

Appendix C Calculated soil properties per CPT location

This appendix presents the state-, stiffness- and strength properties with depth per geotechnical test location. An example for one location can be seen in Figure C-1. The parameters presented in the figures are the ones presented in section 6. The red horizontal lines represent the interpreted stratigraphy at the location where the unit defined per layer together with expected soil behaviour is presented in the right side of the plot. It is noticeable that the undrained shear strength, c_u , is only interpreted for mix and clay units, whereas the friction angle, ϕ' , is interpreted for mix and sand units. Thus, for some locations, subplots of c_u and ϕ' may not contain any data.

The friction angle subplots show a vertical line " I_D limit". This line indicates a maximum value of ϕ' provided that the relative density used to interpret the friction angle has been limited to $I_D = 100\%$. Nevertheless, CPT-interpretation of the relative density may estimate values above 100%, hence in this case, ϕ' exceeds the limit line. This description also applies for the figures presented in D.3.

All figures per geotechnical test location are presented in the following pages.

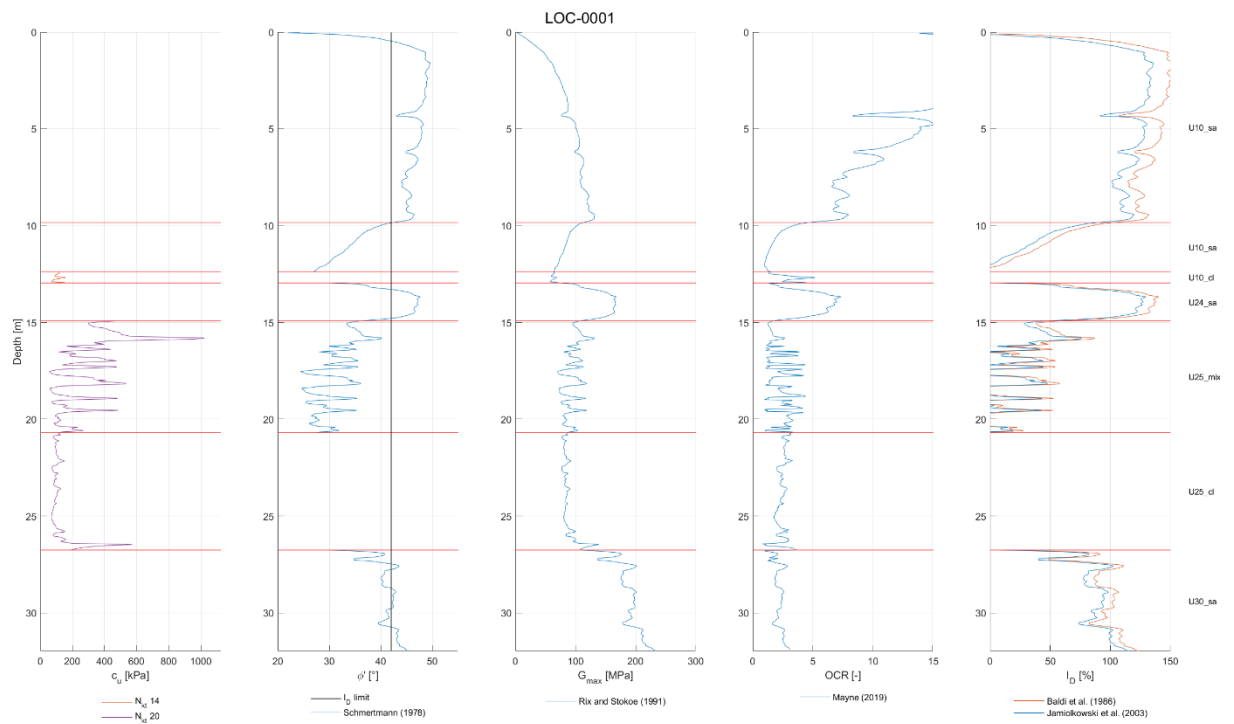
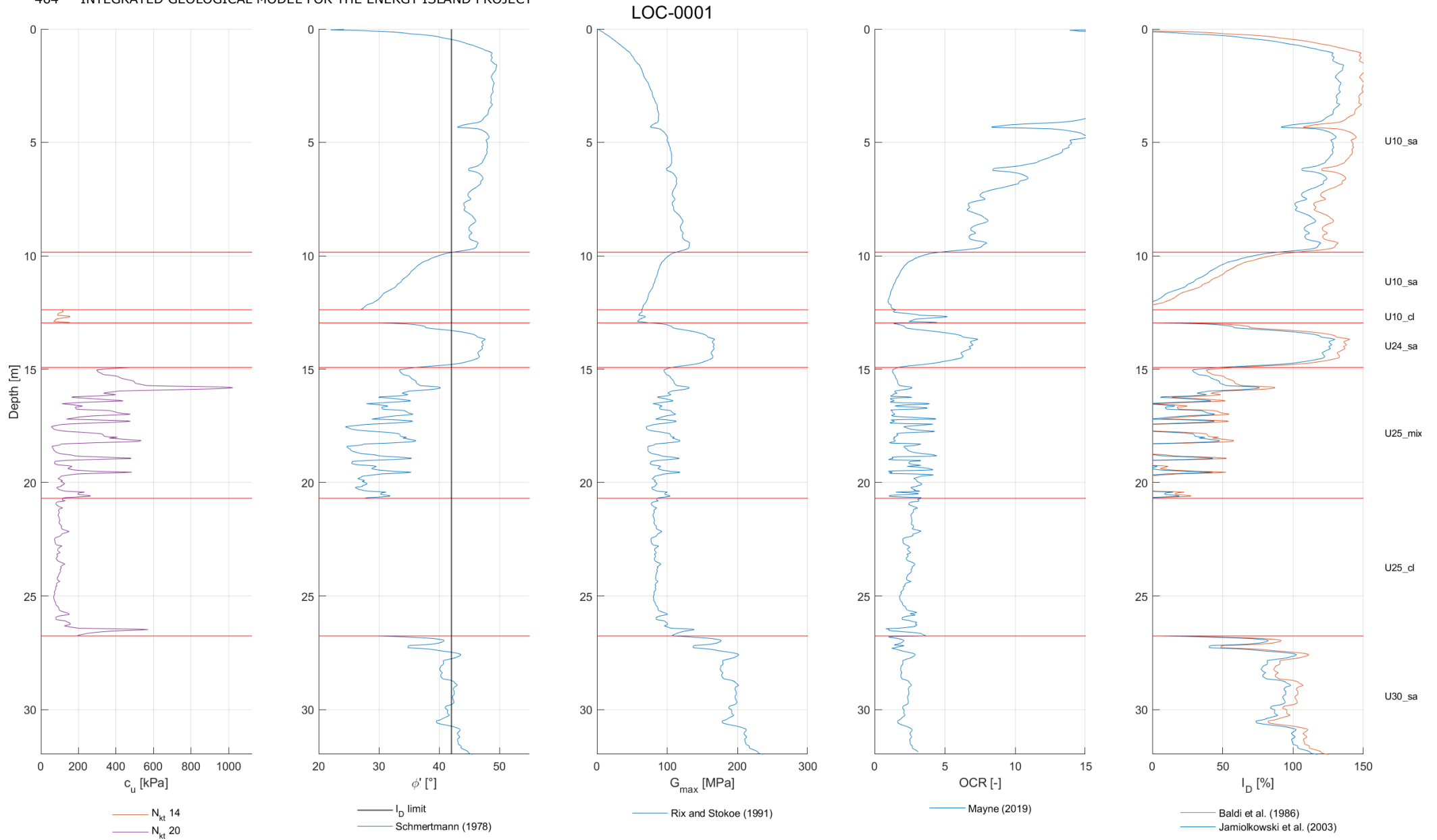
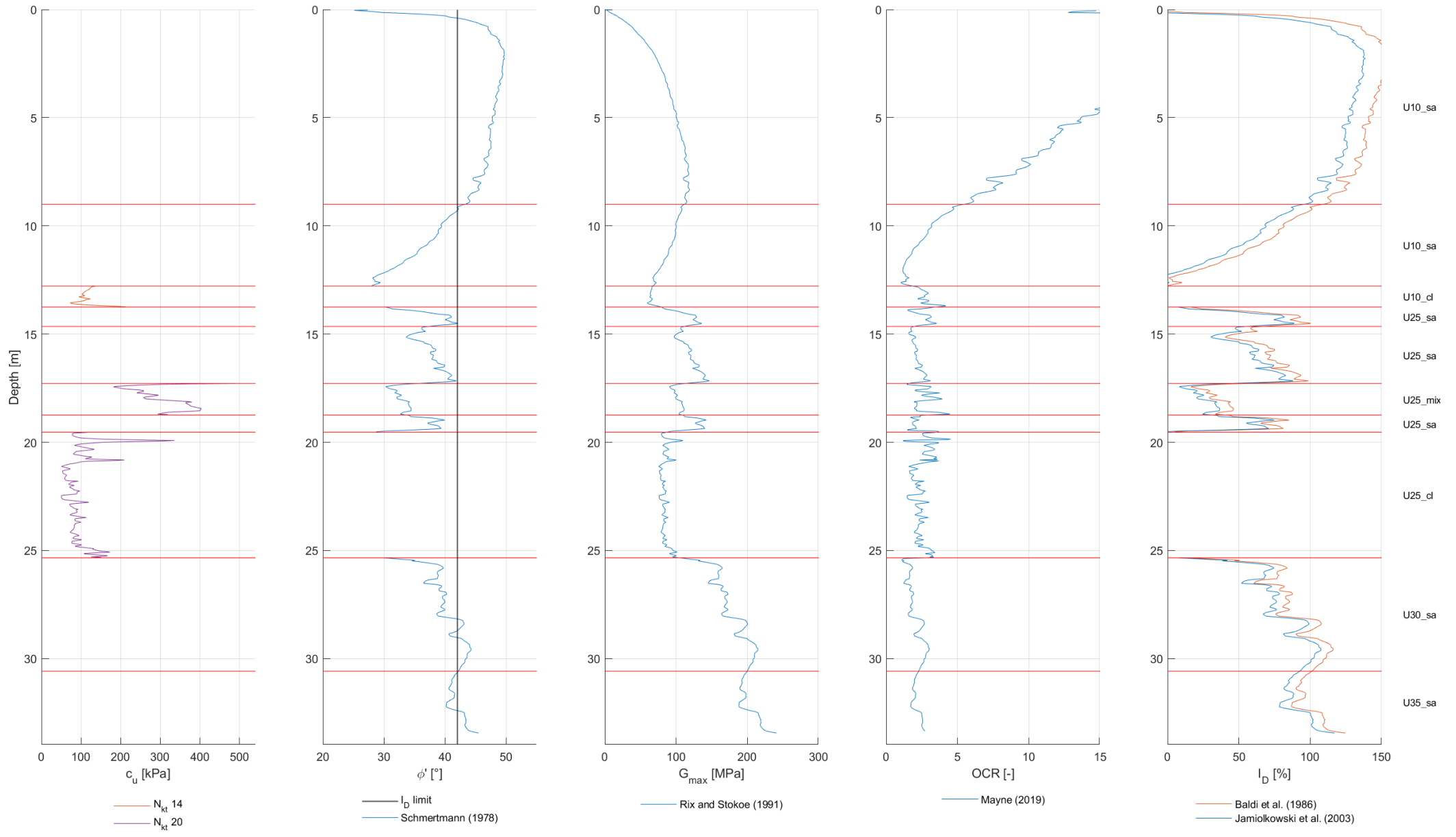


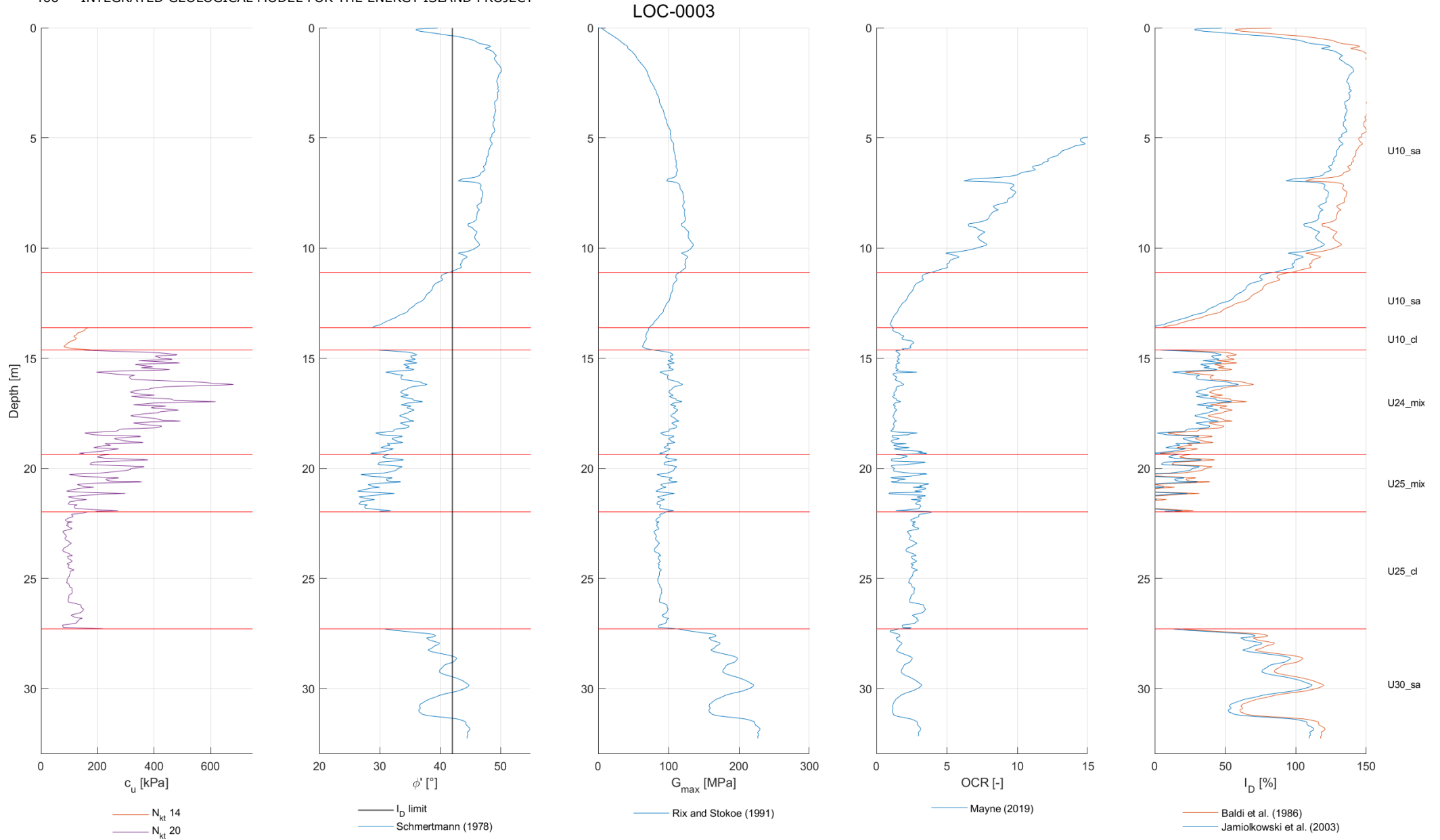
Figure C-1 Example of interpreted properties for LOC-0001.



LOC-0002

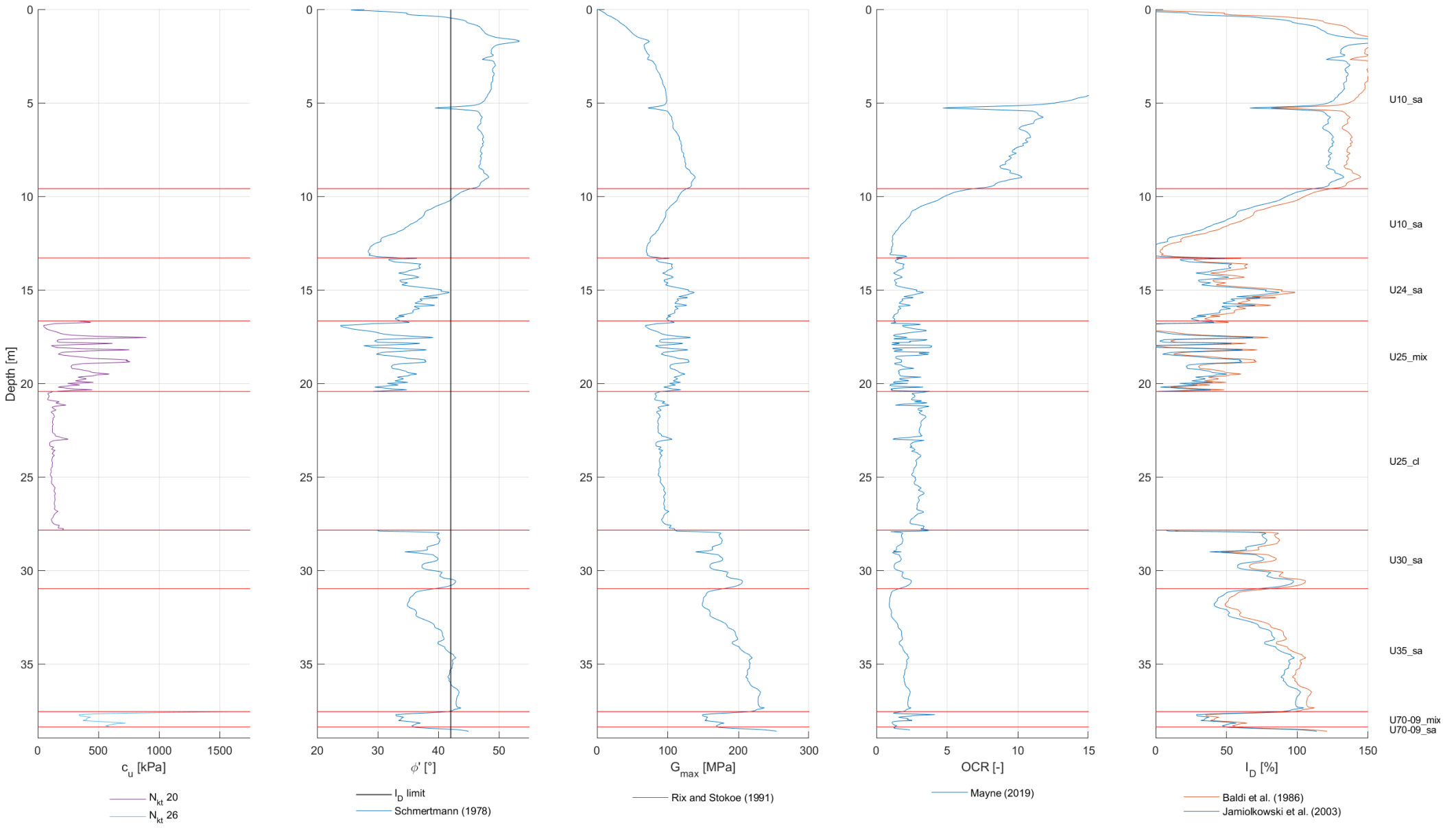
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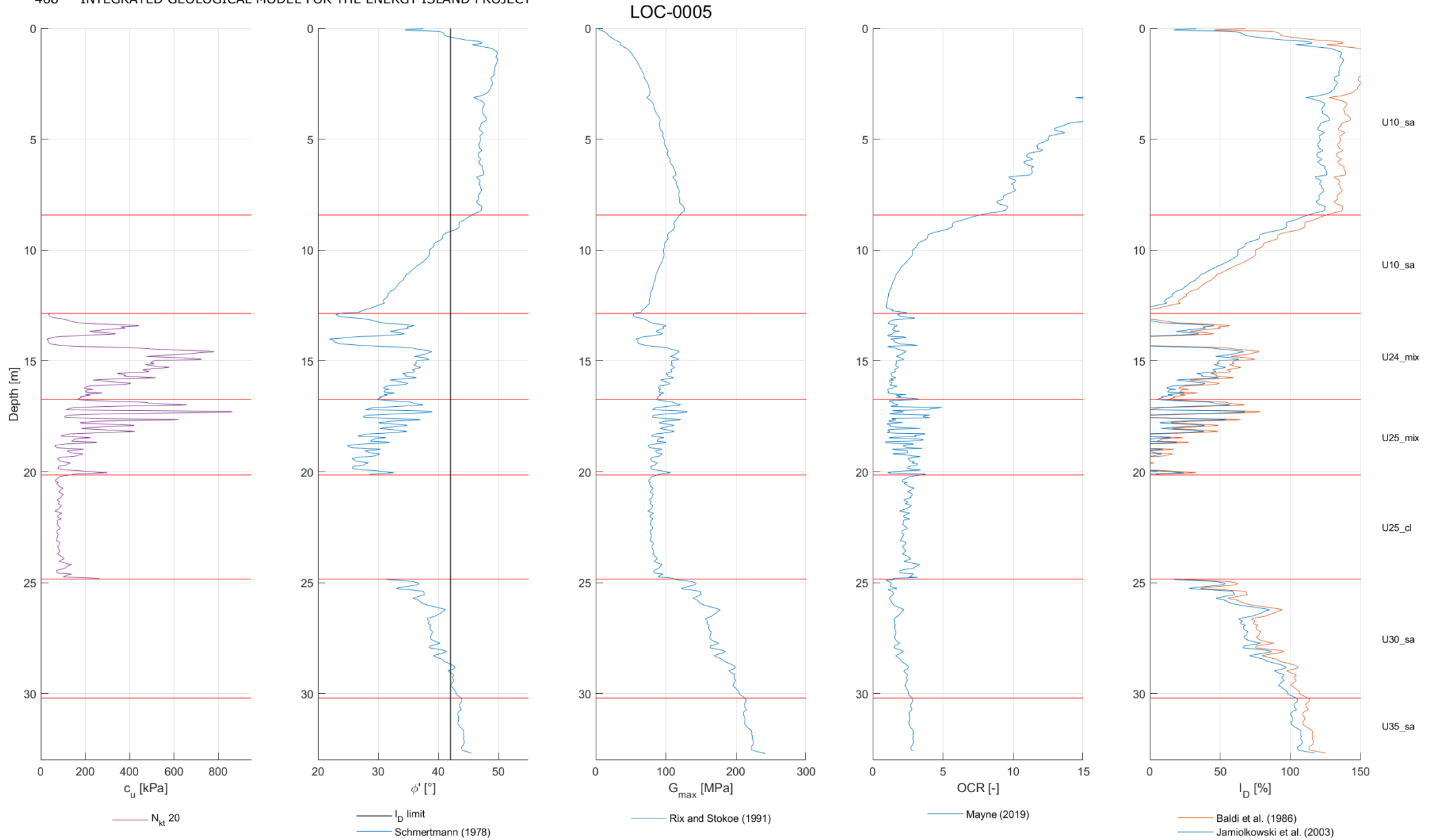




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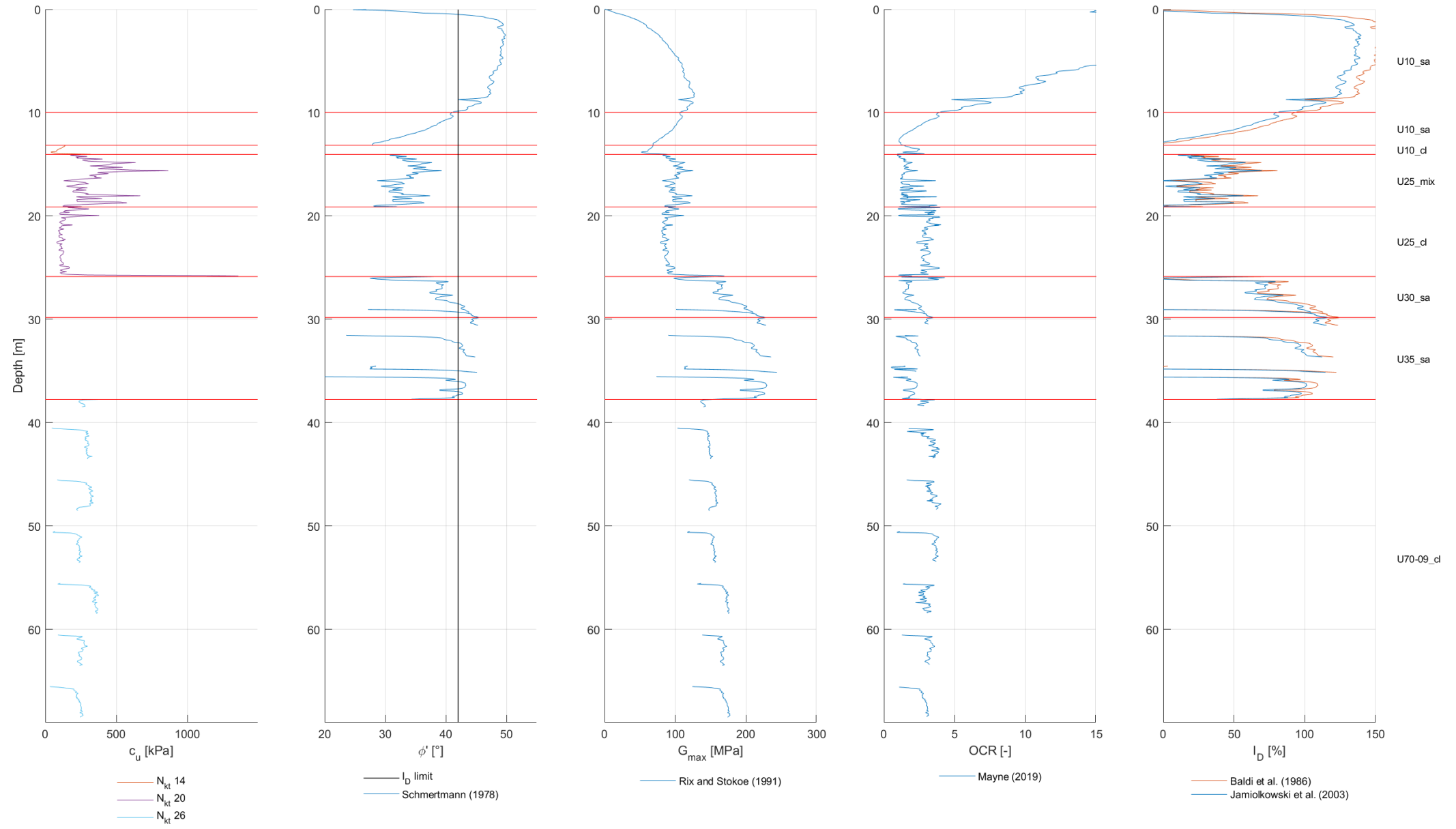
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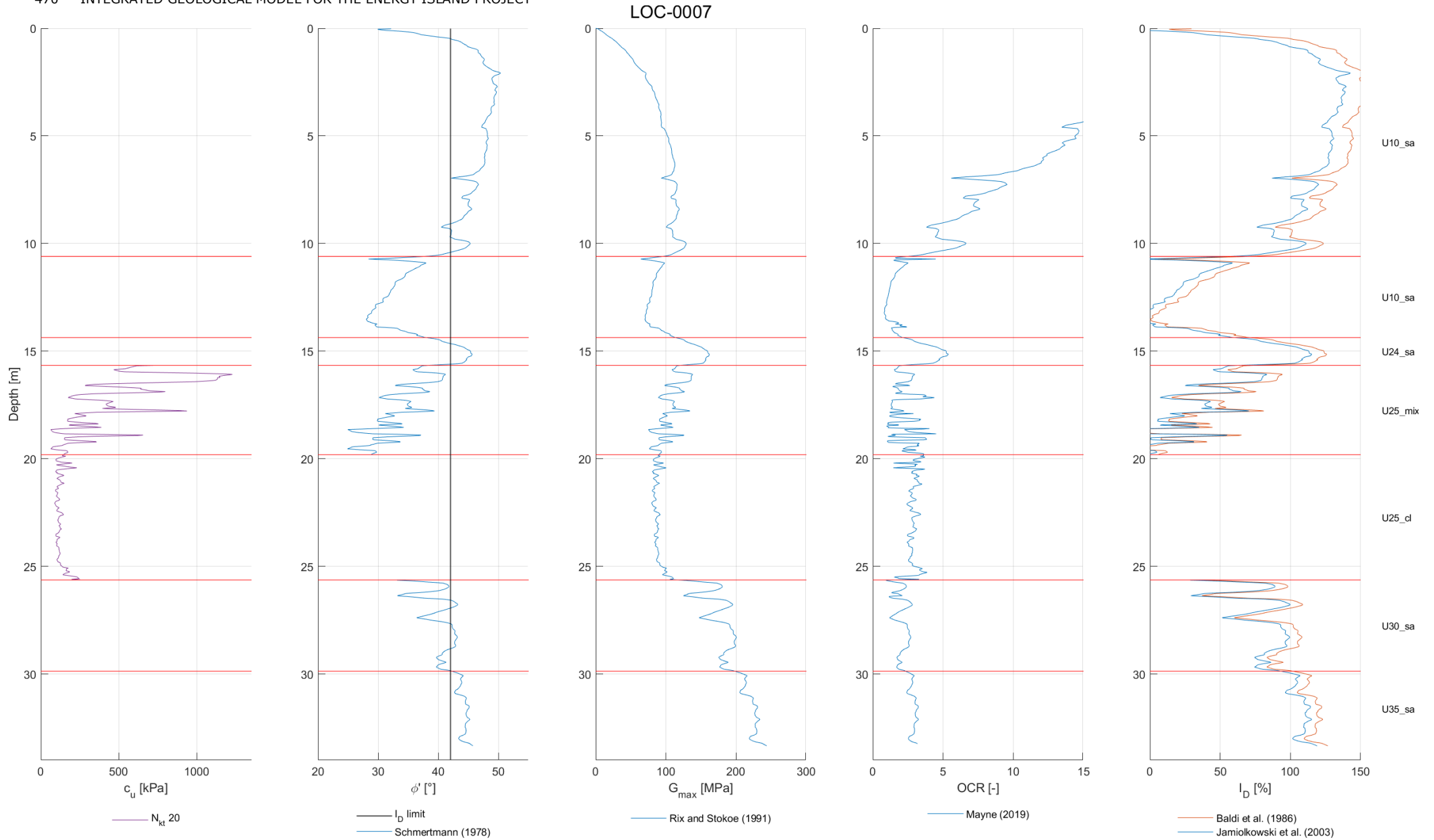




