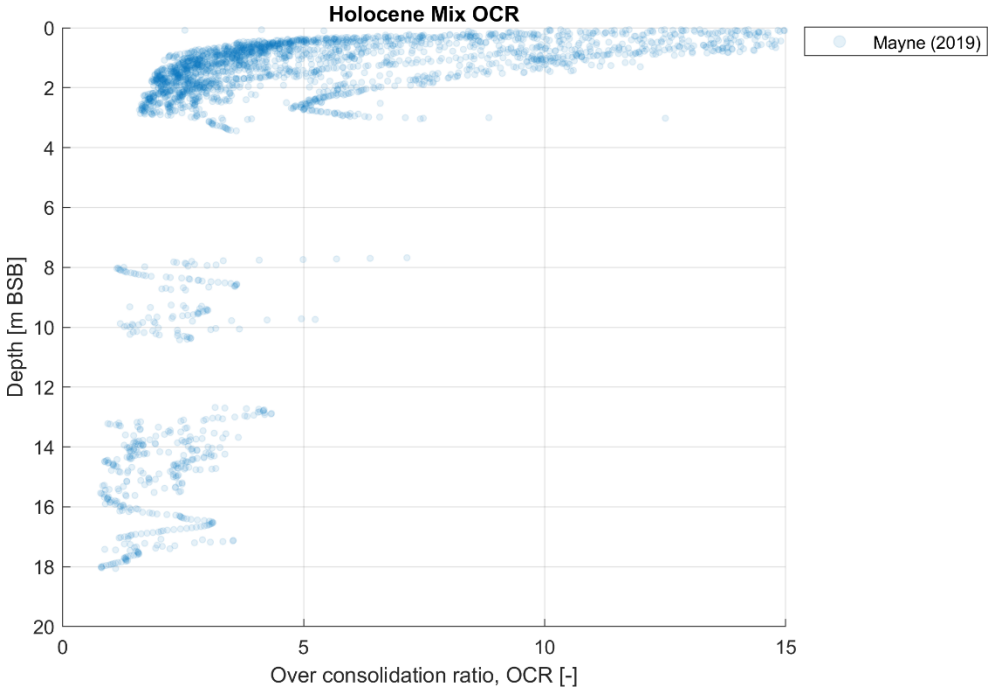

Figure D-2 Range of OCR for geotechnical unit Holocene mix.

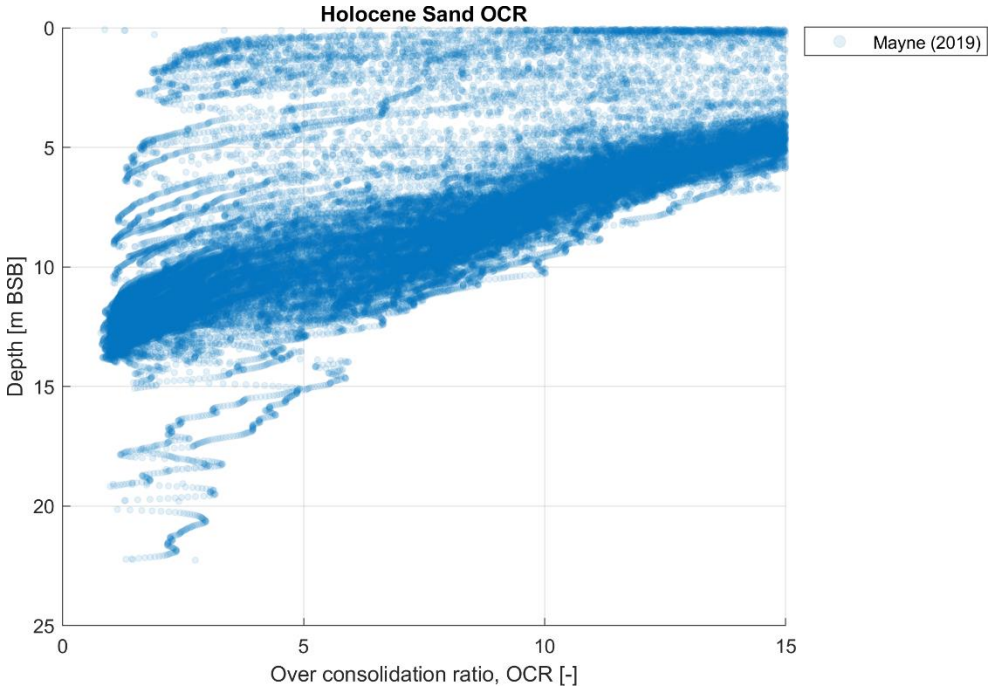

Figure D-3 Range of OCR for geotechnical unit Holocene sand.

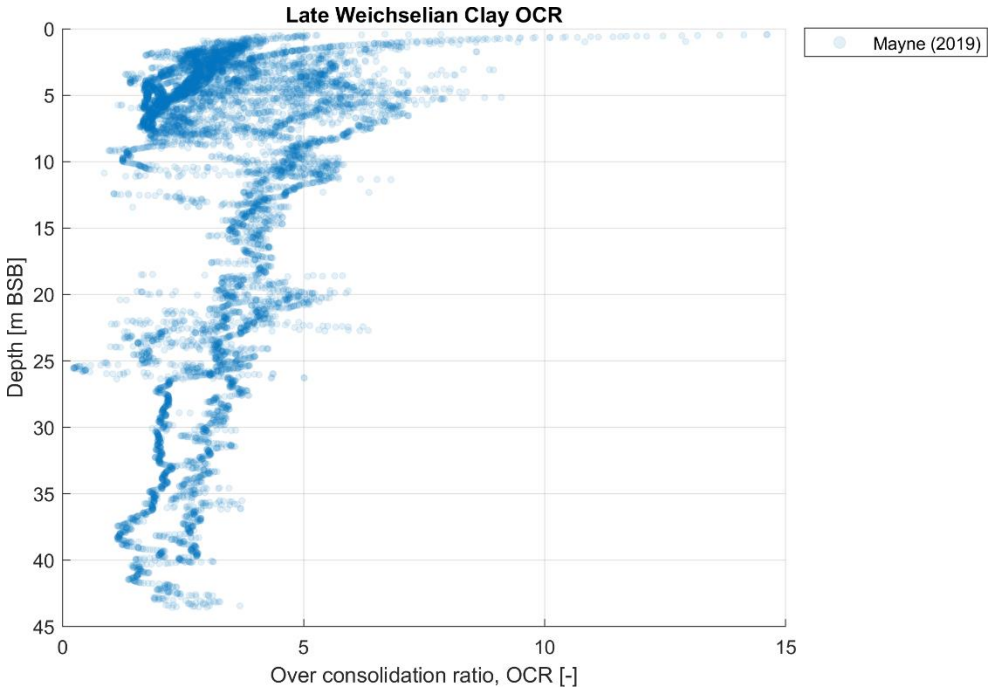

Figure D-4 Range of OCR for geotechnical unit Late Weichselian clay.

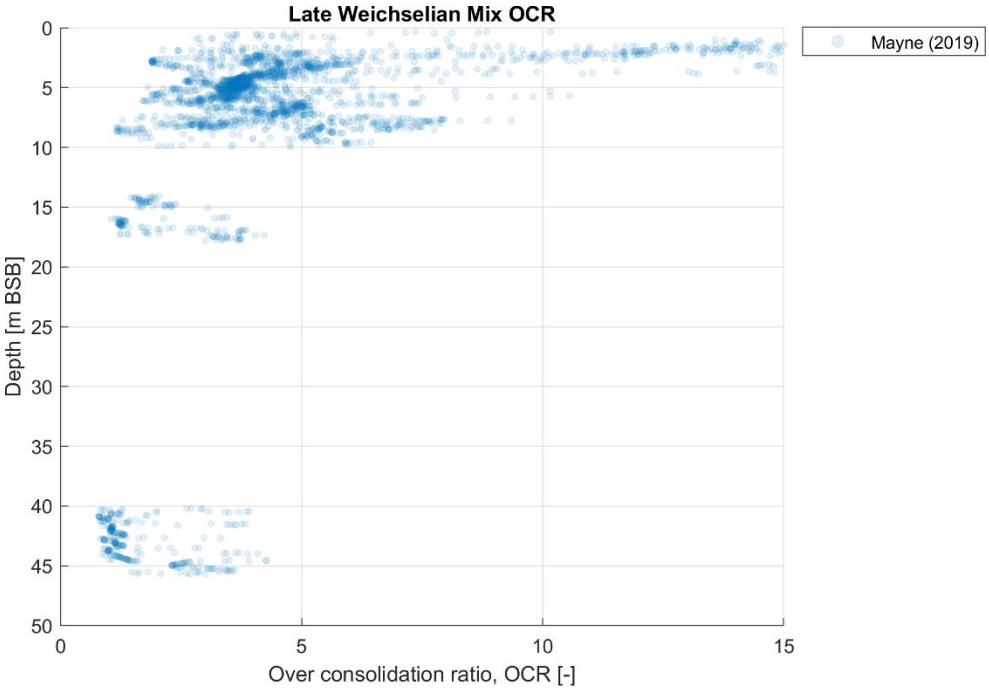

Figure D-5 Range of OCR for geotechnical unit Late Weichselian mix.

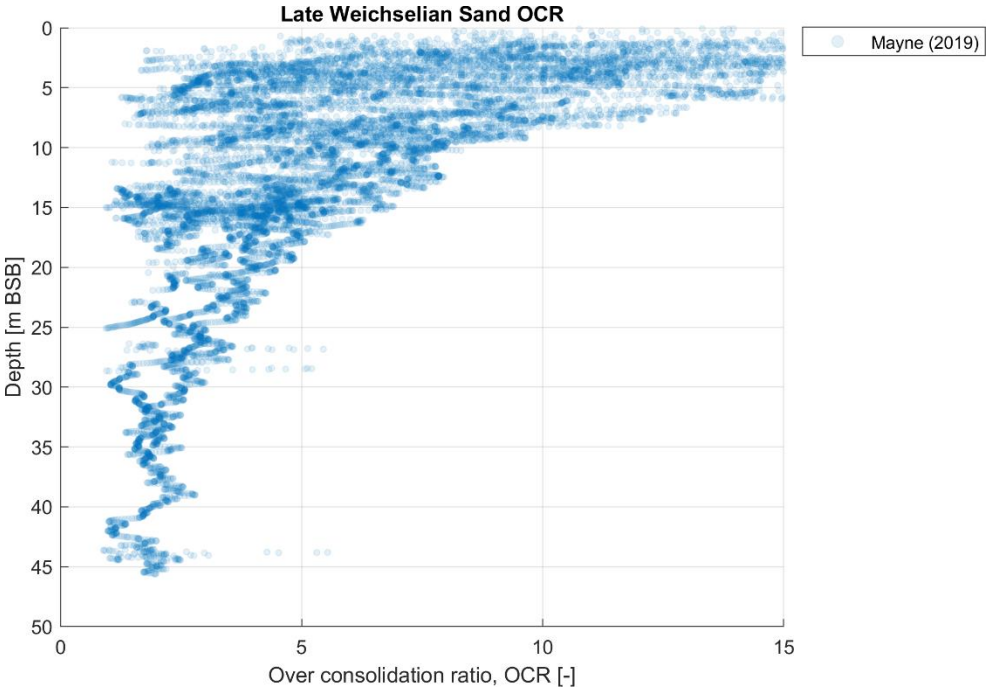

Figure D-6 Range of OCR for geotechnical unit Late Weichselian sand.

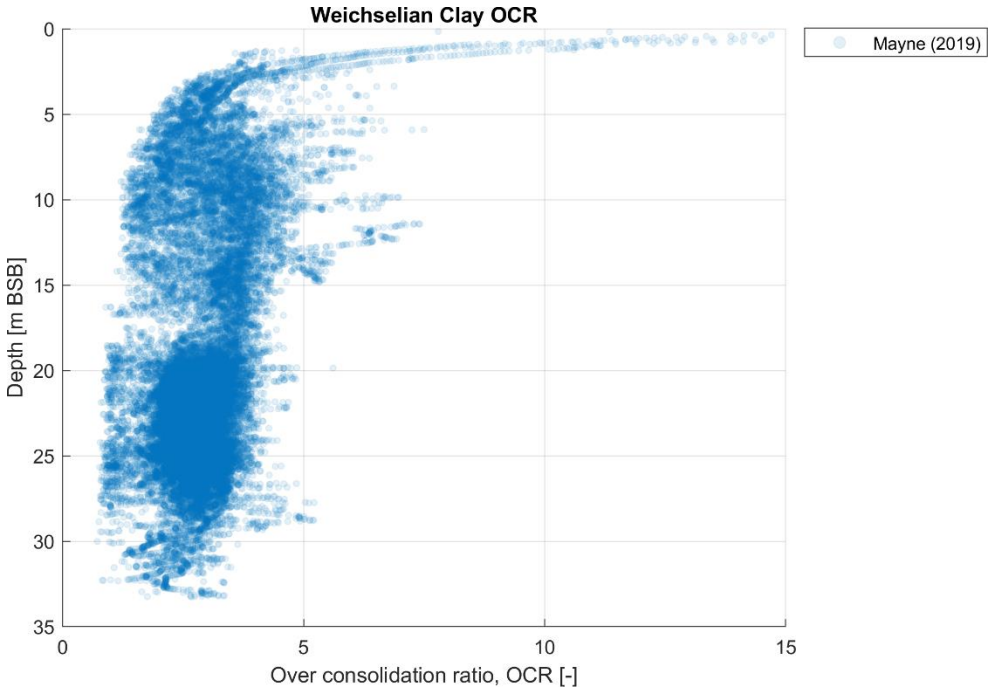

Figure D-7 Range of OCR for geotechnical unit Weichselian clay.

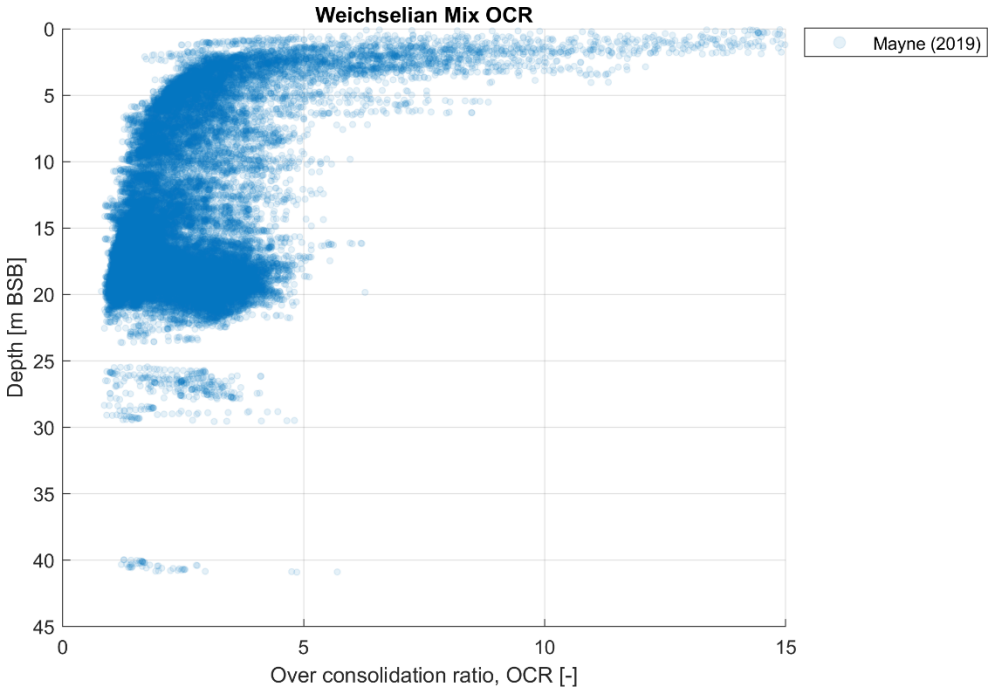

Figure D-8 Range of OCR for geotechnical unit Weichselian mix.

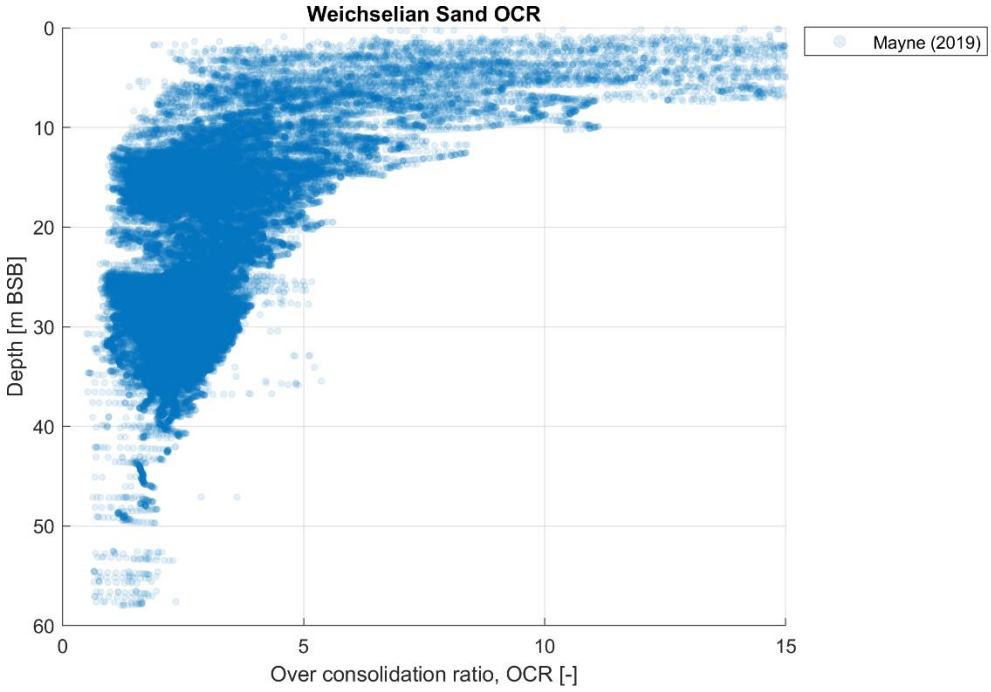

Figure D-9 Range of OCR for geotechnical unit Weichselian sand.

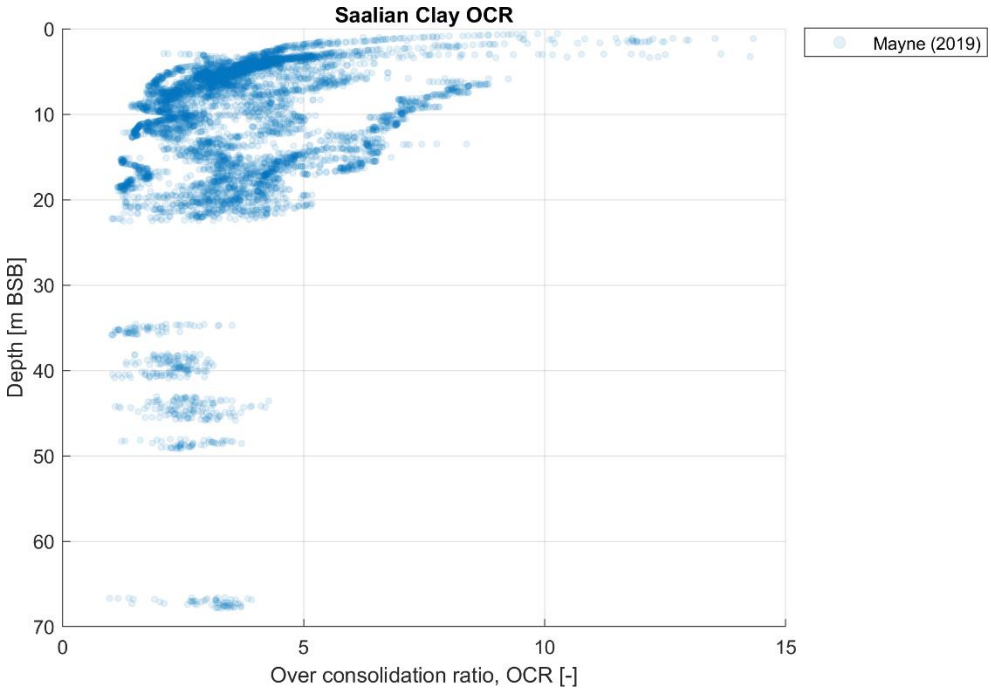

Figure D-10 Range of OCR for geotechnical unit Saalian clay.

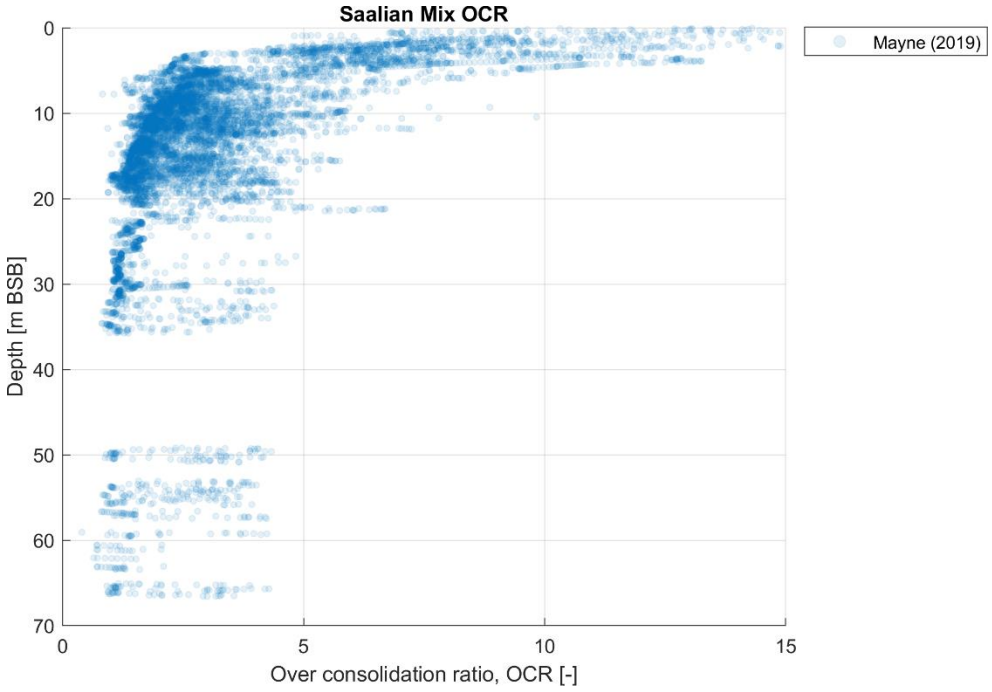

Figure D-11 Range of OCR for geotechnical unit Saalian mix.

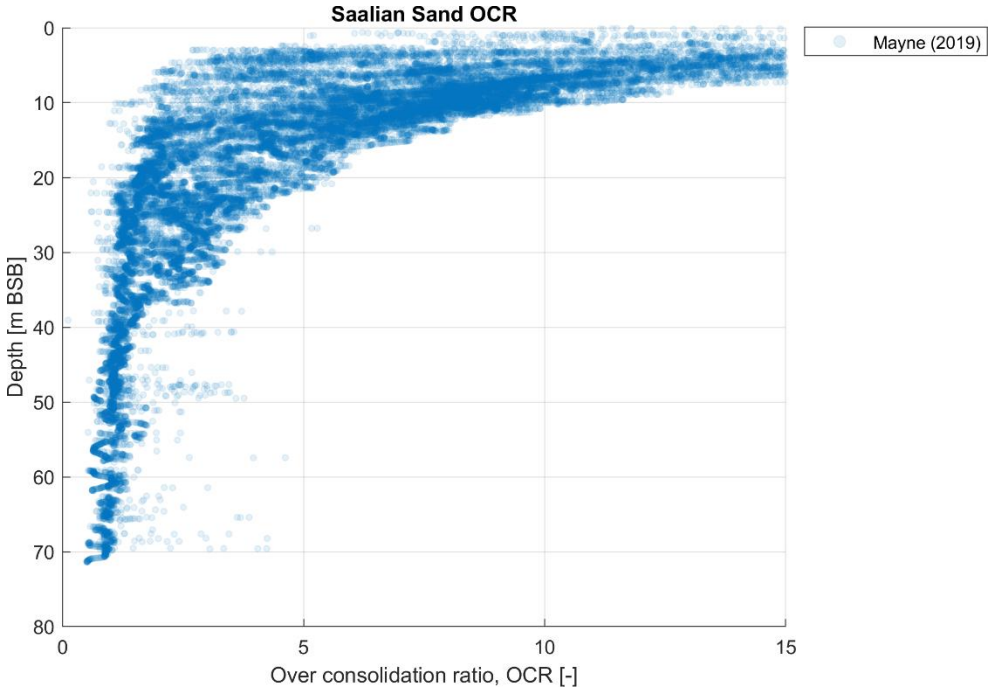

Figure D-12 Range of OCR for geotechnical unit Saalian sand.