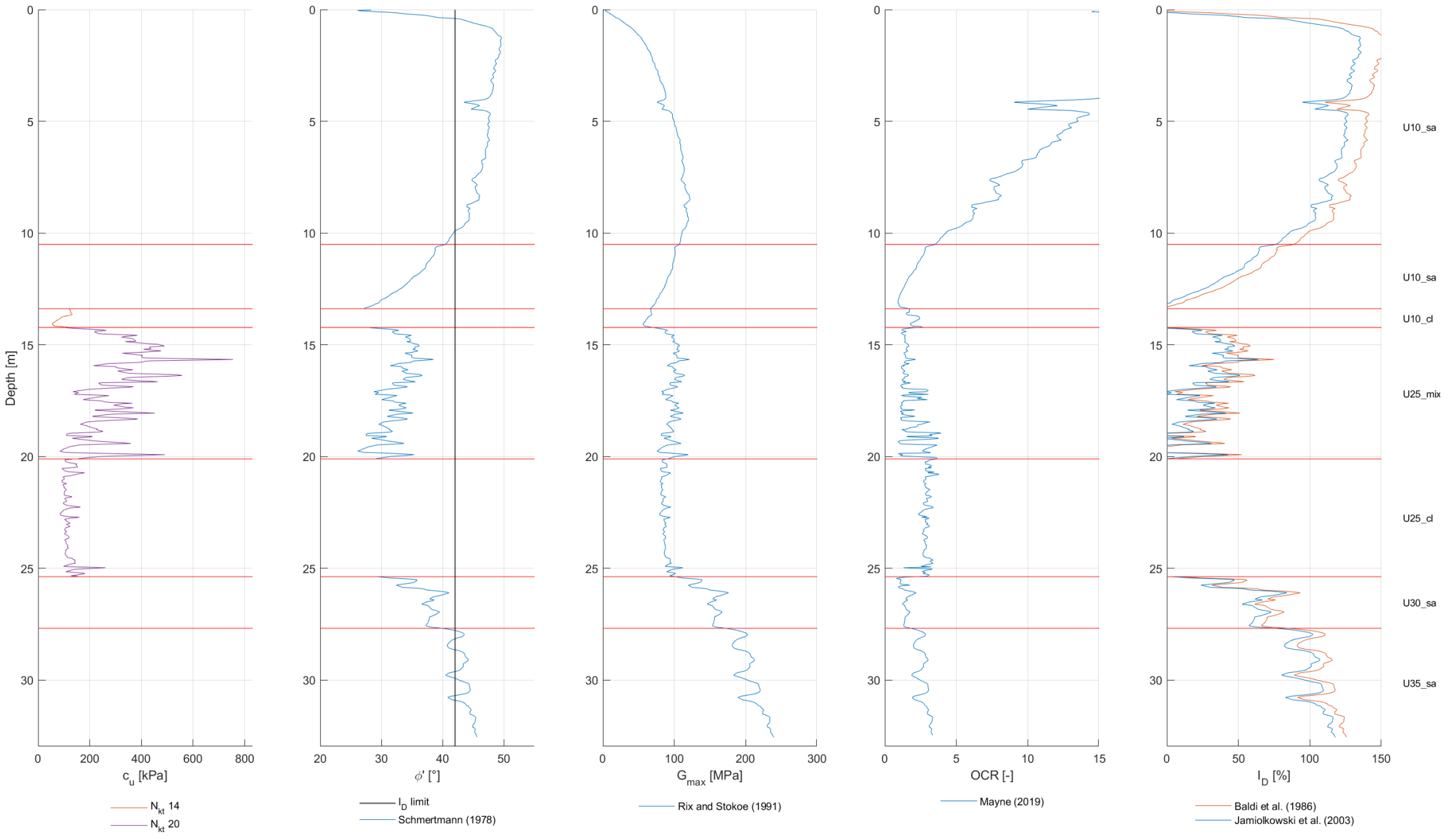
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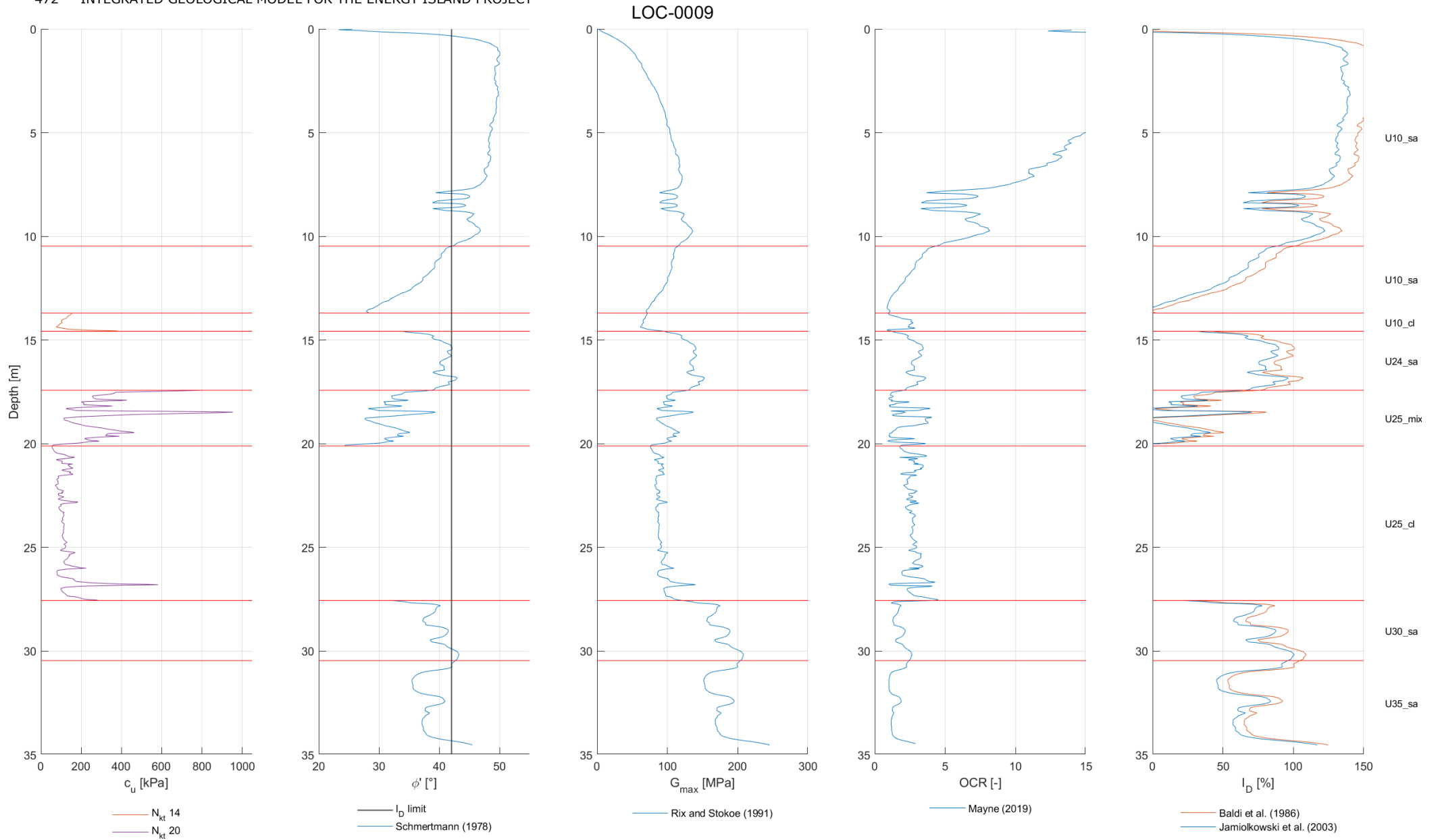
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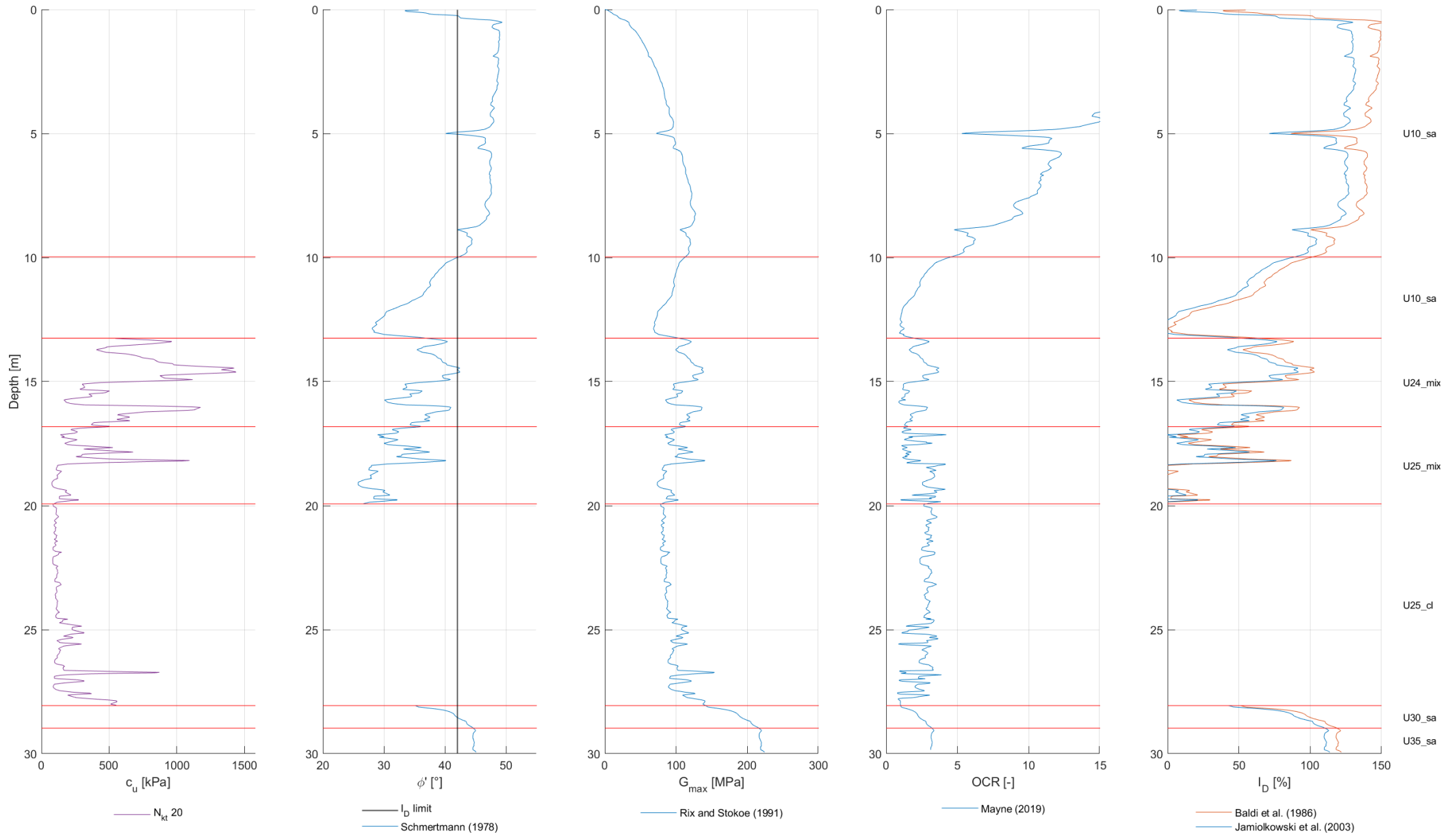
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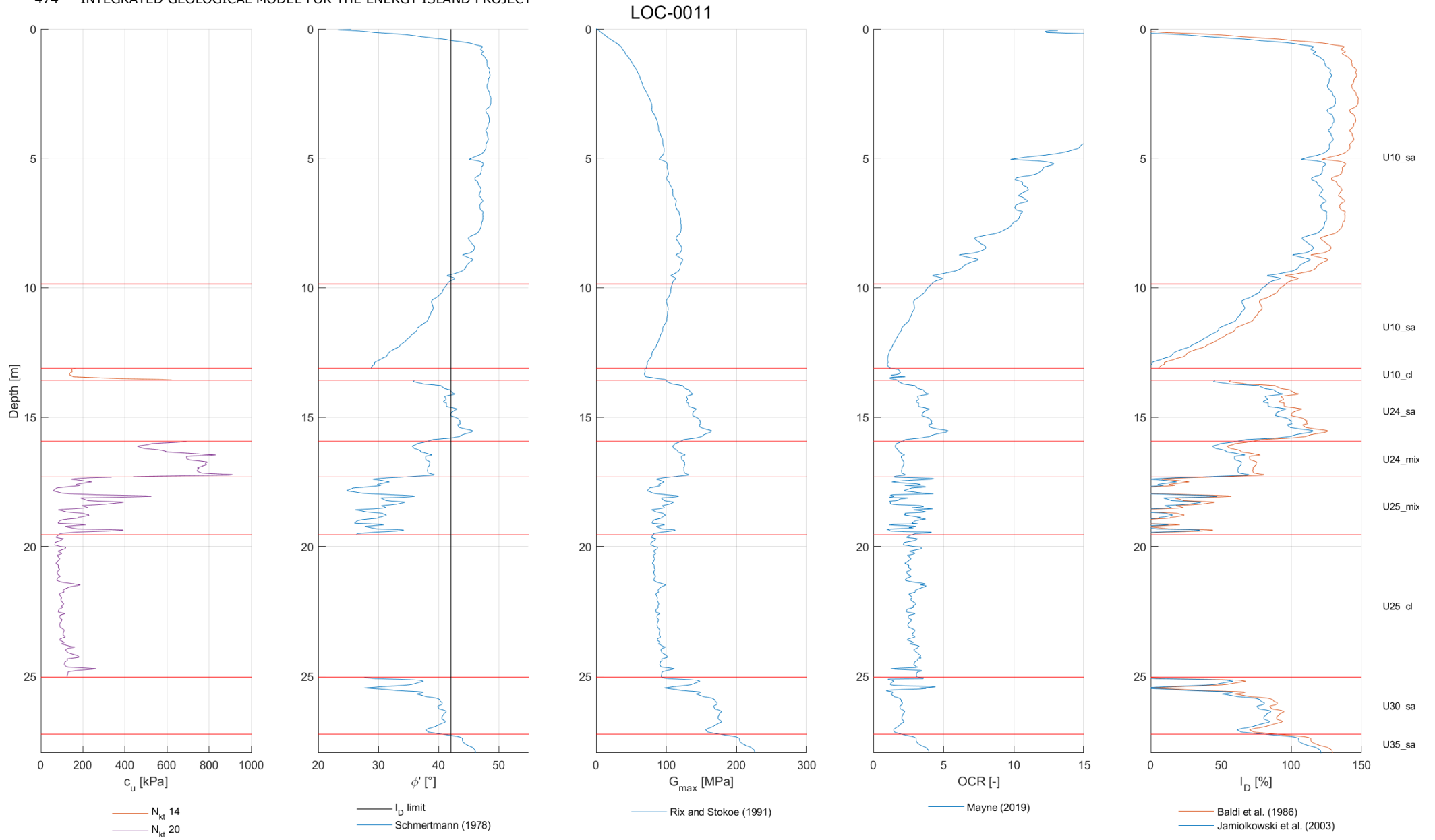




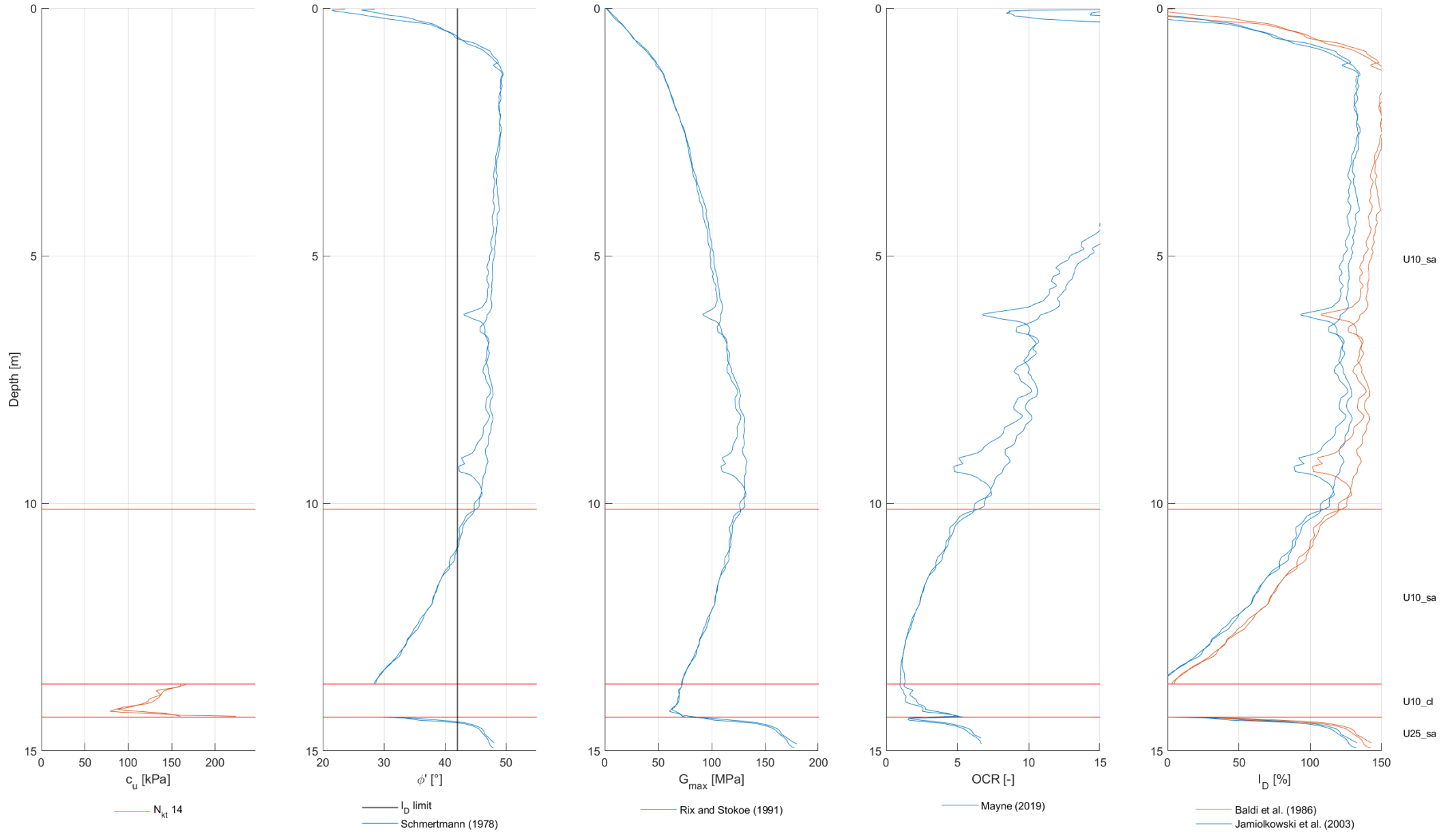
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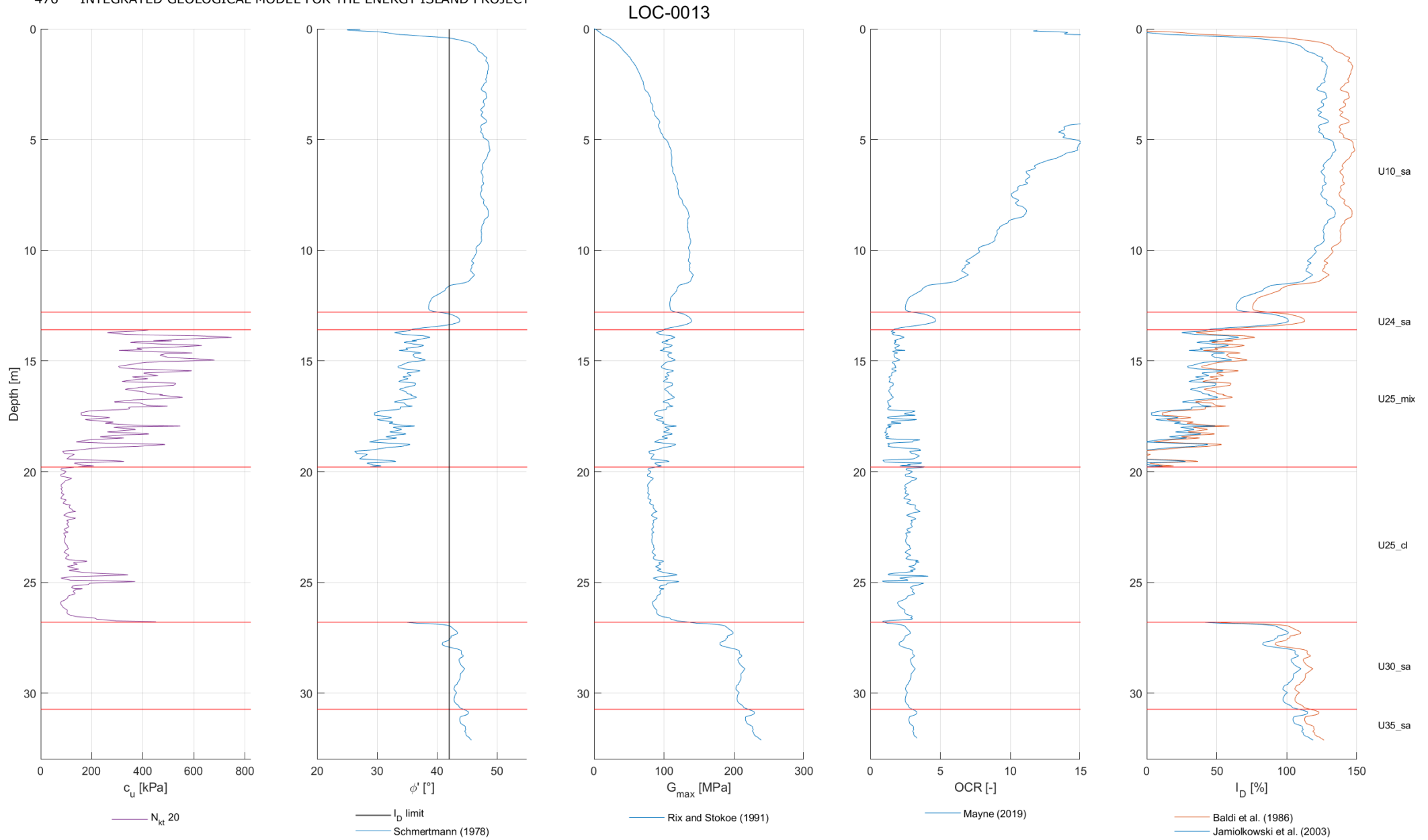
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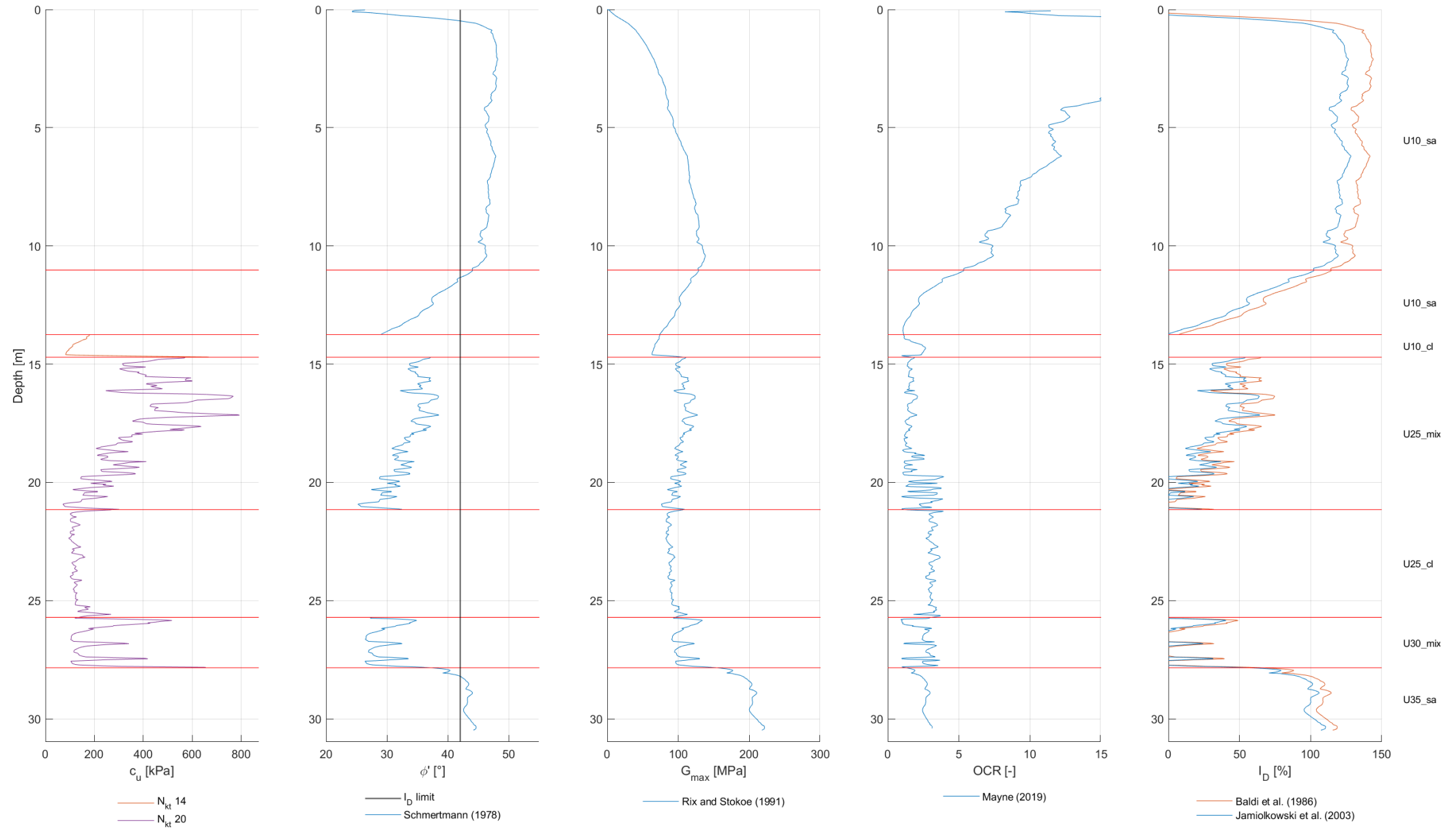