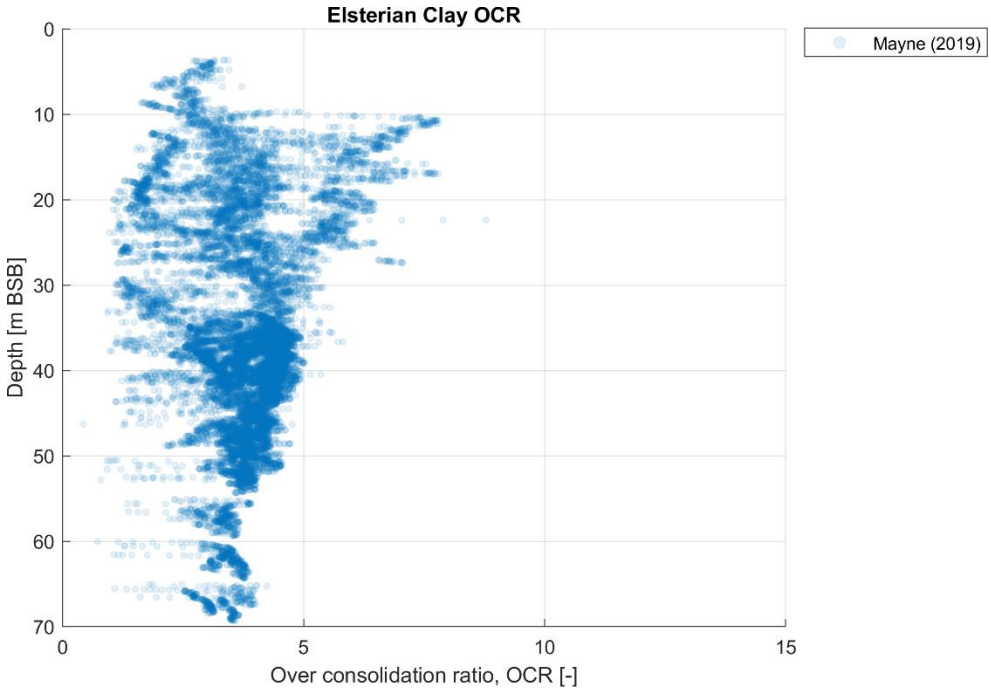

Figure D-13 Range of OCR for geotechnical unit Elsterian clay.

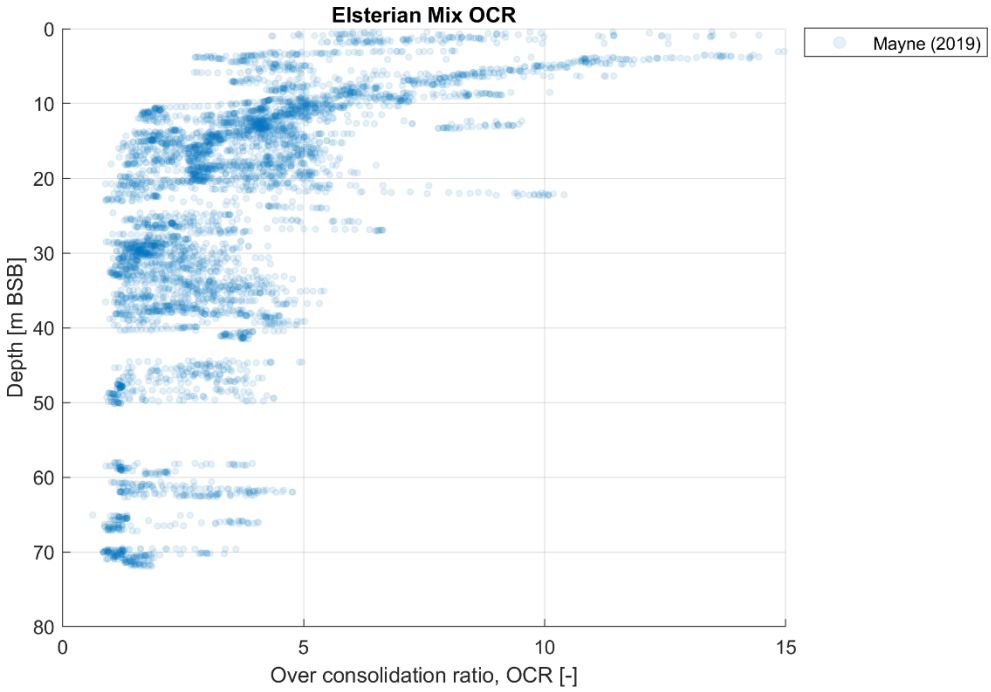

Figure D-14 Range of OCR for geotechnical unit Elsterian mix.

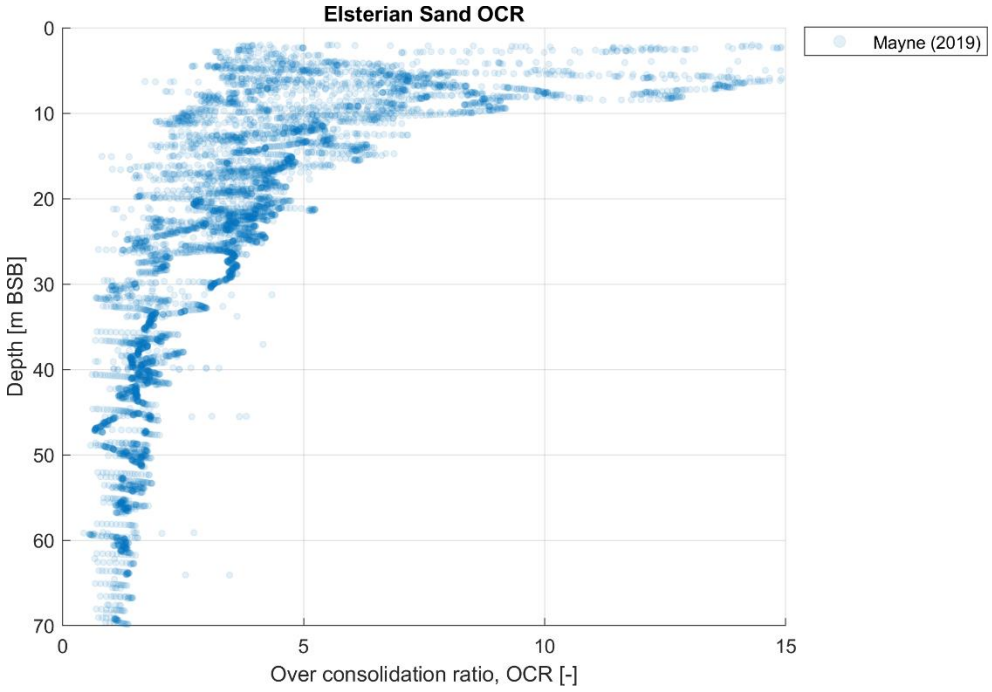

Figure D-15 Range of OCR for geotechnical unit Elsterian sand.

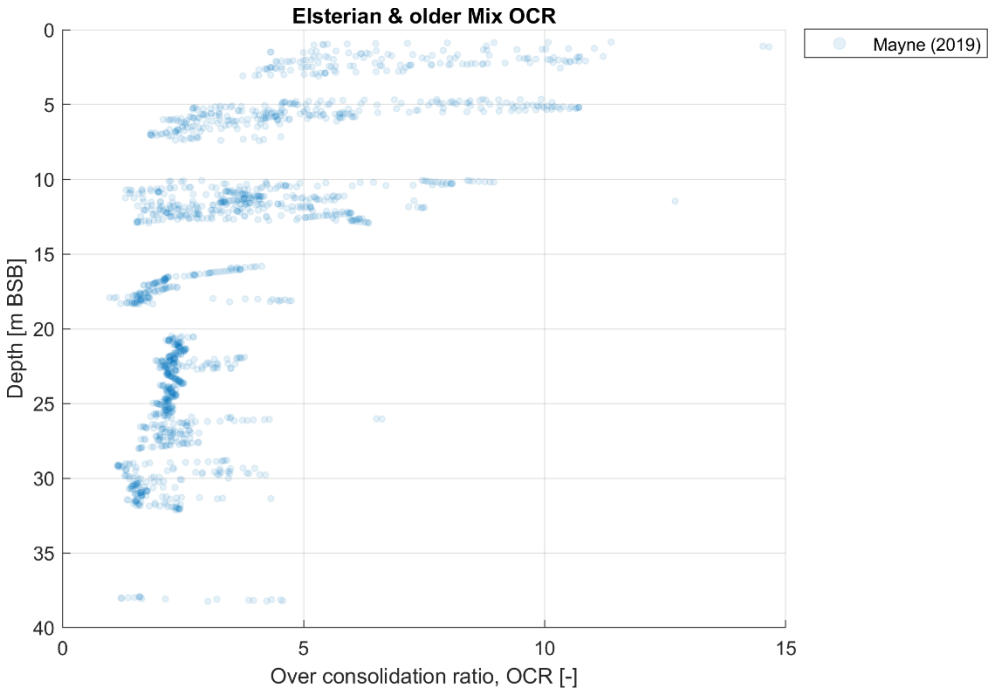

Figure D-16 Range of OCR for geotechnical unit Elsterian & older mix.

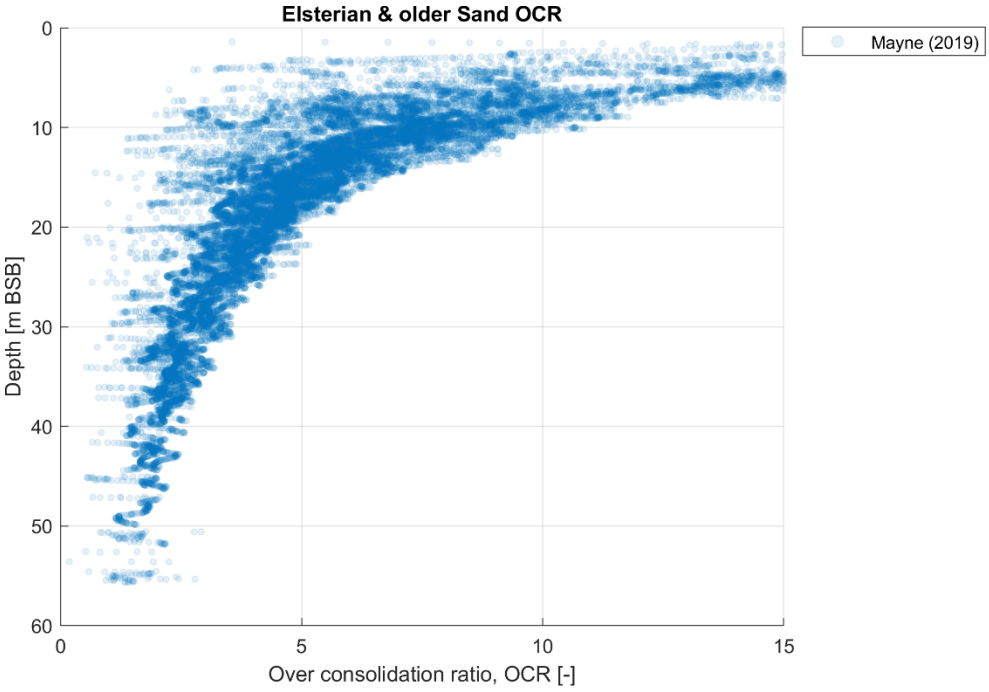

Figure D-17 Range of OCR for geotechnical unit Elsterian & older sand.

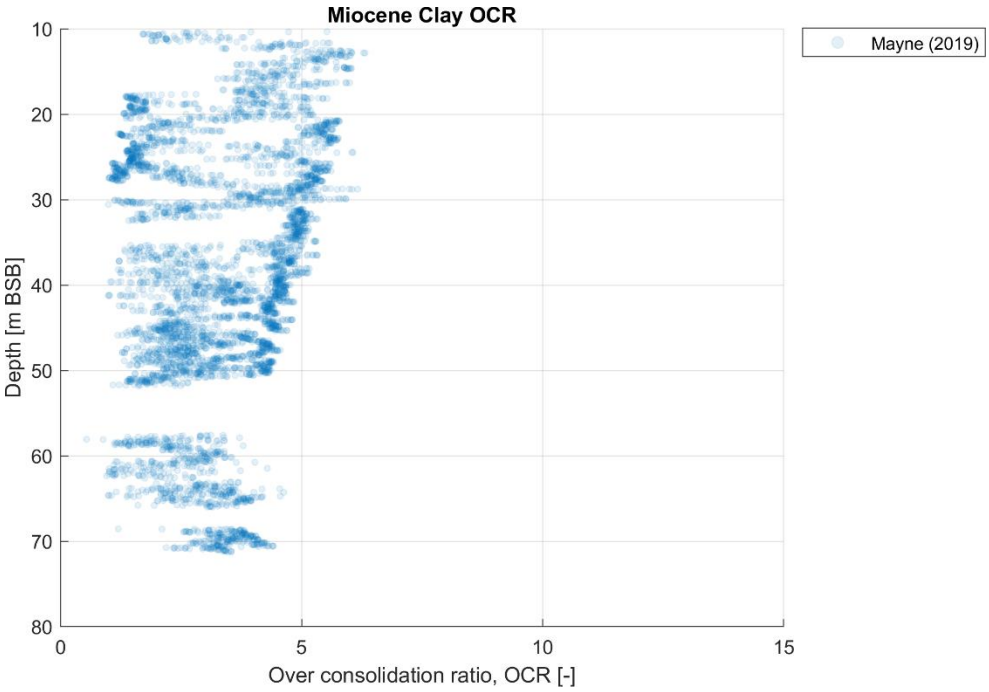

Figure D-18 Range of OCR for geotechnical unit Miocene clay.

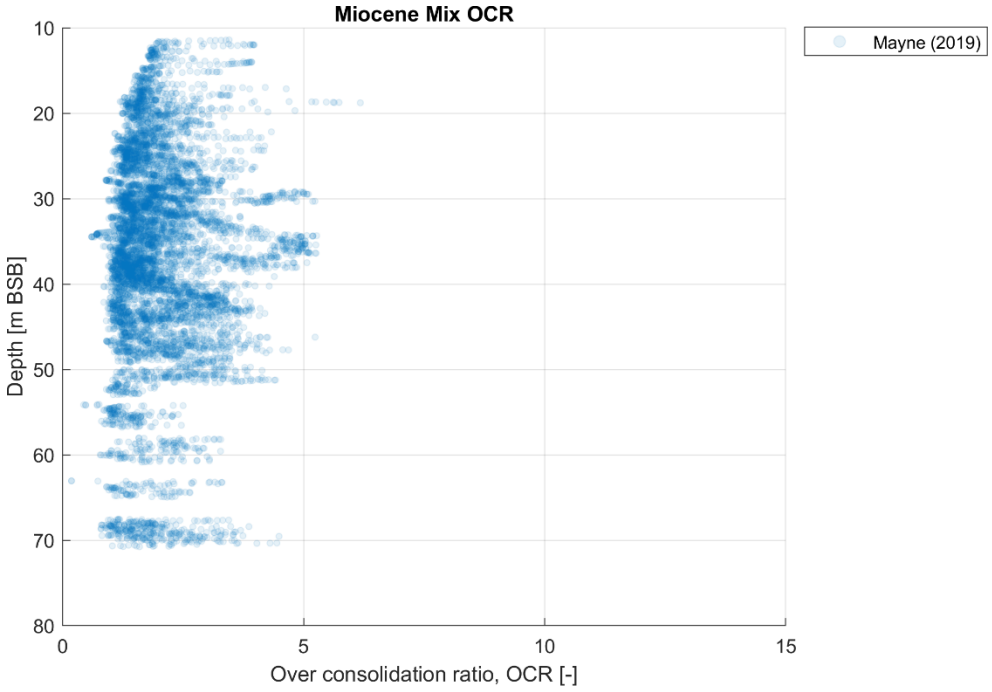

Figure D-19 Range of OCR for geotechnical unit Miocene mix.

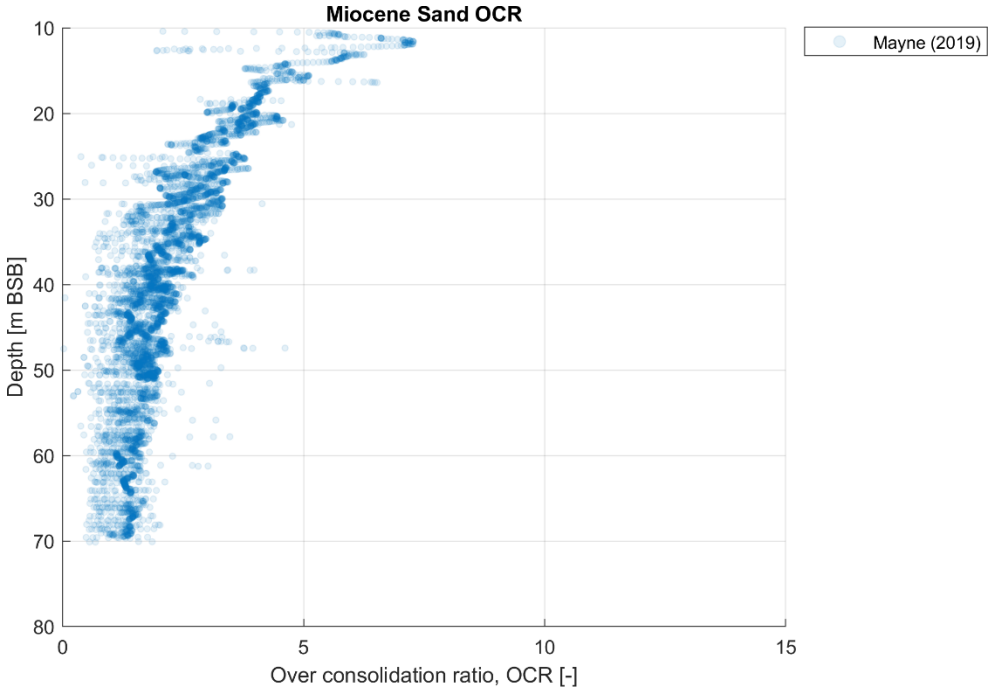

Figure D-20 Range of OCR for geotechnical unit Miocene sand.

D.2 Relative density

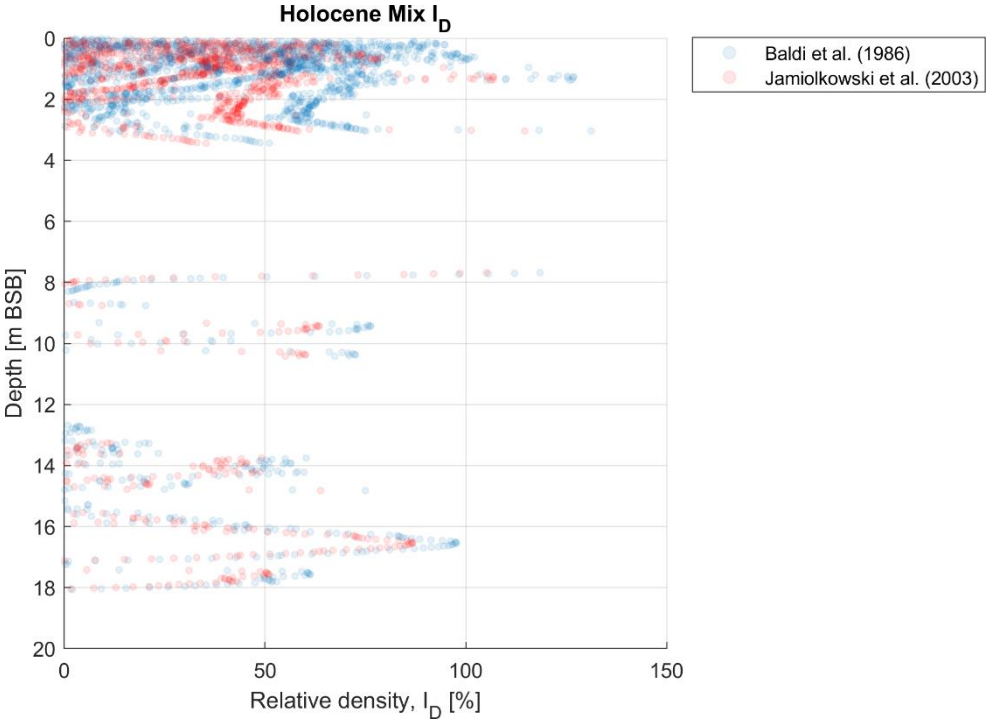

Figure D-21 Range of I_D for geotechnical unit Holocene mix.

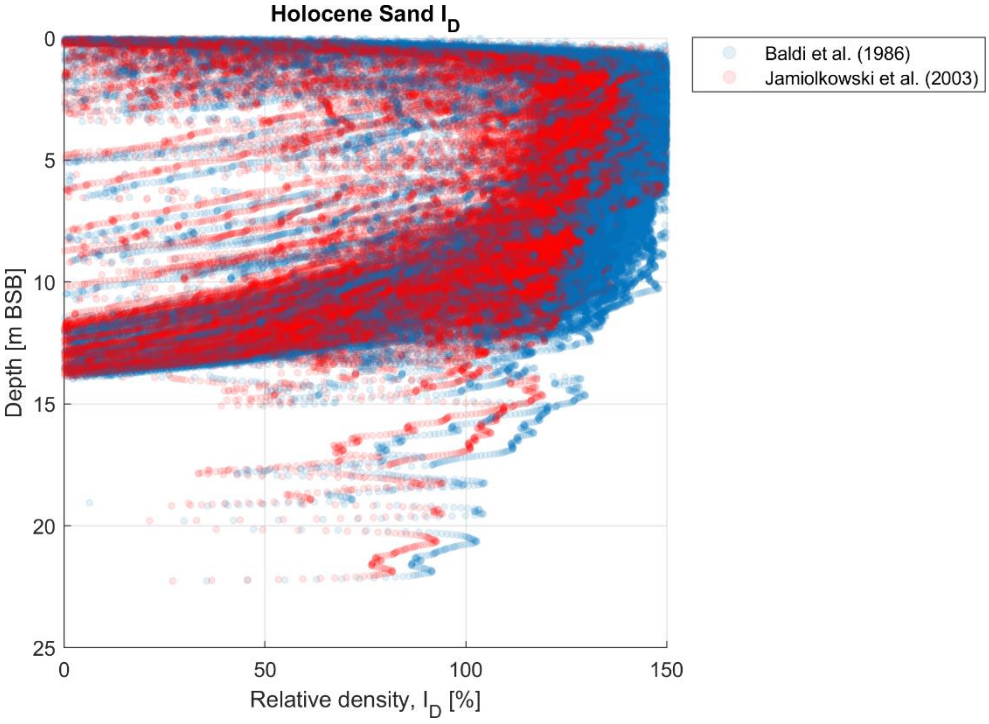

Figure D-22 Range of I_D for geotechnical unit Holocene sand.

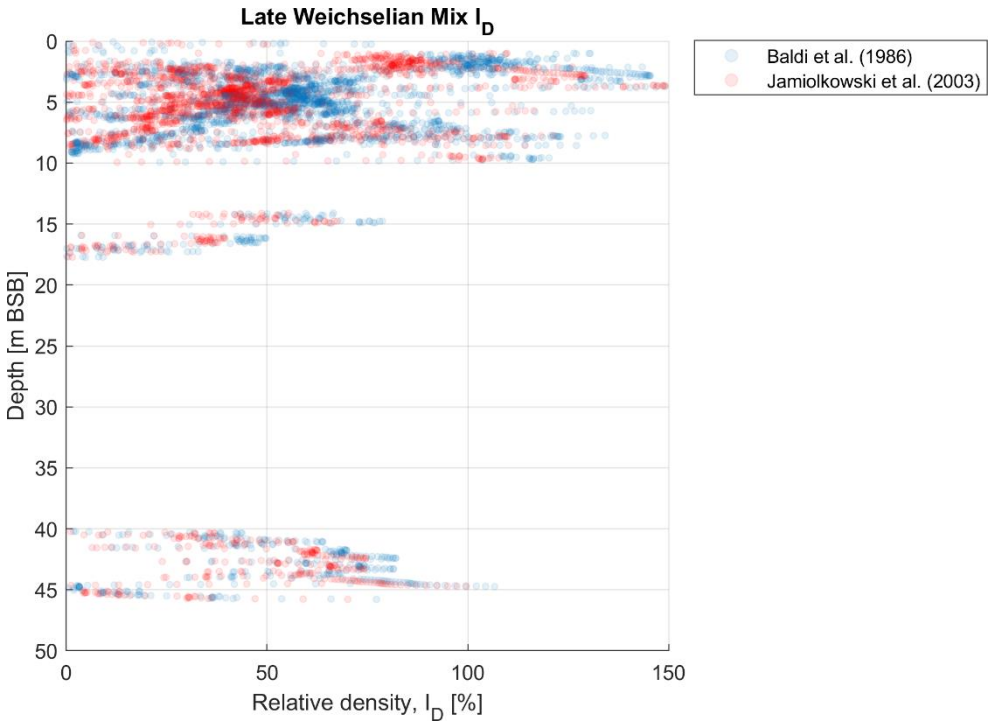

Figure D-23 Range of I_D for geotechnical unit Late Weichselian mix.