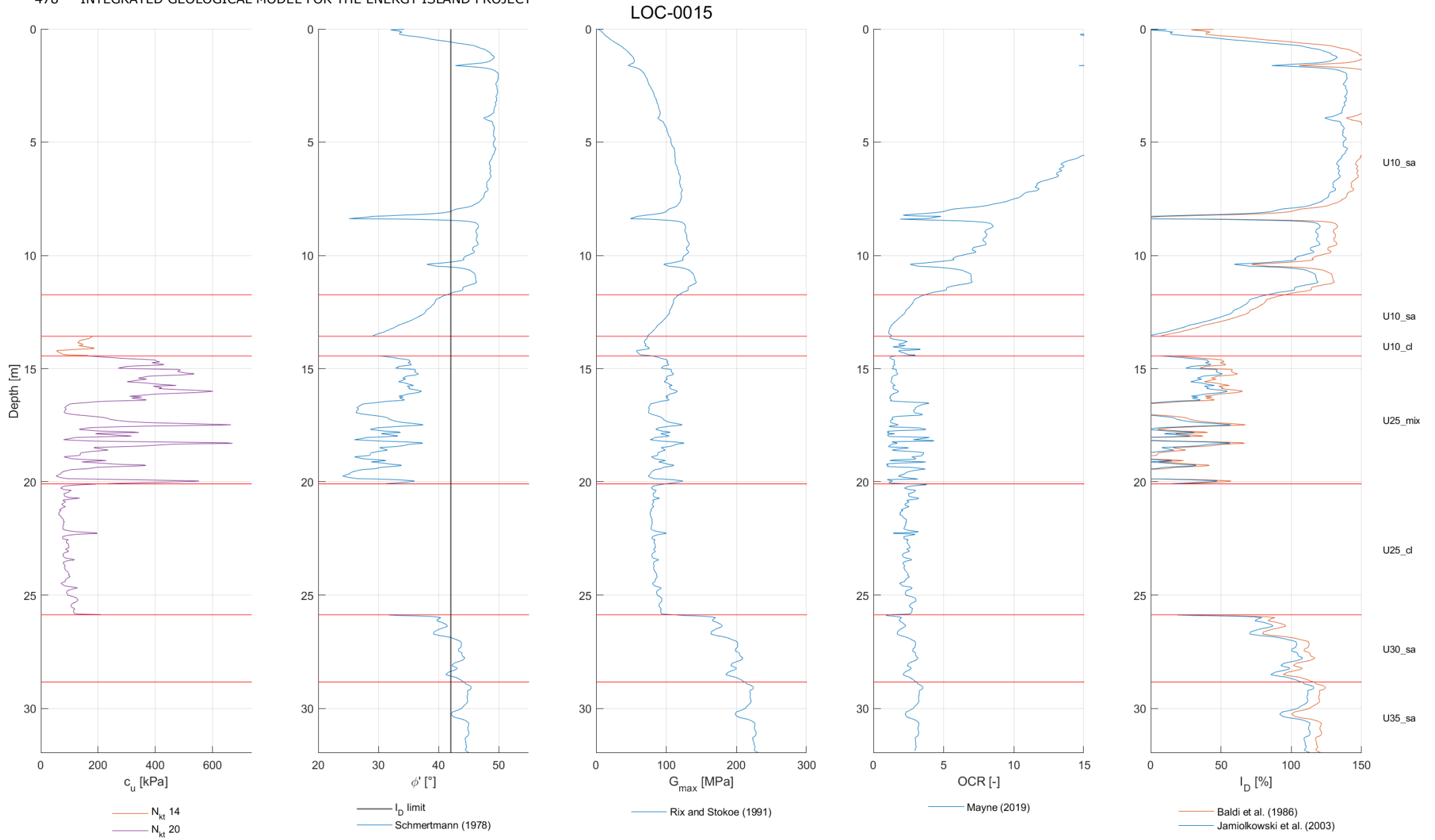
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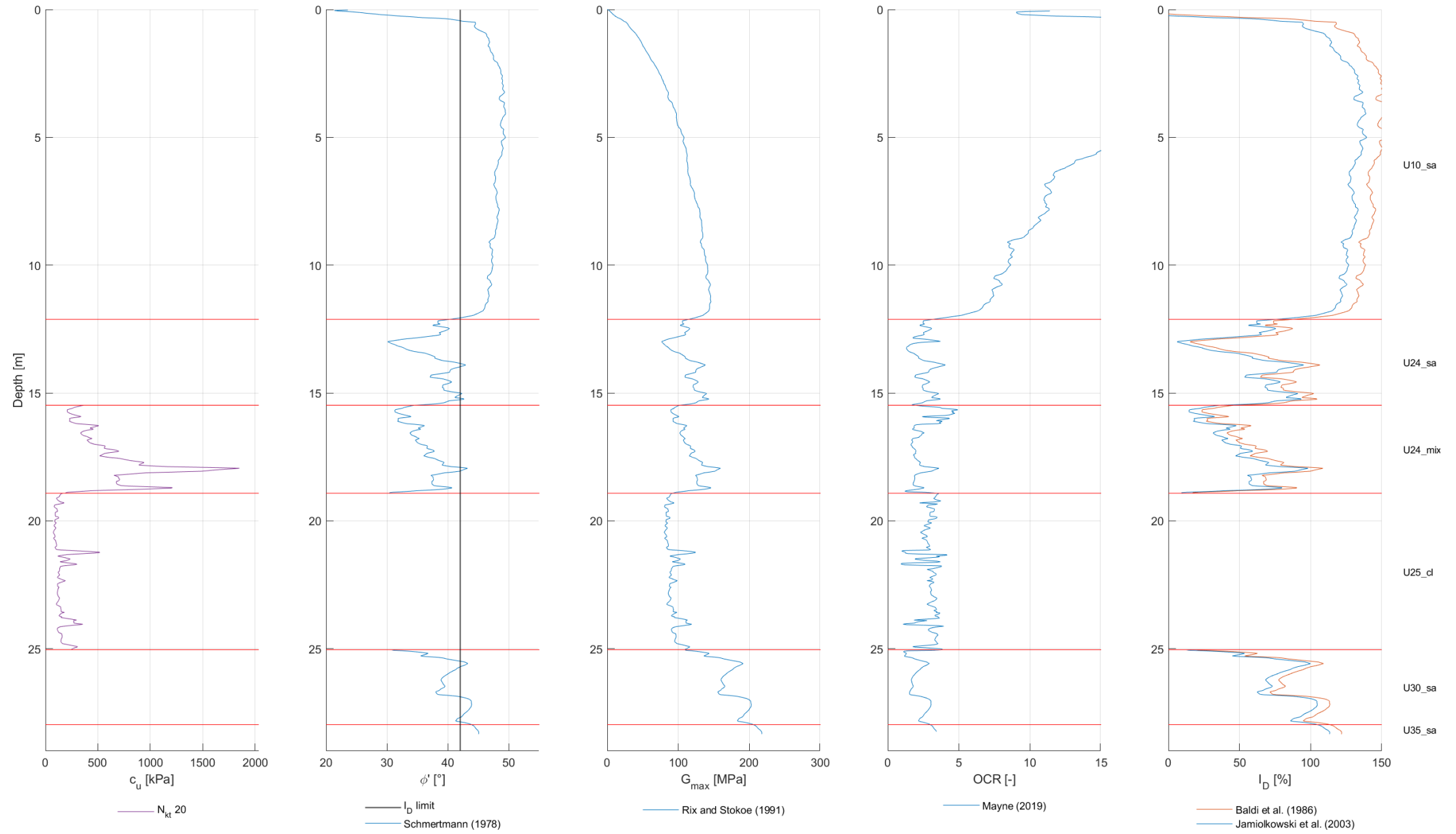


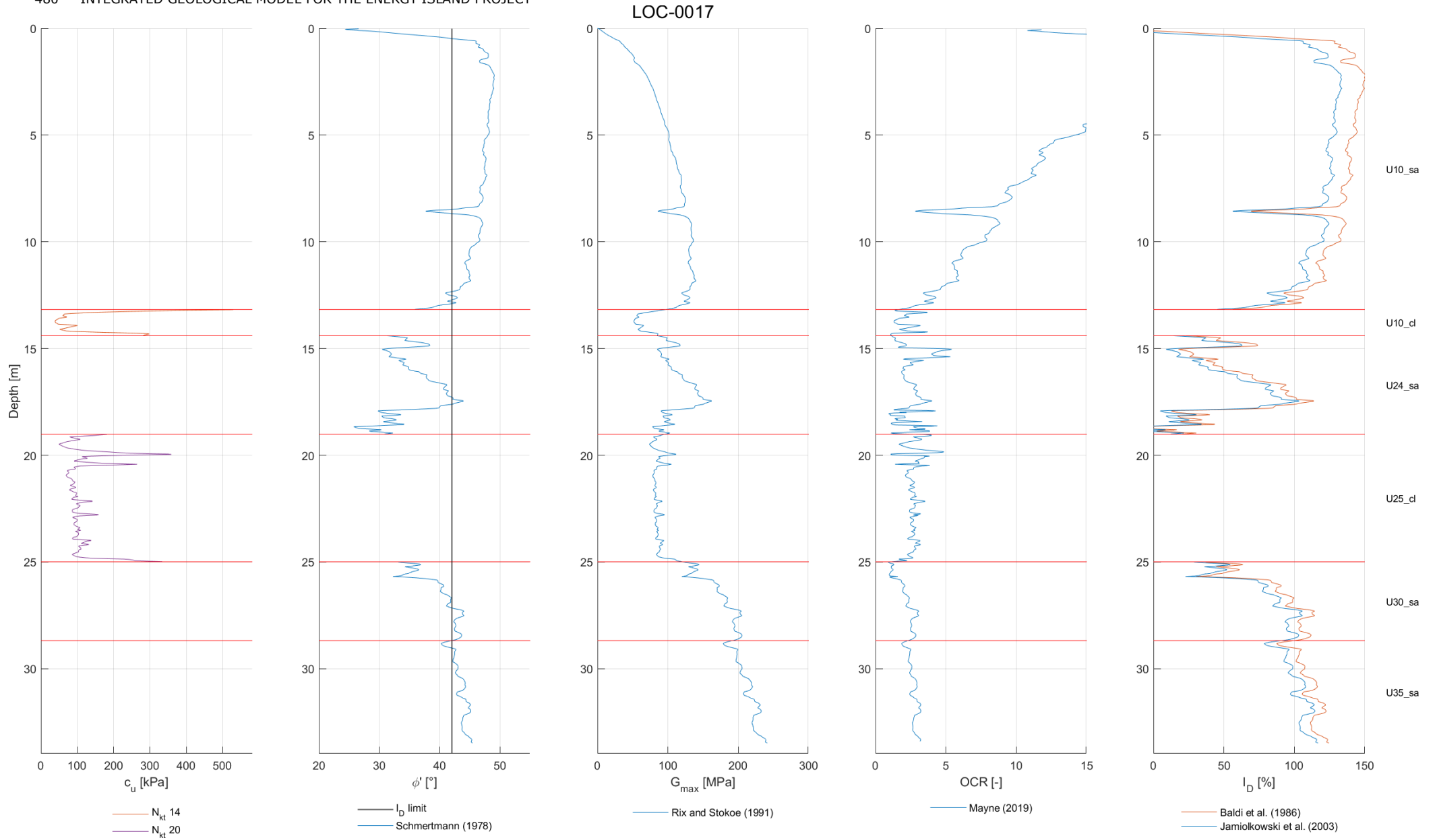
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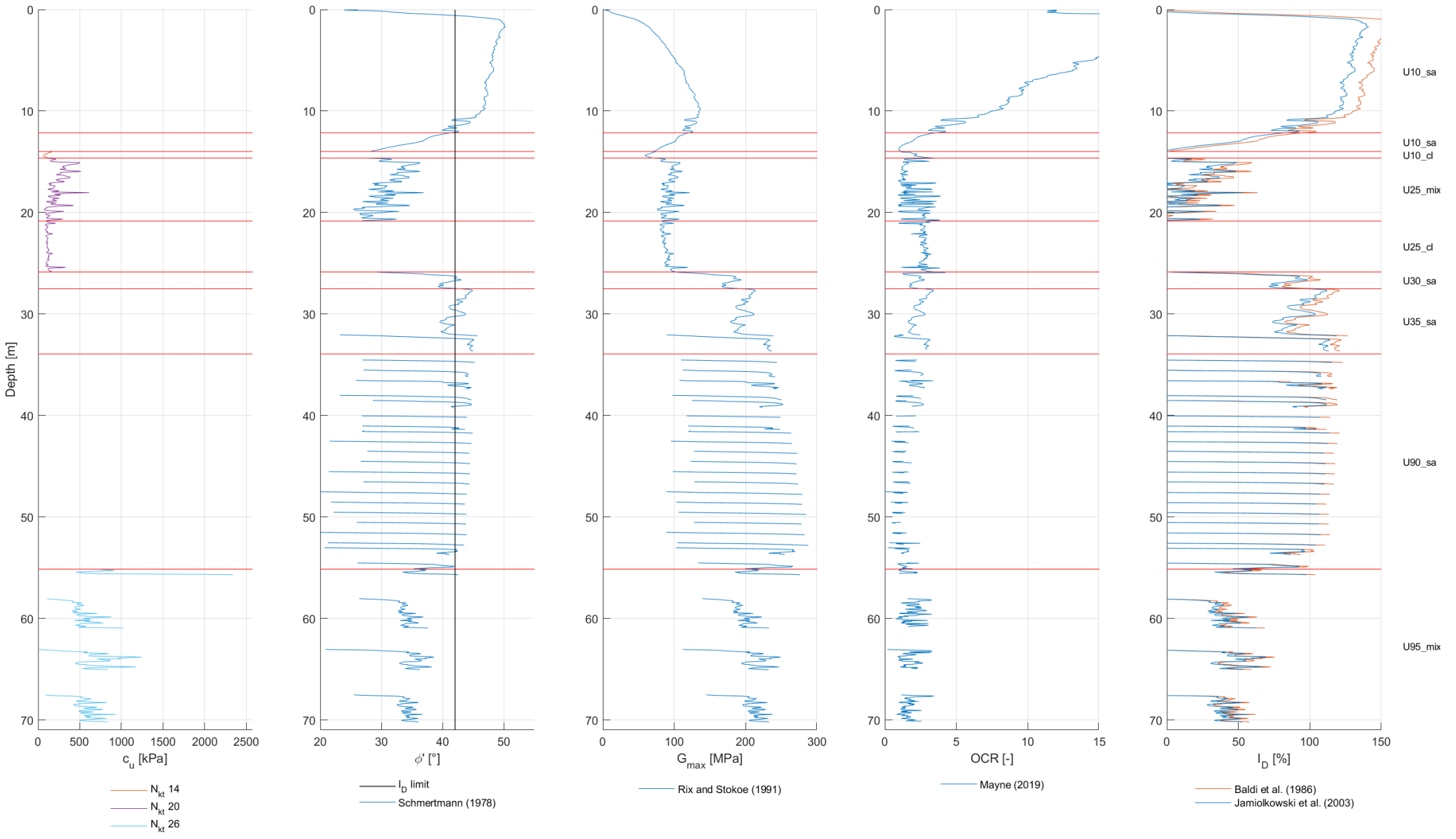
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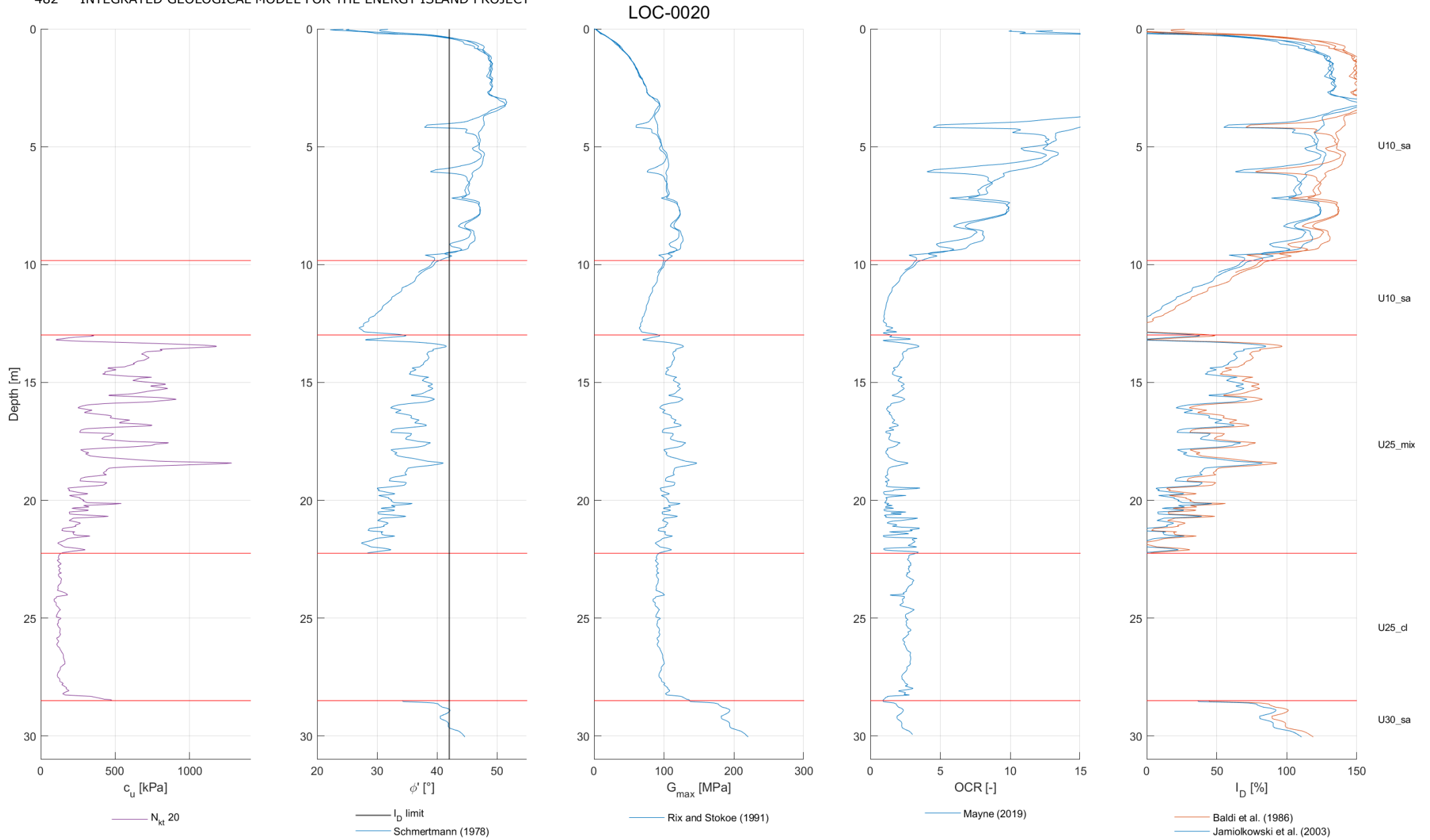




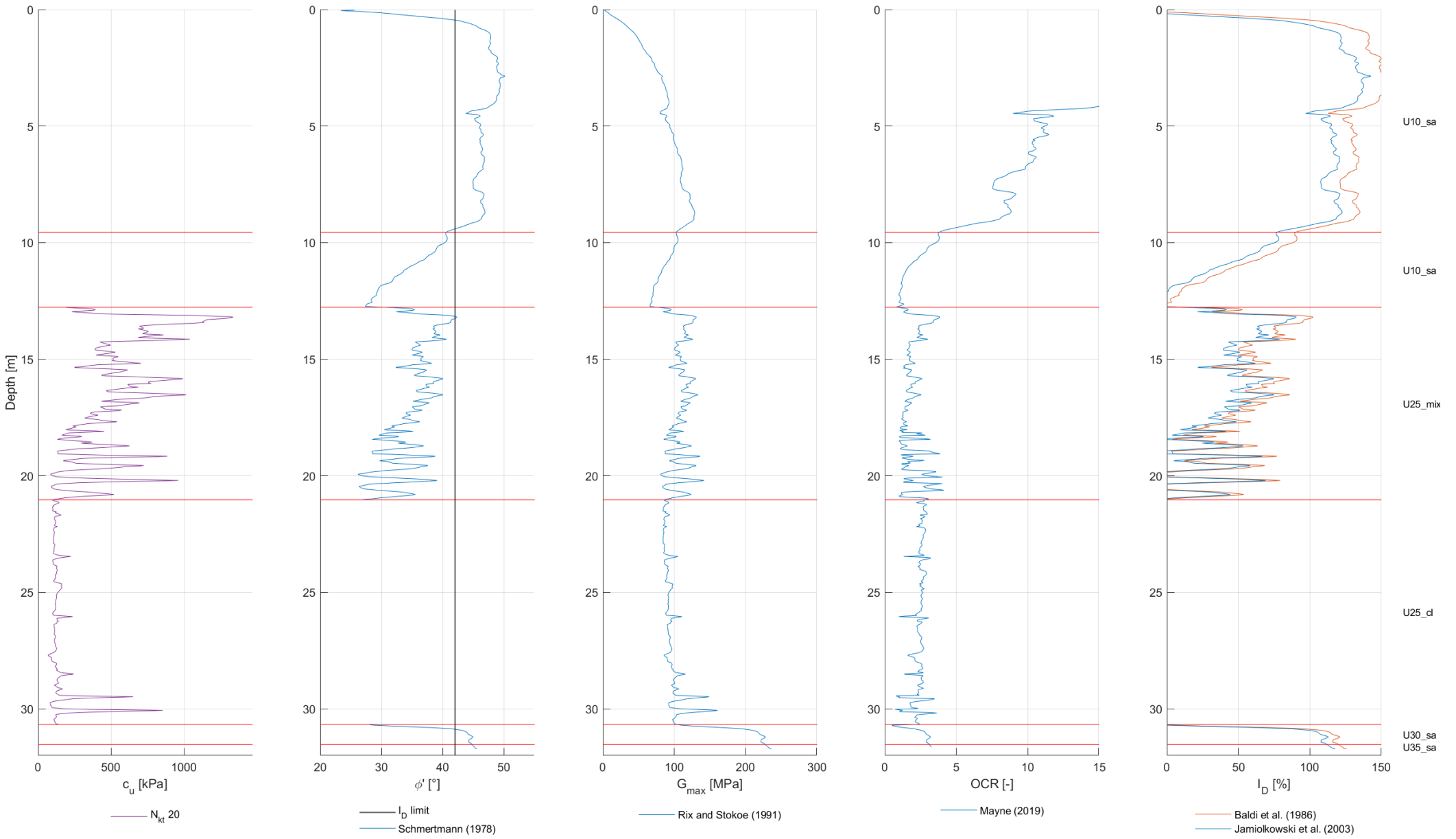
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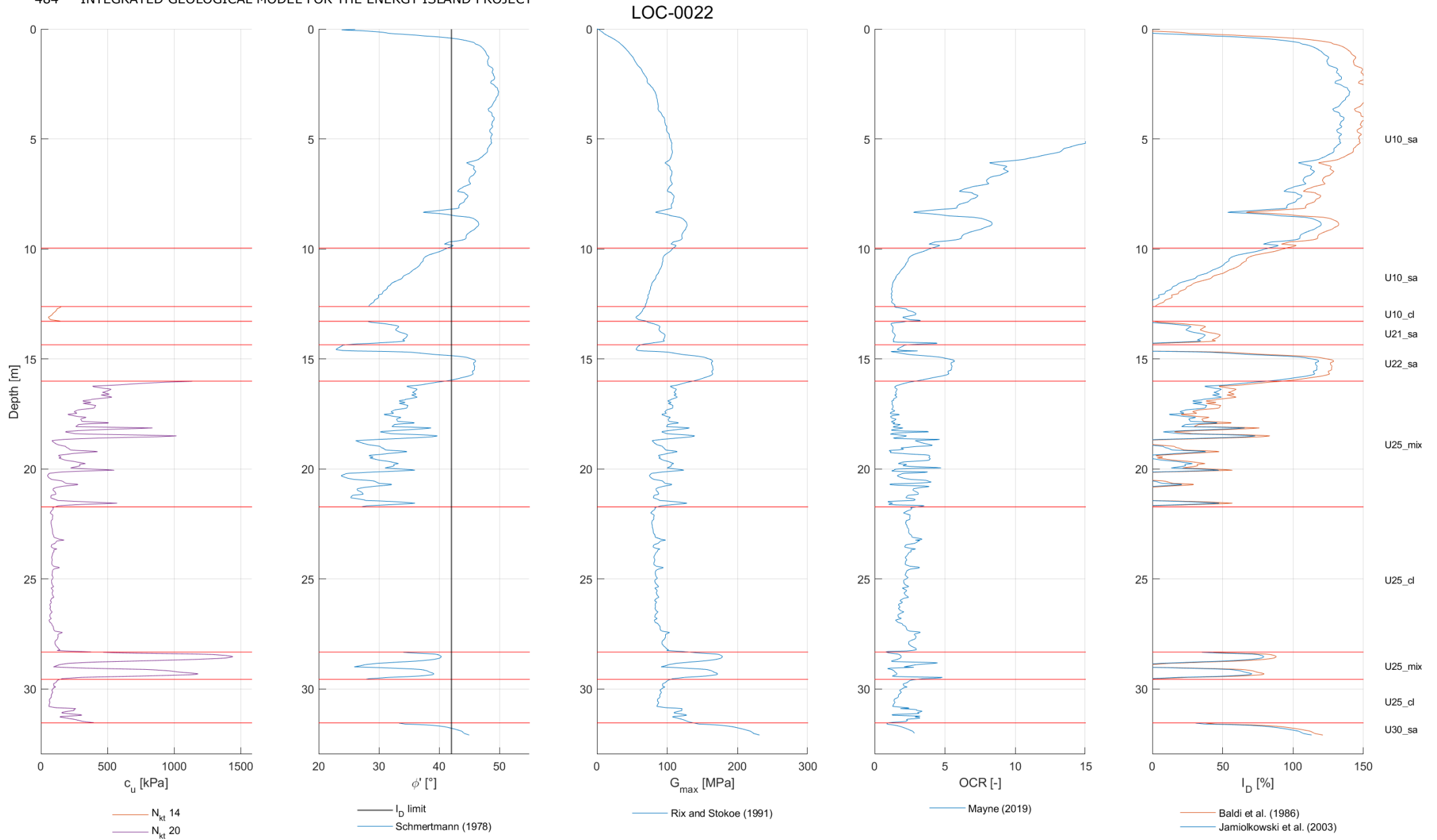
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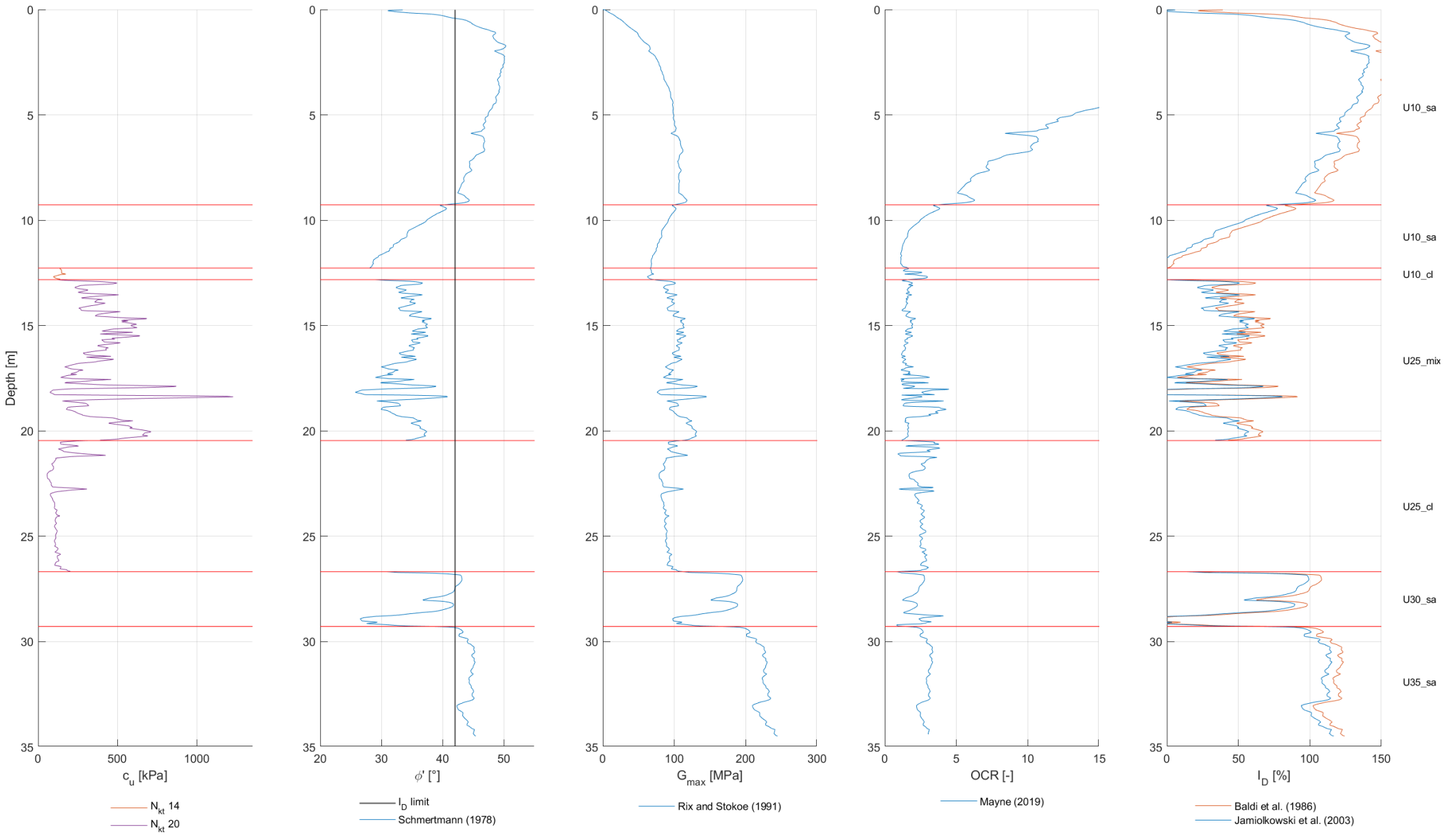


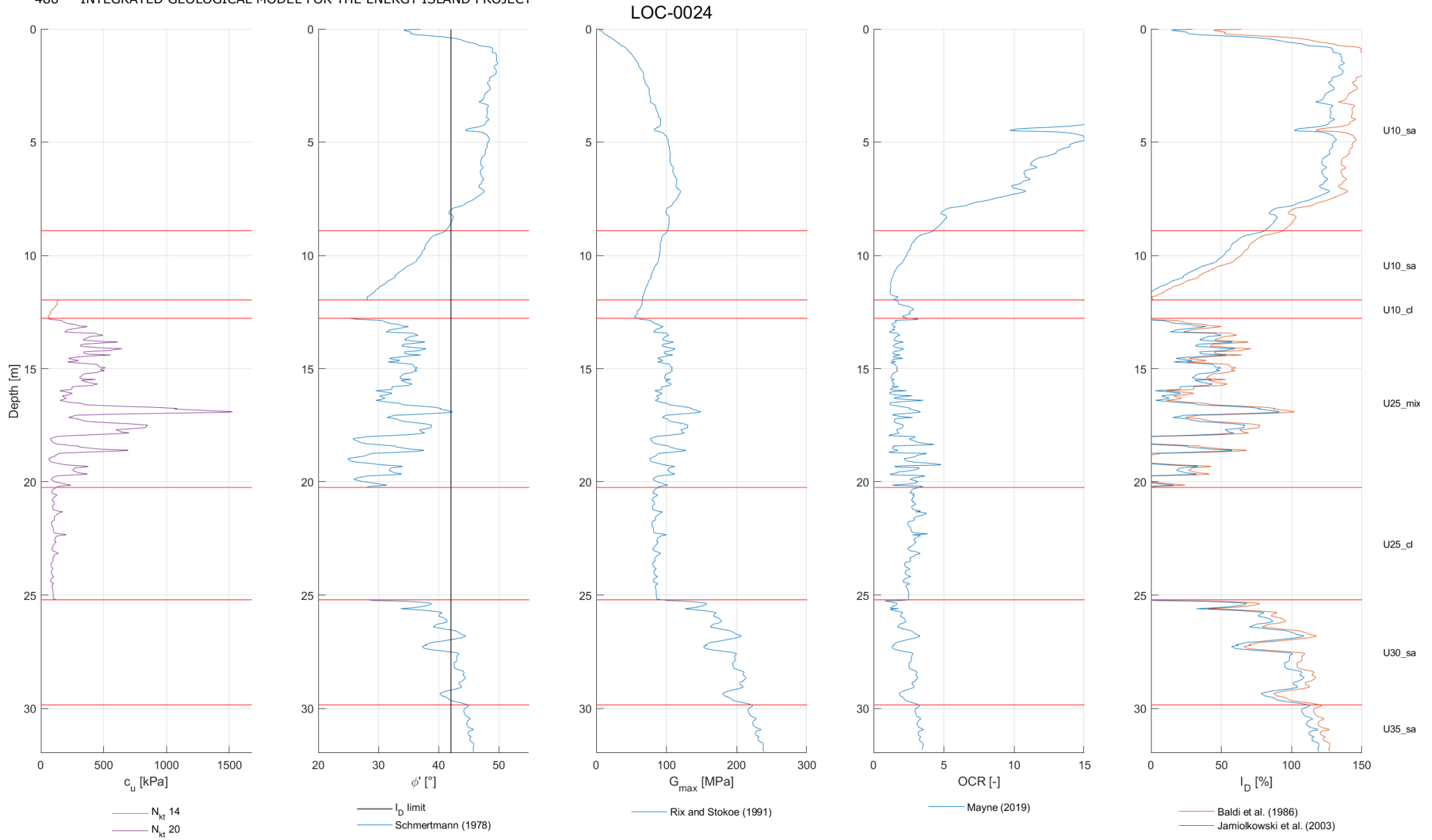
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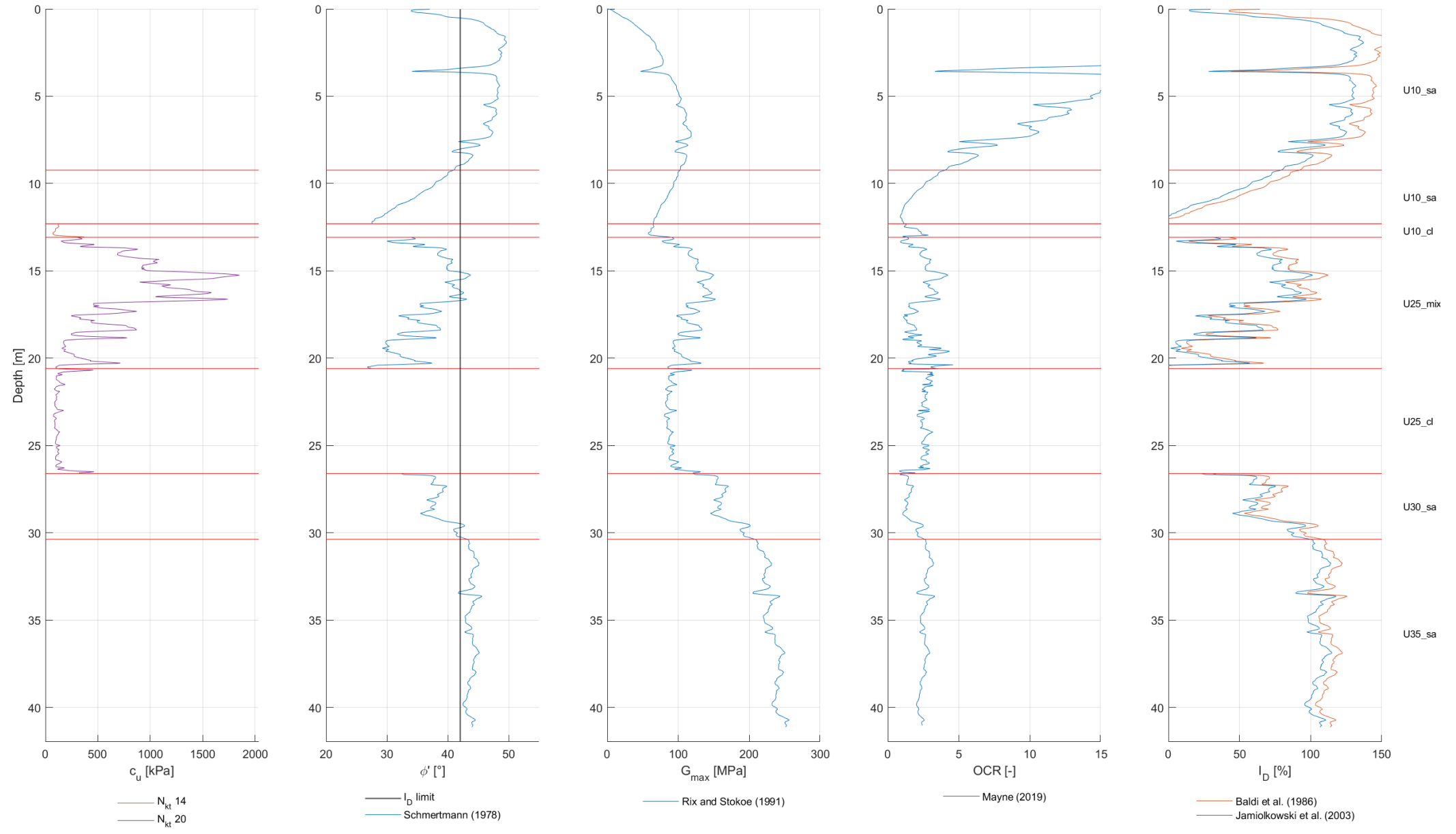


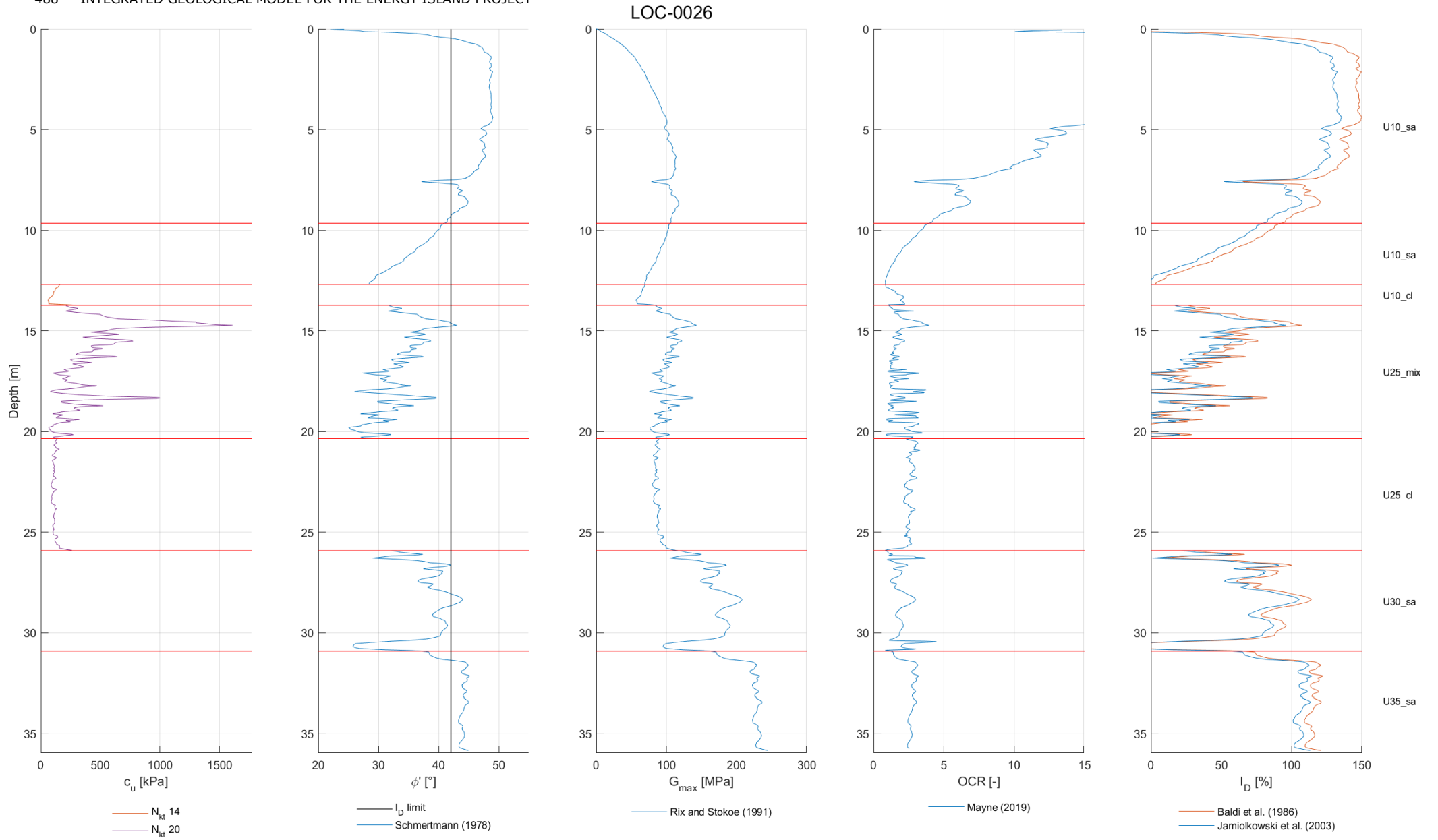
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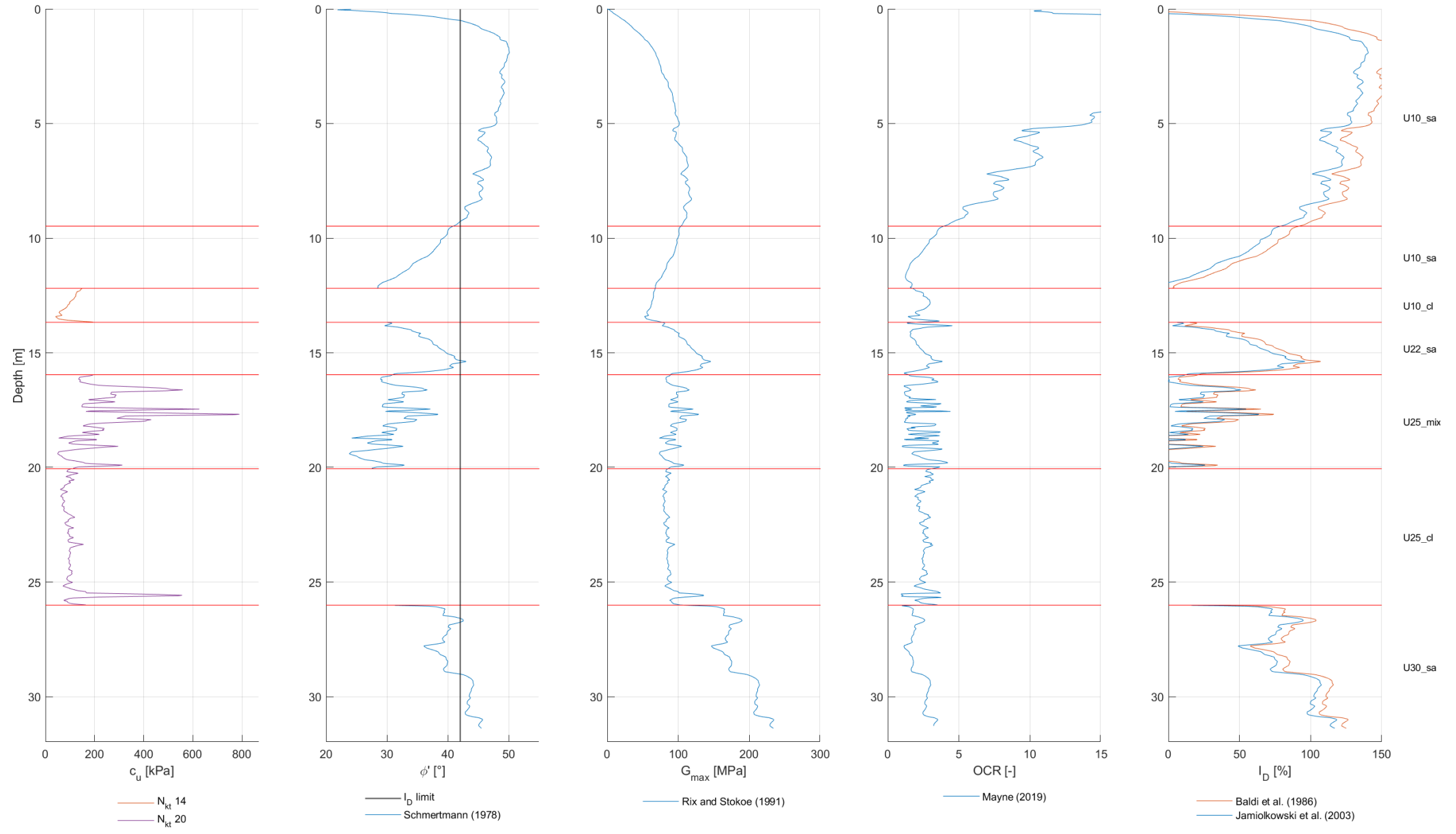


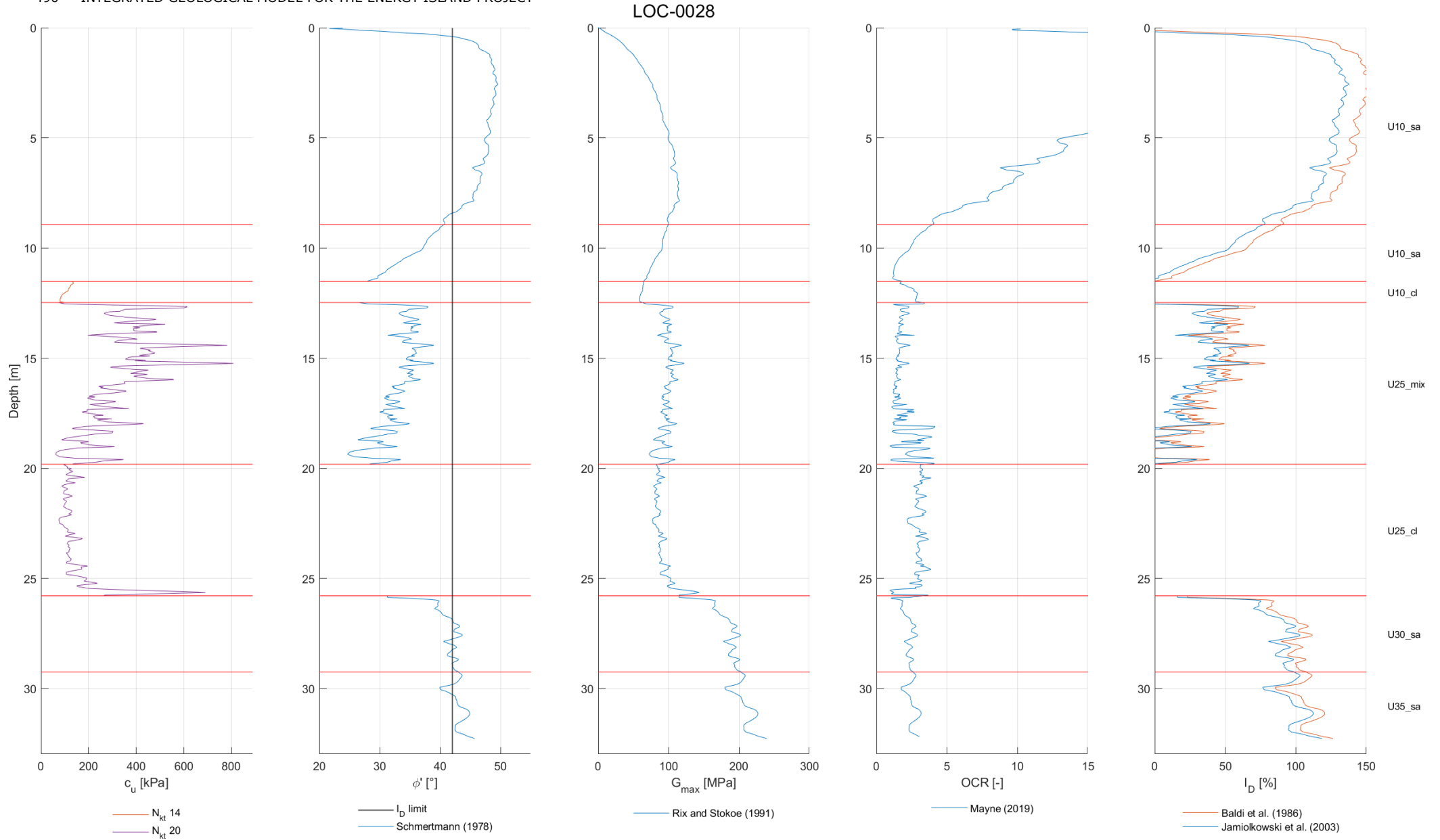
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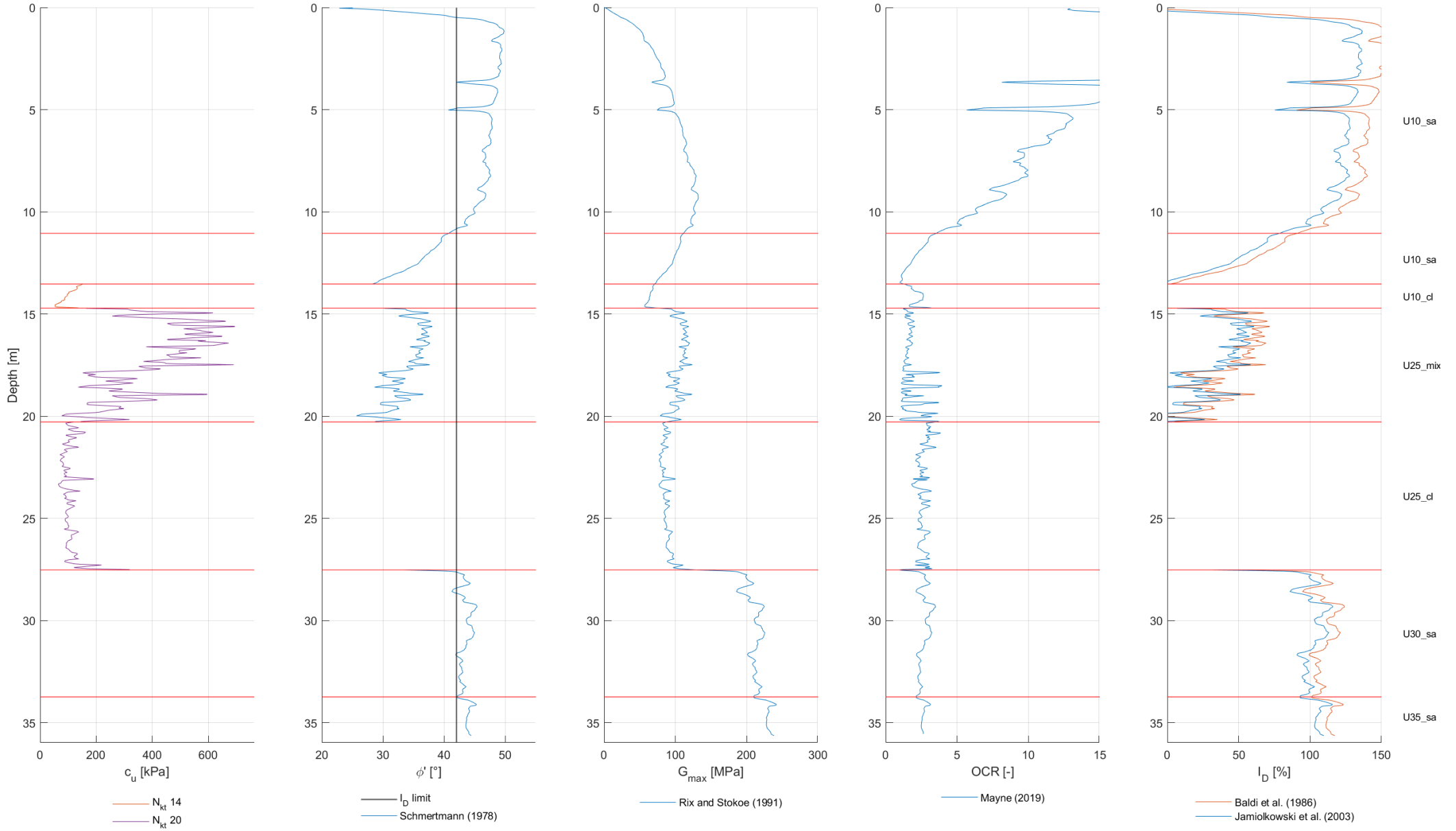