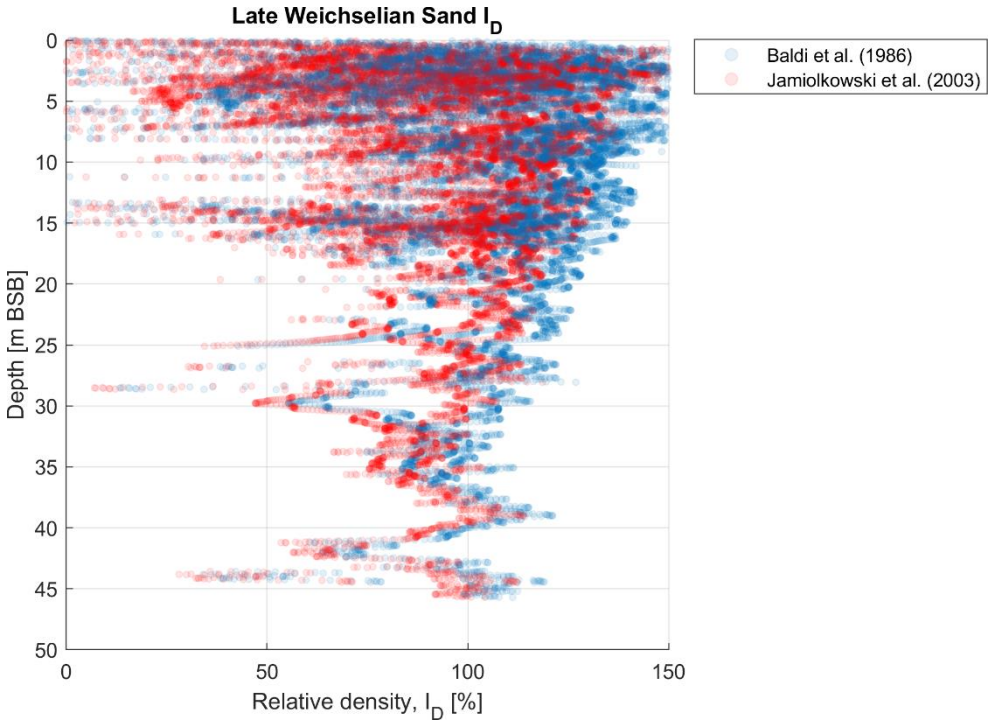

Figure D-24 Range of I_D for geotechnical unit Late Weichselian sand.

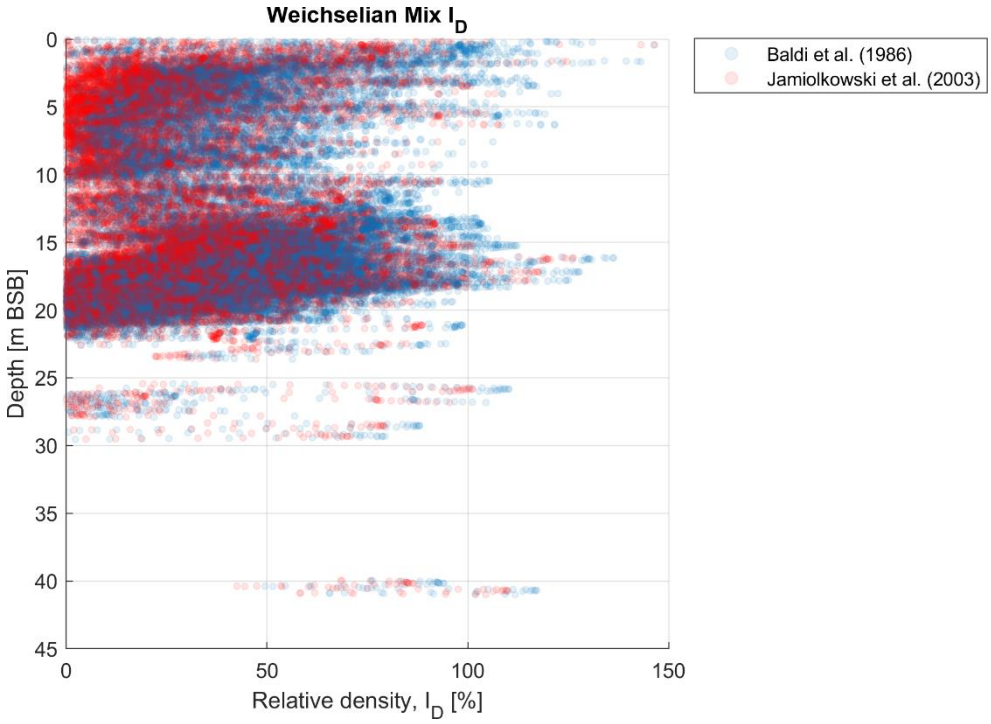

Figure D-25 Range of I_D for geotechnical unit Weichselian mix.

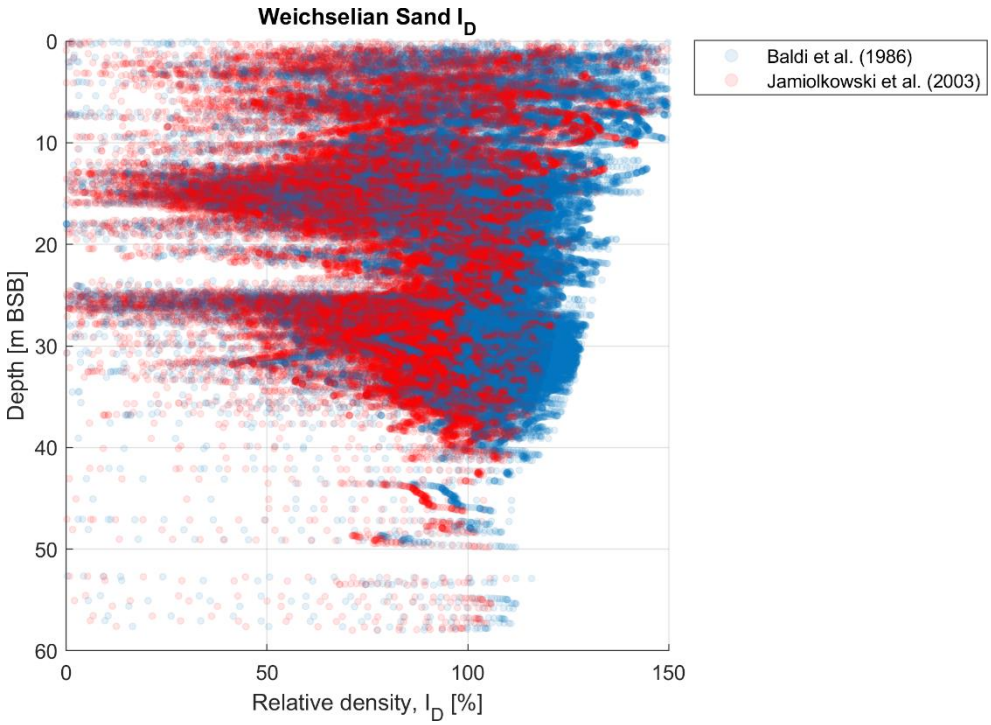

Figure D-26 Range of I_D for geotechnical unit Weichselian sand.

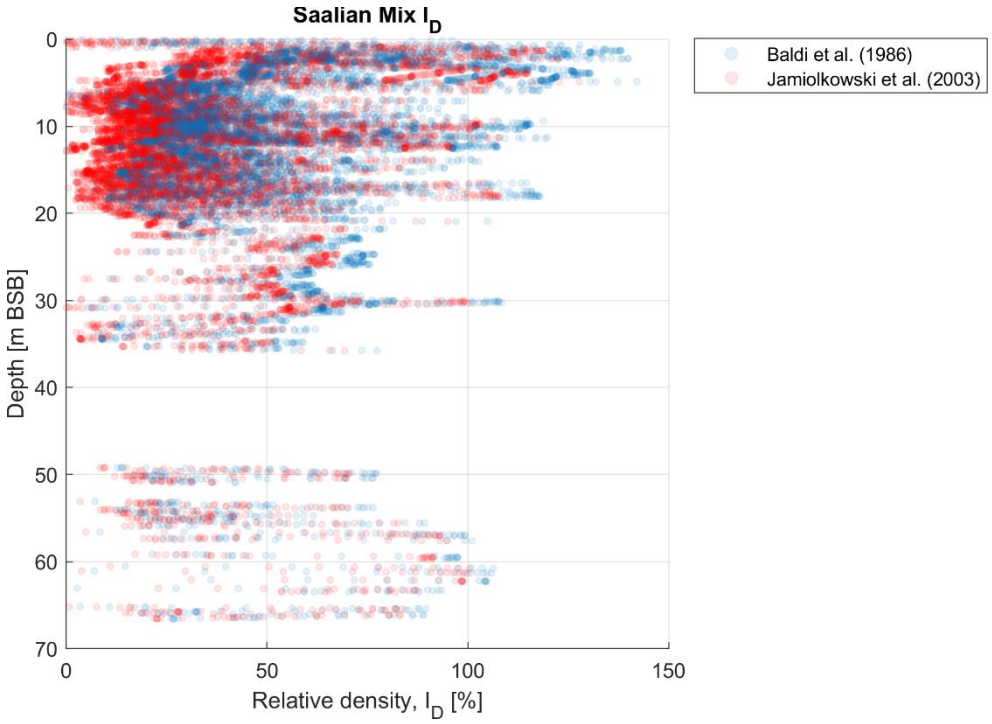

Figure D-27 Range of I_D for geotechnical unit Saalian mix.

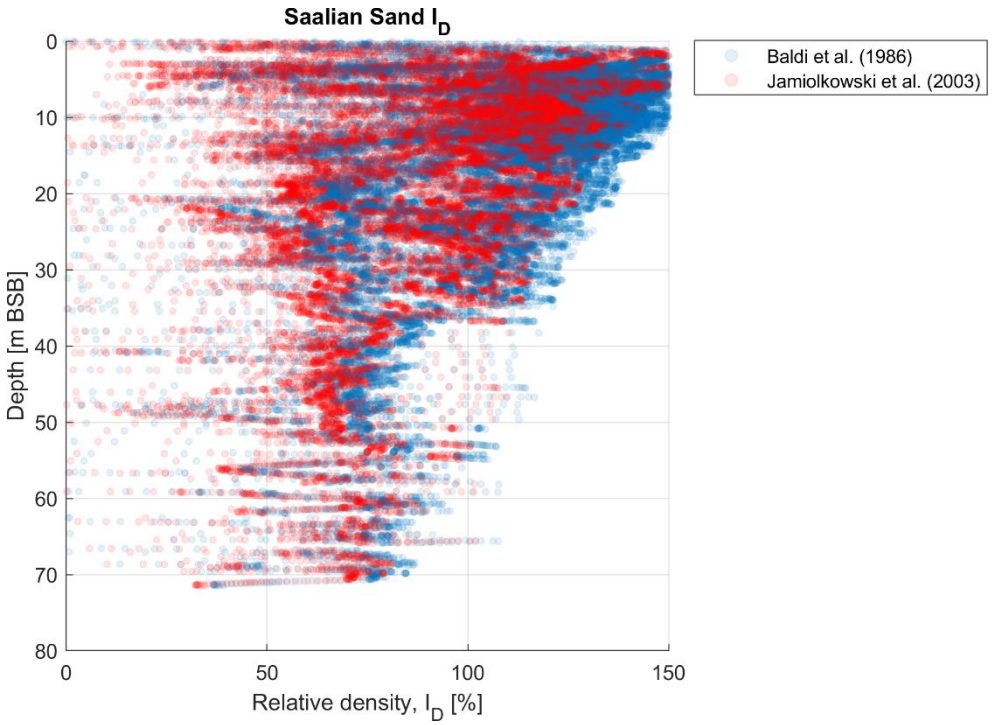

Figure D-28 Range of I_D for geotechnical unit Saalian sand.

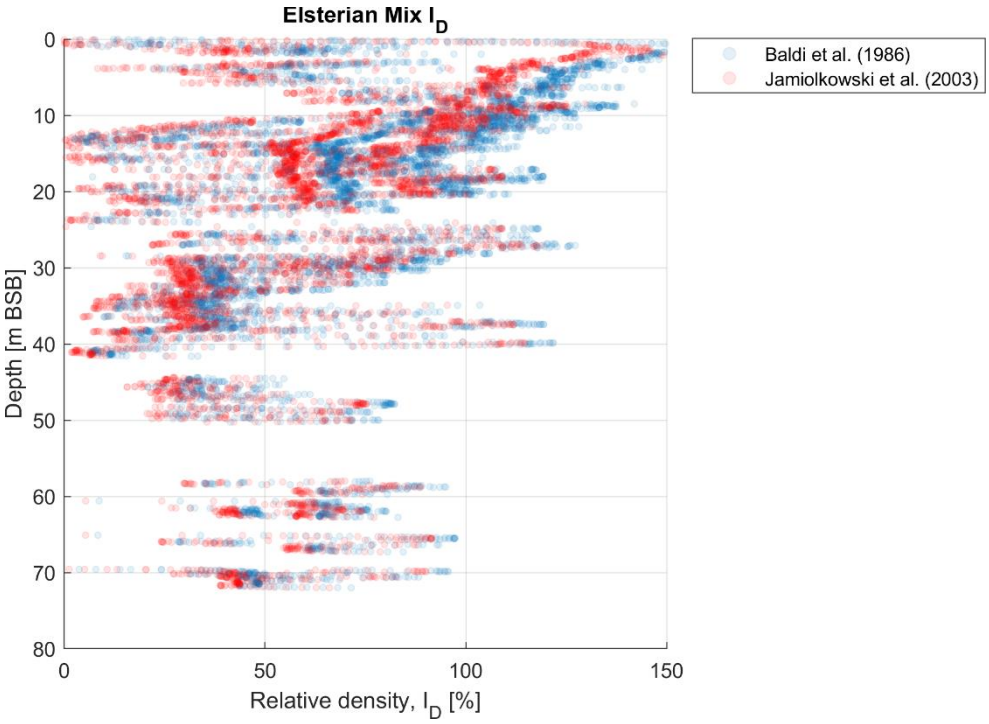

Figure D-29 Range of I_D for geotechnical unit Elsterian mix.

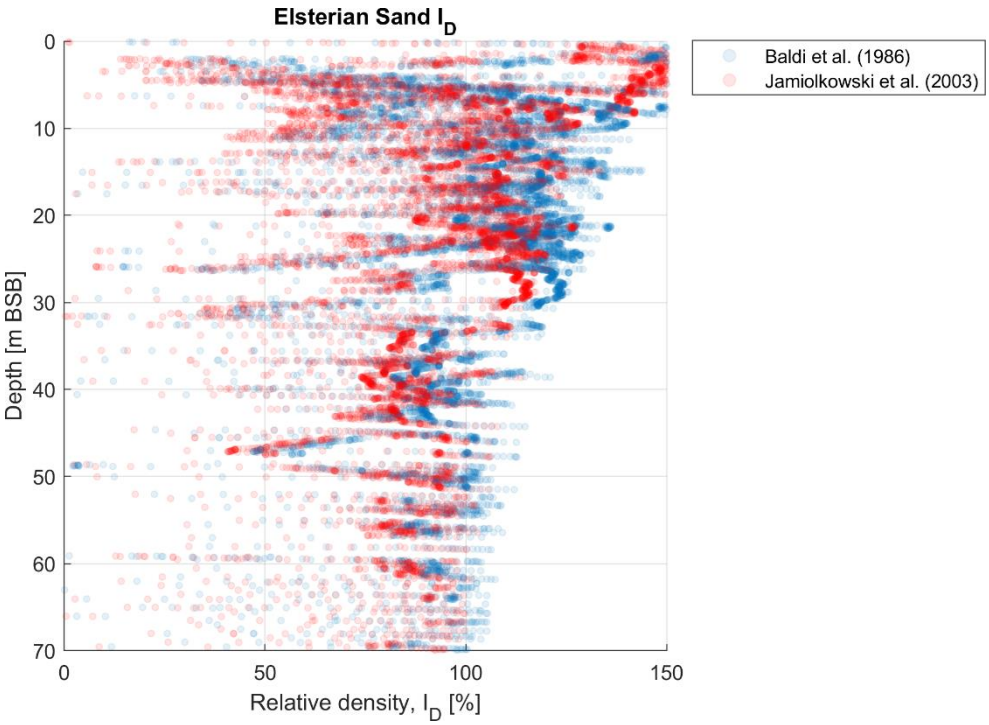

Figure D-30 Range of I_D for geotechnical unit Elsterian sand.

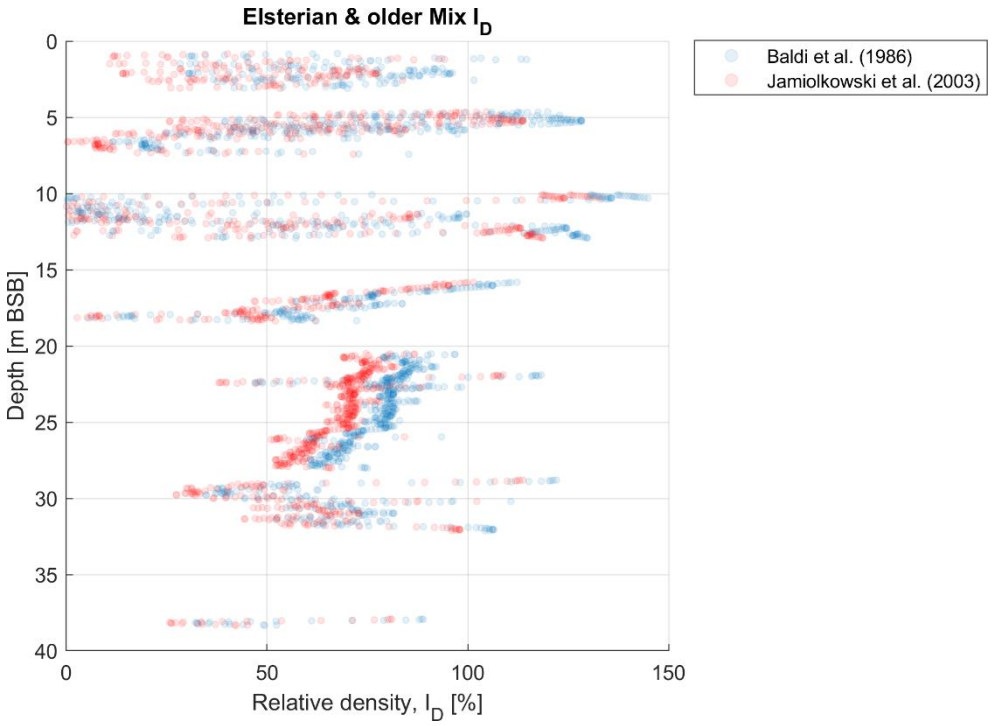

Figure D-31 Range of I_D for geotechnical unit Elsterian & older mix.

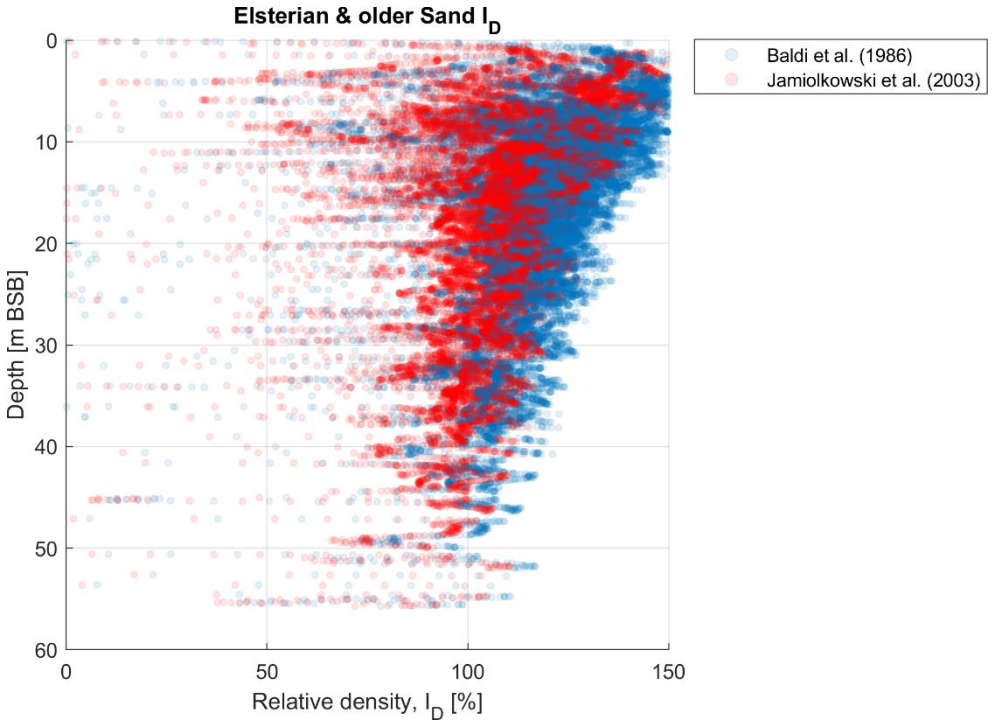

Figure D-32 Range of I_D for geotechnical unit Elsterian & older sand.

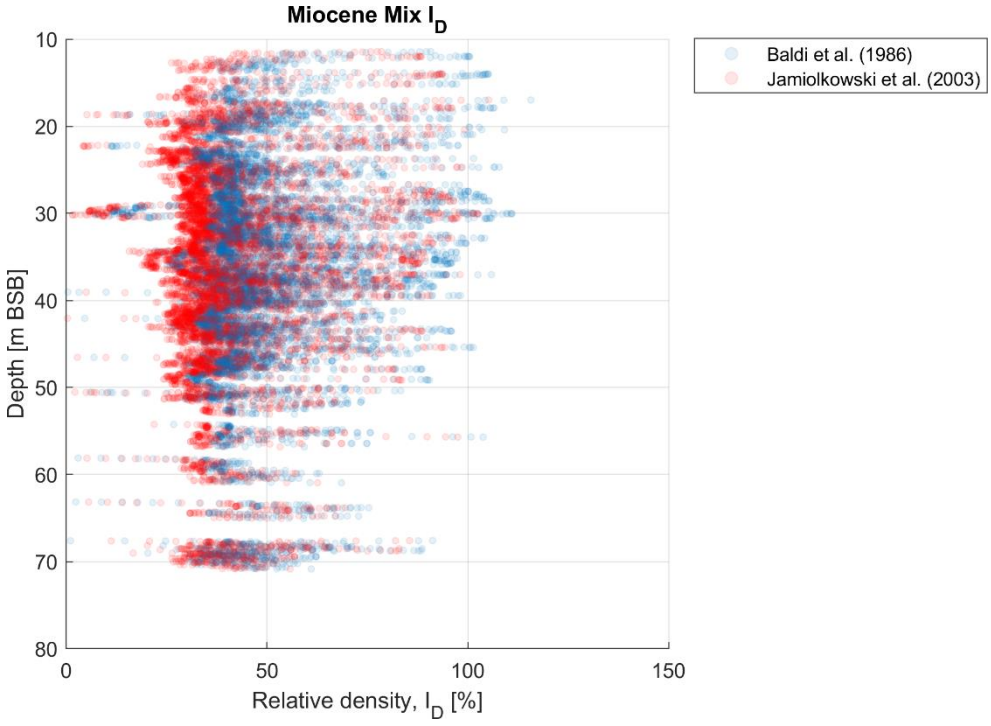

Figure D-33 Range of I_D for geotechnical unit Miocene mix.