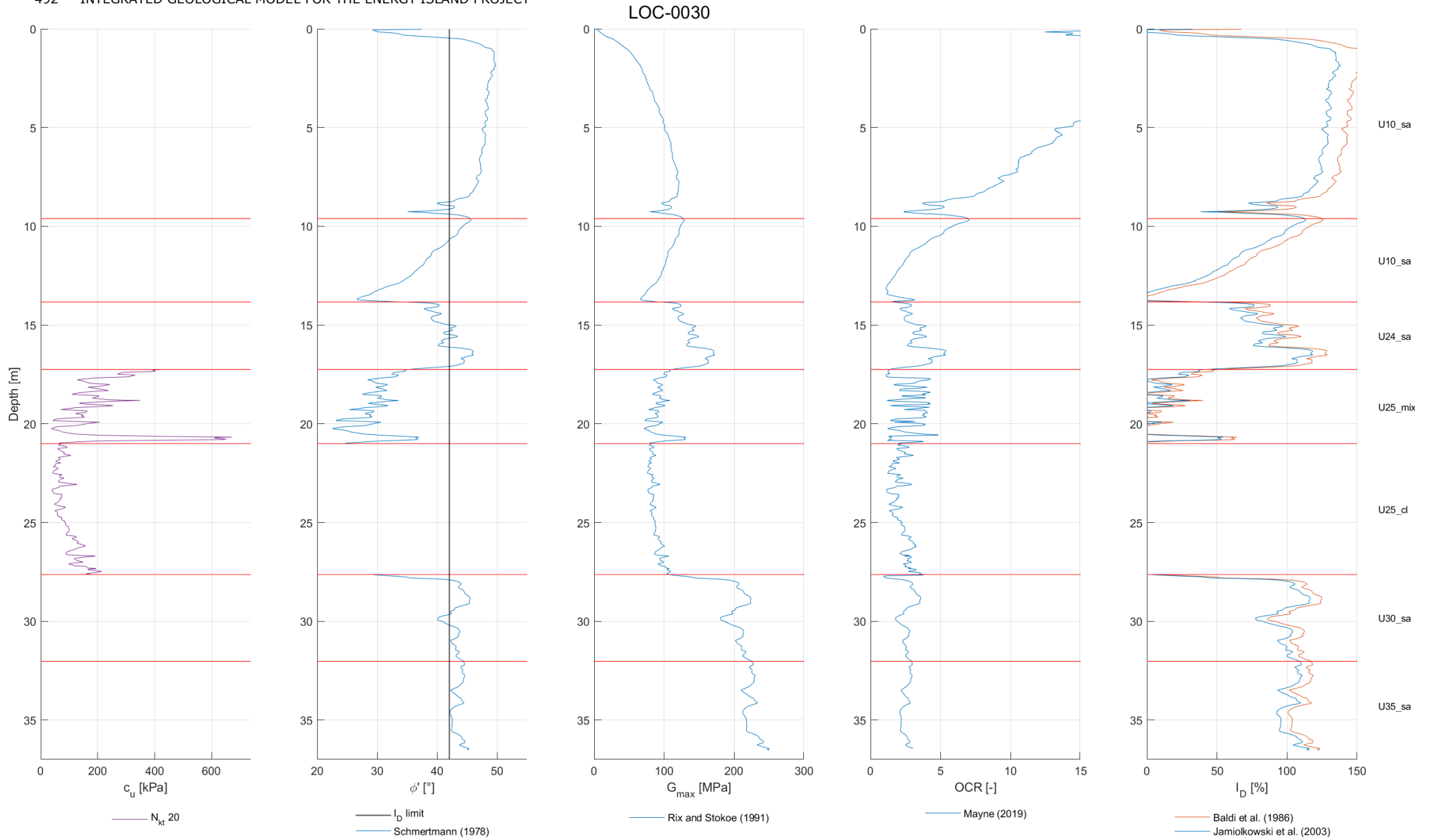
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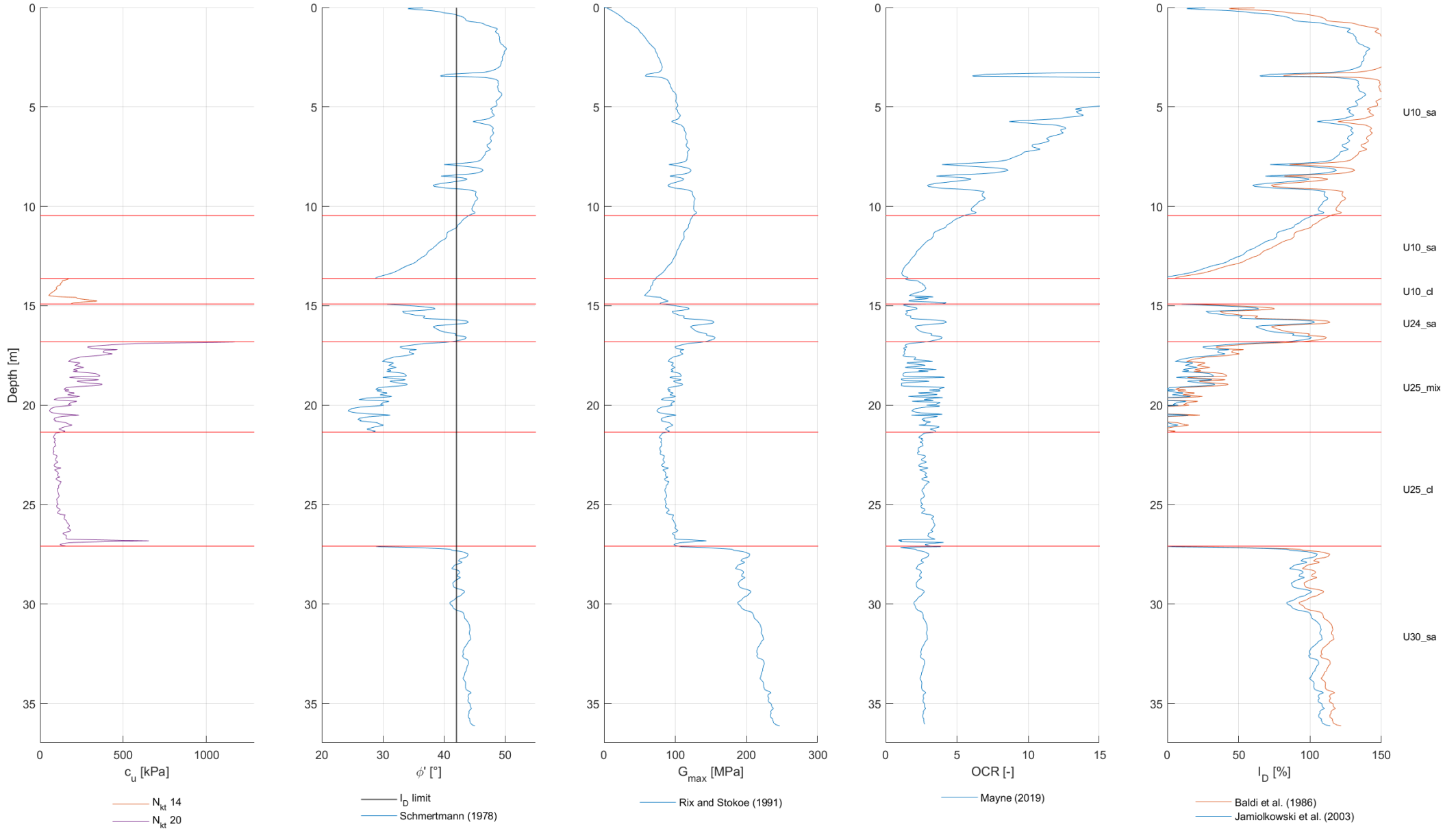


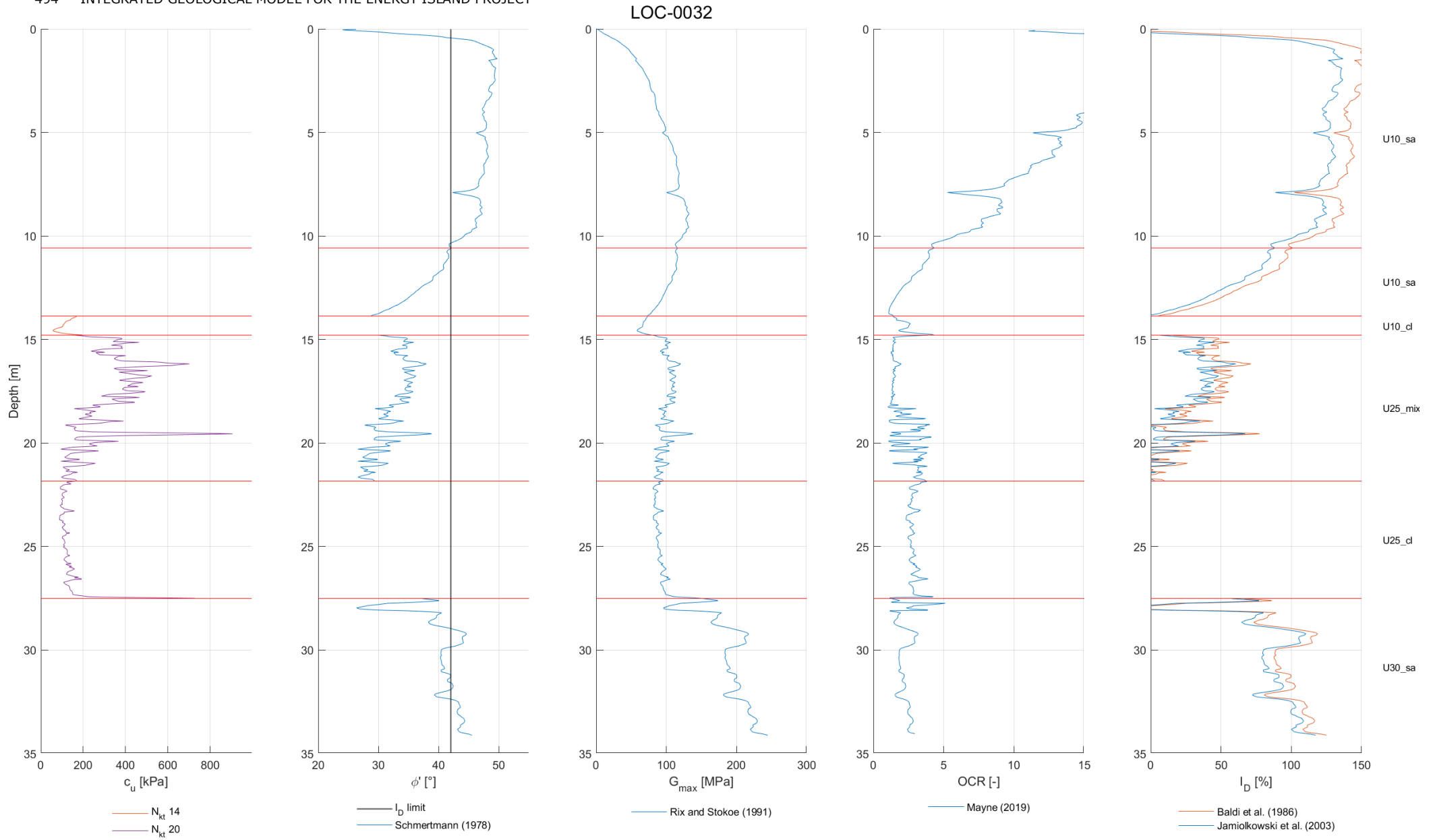
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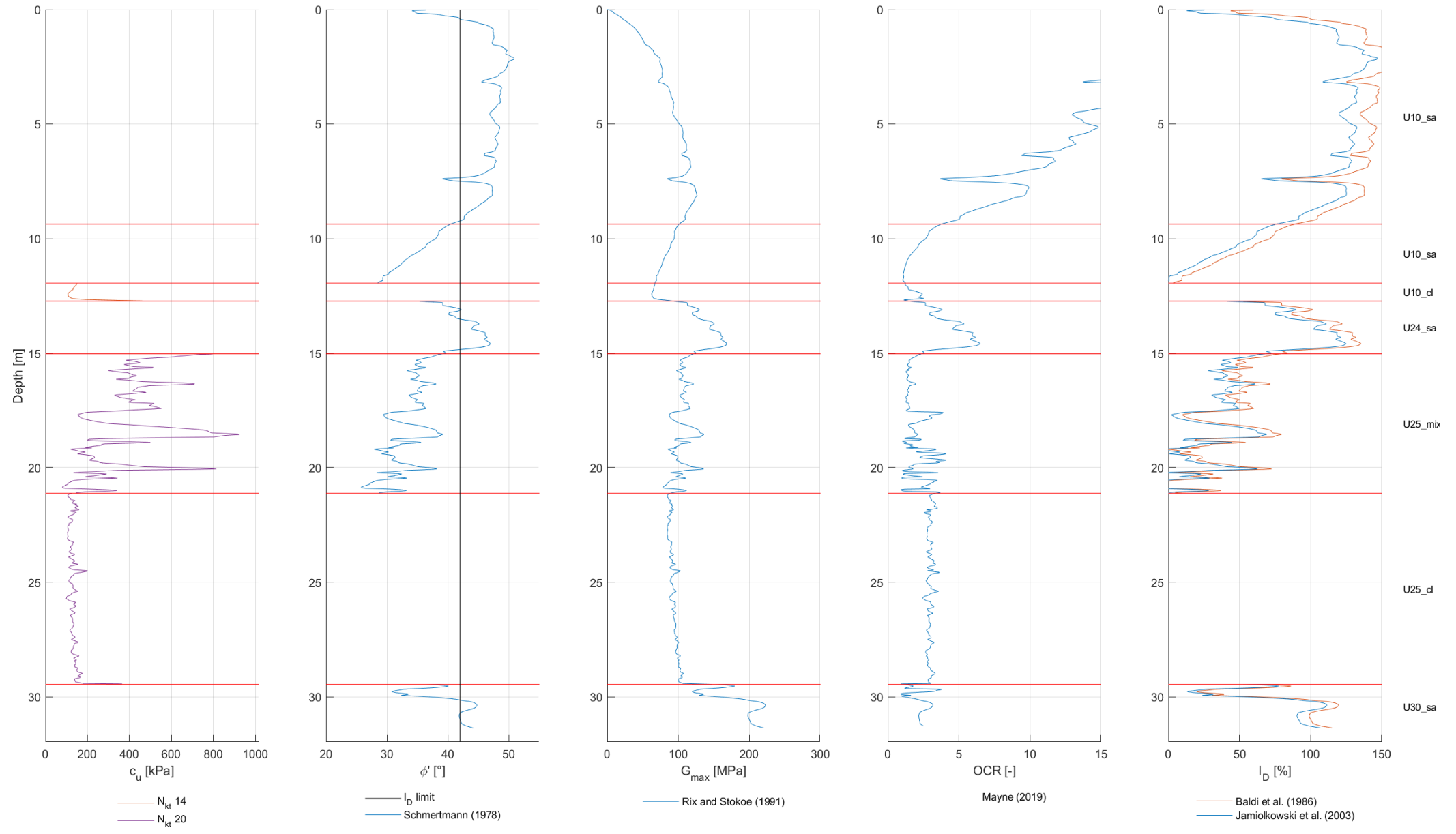


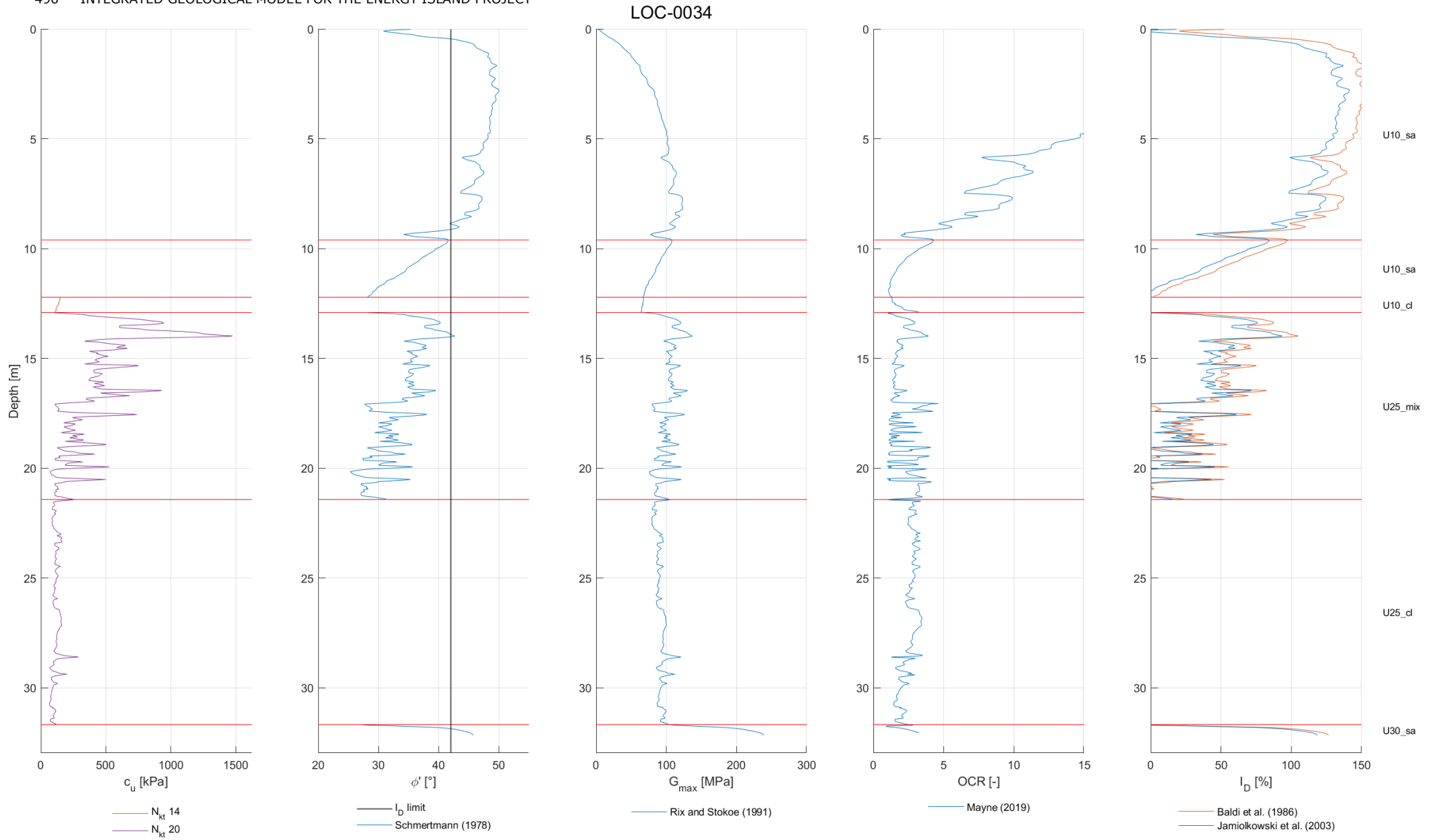
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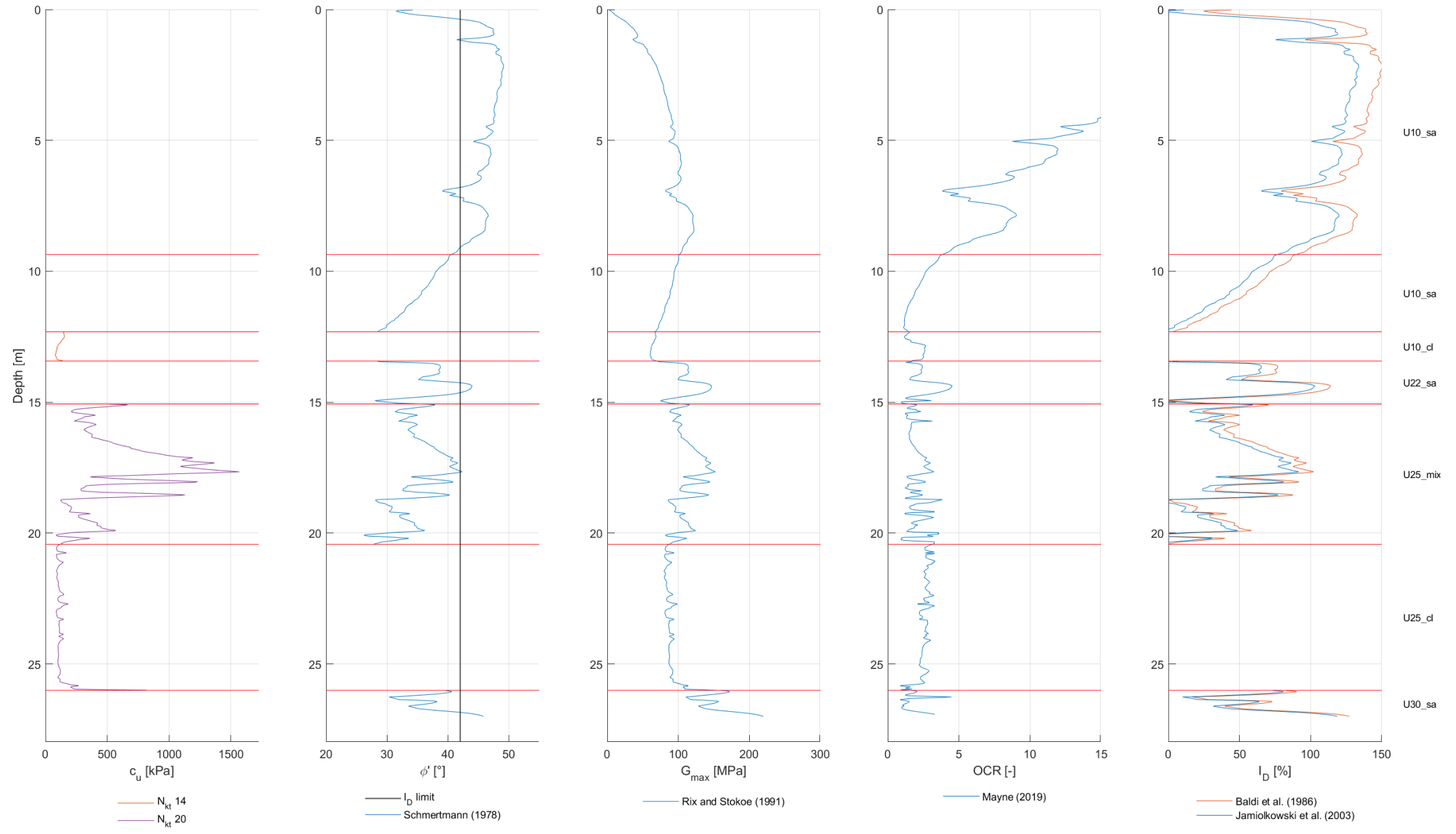


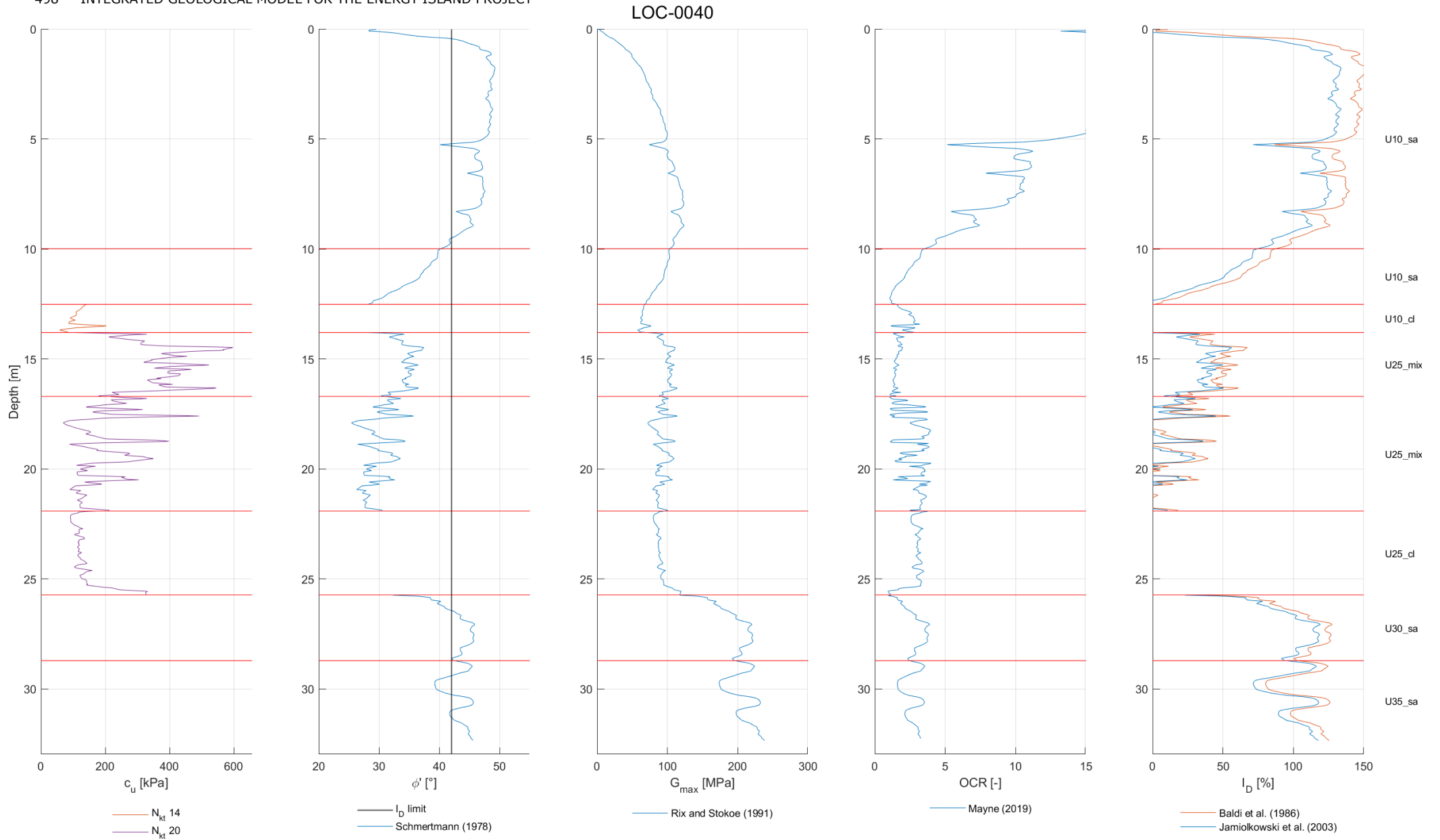
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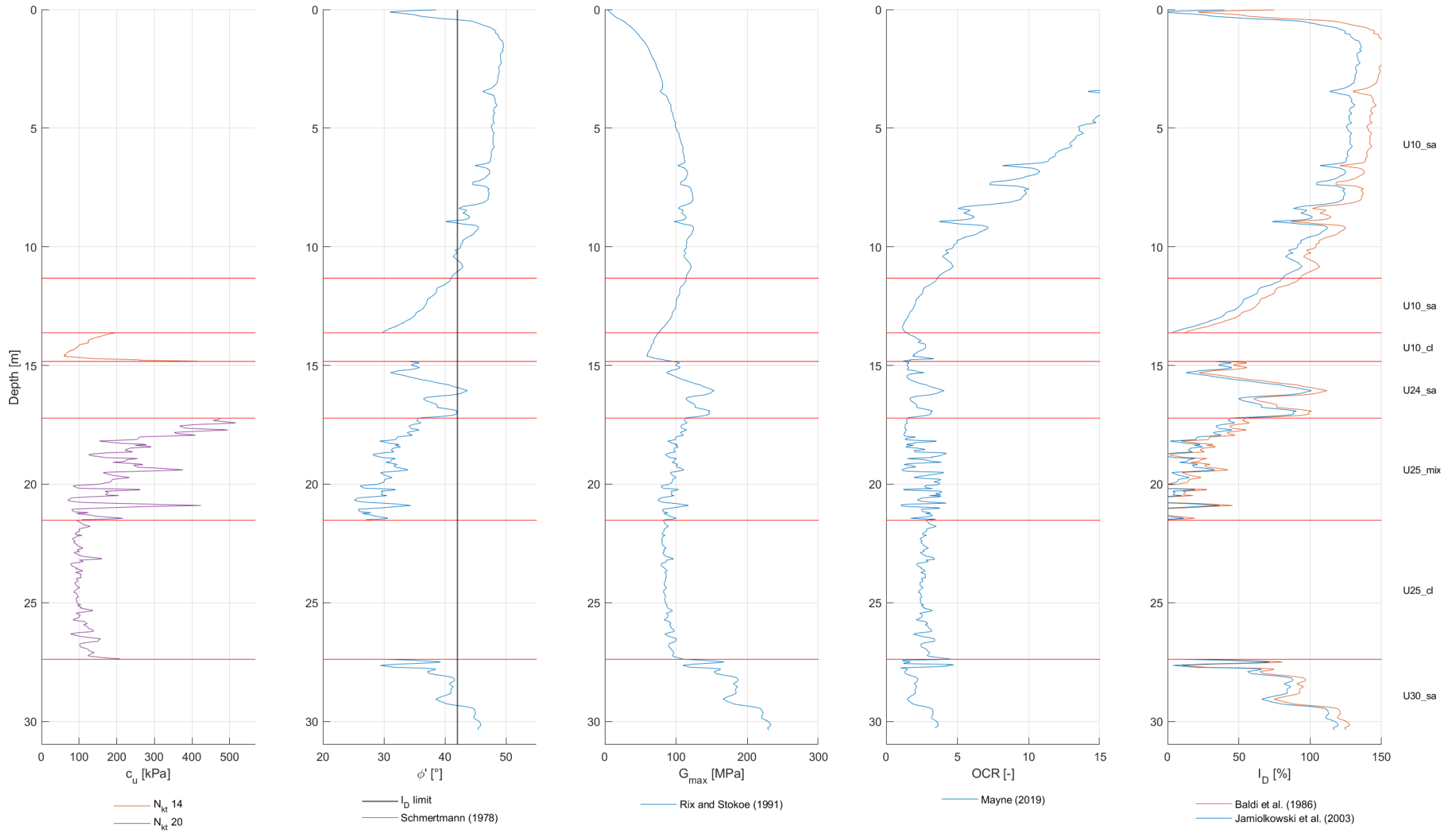
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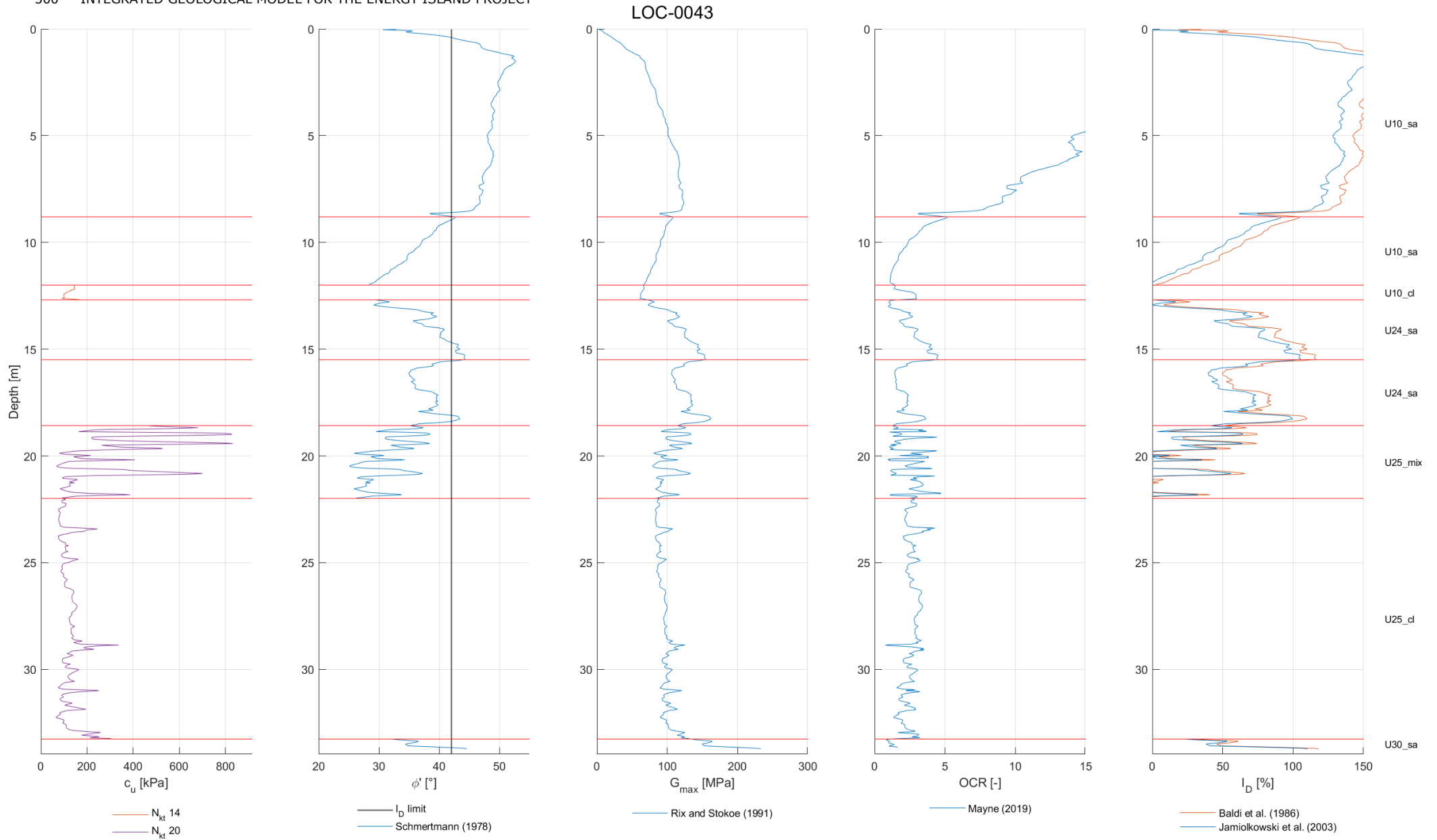




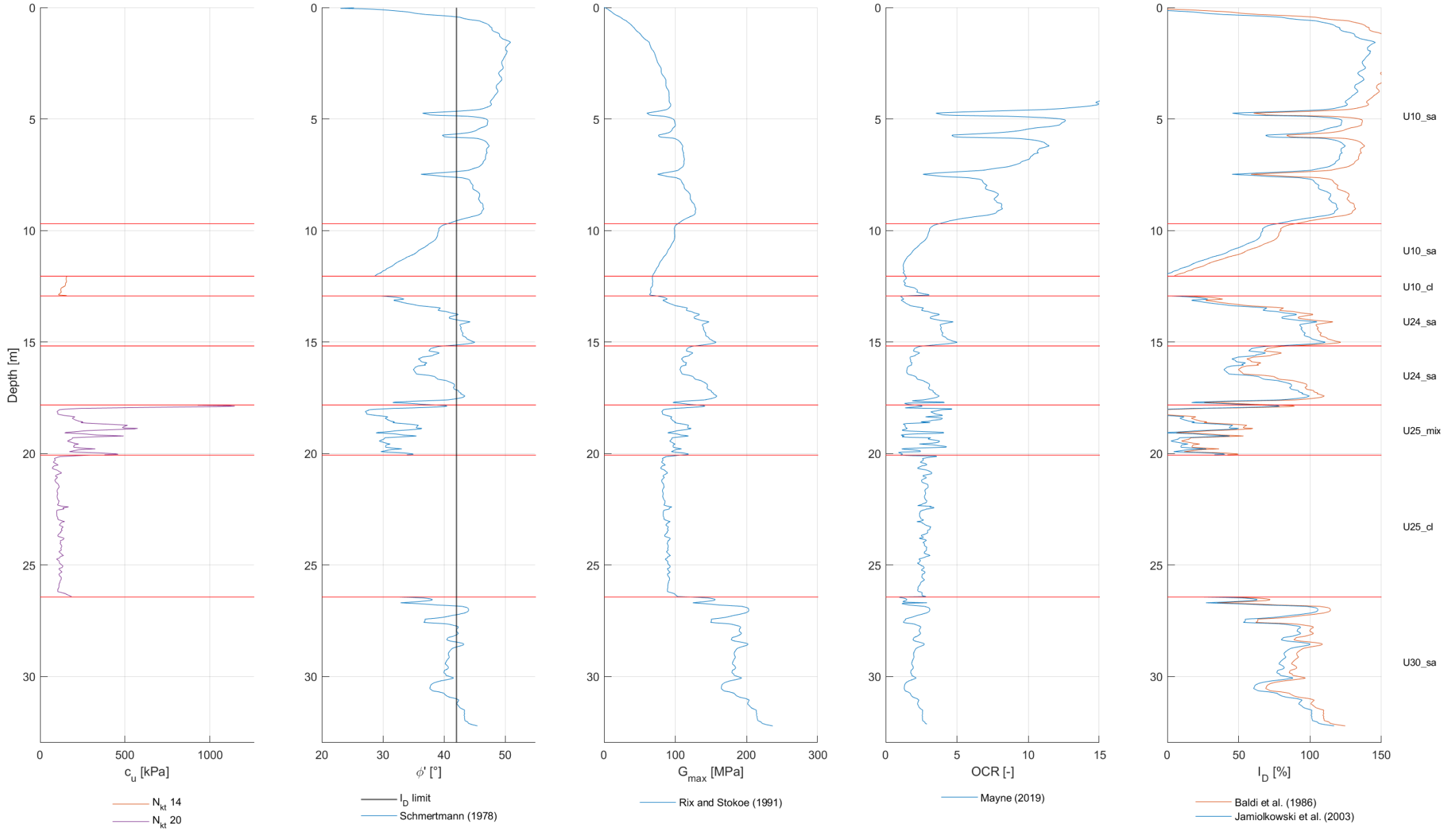
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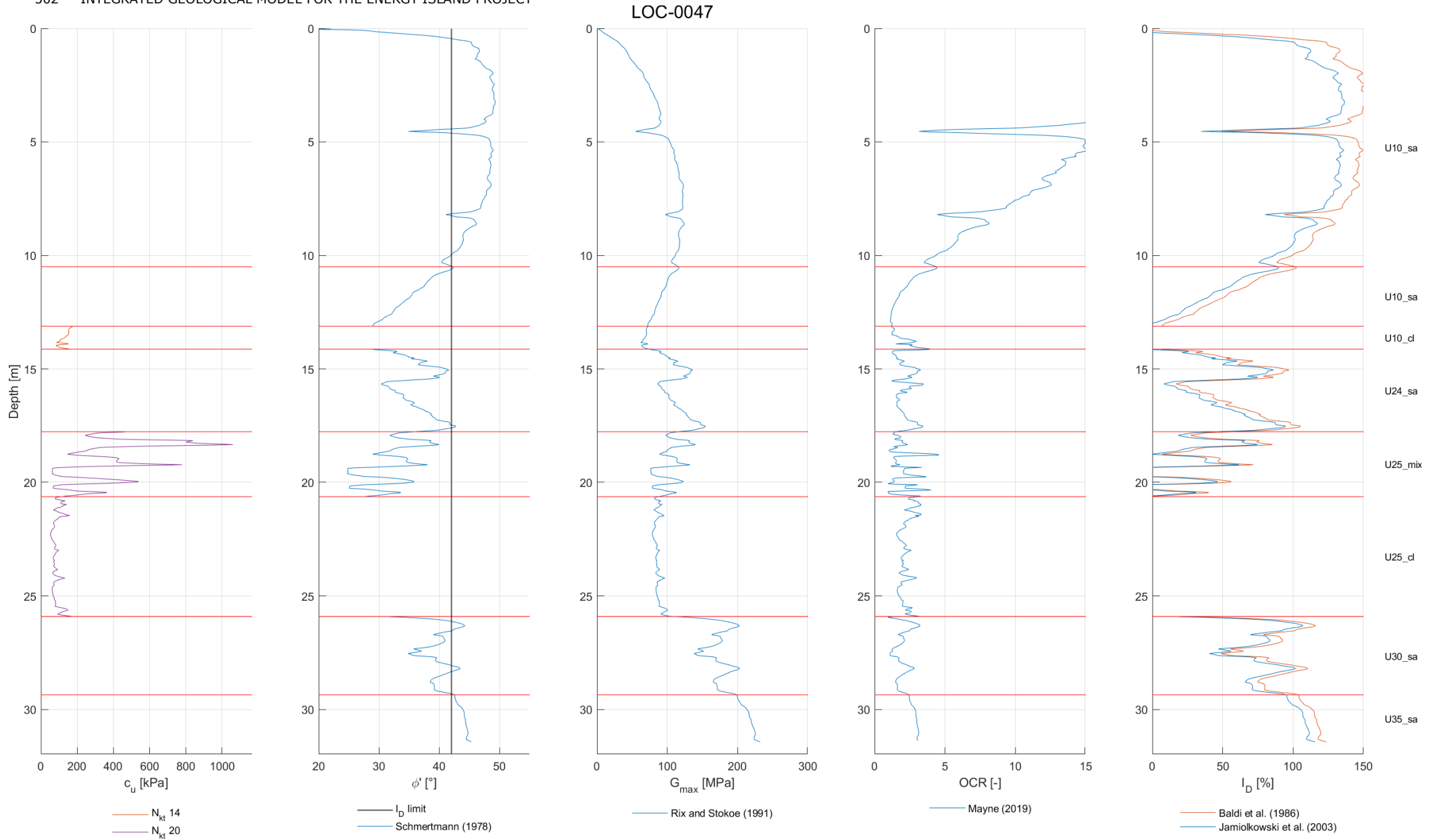
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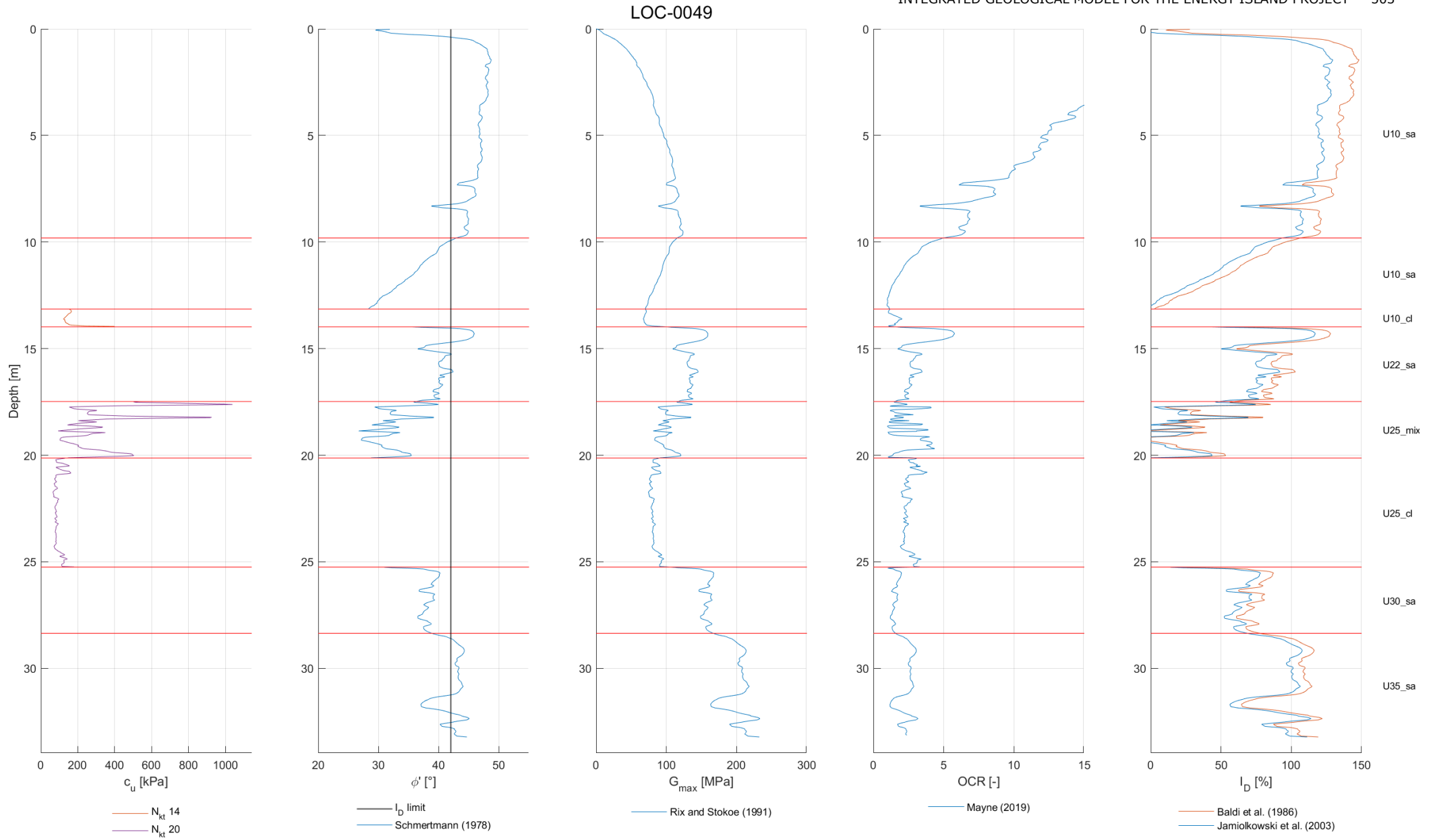