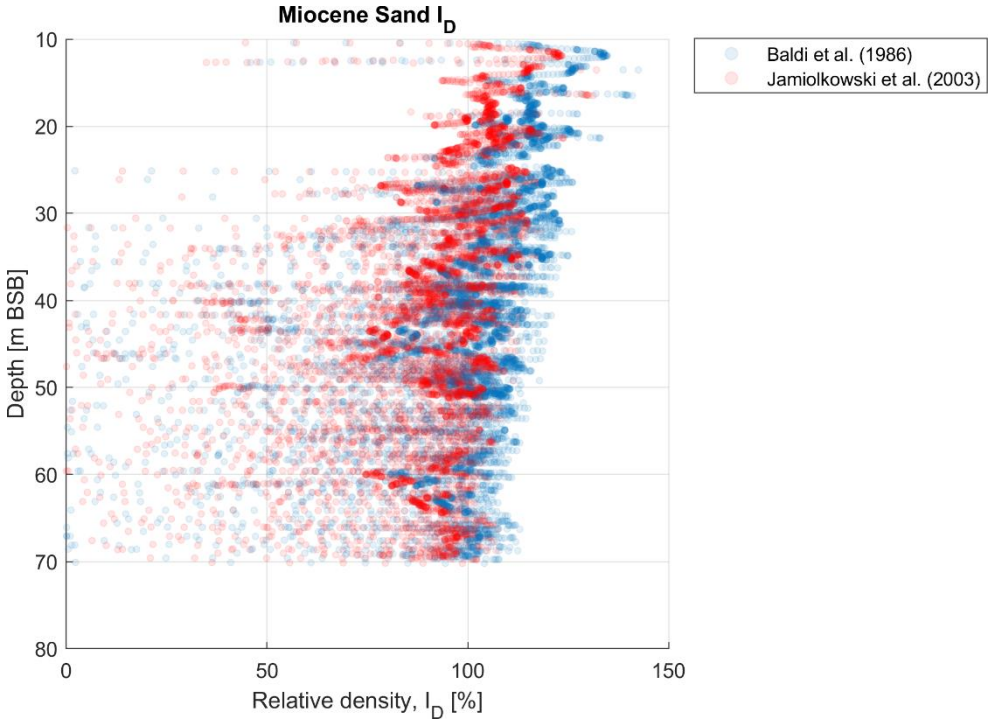

Figure D-34 Range of I_D for geotechnical unit Miocene sand.

D.3 Friction angle

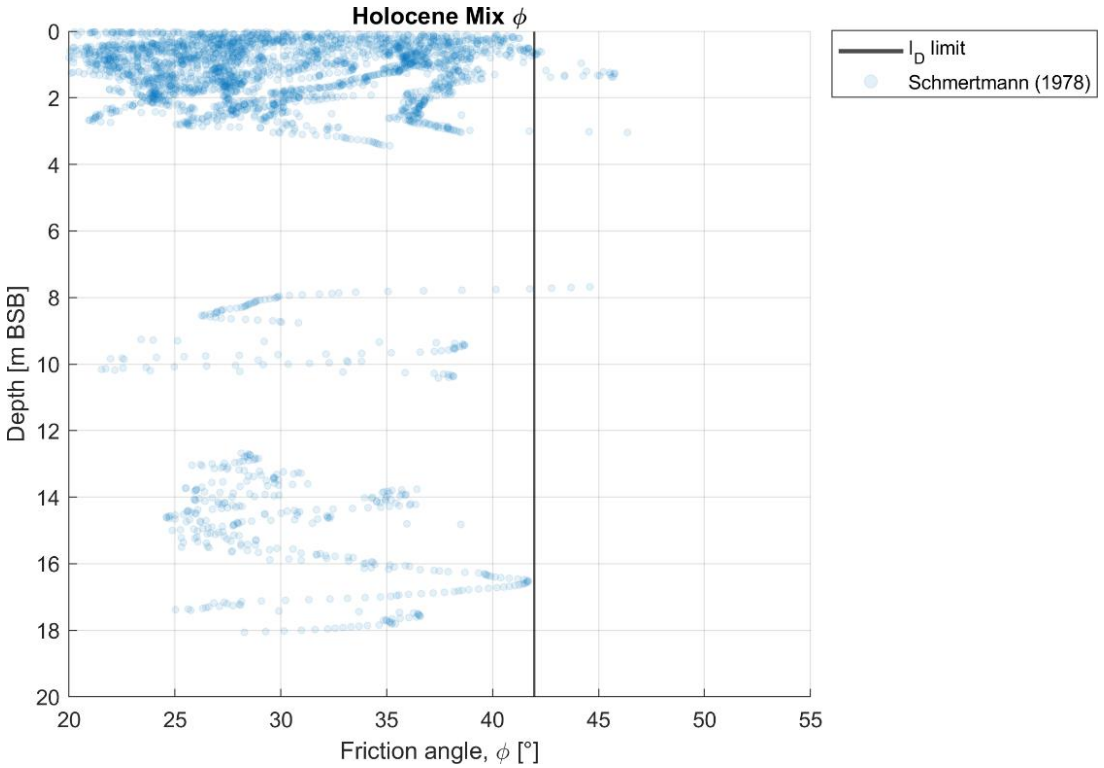

Figure D-35 Range of φ for geotechnical unit Holocene mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).

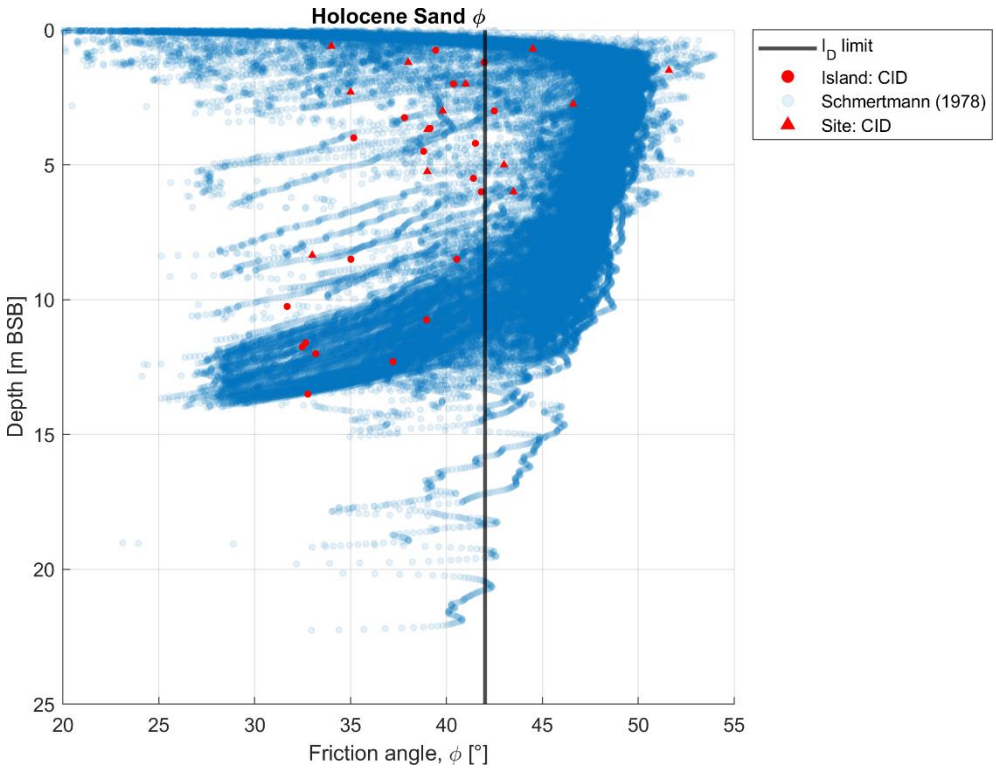

Figure D-36 Range of φ for geotechnical unit Holocene sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).

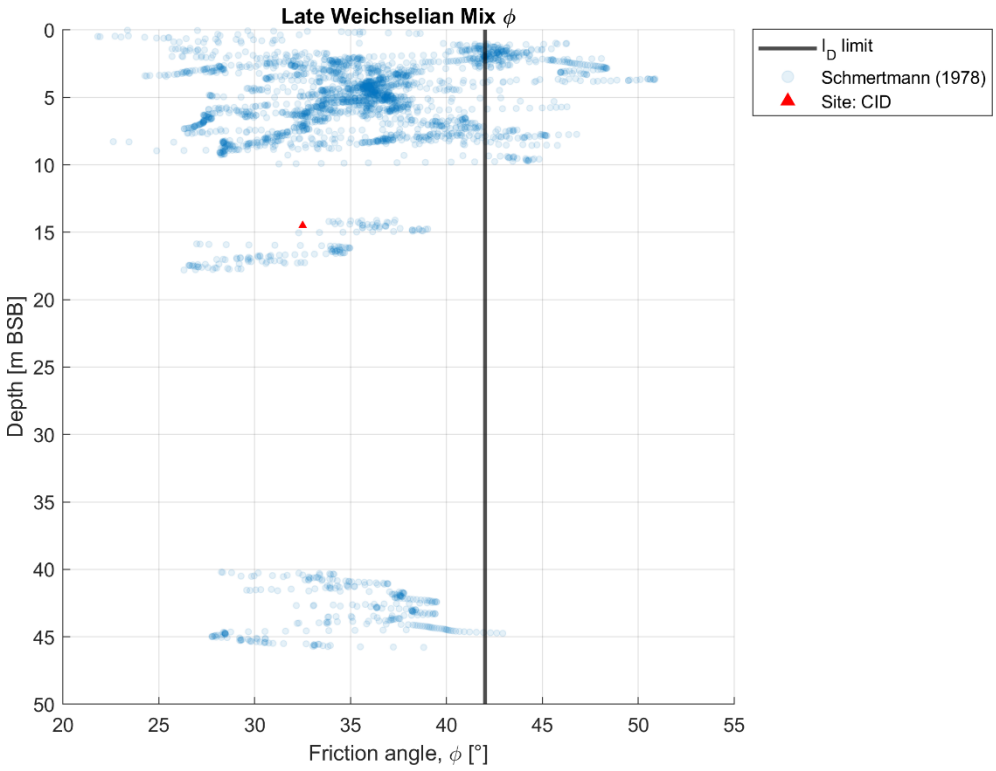

Figure D-37 *Range of φ for geotechnical unit Late Weichselian mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

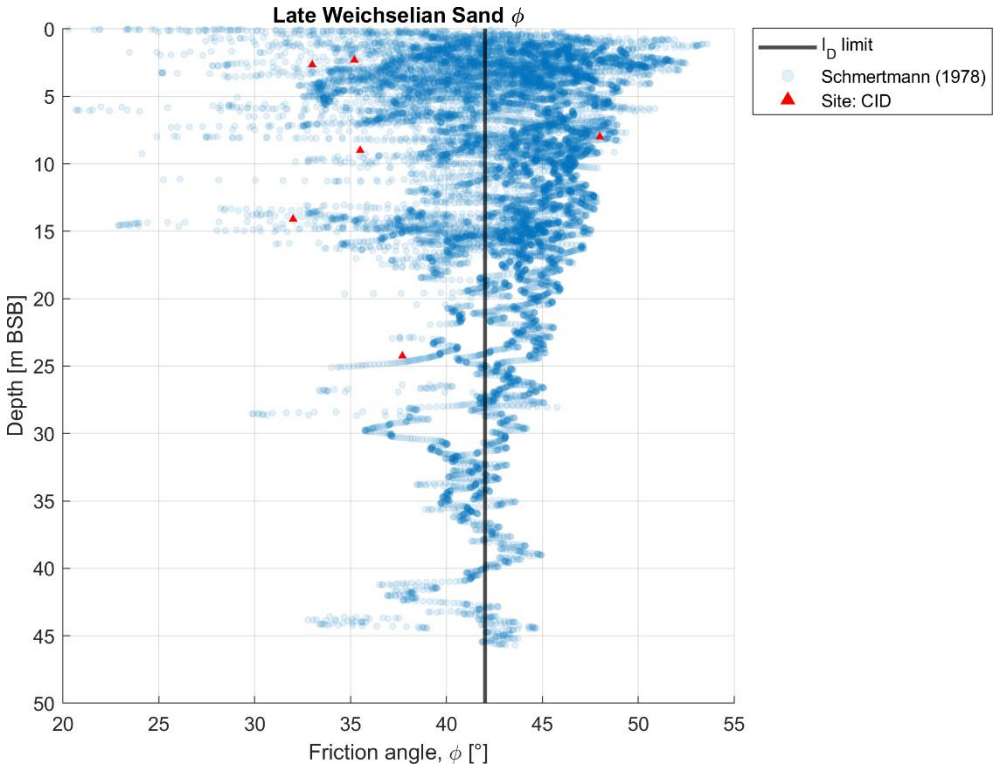

Figure D-38 *Range of φ for geotechnical unit Late Weichselian sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

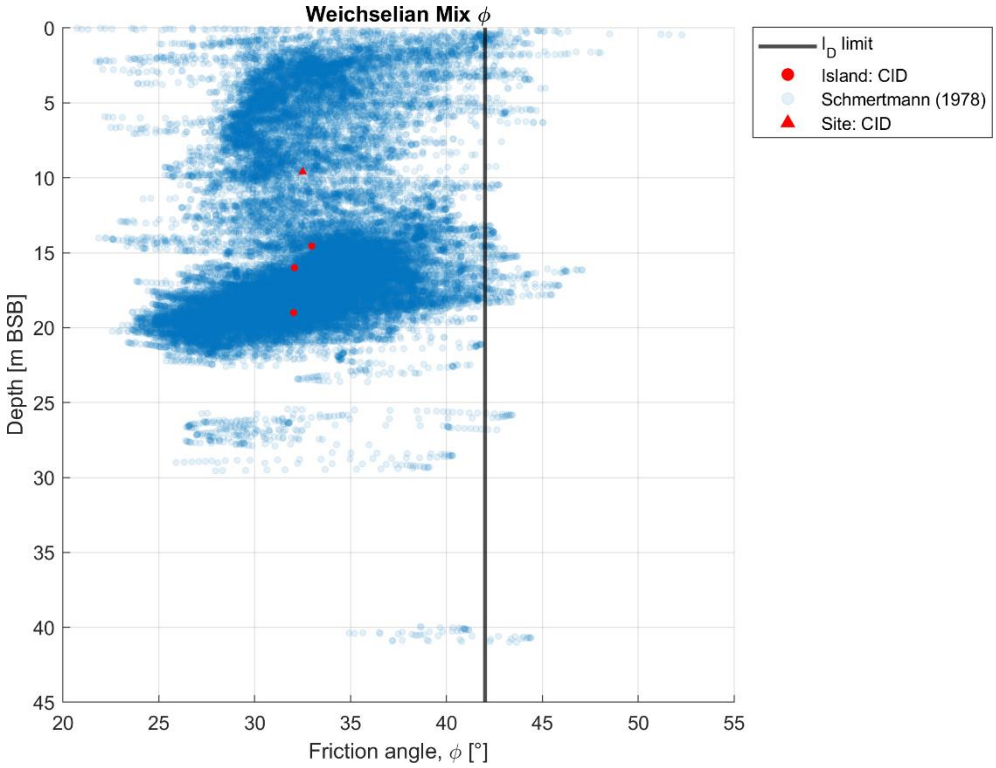

Figure D-39 *Range of φ for geotechnical unit Weichselian mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

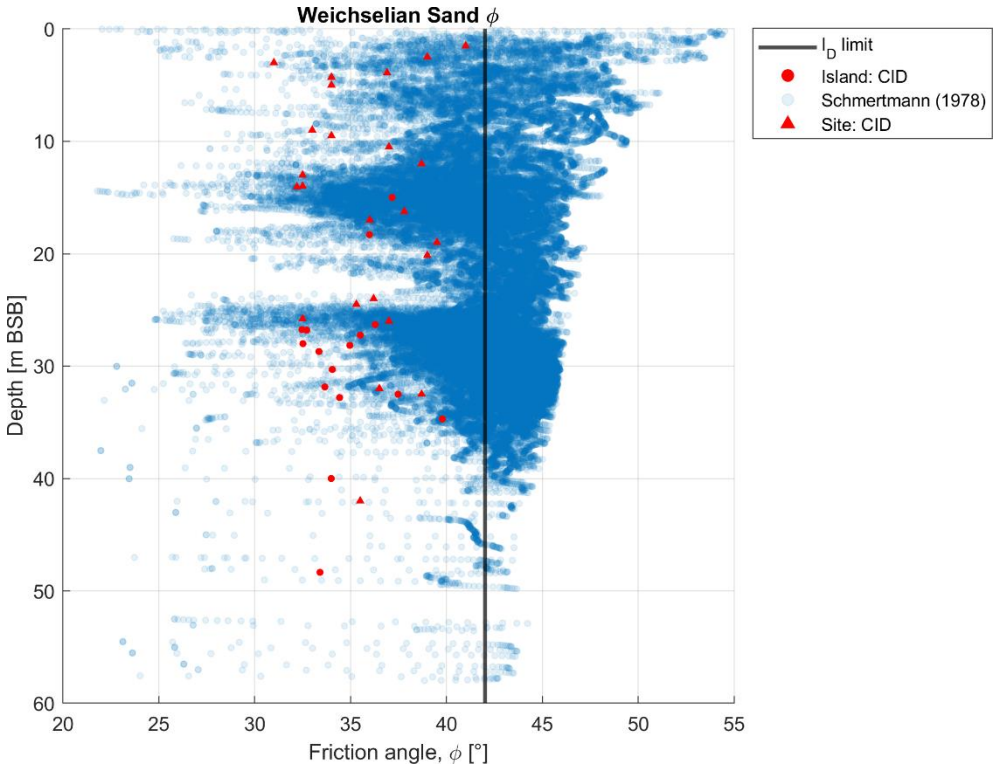

Figure D-40 *Range of φ for geotechnical unit Weichselian sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

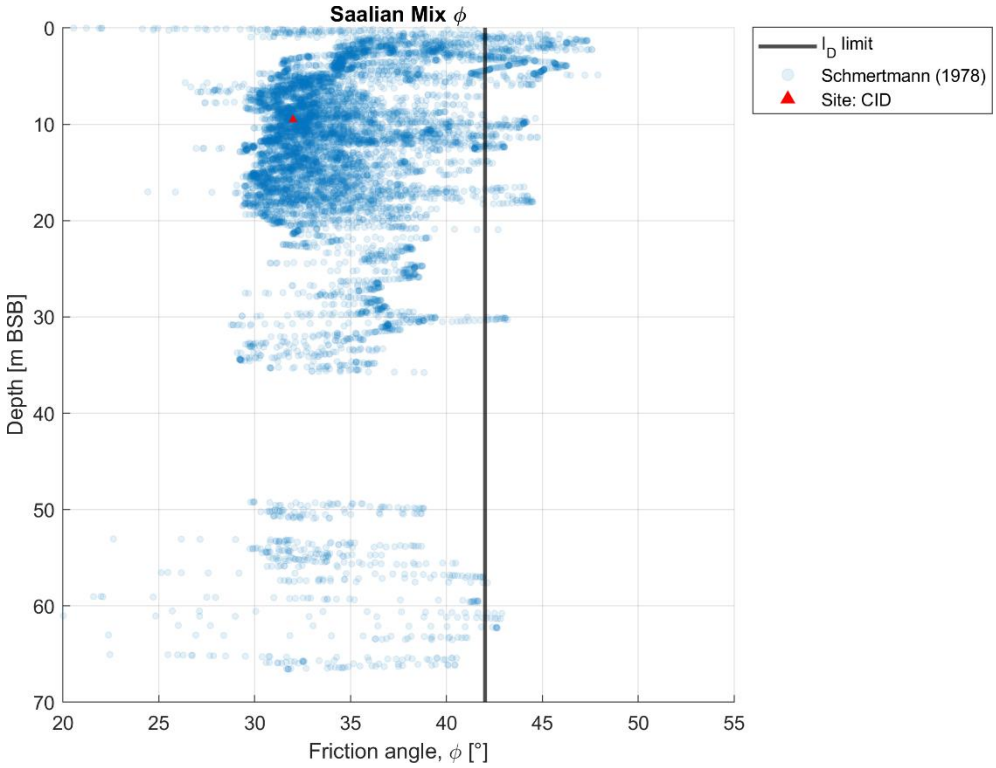

Figure D-41 *Range of φ for geotechnical unit Saalian mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

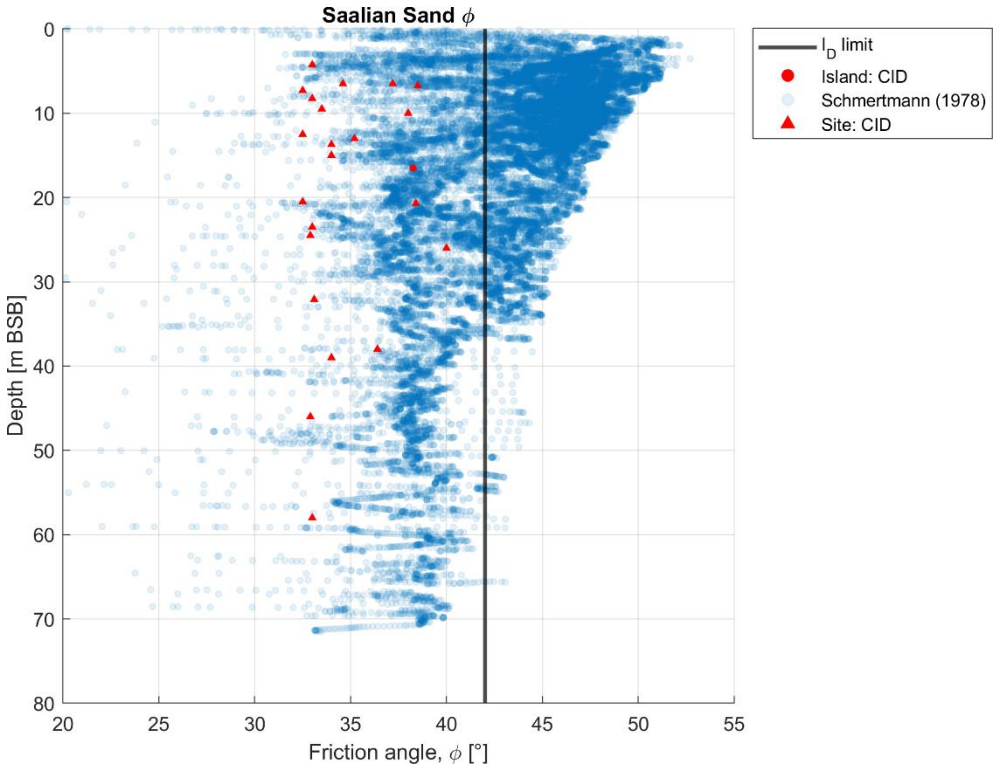

Figure D-42 *Range of φ for geotechnical unit Saalian sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

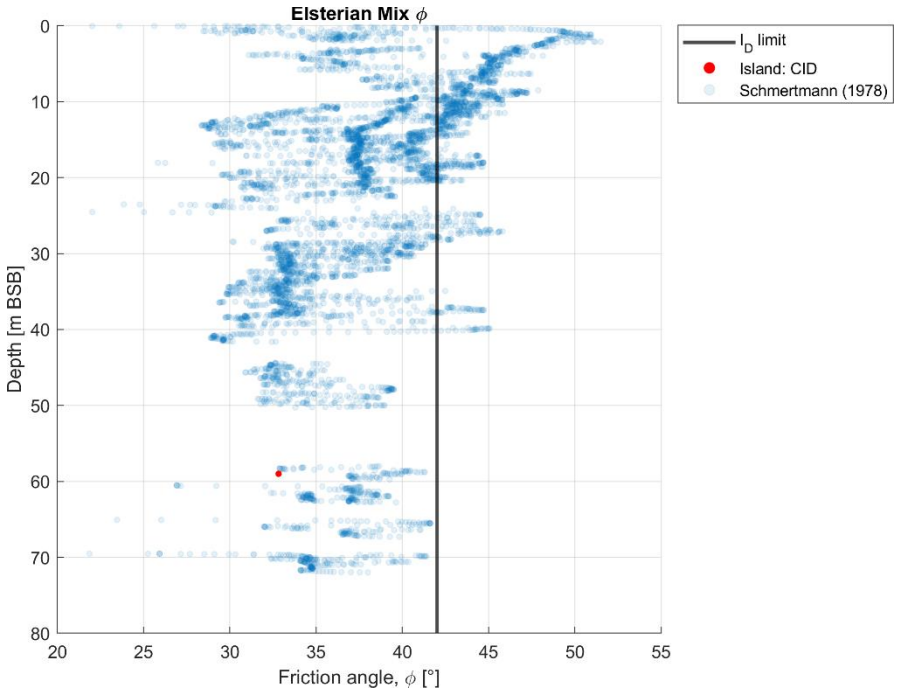

Figure D-43 *Range of φ for geotechnical unit Elsterian mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