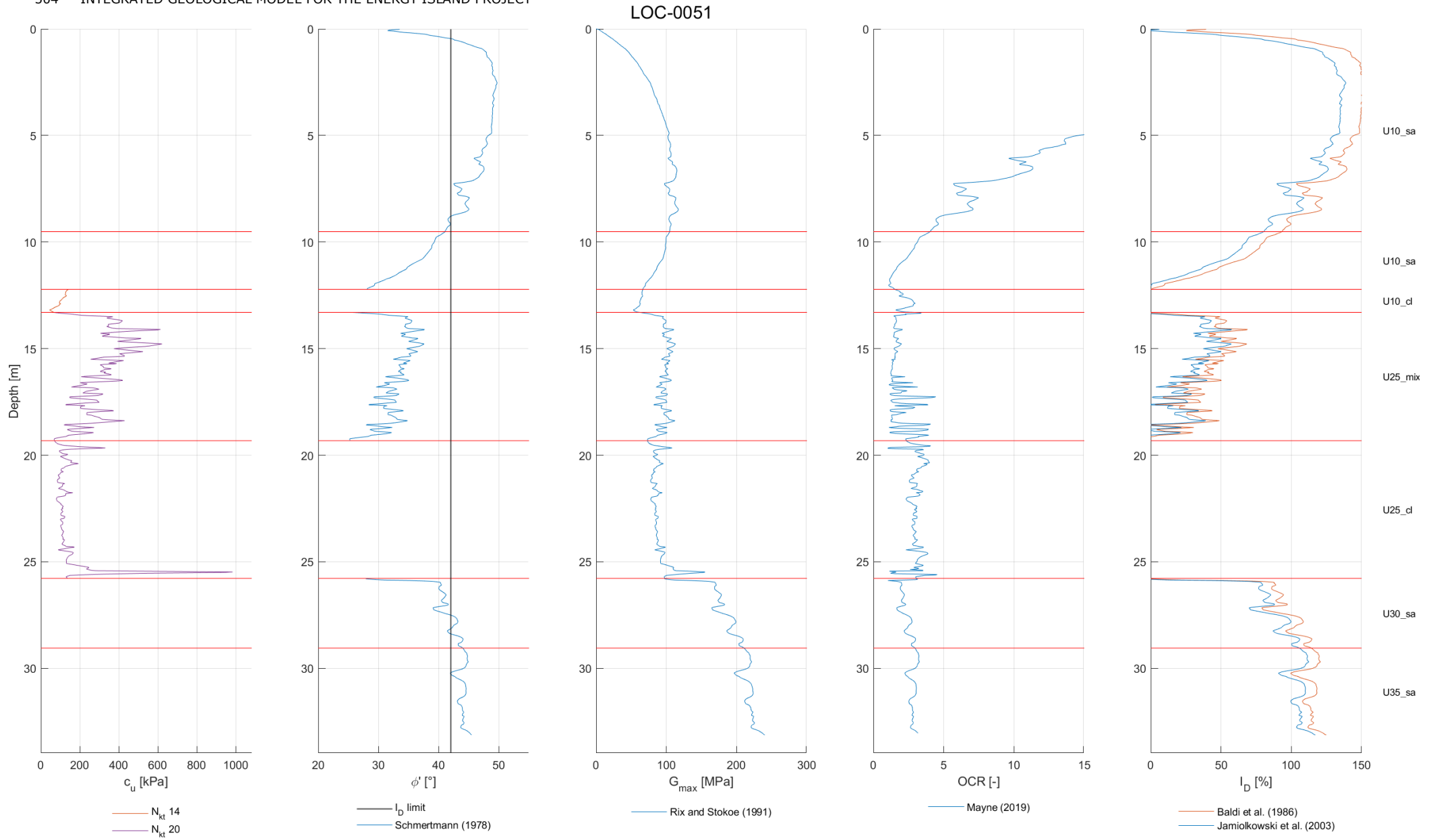


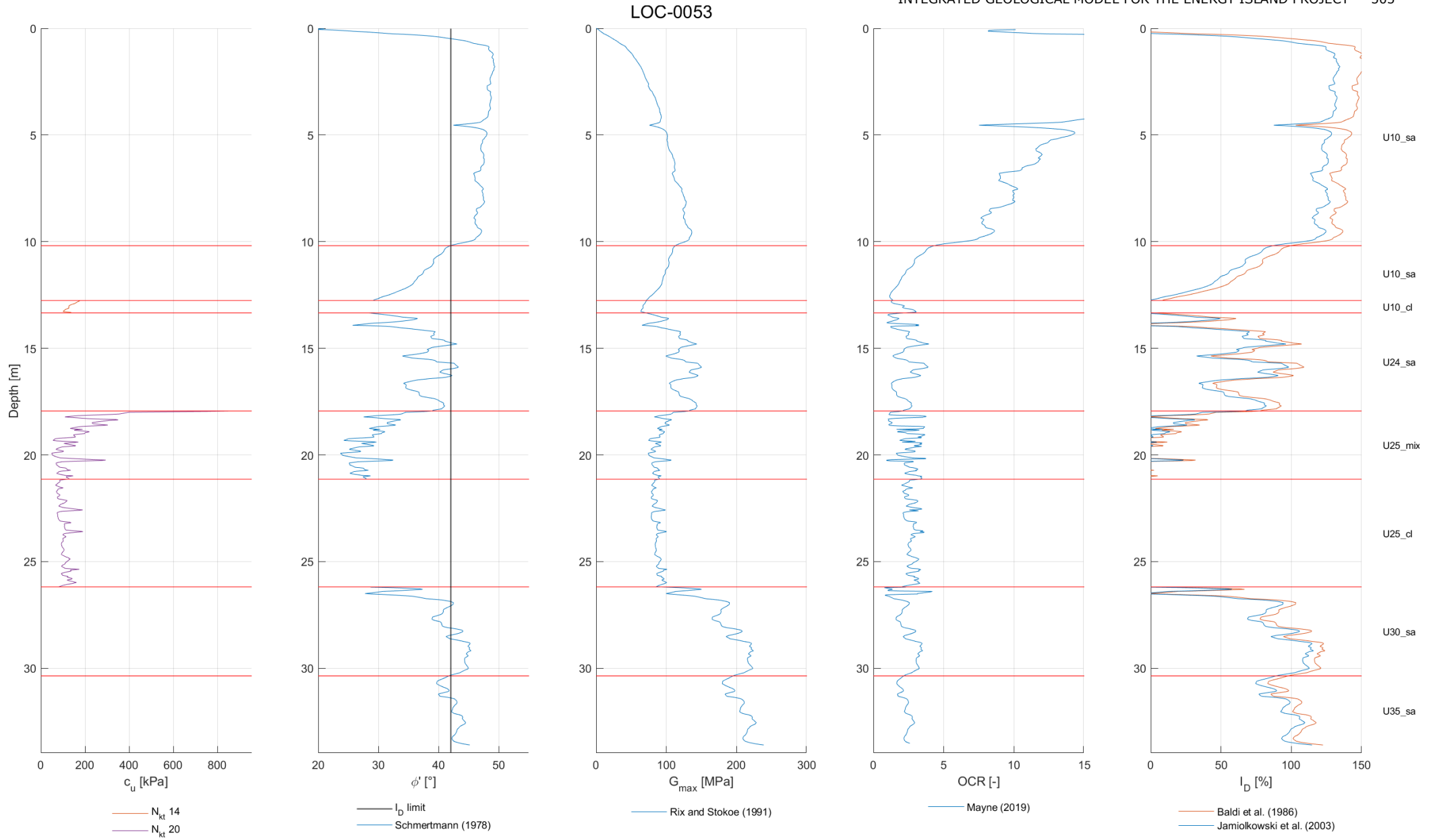
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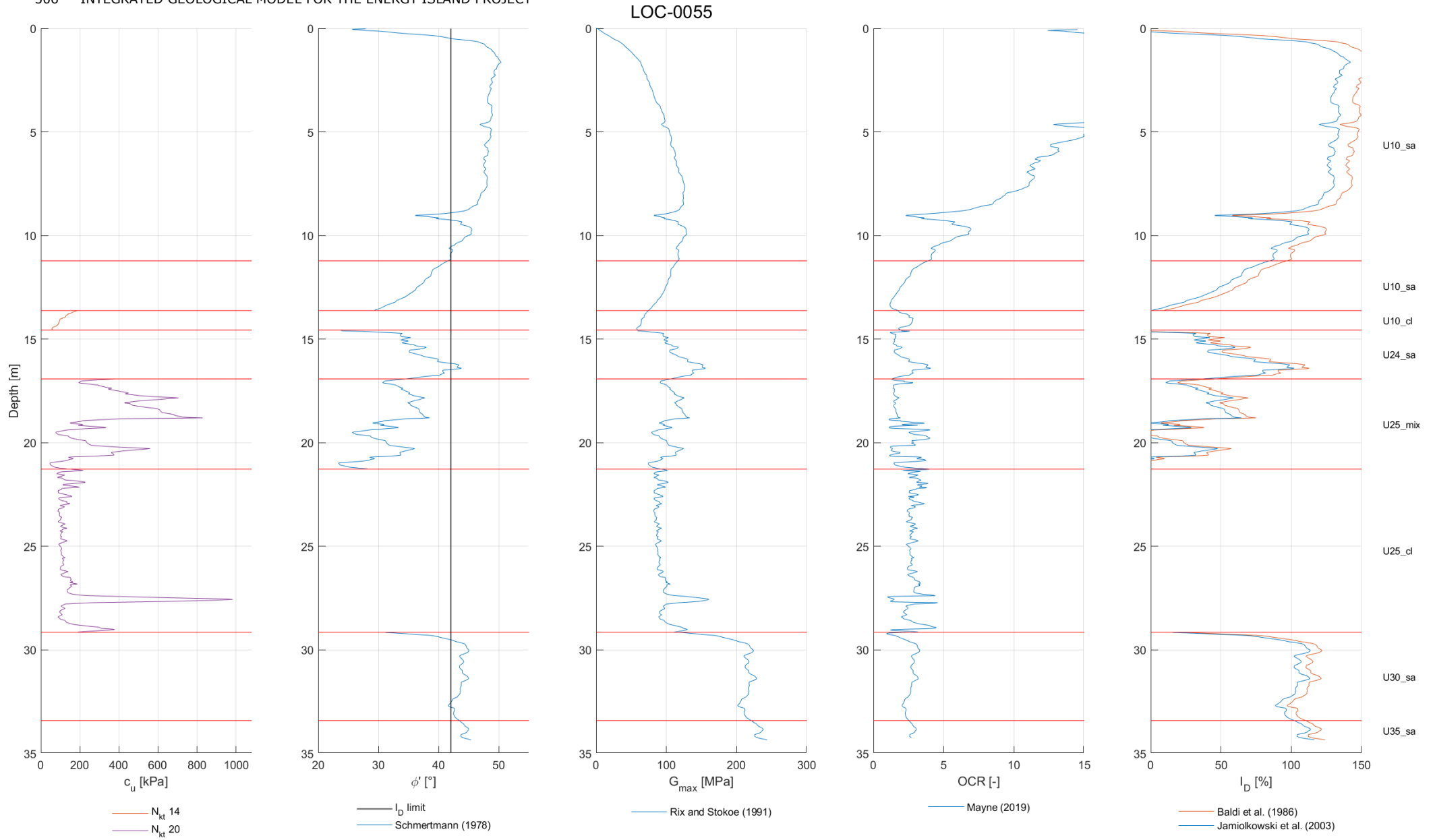






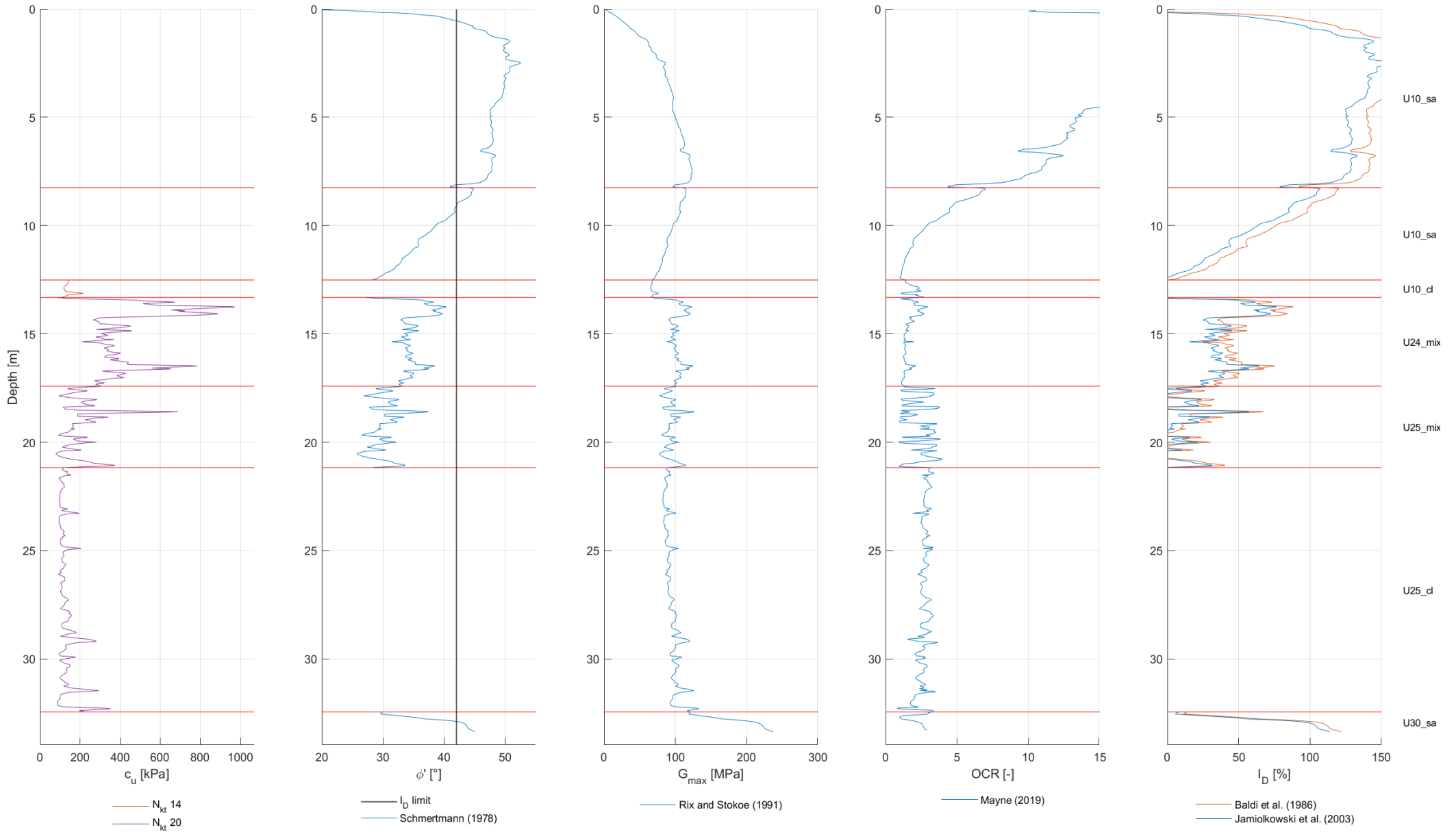


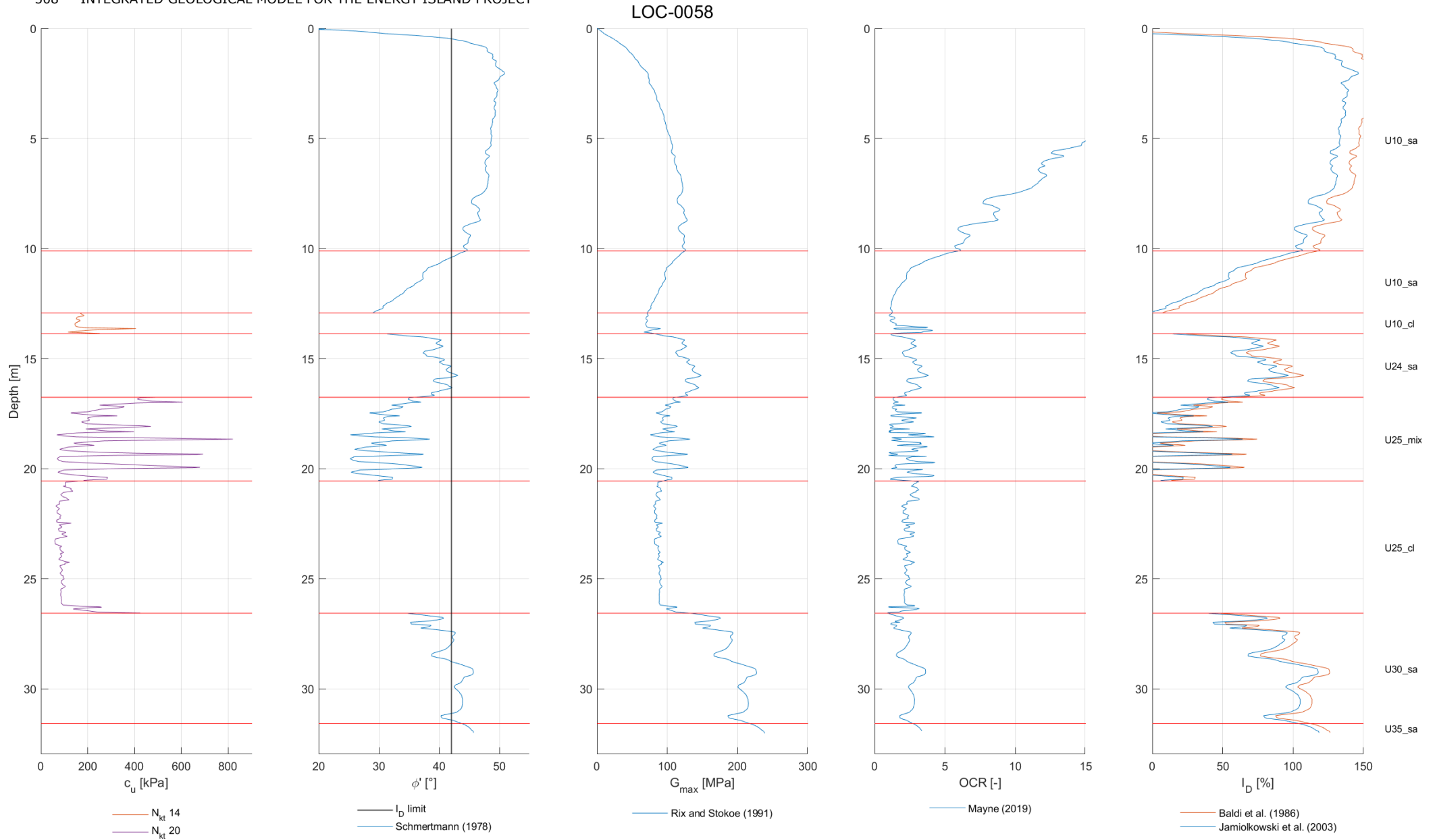




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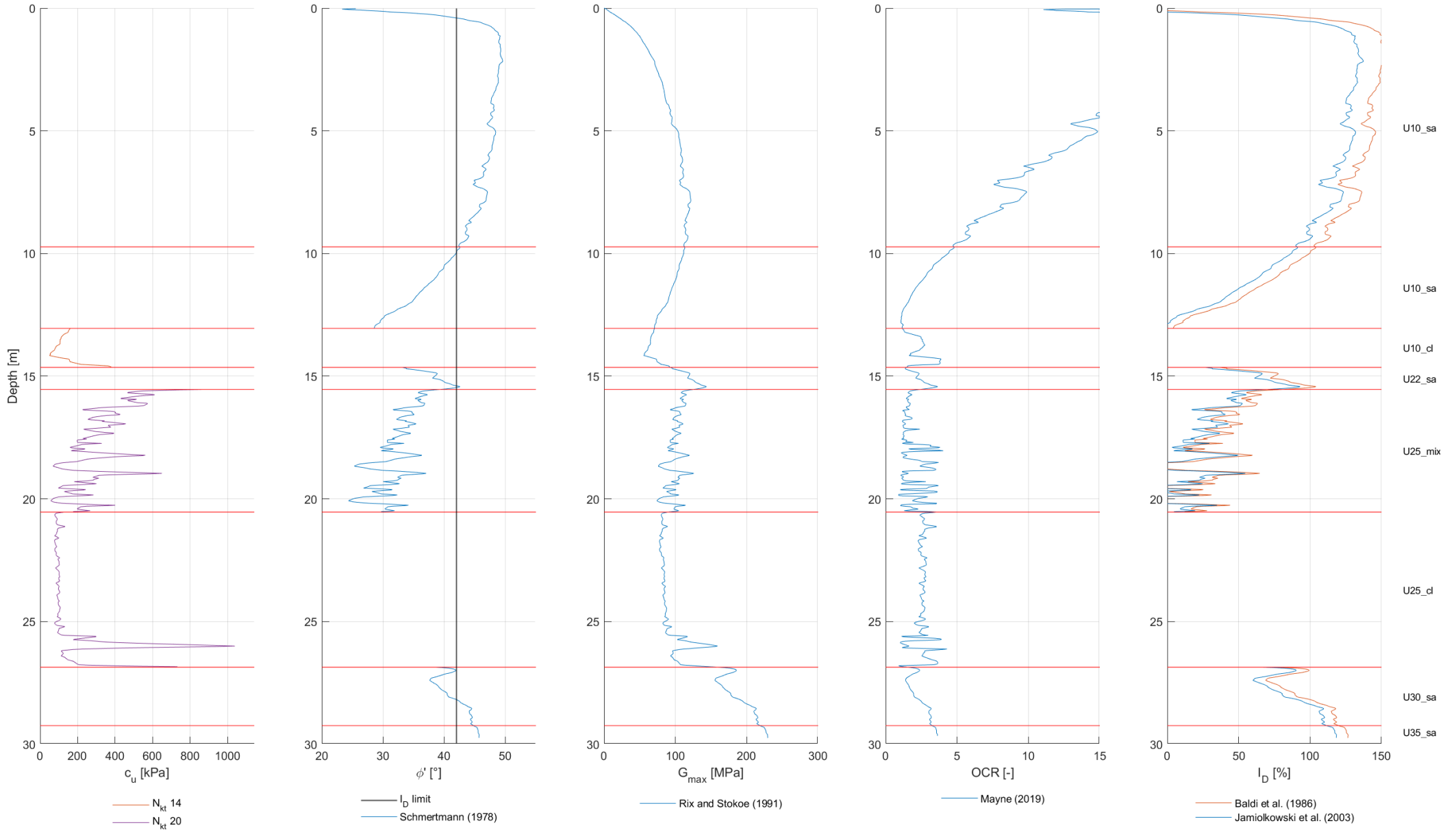
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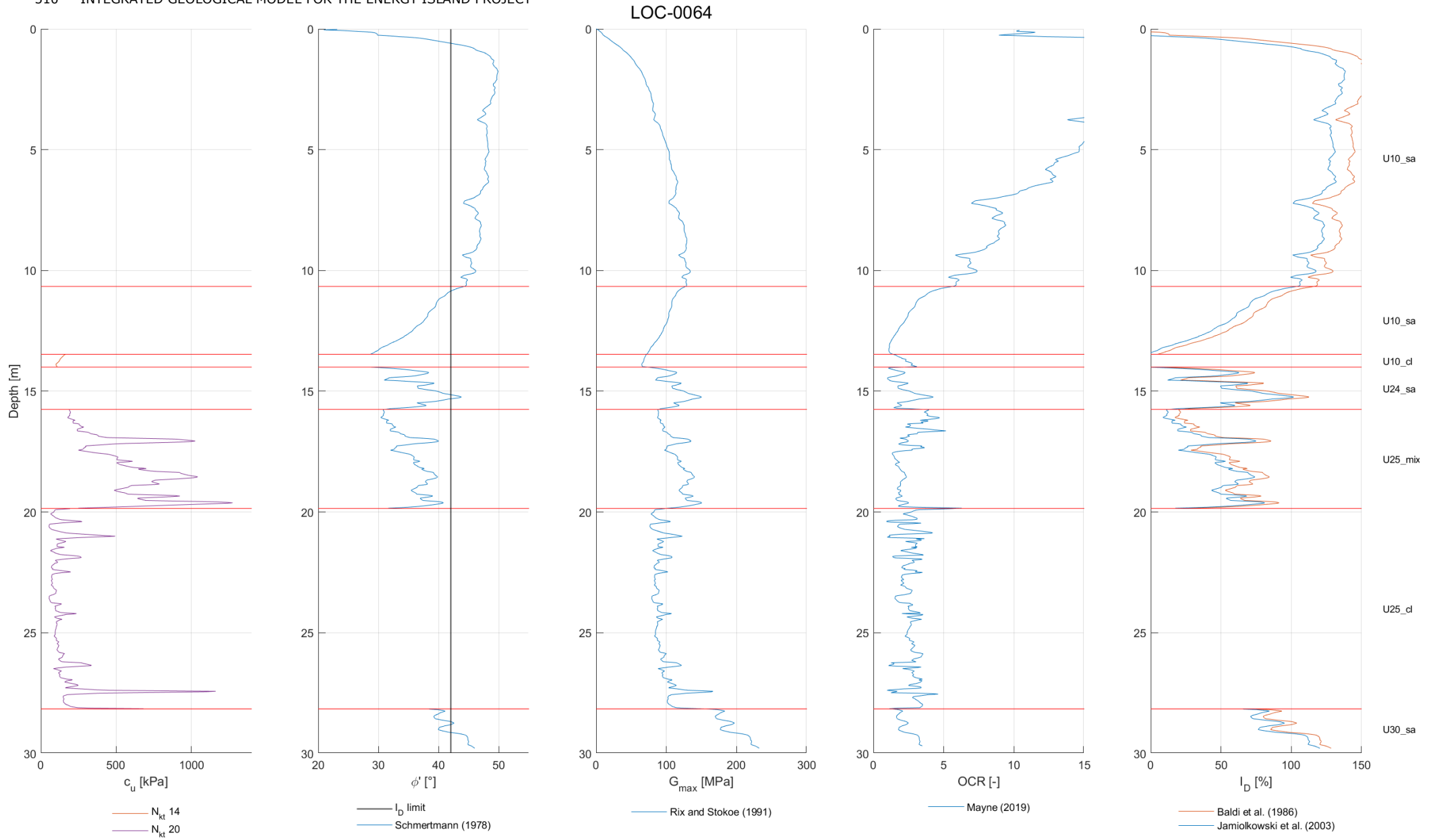




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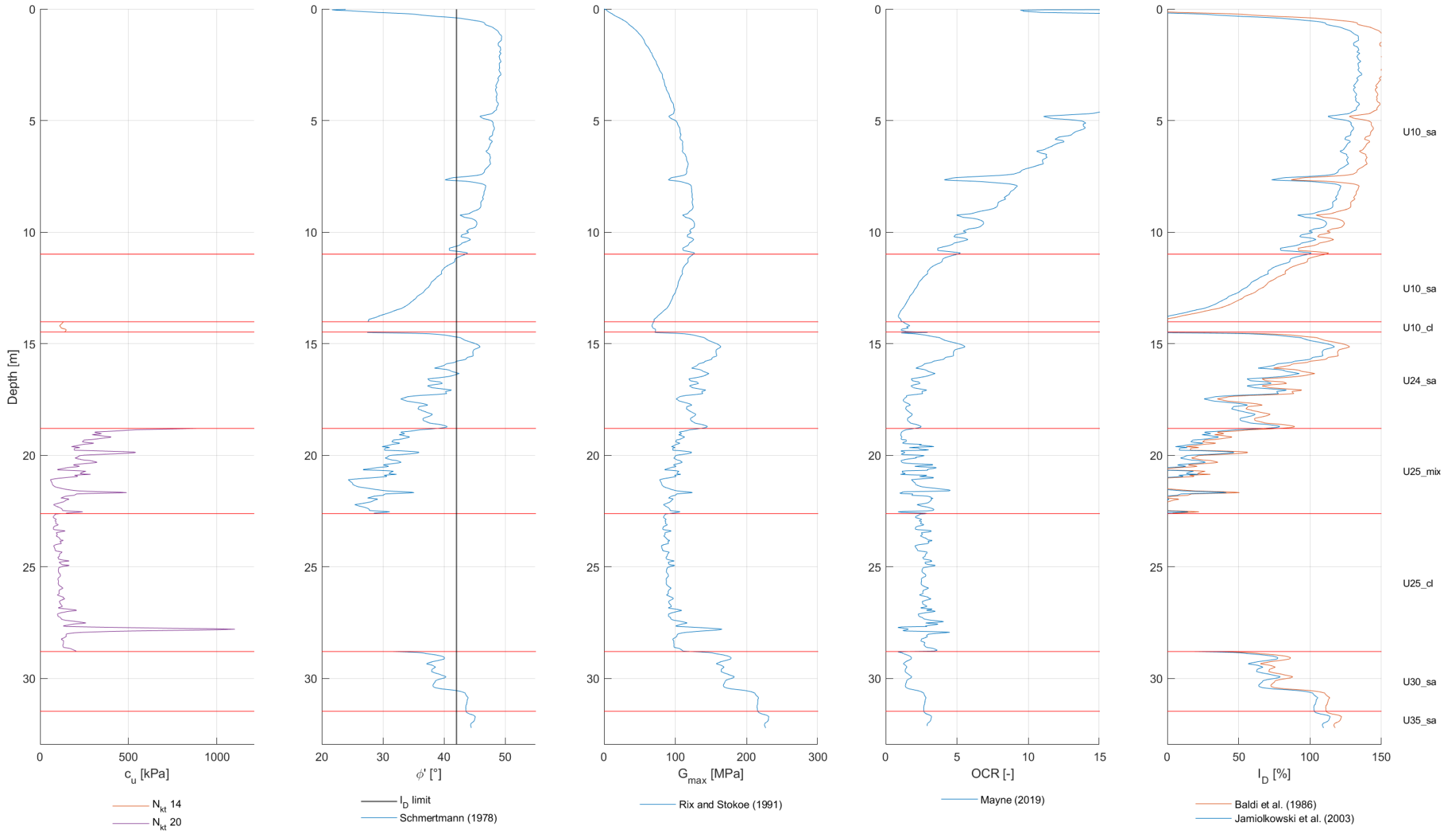
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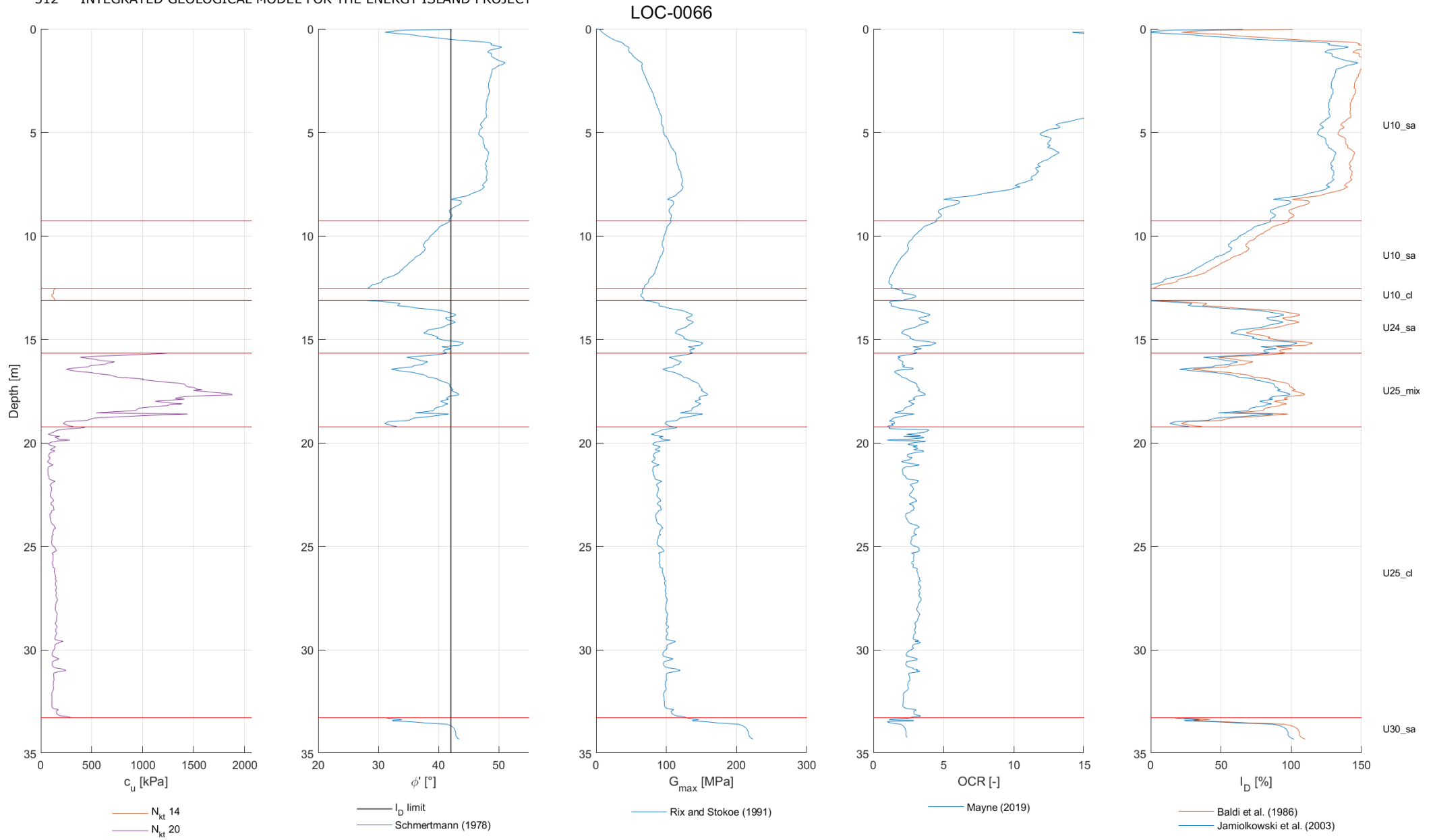