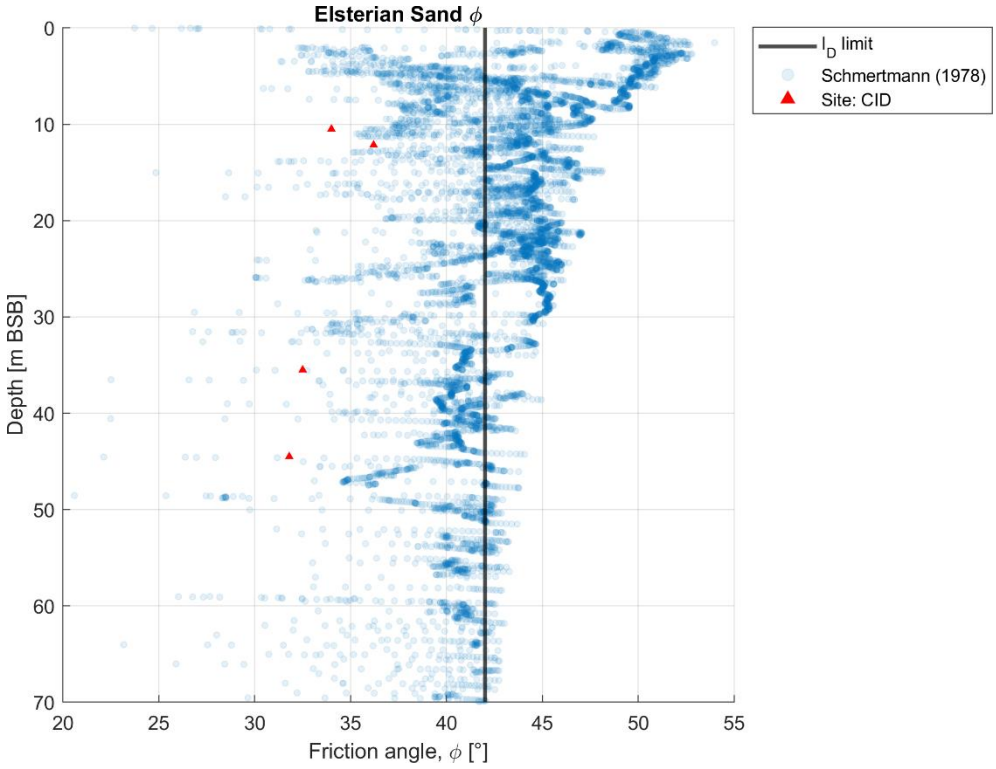

Figure D-44 *Range of φ for geotechnical unit Elsterian sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

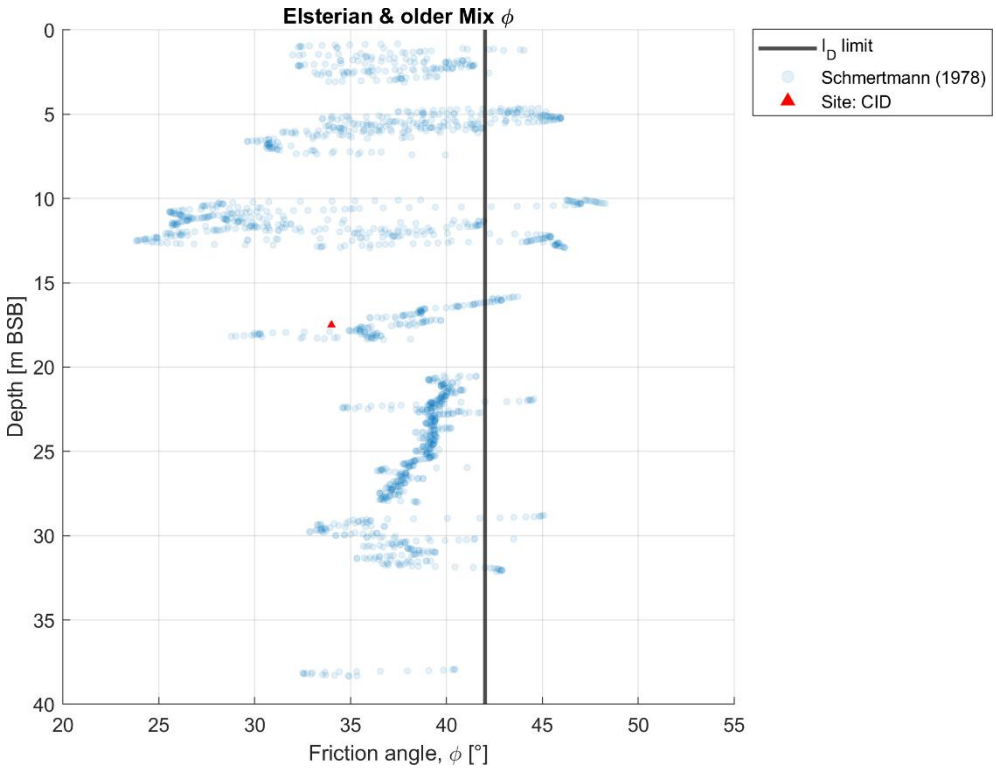

Figure D-45 *Range of φ for geotechnical unit Elsterian & older mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

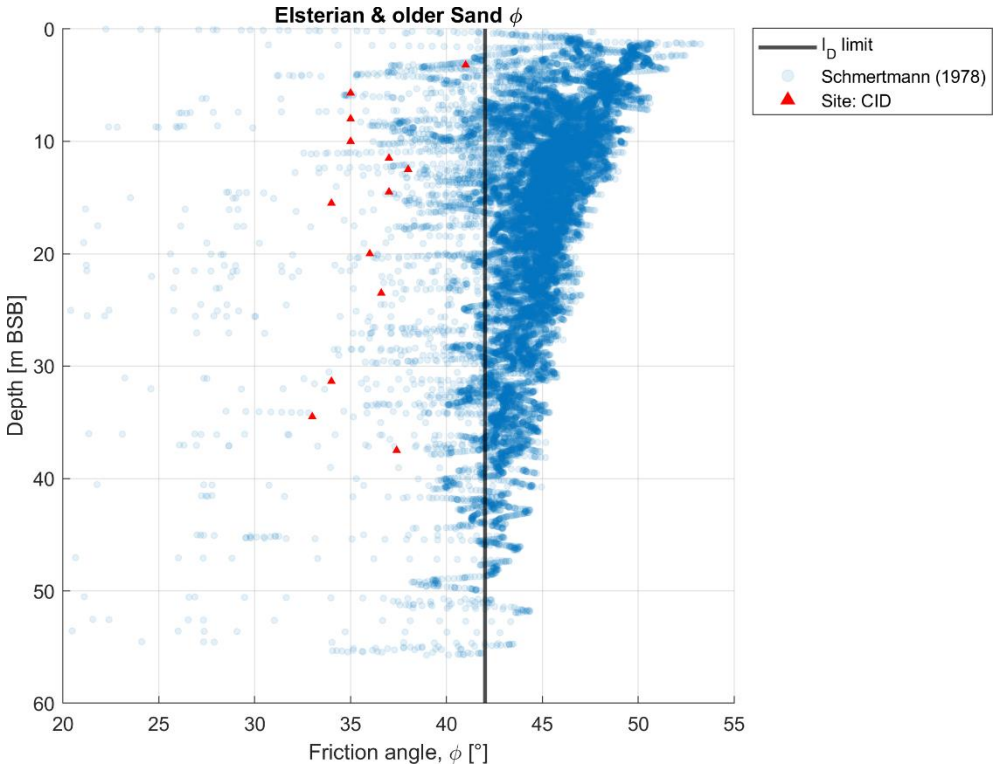

Figure D-46 *Range of φ for geotechnical unit Elsterian & older sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

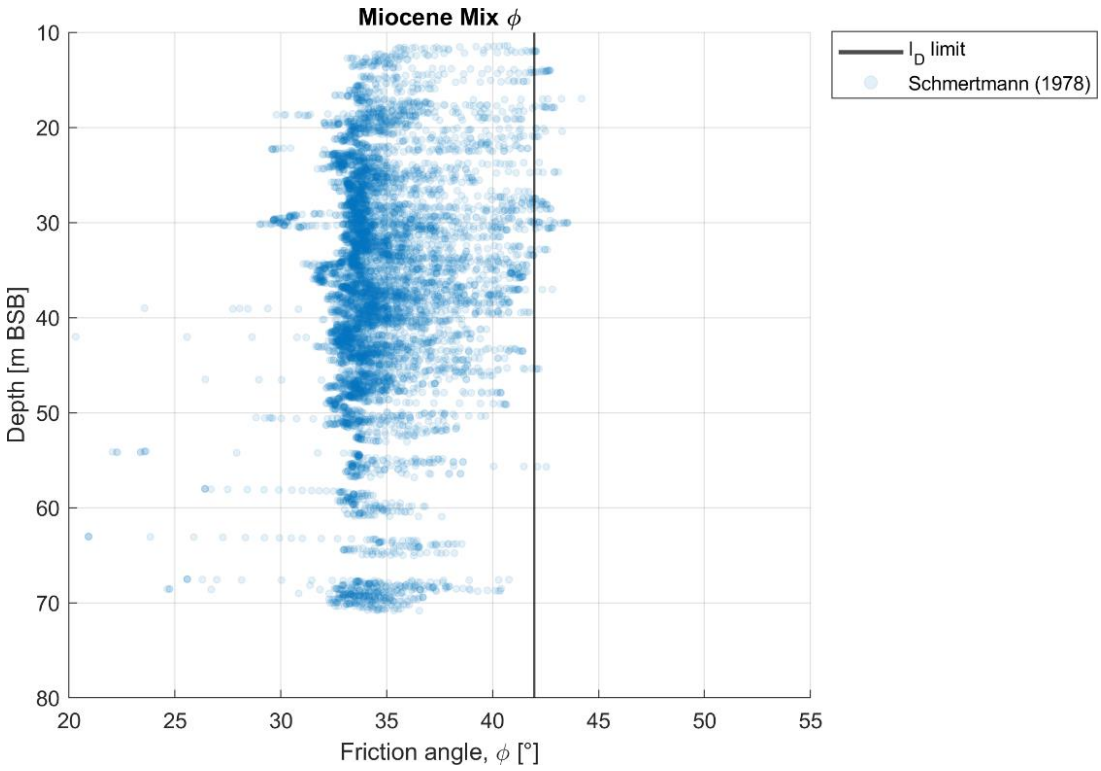

Figure D-47 *Range of φ for geotechnical unit Miocene mix using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

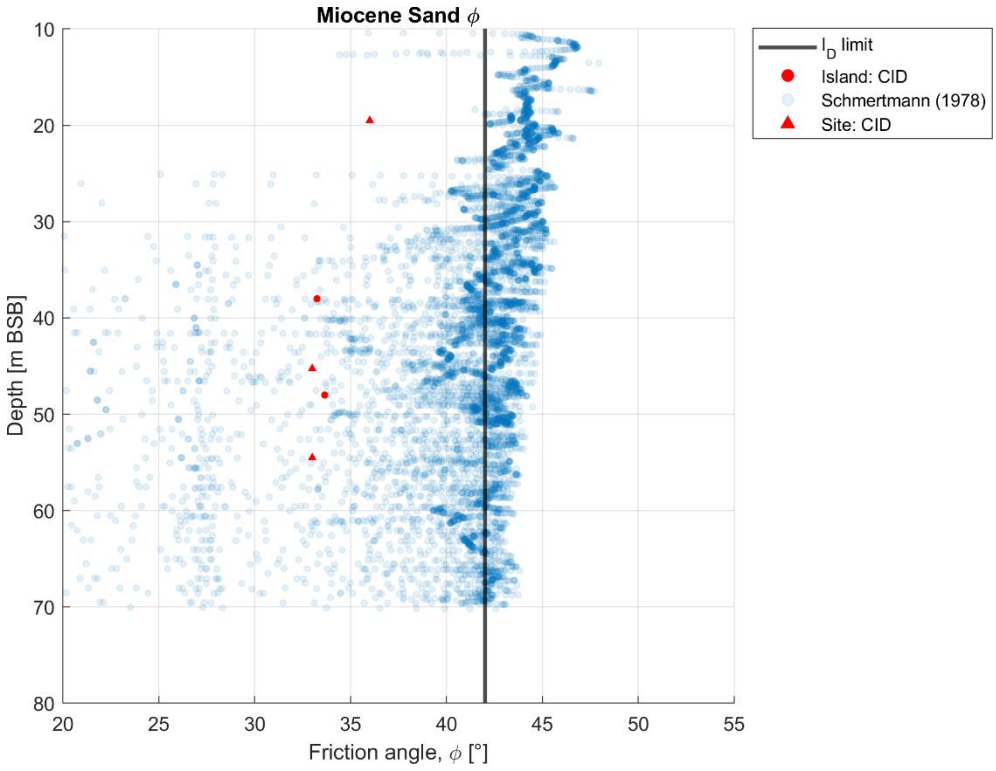

Figure D-48 *Range of φ for geotechnical unit Miocene sand using CPT correlation and laboratory test results (CID – Consolidated Drained triaxial test).*

D.4 Undrained shear strength

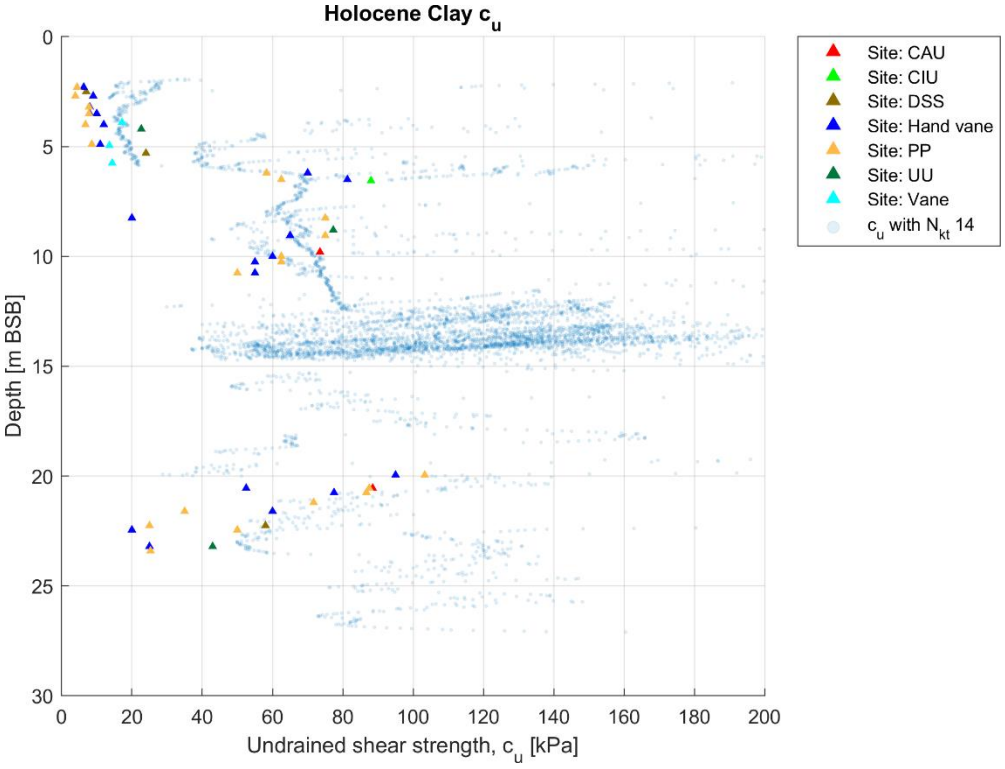

Figure D-49 Range of c_u for geotechnical unit Holocene clay using CPT correlation and laboratory test results.

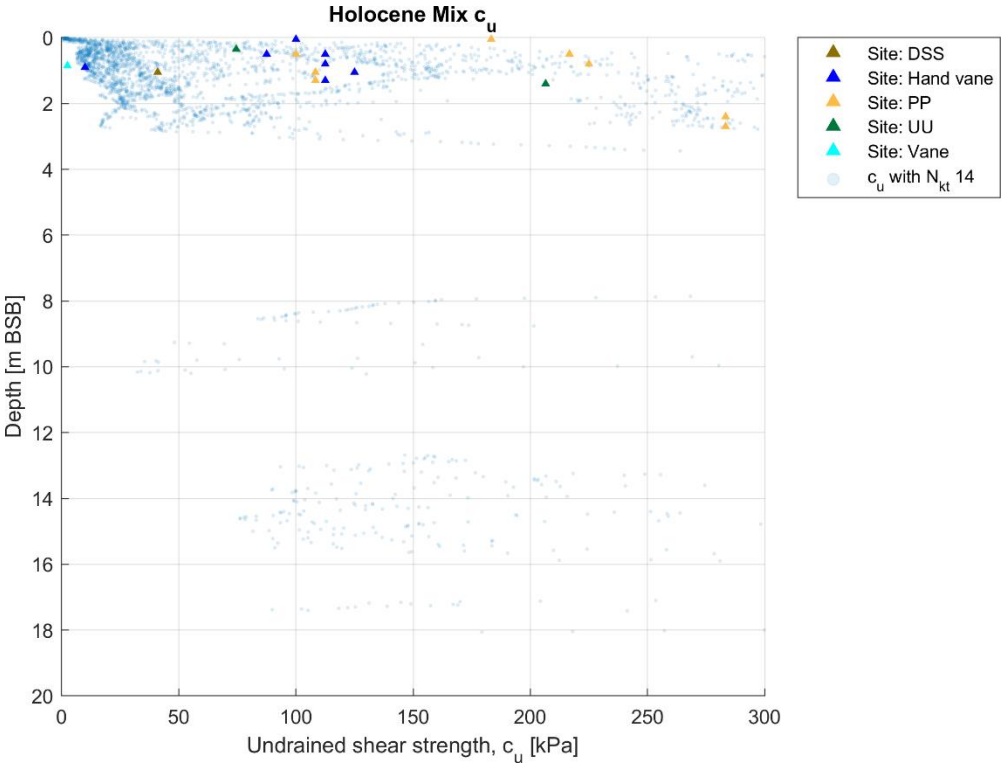

Figure D-50 Range of c_u for geotechnical unit Holocene mix using CPT correlation and laboratory test results.

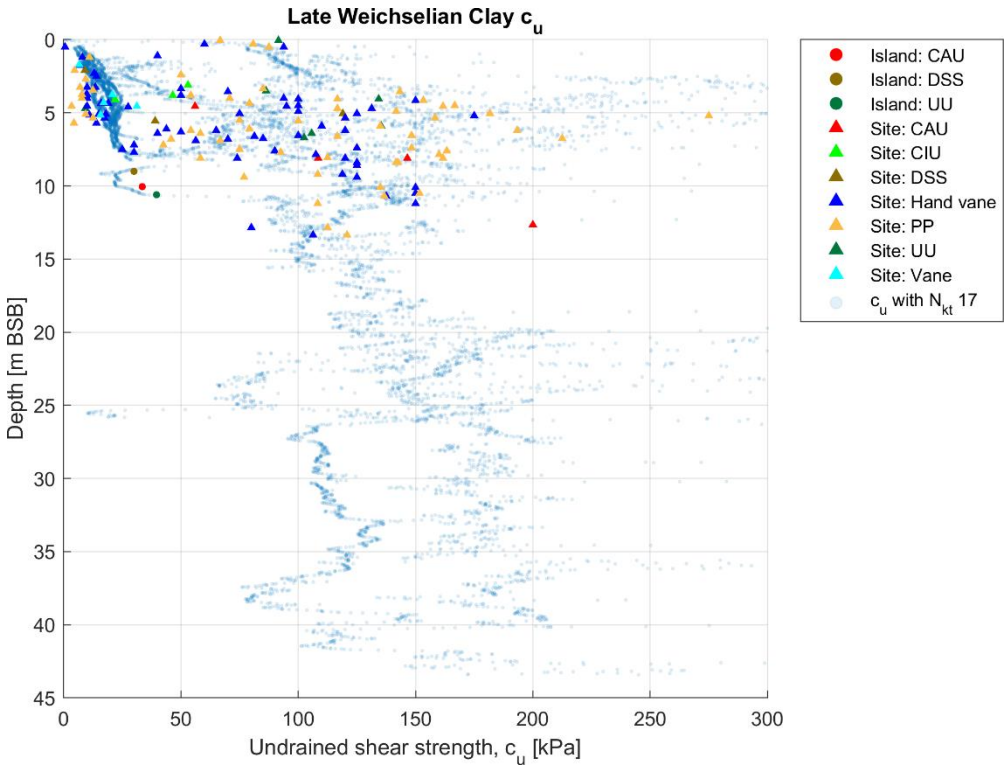

Figure D-51 *Range of c_u for geotechnical unit Late Weichselian clay using CPT correlation and laboratory test results.*

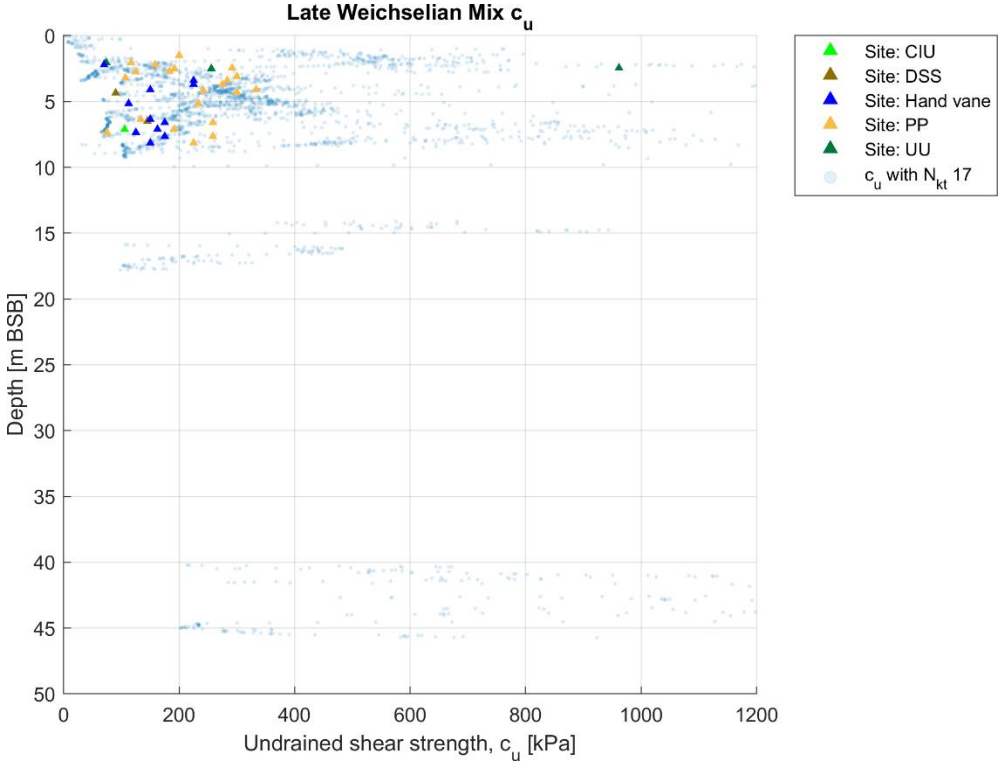

Figure D-52 *Range of c_u for geotechnical unit Late Weichselian mix using CPT correlation and laboratory test results.*

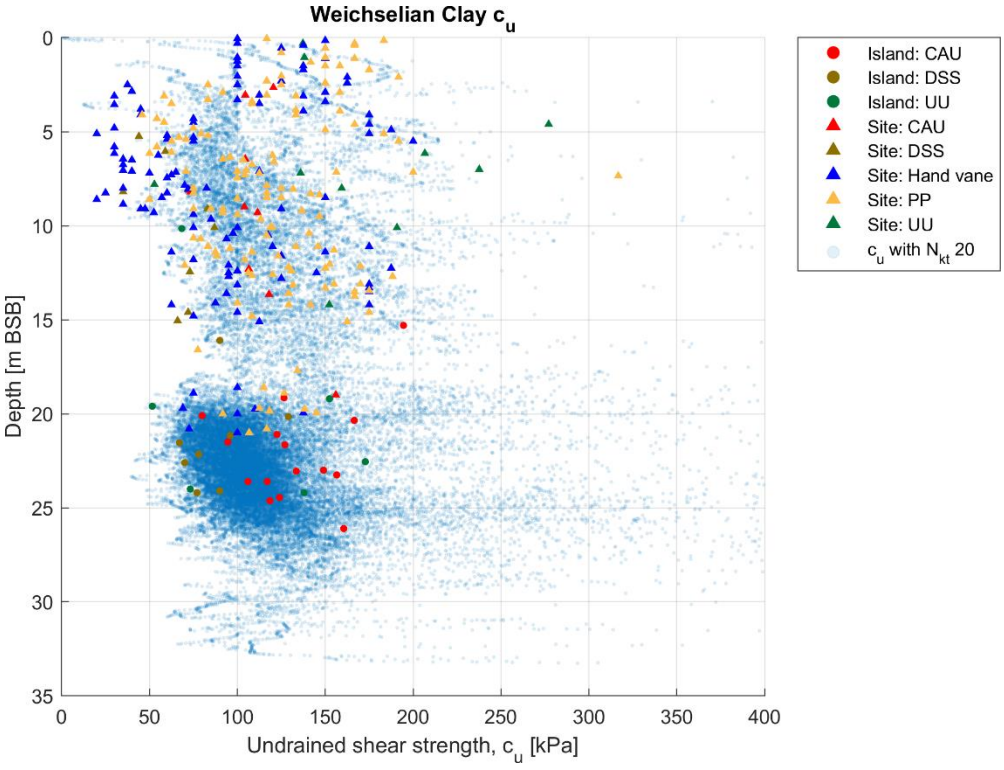

Figure D-53 Range of c_u for geotechnical unit Weichselian clay using CPT correlation and laboratory test results.

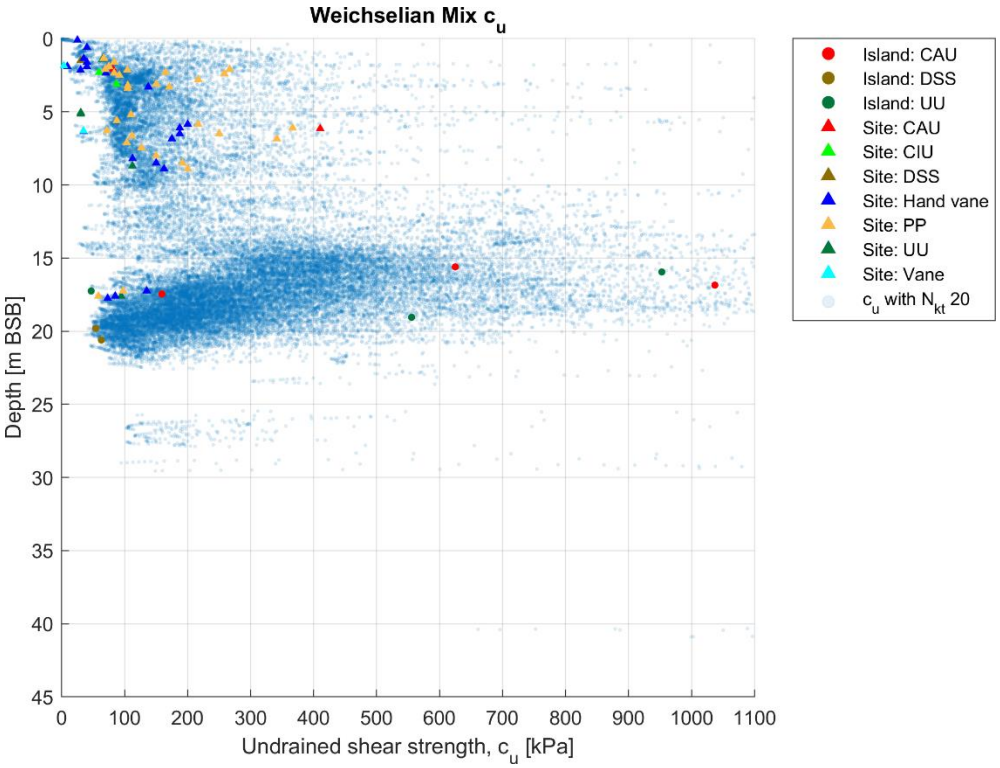

Figure D-54 Range of c_u for geotechnical unit Weichselian mix using CPT correlation and laboratory test results.

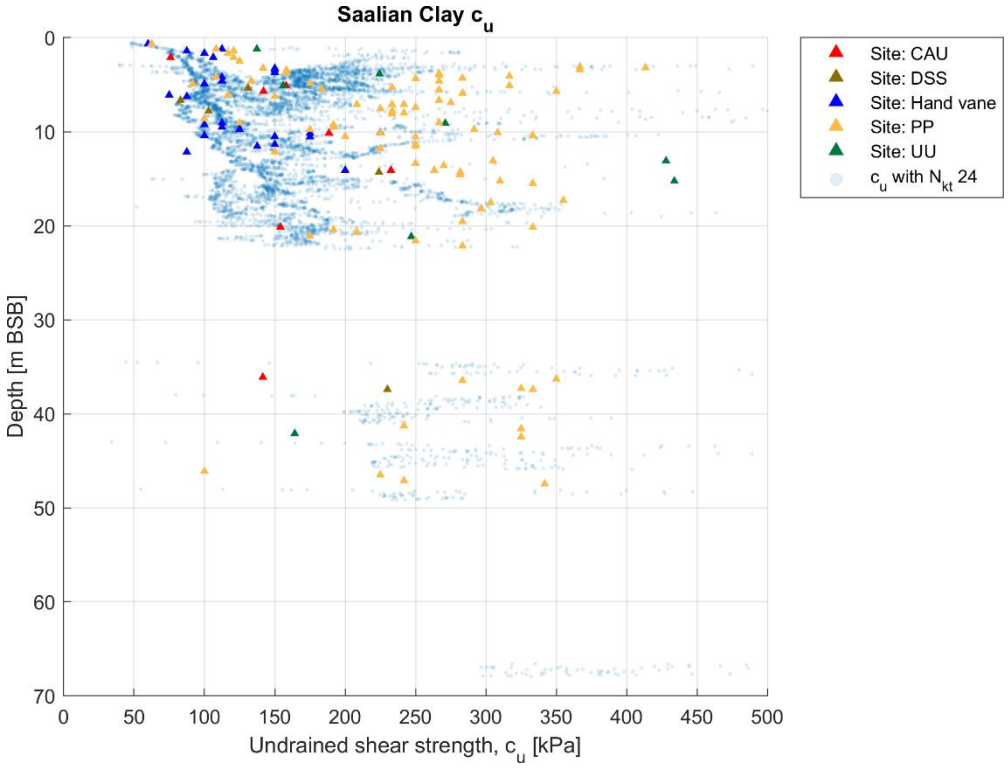

Figure D-55 Range of c_u for geotechnical unit Saalian clay using CPT correlation and laboratory test results.

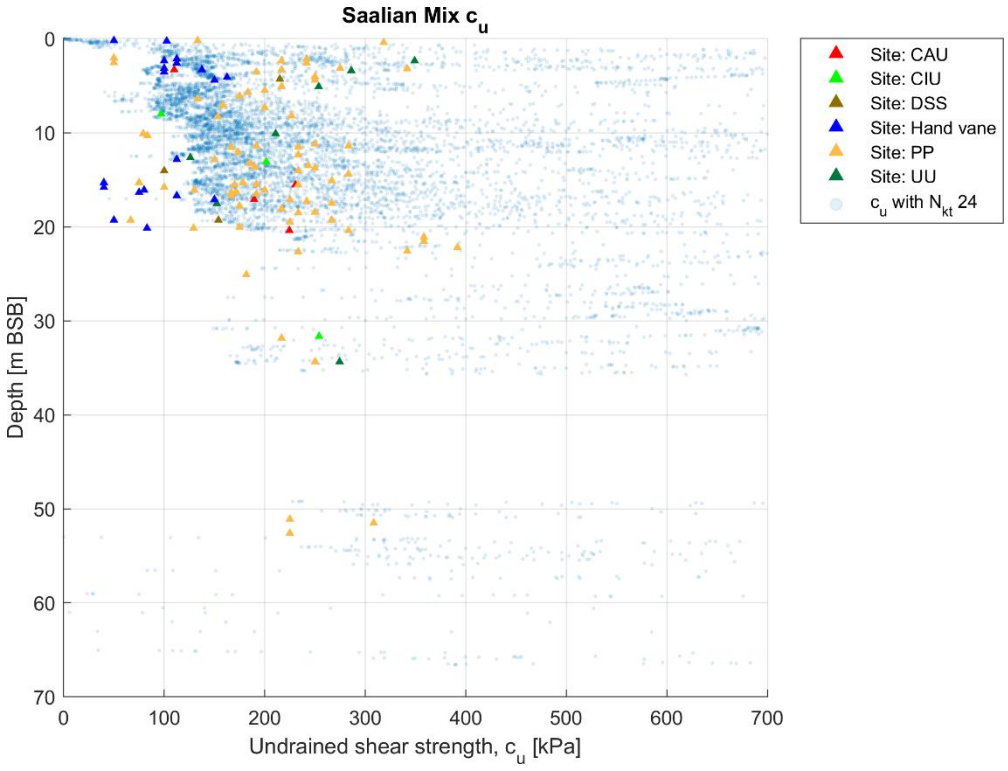

Figure D-56 Range of c_u for geotechnical unit Saalian mix using CPT correlation and laboratory test results.

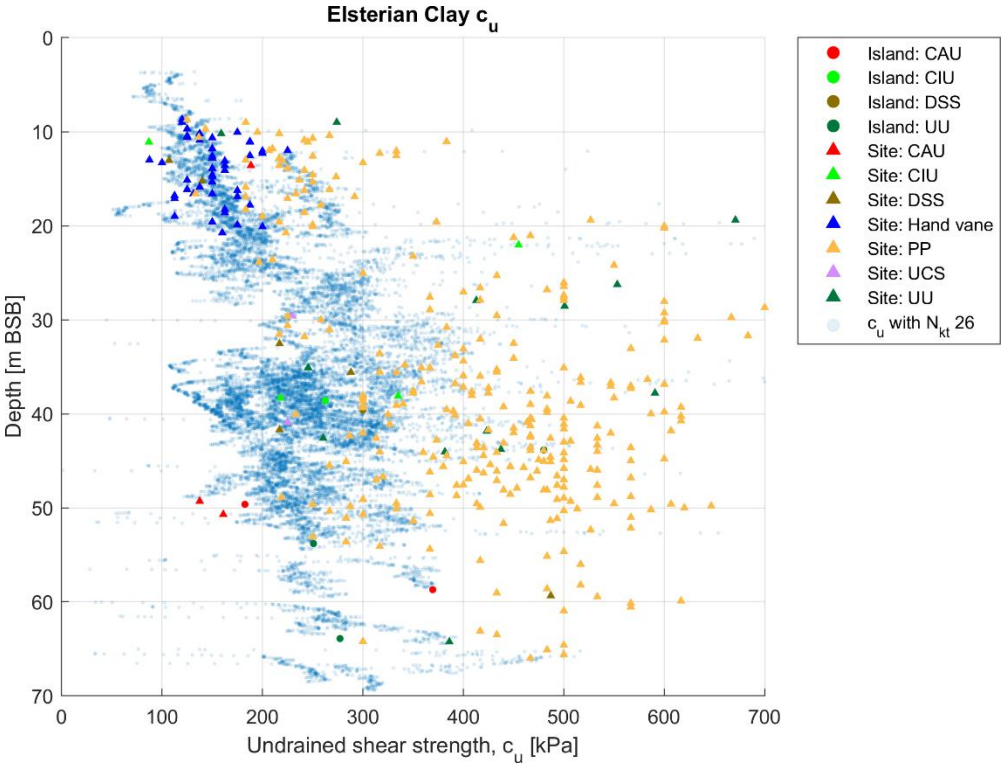

Figure D-57 Range of c_u for geotechnical unit Elsterian clay using CPT correlation and laboratory test results.

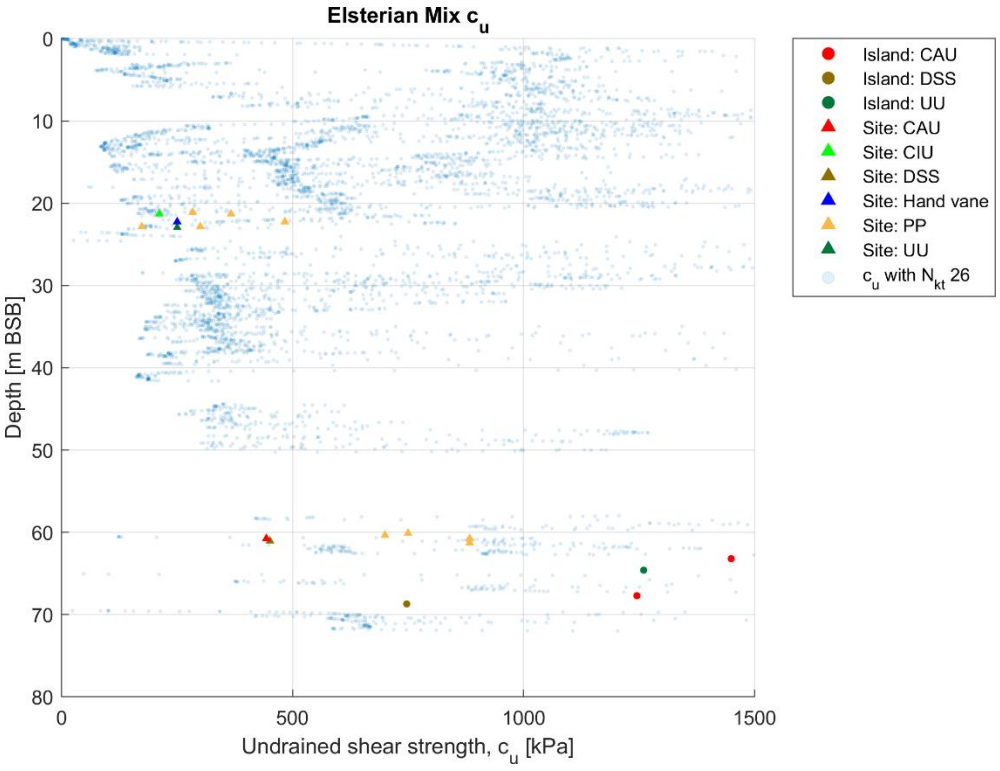

Figure D-58 Range of c_u for geotechnical unit Elsterian mix using CPT correlation and laboratory test results.

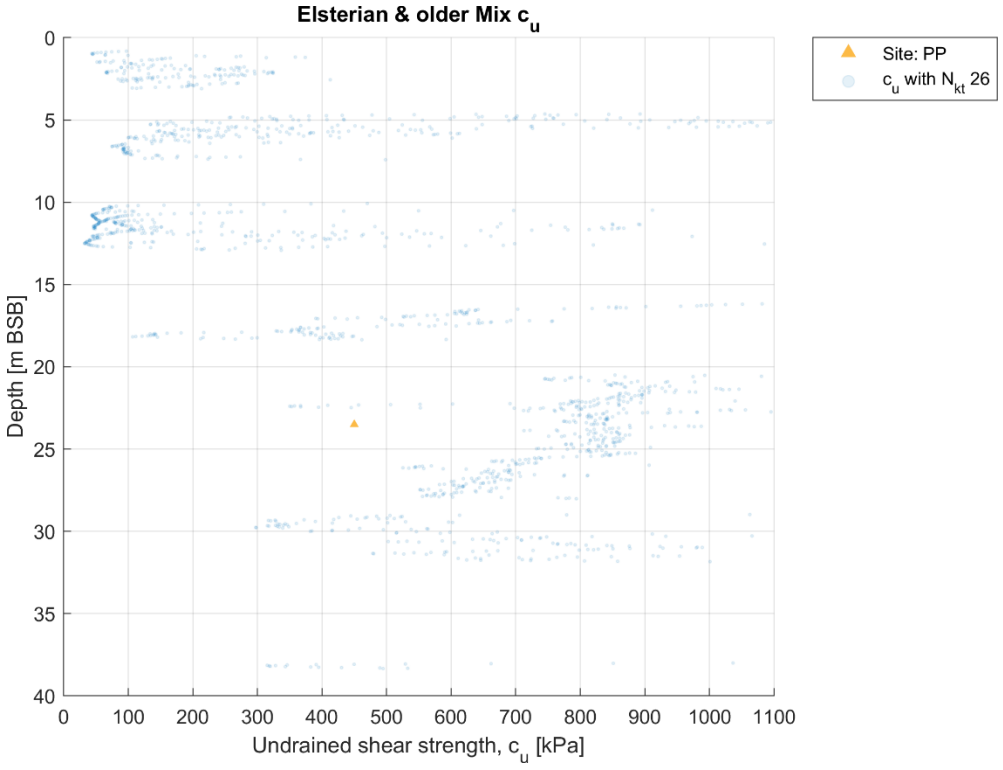

Figure D-59 Range of c_u for geotechnical unit Elsterian & older mix using CPT correlation and laboratory test results.

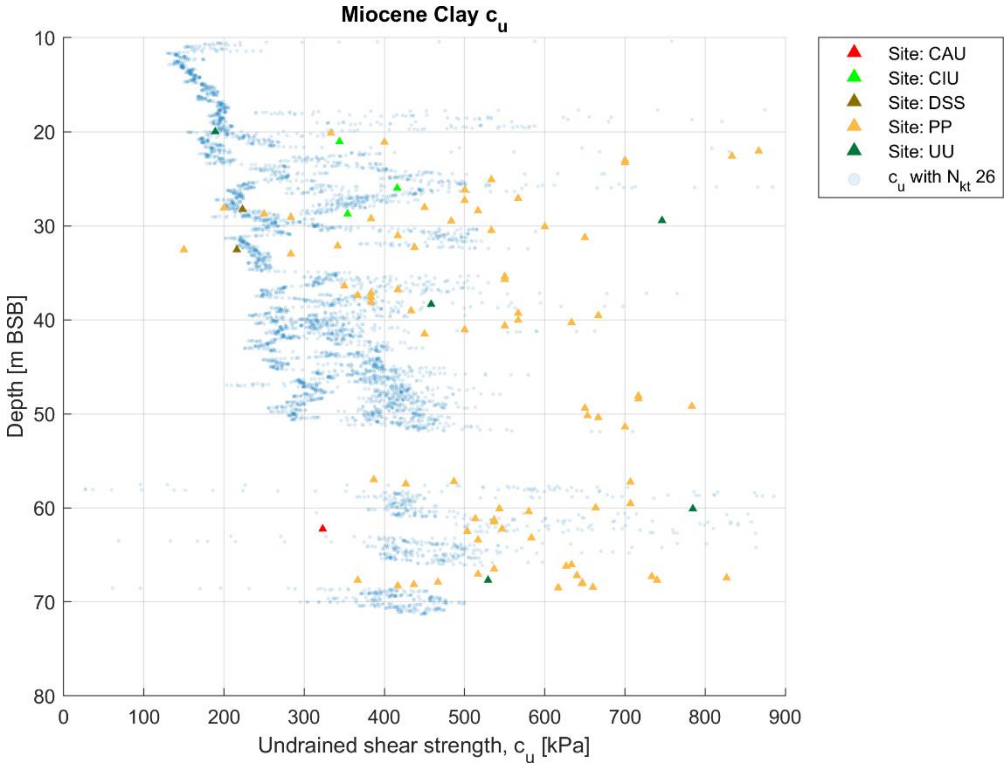

Figure D-60 Range of c_u for geotechnical unit Miocene clay using CPT correlation and laboratory test results.

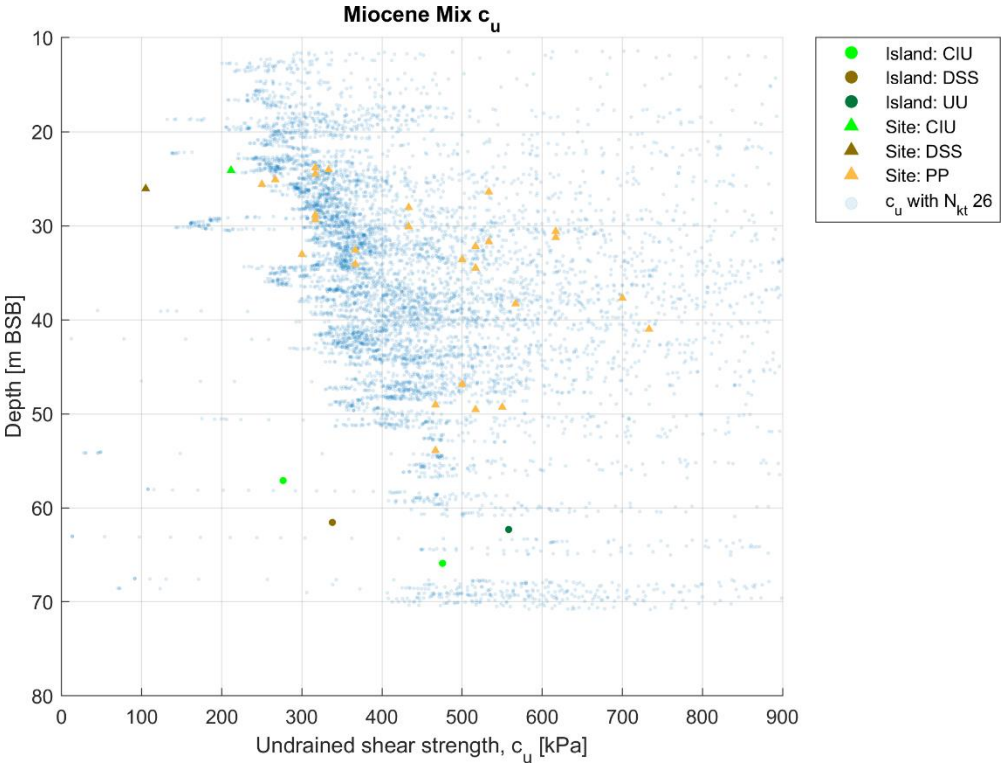

Figure D-61 Range of c_u for geotechnical unit Miocene mix using CPT correlation and laboratory test results.

D.5 Small-strain shear modulus

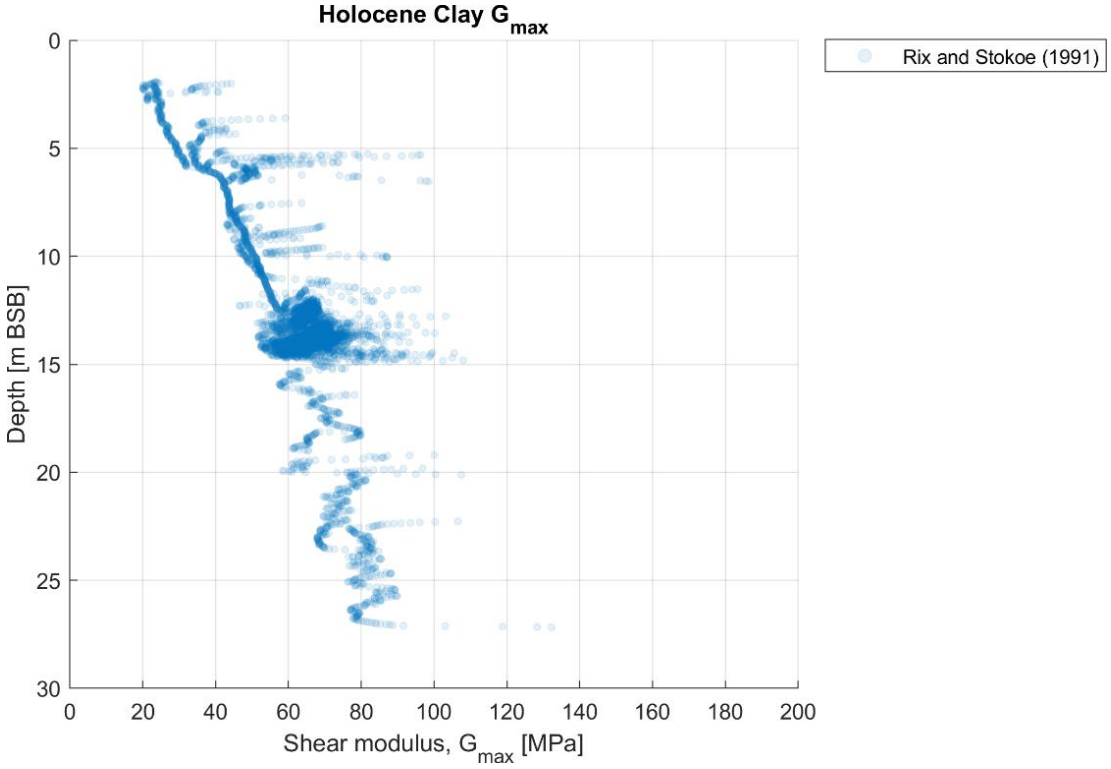

Figure D-62 Range of G_{max} for geotechnical unit Holocene clay using CPT correlation, SCPT, P-S logging and laboratory results.

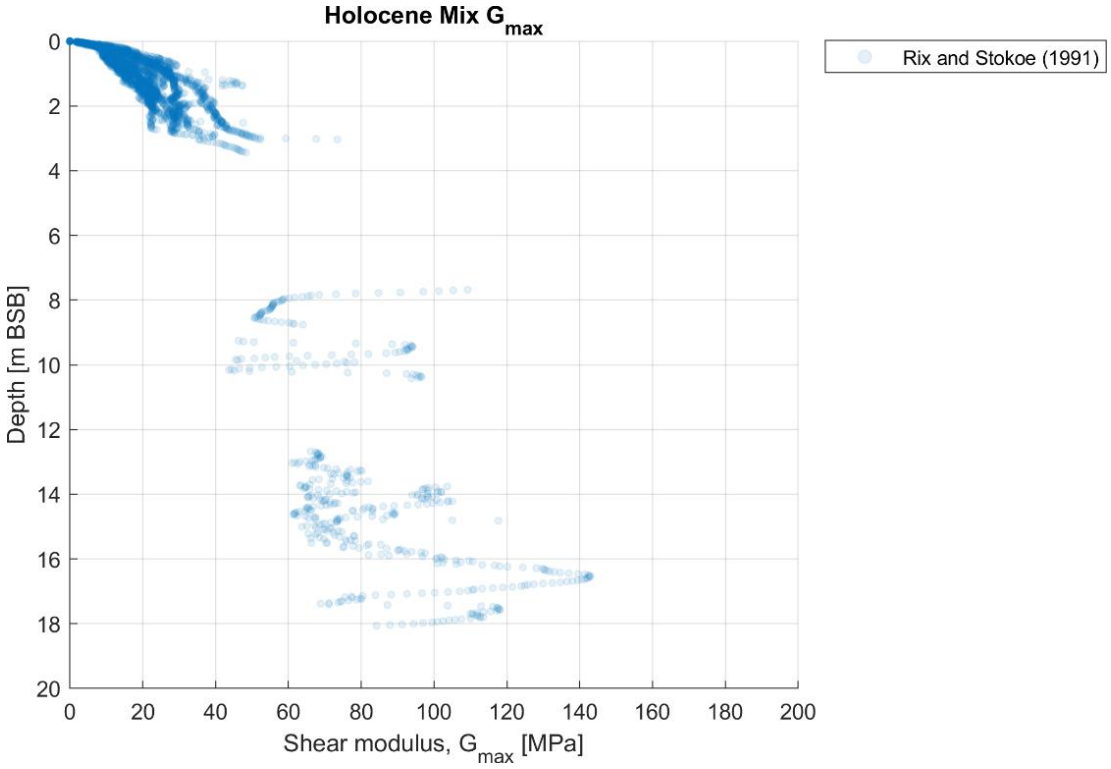

Figure D-63 Range of G_{max} for geotechnical unit Holocene mix using CPT correlation, SCPT, P-S logging and laboratory results.

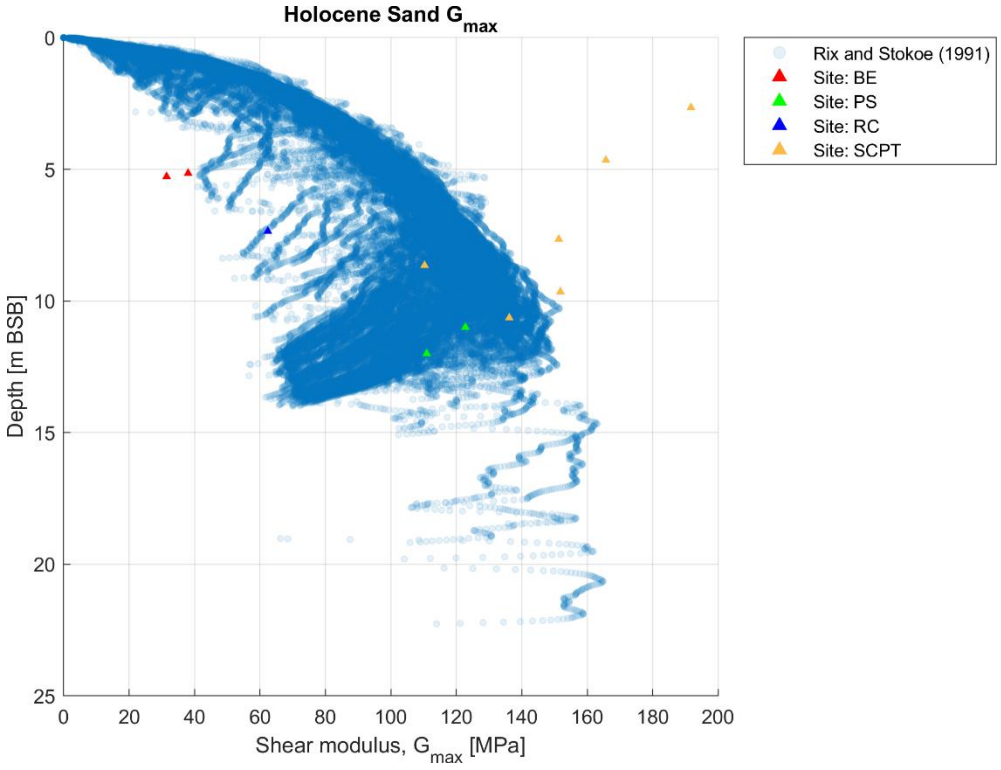

Figure D-64 Range of G_{max} for geotechnical unit Holocene sand using CPT correlation, SCPT, P-S logging and laboratory results.

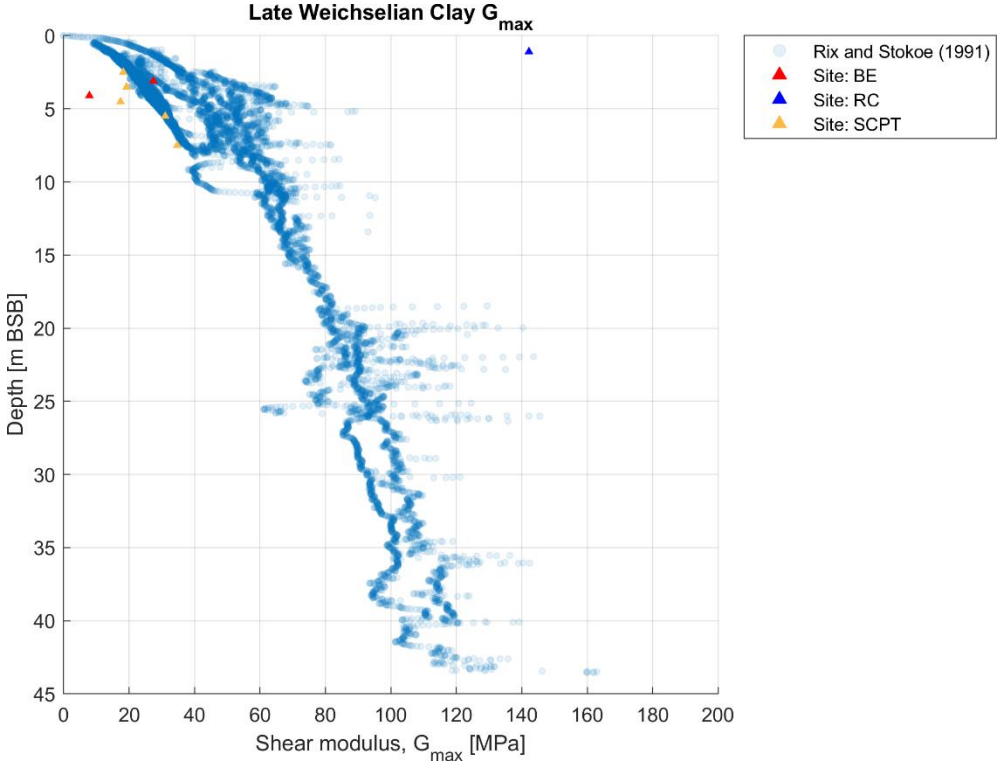

Figure D-65 Range of G_{max} for geotechnical unit Late Weichselian clay using CPT correlation, SCPT, P-S logging and laboratory results.

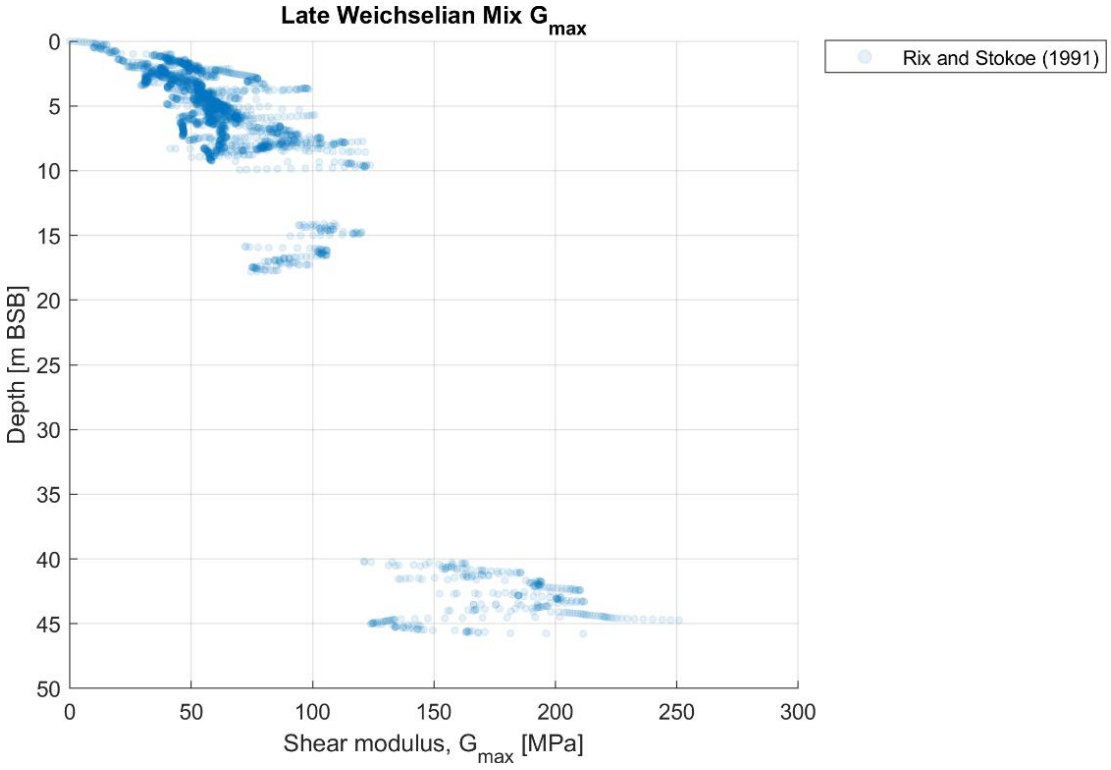

Figure D-66 *Range of G_{max} for geotechnical unit Late Weichselian mix using CPT correlation, SCPT, P-S logging and laboratory results.*

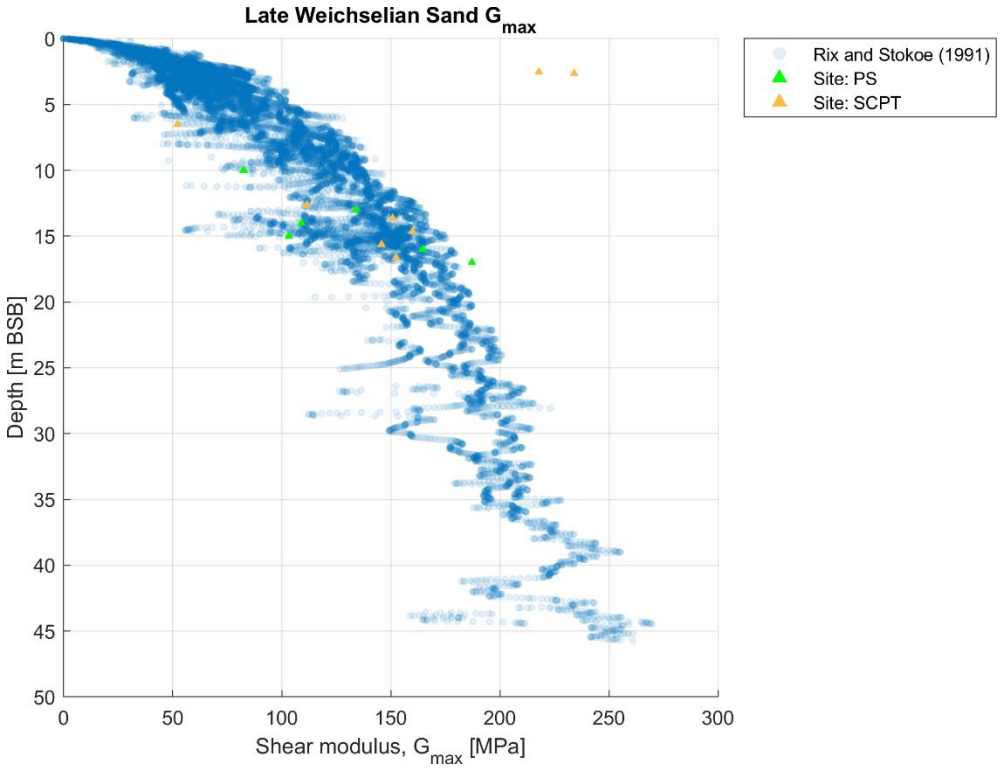

Figure D-67 *Range of G_{max} for geotechnical unit Late Weichselian sand using CPT correlation, SCPT, P-S logging and laboratory results.*

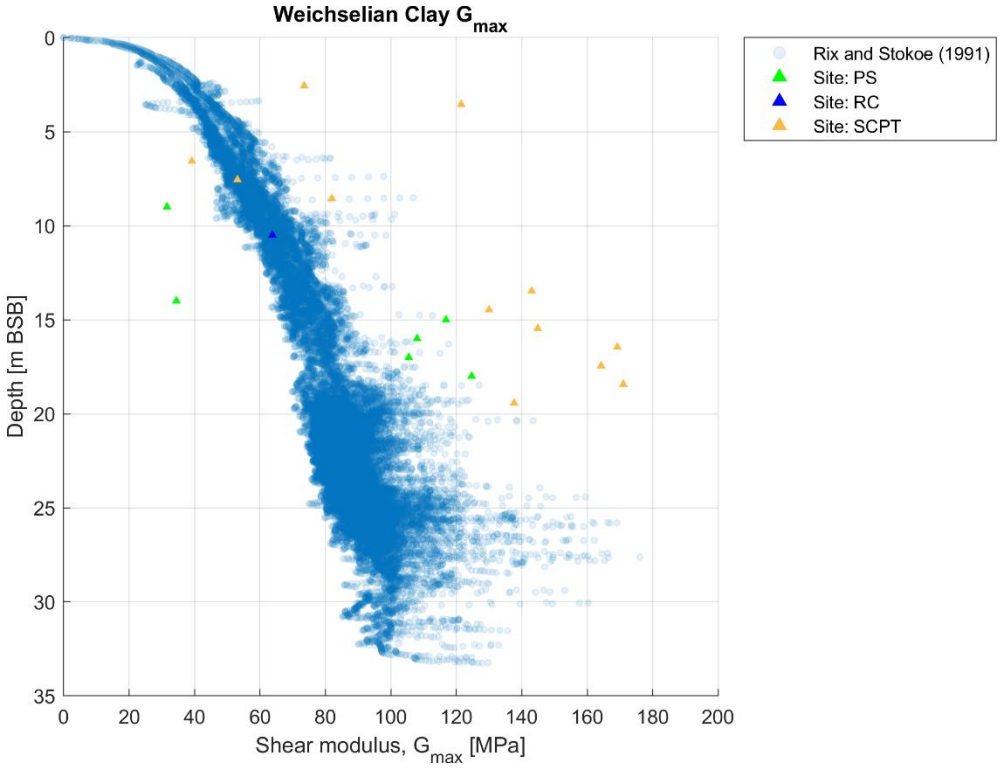

Figure D-68 Range of G_{max} for geotechnical unit Weichselian clay using CPT correlation, SCPT, P-S logging and laboratory results.

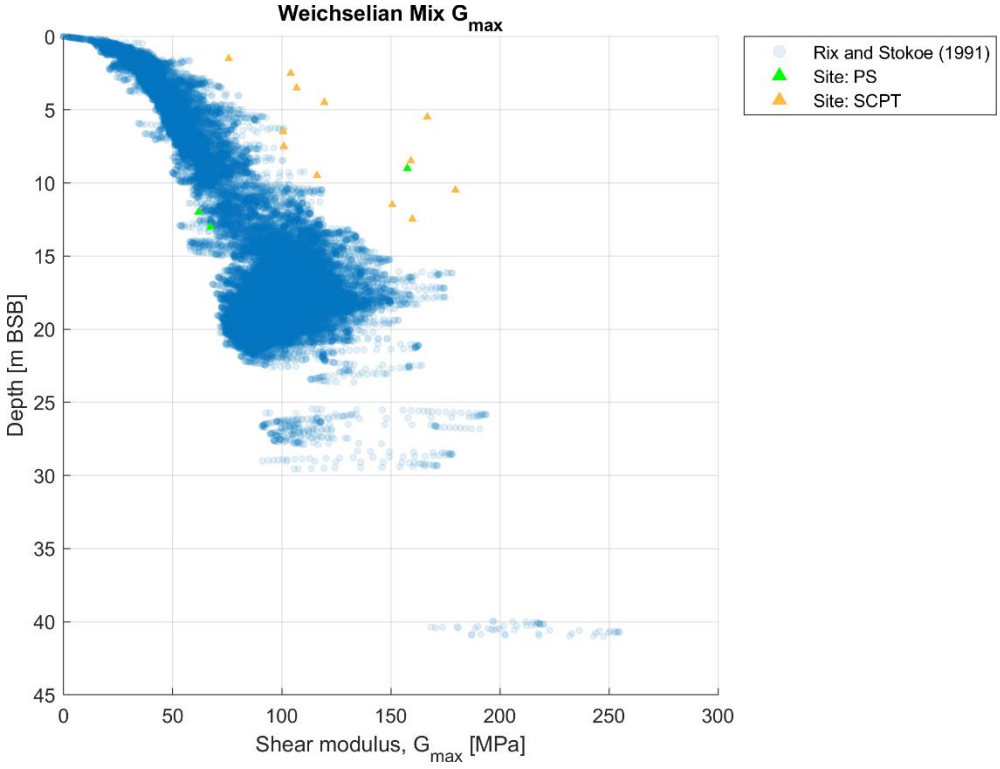

Figure D-69 Range of G_{max} for geotechnical unit Weichselian mix using CPT correlation, SCPT, P-S logging and laboratory results.

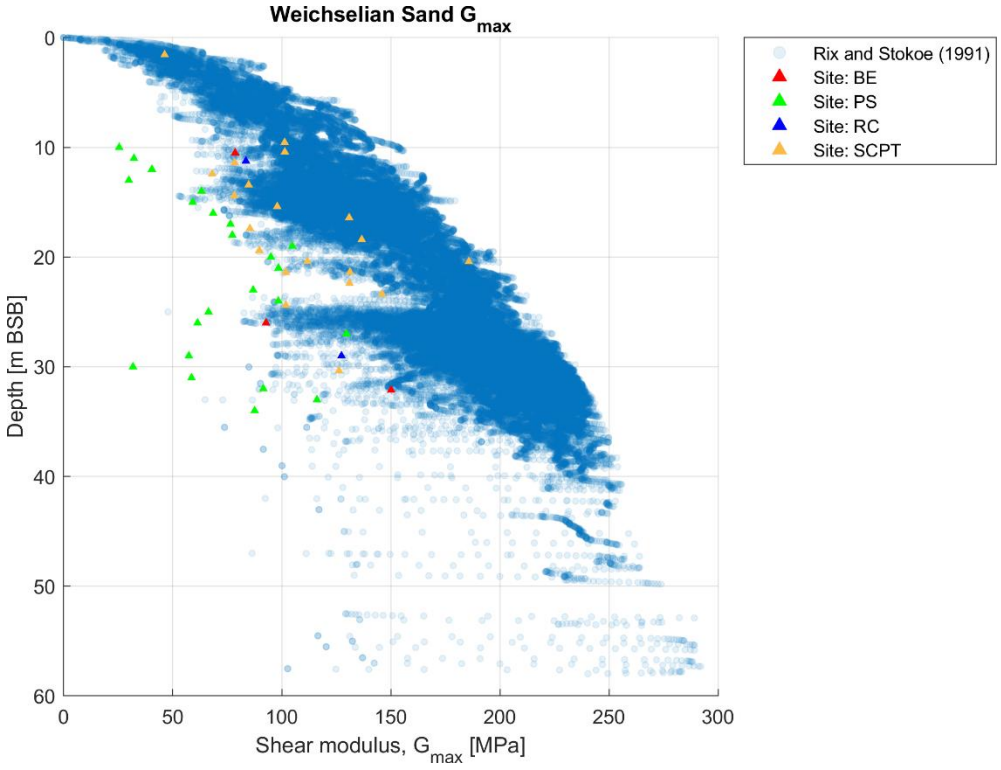

Figure D-70 *Range of G_{max} for geotechnical unit Weichselian sand using CPT correlation, SCPT, P-S logging and laboratory results.*

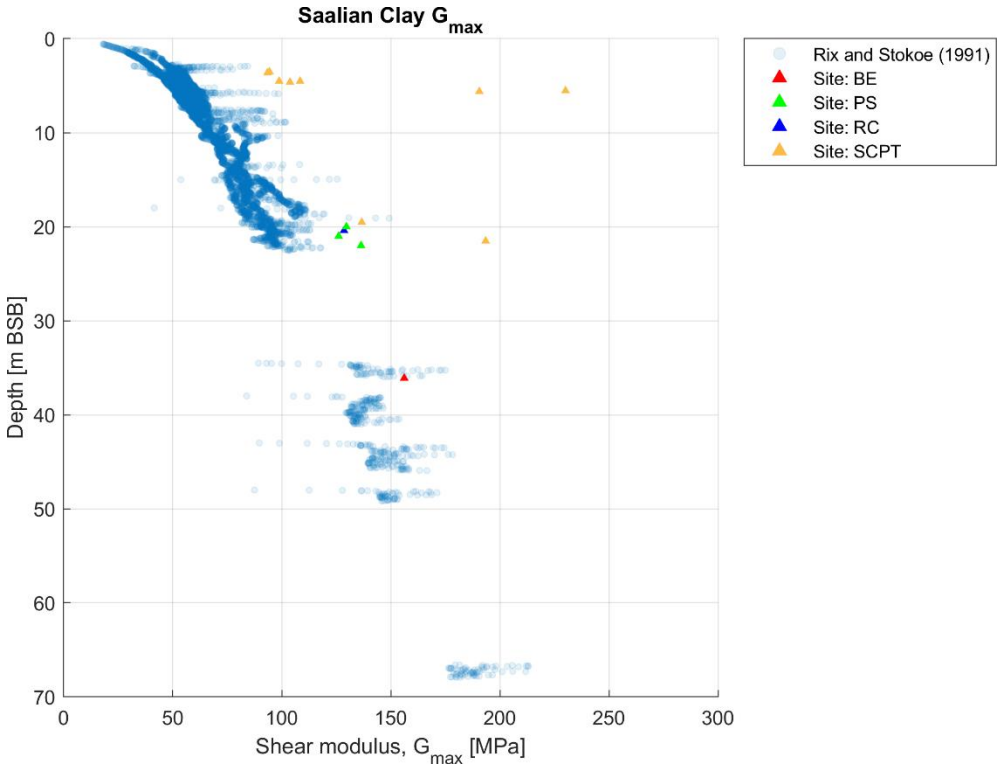

Figure D-71 *Range of G_{max} for geotechnical unit Saalian clay using CPT correlation, SCPT, P-S logging and laboratory results.*

Figure D-72 Range of G_{max} for geotechnical unit Saalian mix using CPT correlation, SCPT, P-S logging and laboratory results.

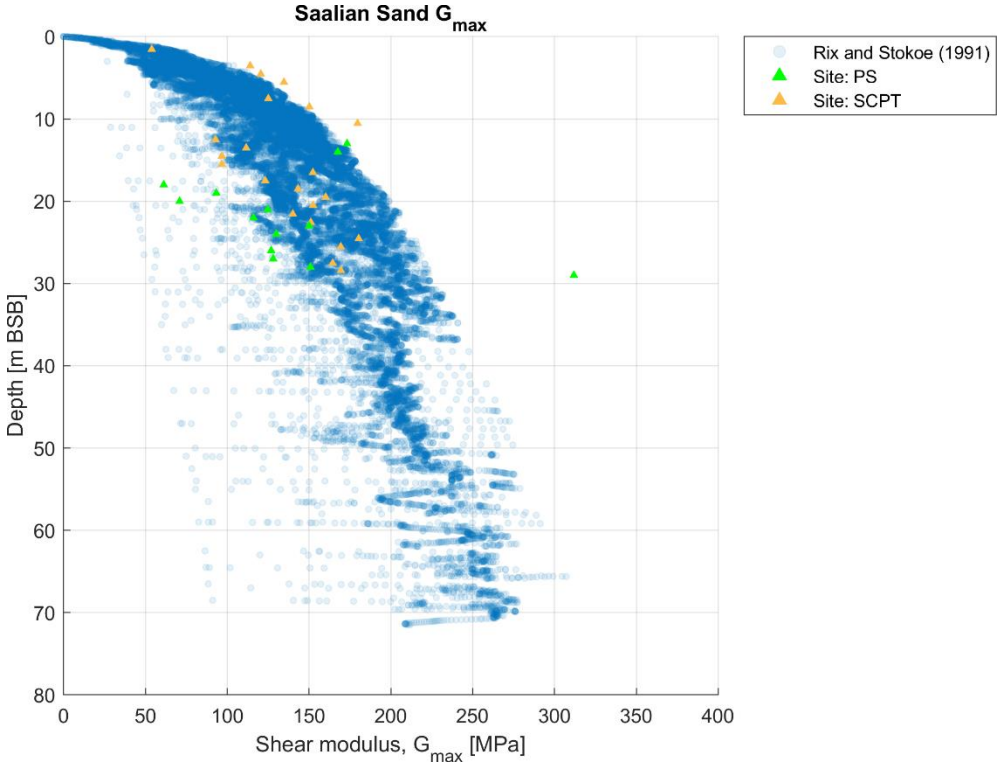

Figure D-73 Range of G_{max} for geotechnical unit Saalian sand using CPT correlation, SCPT, P-S logging and laboratory results.

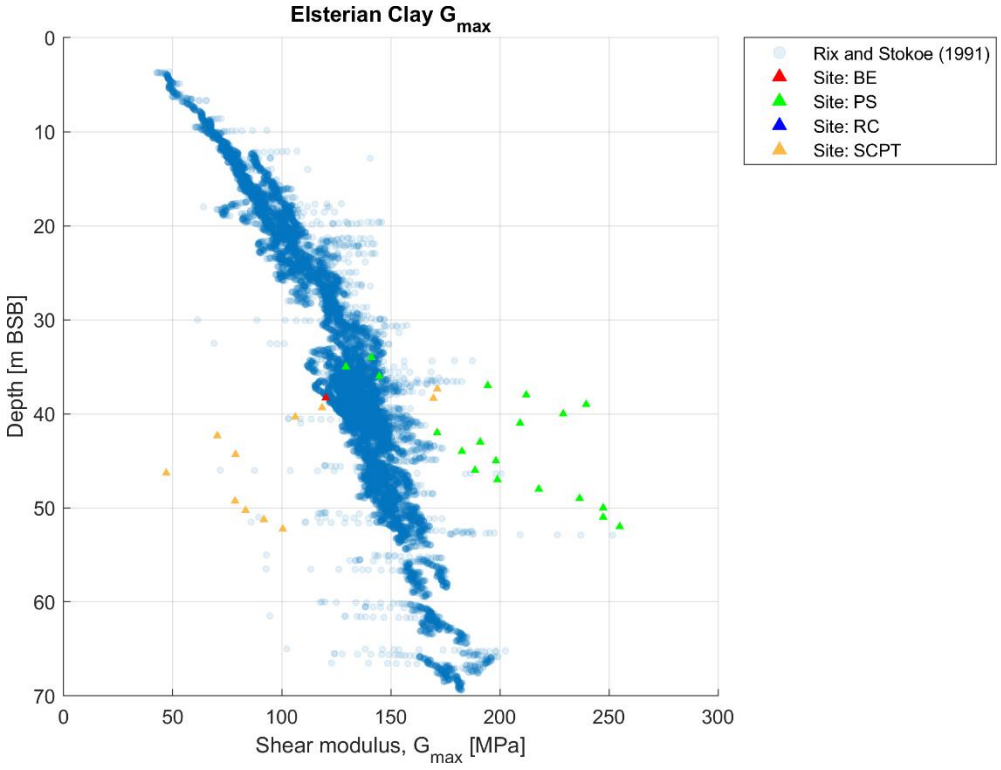

Figure D-74 *Range of G_{max} for geotechnical unit Elsterian clay using CPT correlation, SCPT, P-S logging and laboratory results.*

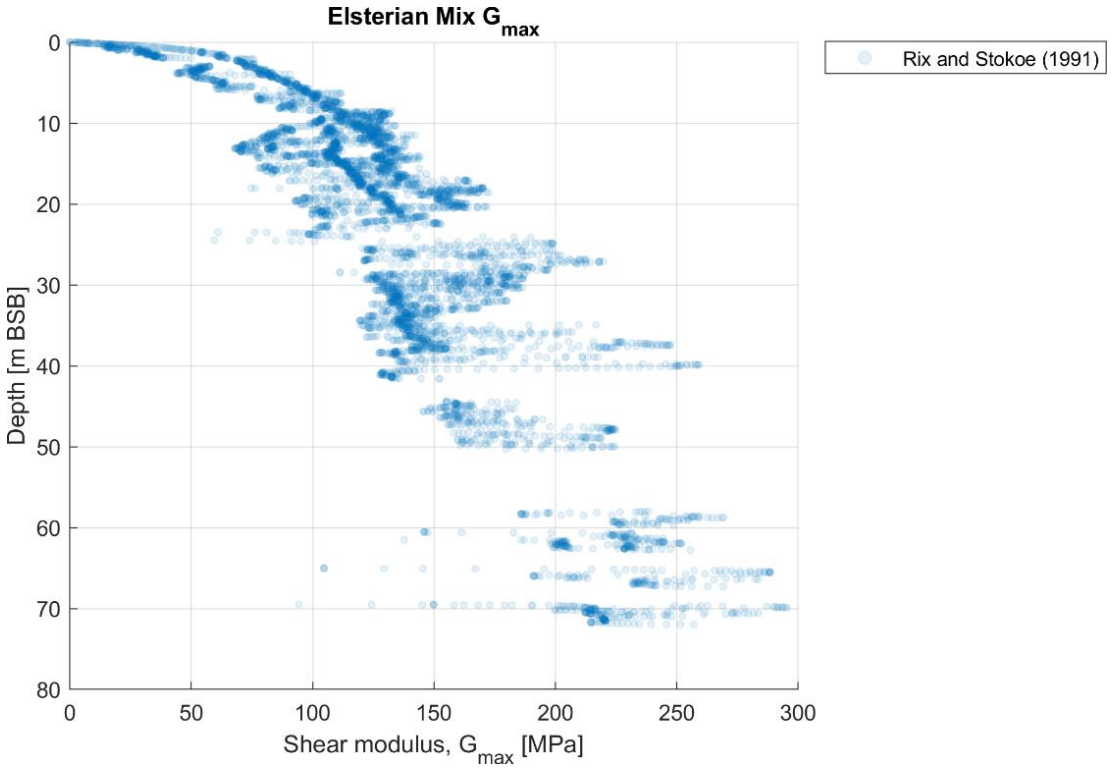

Figure D-75 *Range of G_{max} for geotechnical unit Elsterian mix using CPT correlation, SCPT, P-S logging and laboratory results.*

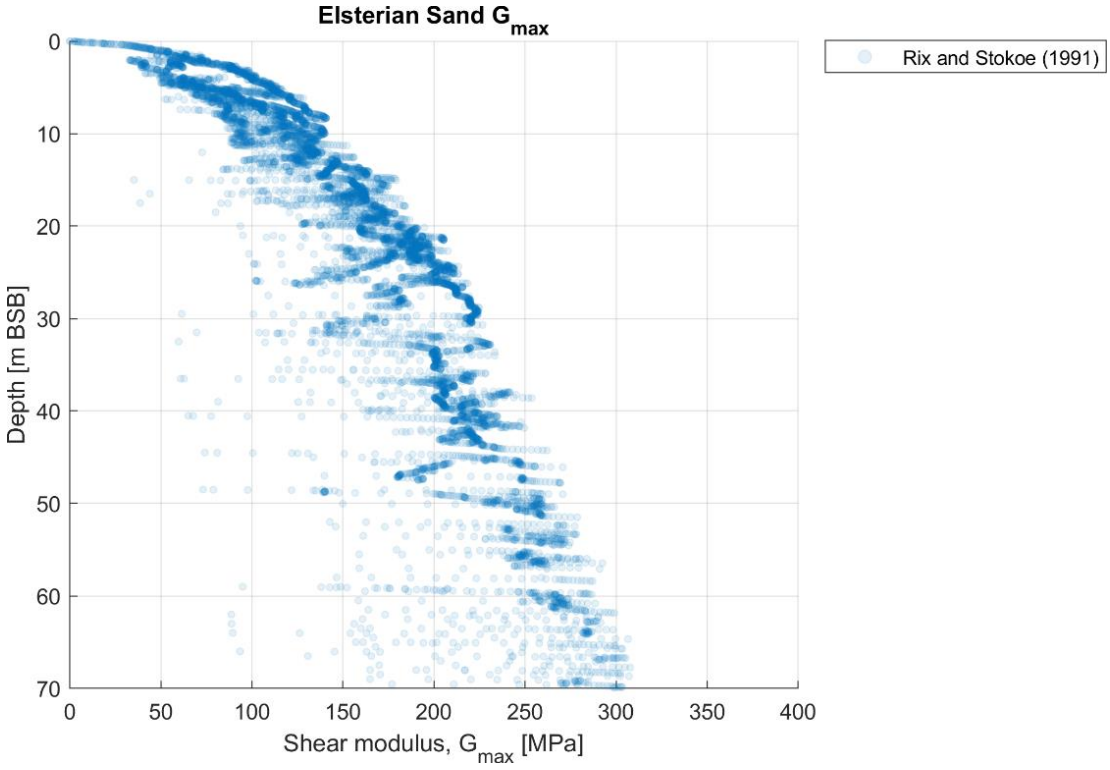

Figure D-76 Range of G_{max} for geotechnical unit Elsterian sand using CPT correlation, SCPT, P-S logging and laboratory results.

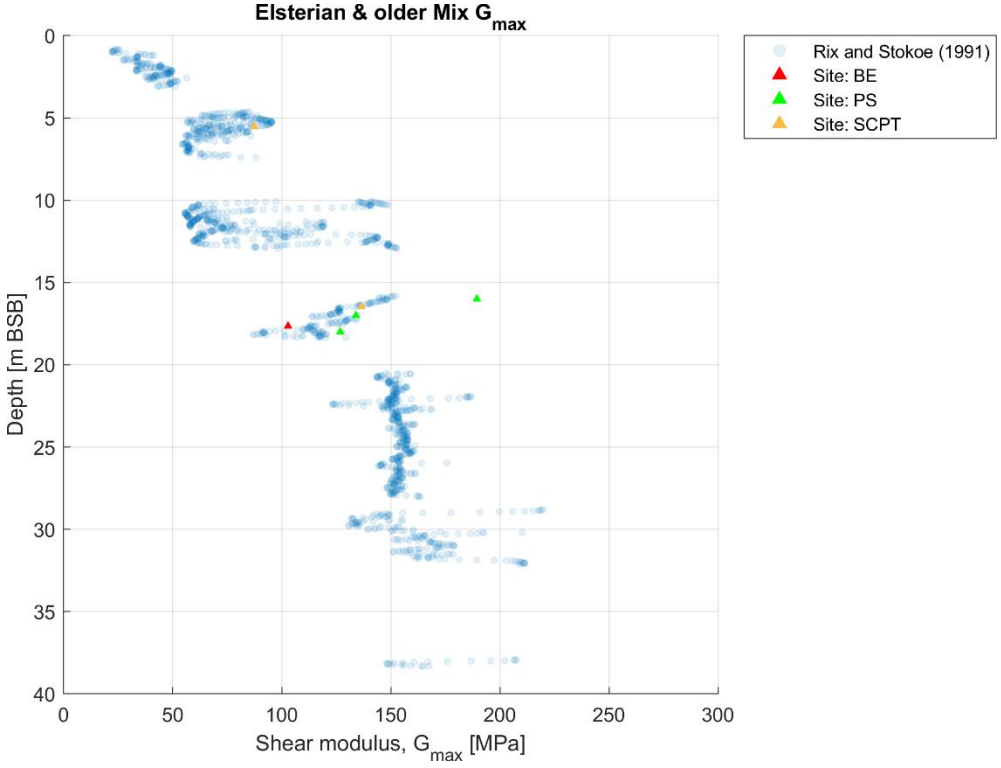

Figure D-77 Range of G_{max} for geotechnical unit Elsterian & older mix using CPT correlation, SCPT, P-S logging and laboratory results.

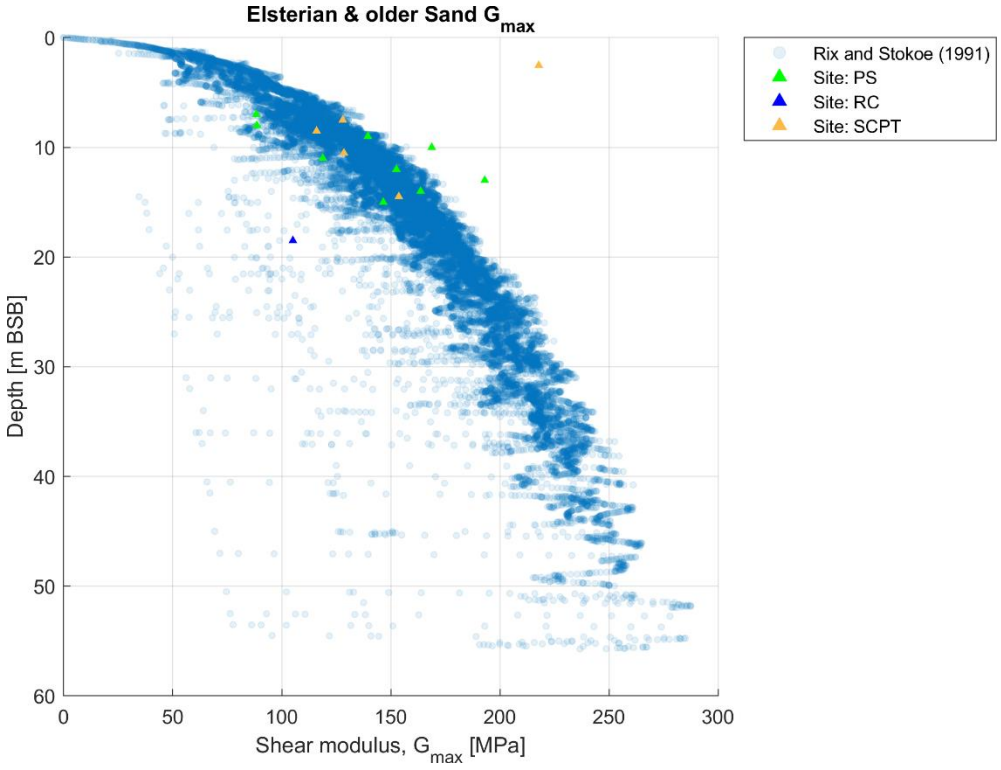

Figure D-78 *Range of G_{max} for geotechnical unit Elsterian & older sand using CPT correlation, SCPT, P-S logging and laboratory results.*

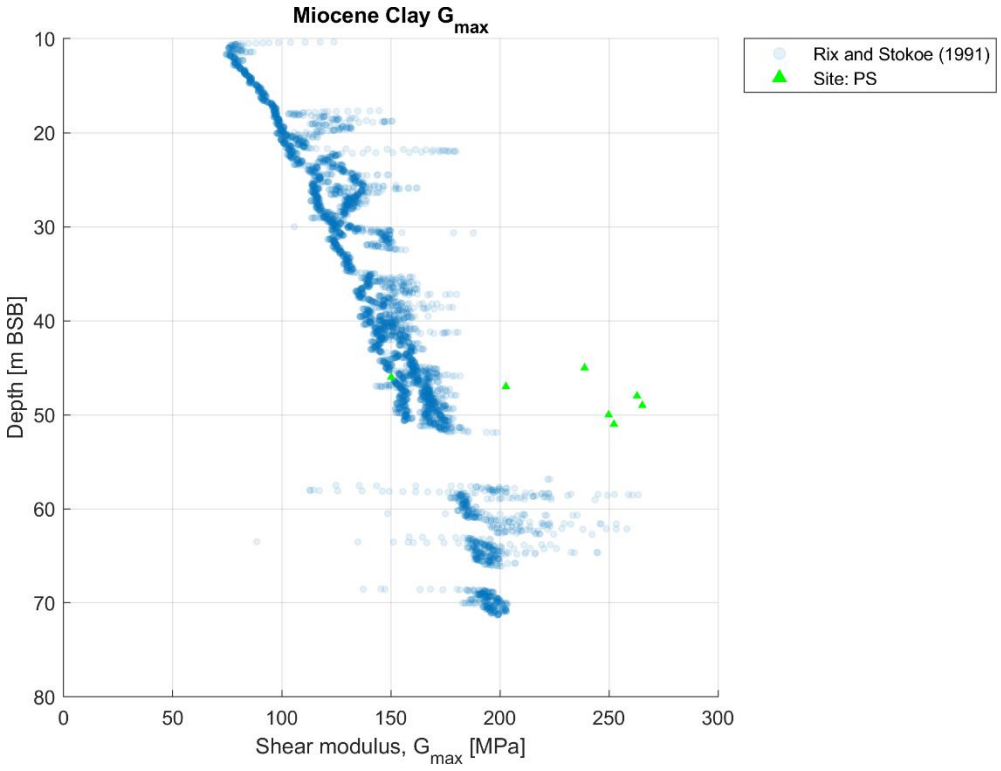

Figure D-79 *Range of G_{max} for geotechnical unit Miocene clay using CPT correlation, SCPT, P-S logging and laboratory results.*

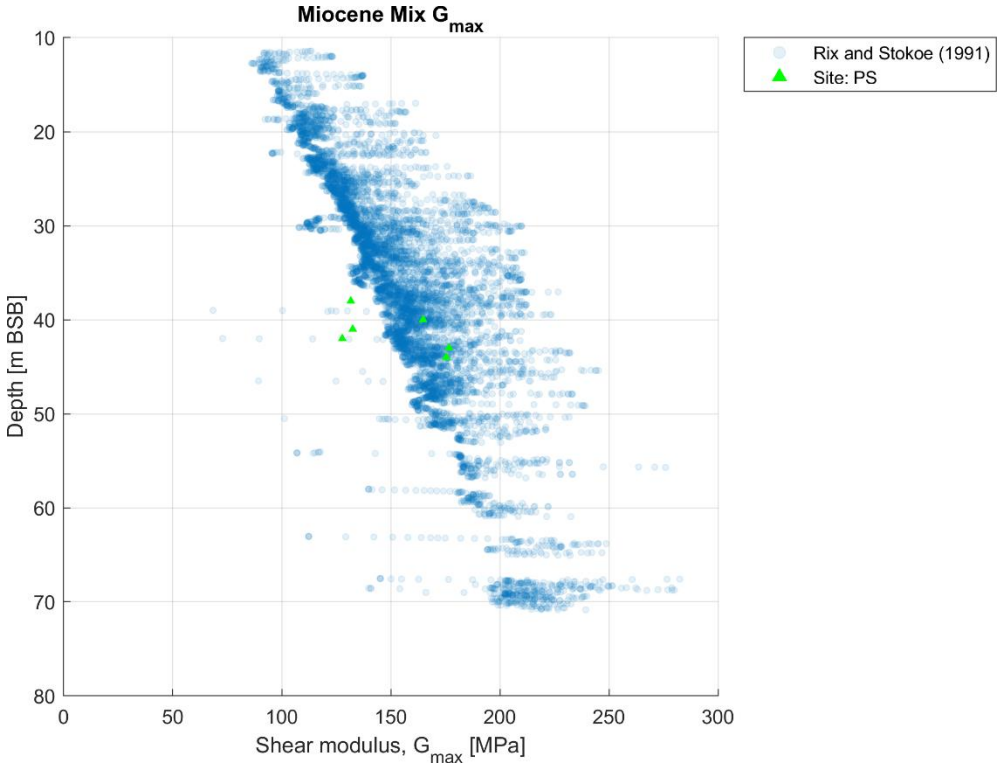

Figure D-80 *Range of G_{max} for geotechnical unit Miocene mix using CPT correlation, SCPT, P-S logging and laboratory results.*

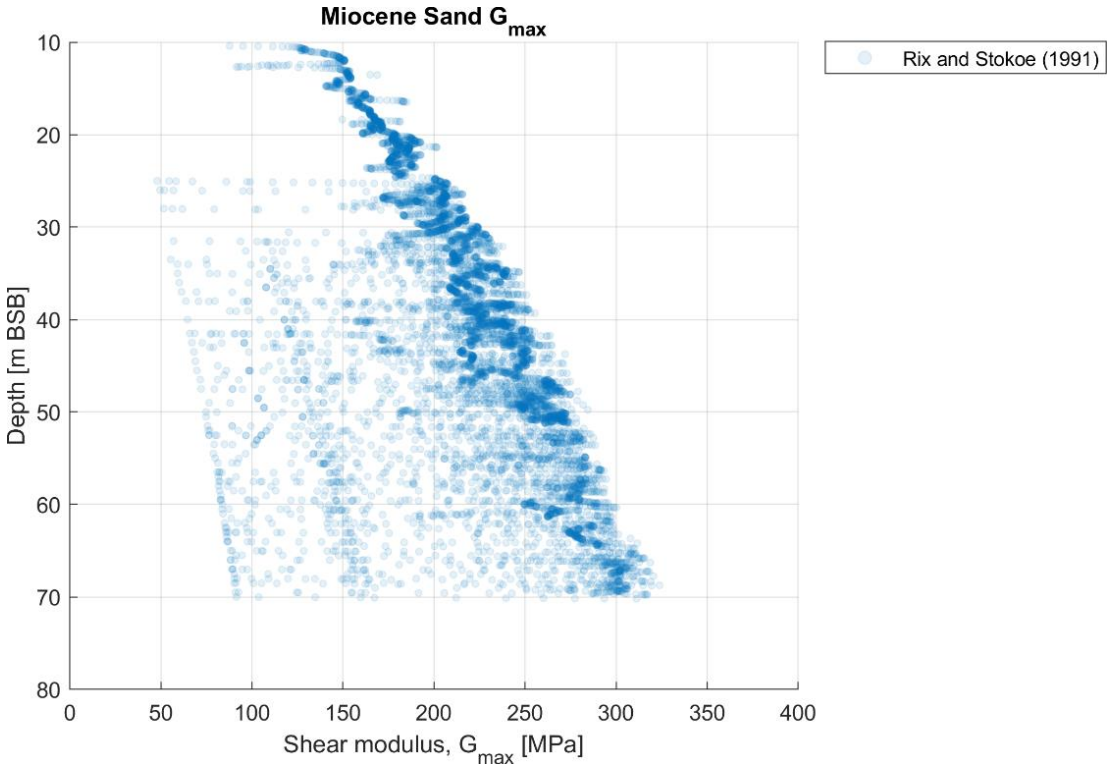

Figure D-81 *Range of G_{max} for geotechnical unit Miocene sand using CPT correlation, SCPT, P-S logging and laboratory results.*