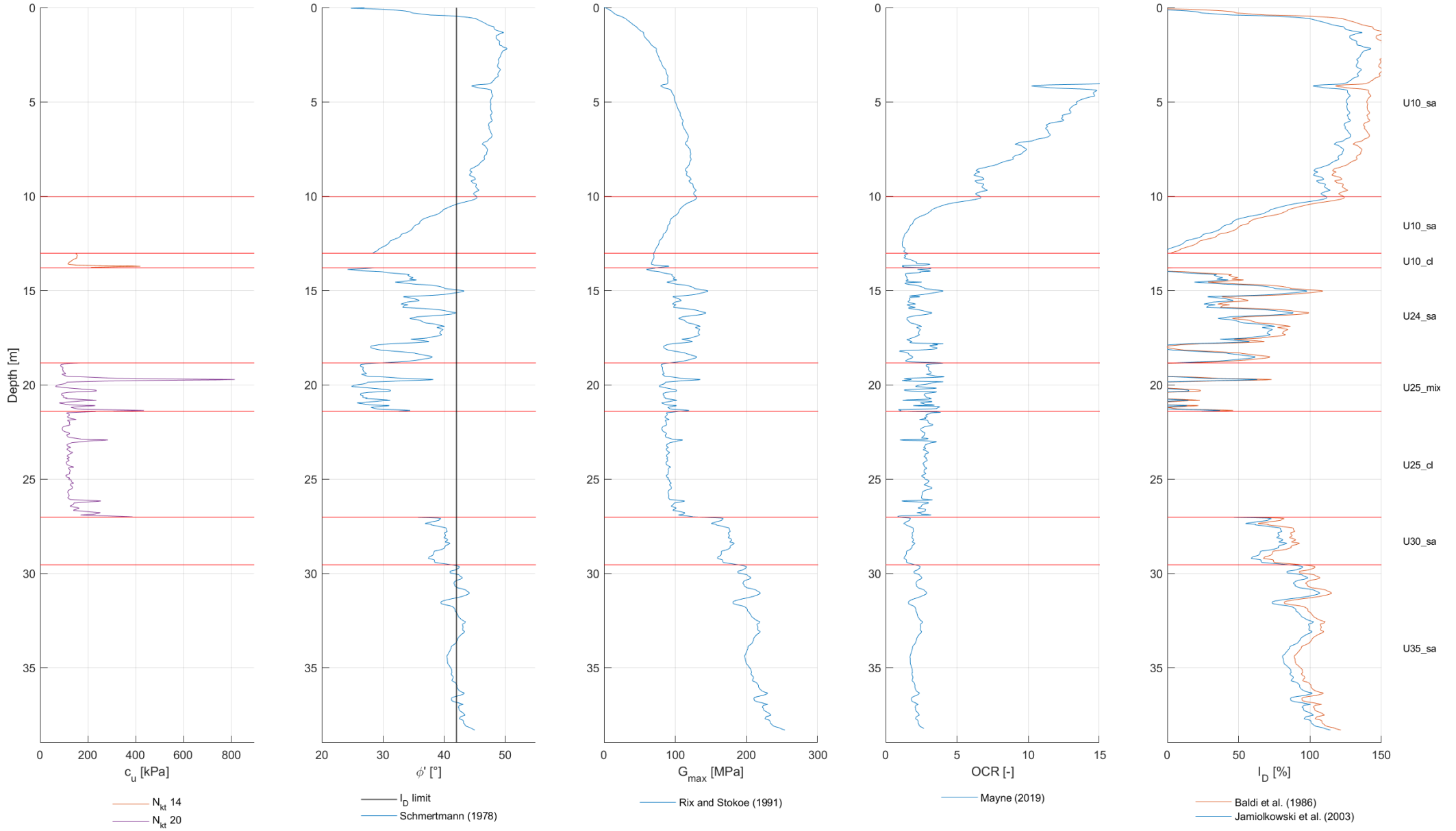
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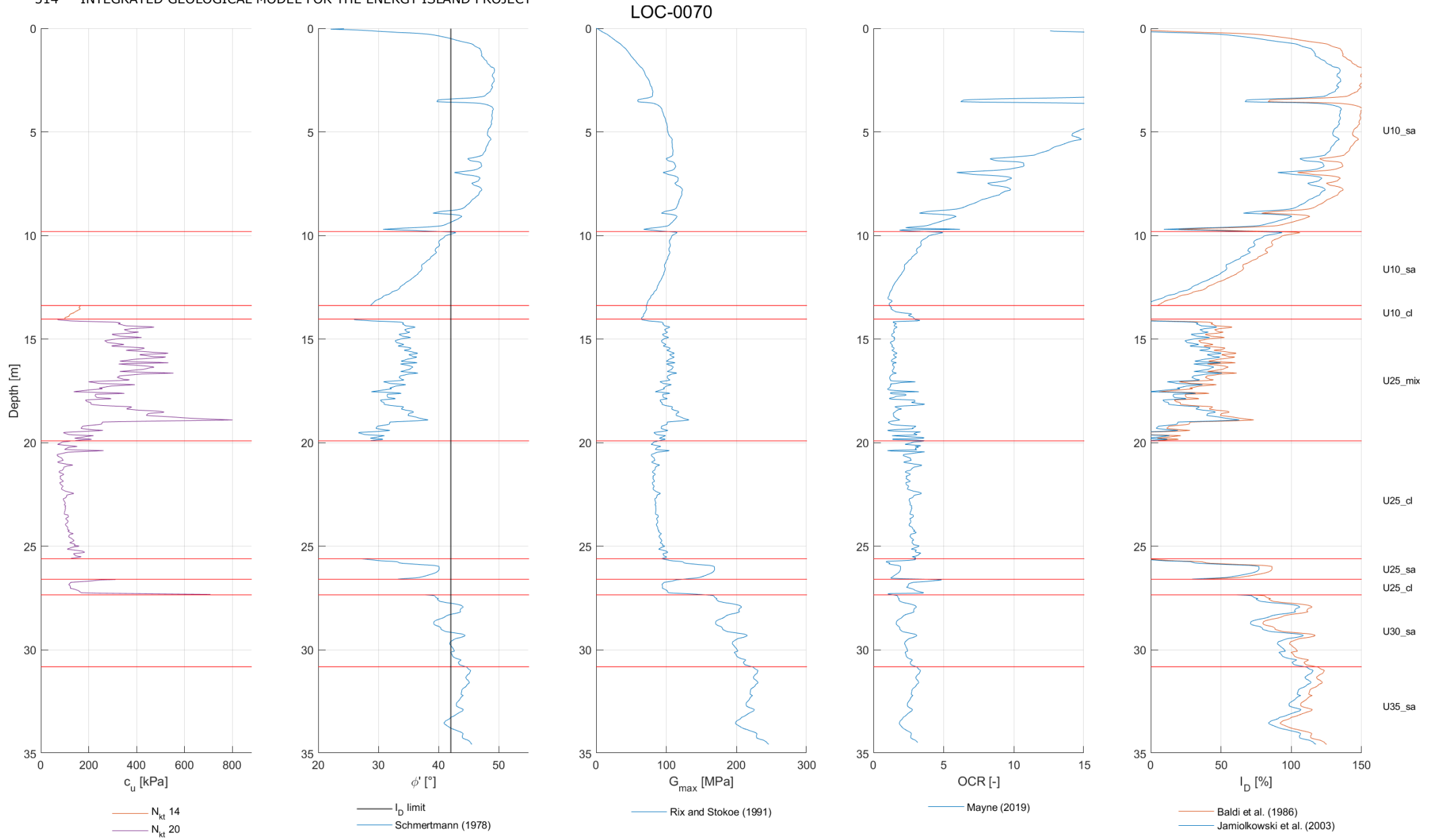
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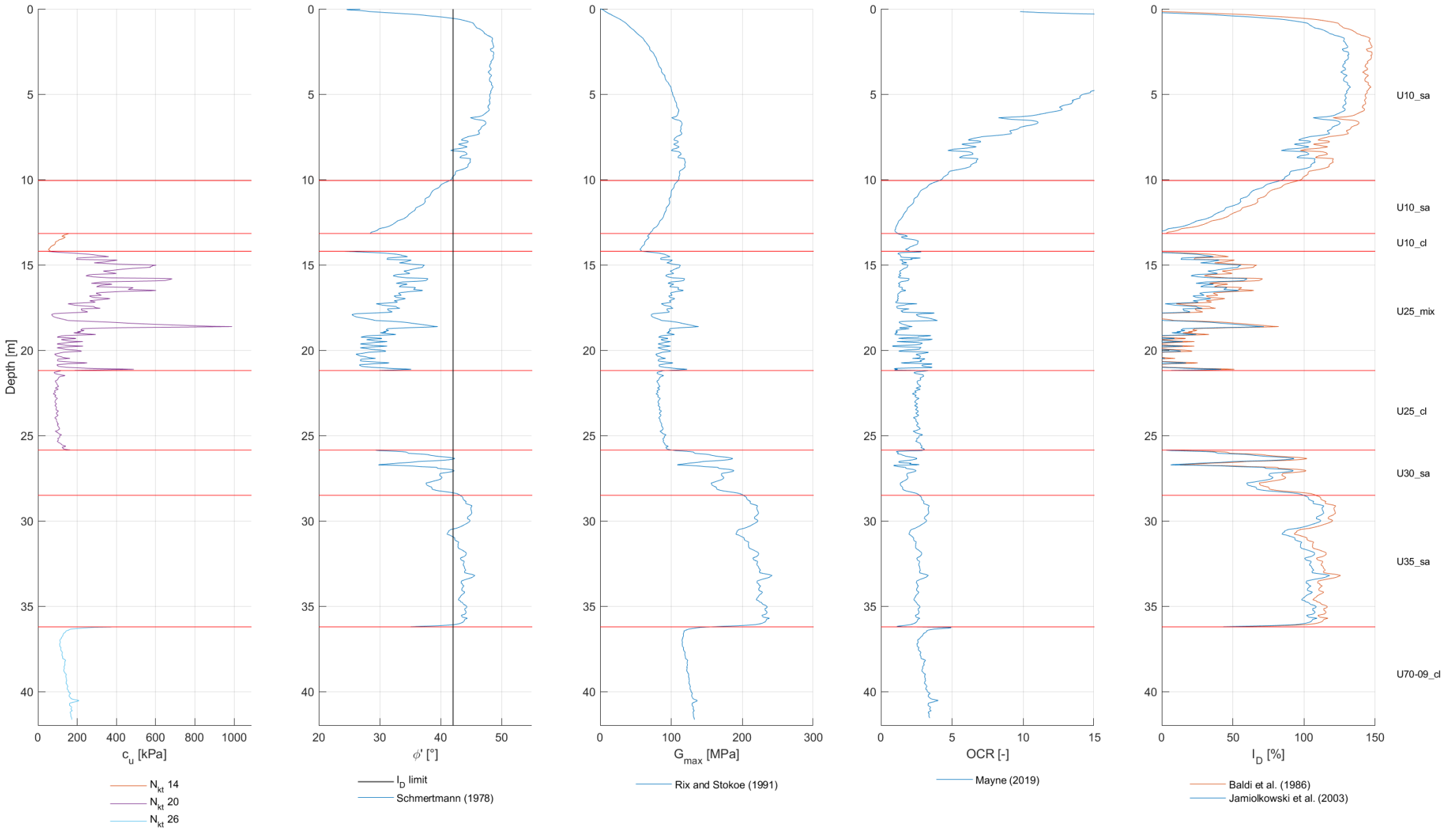


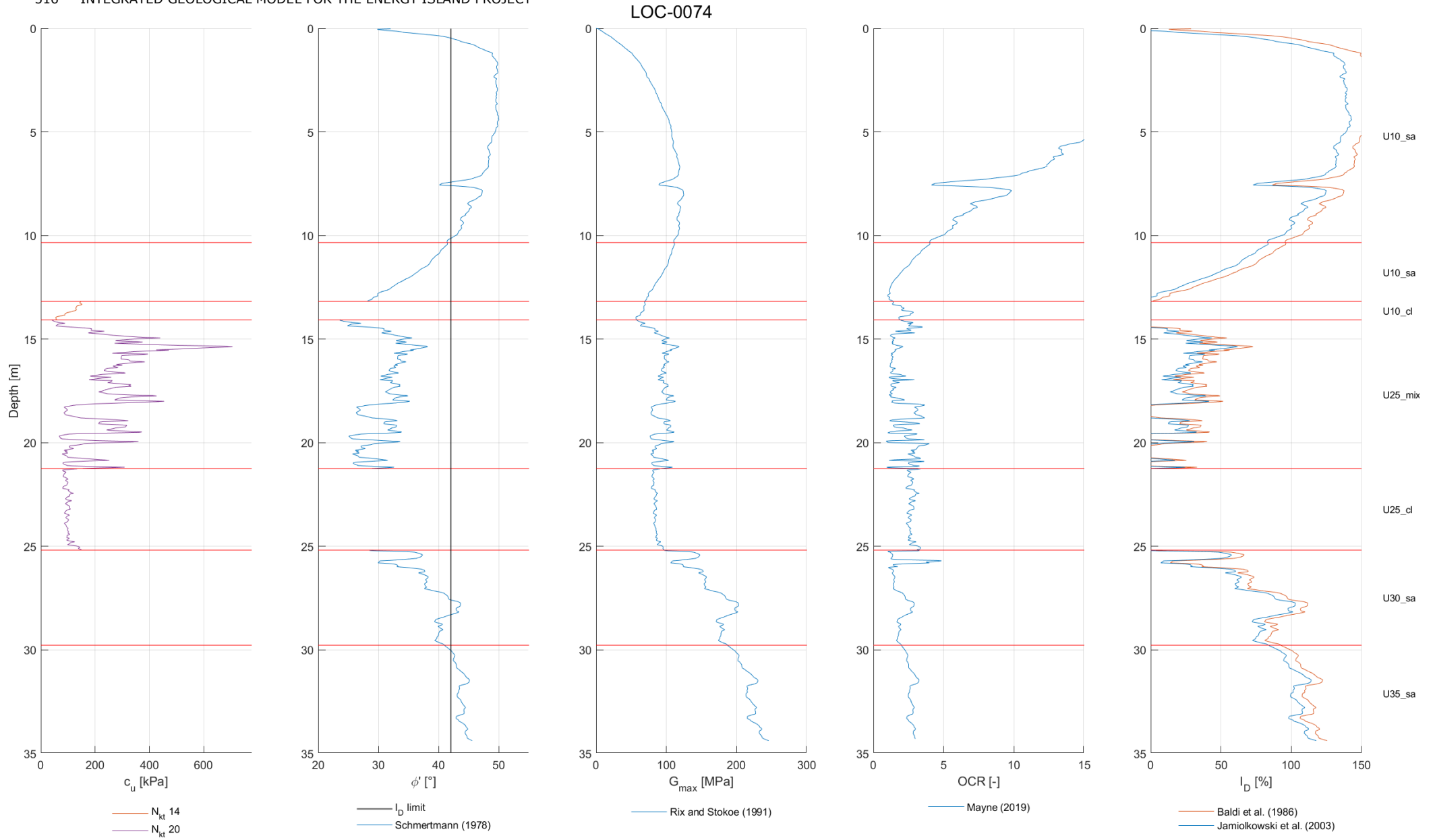
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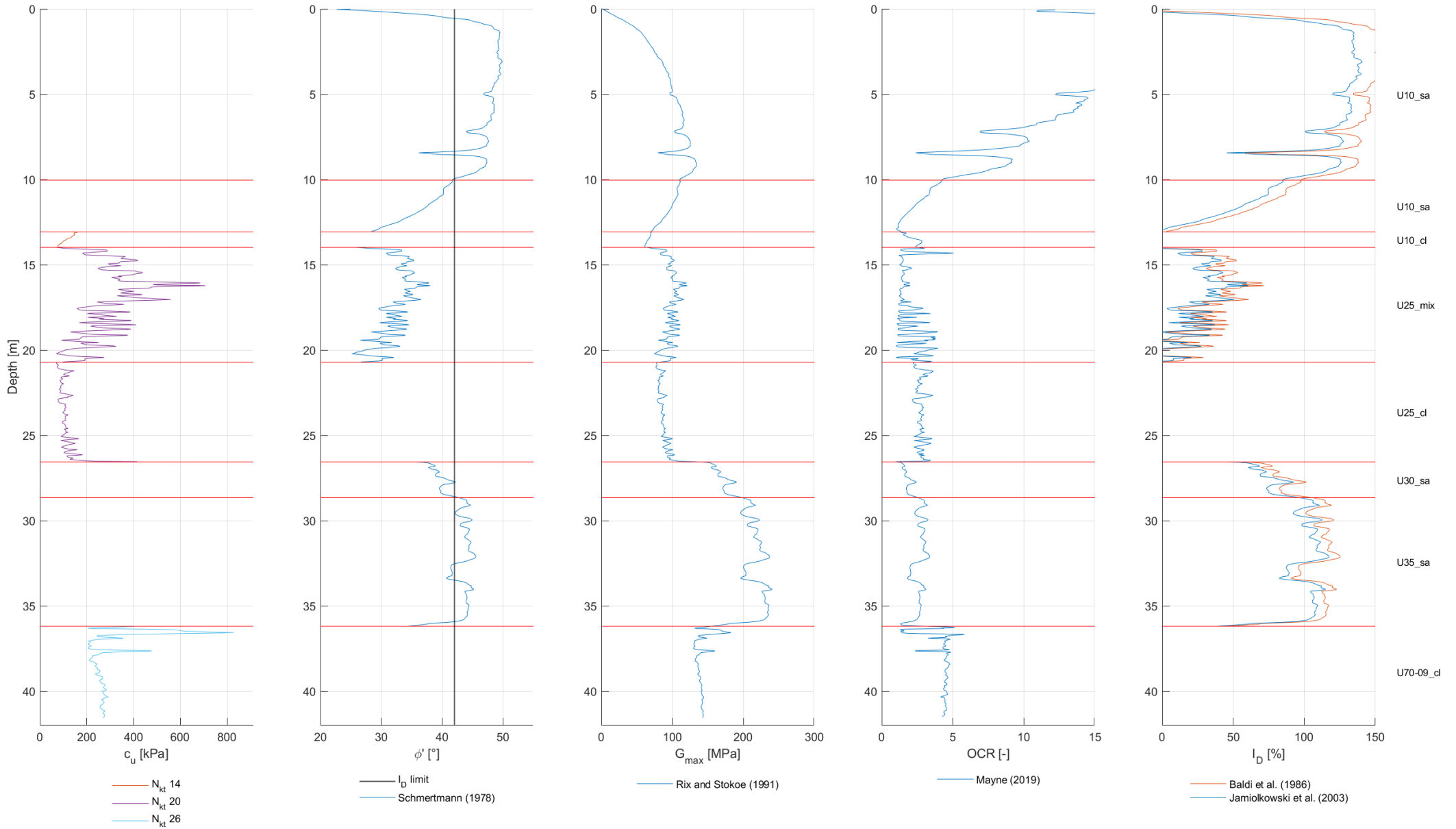


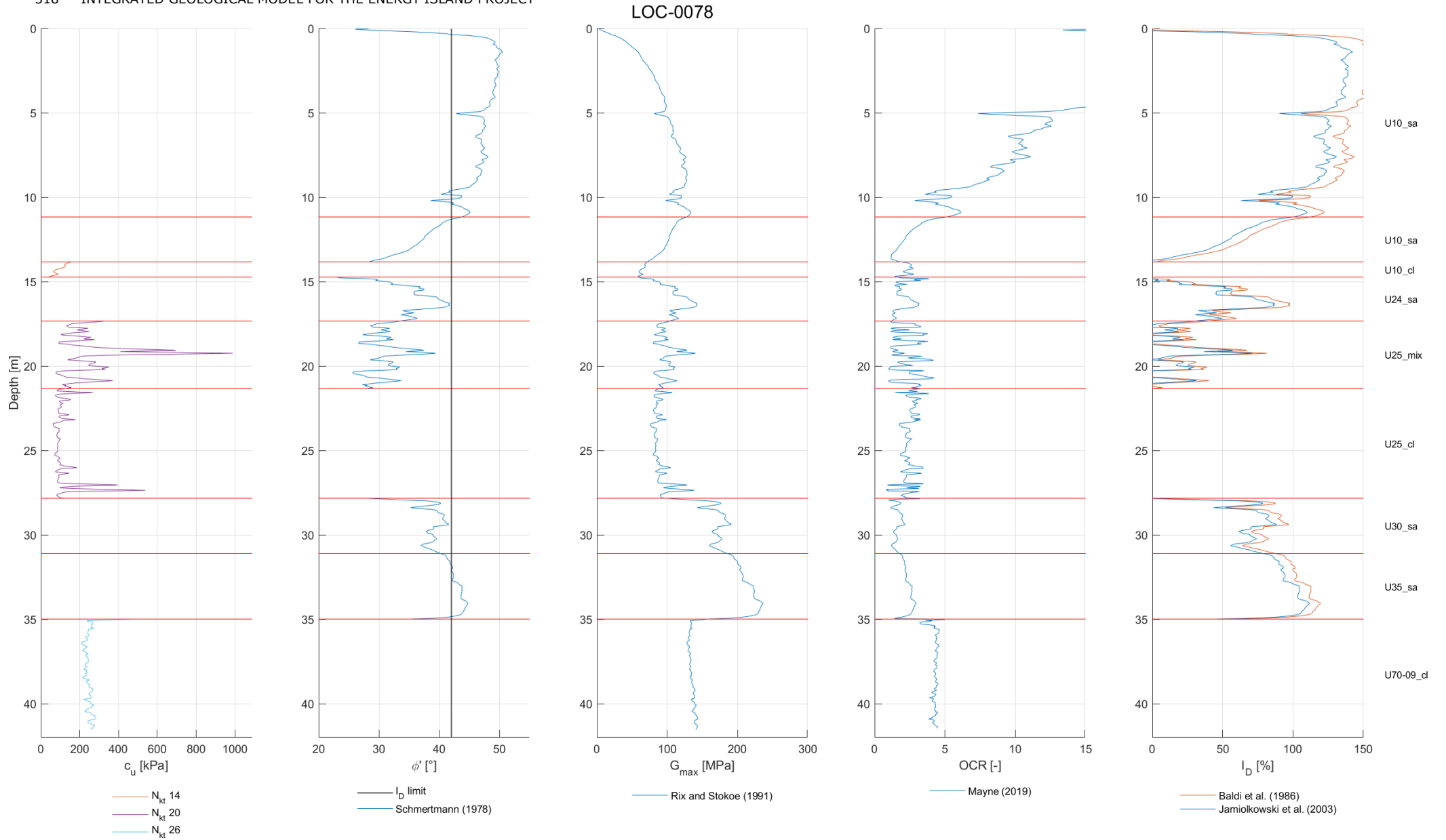
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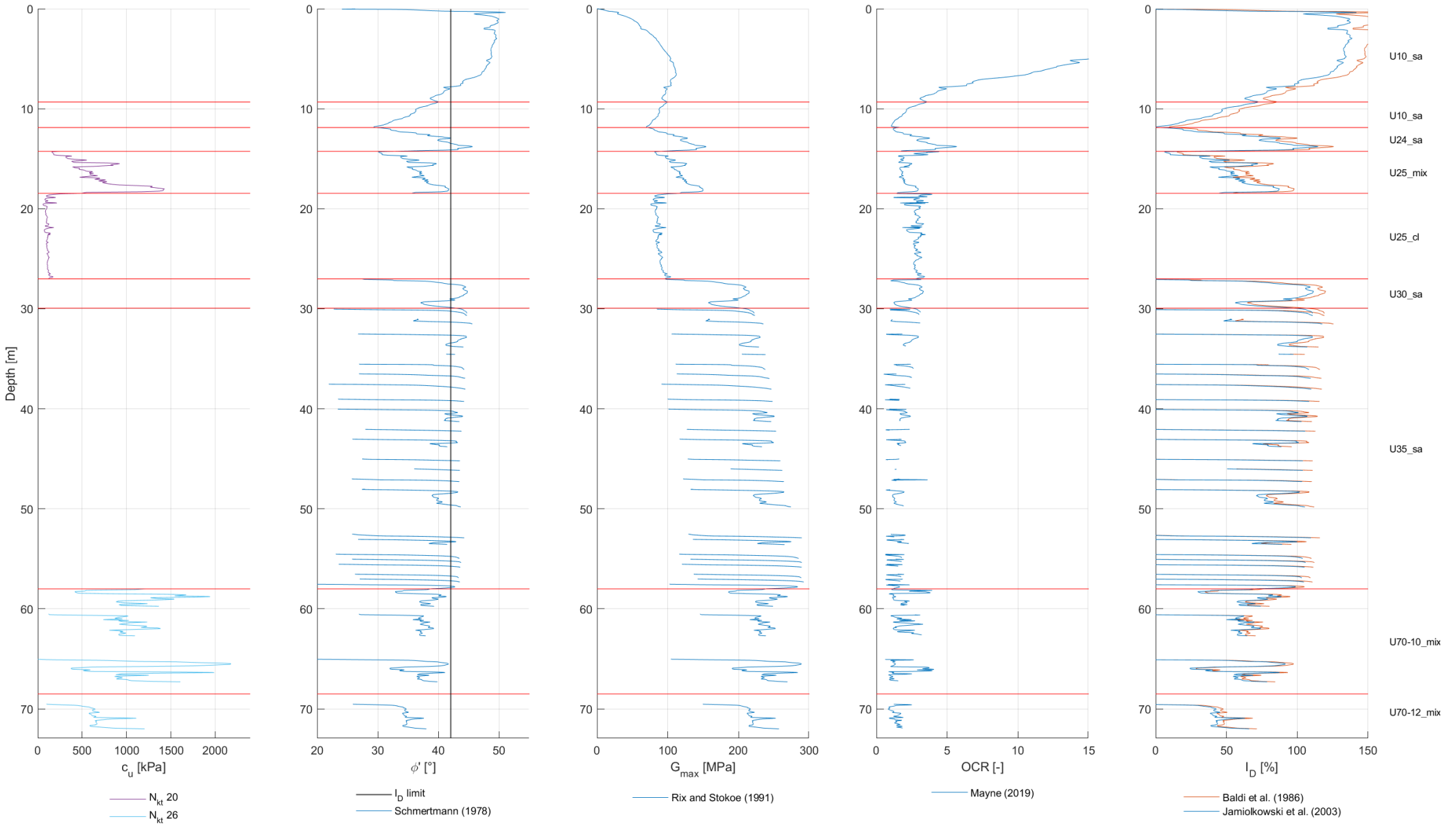


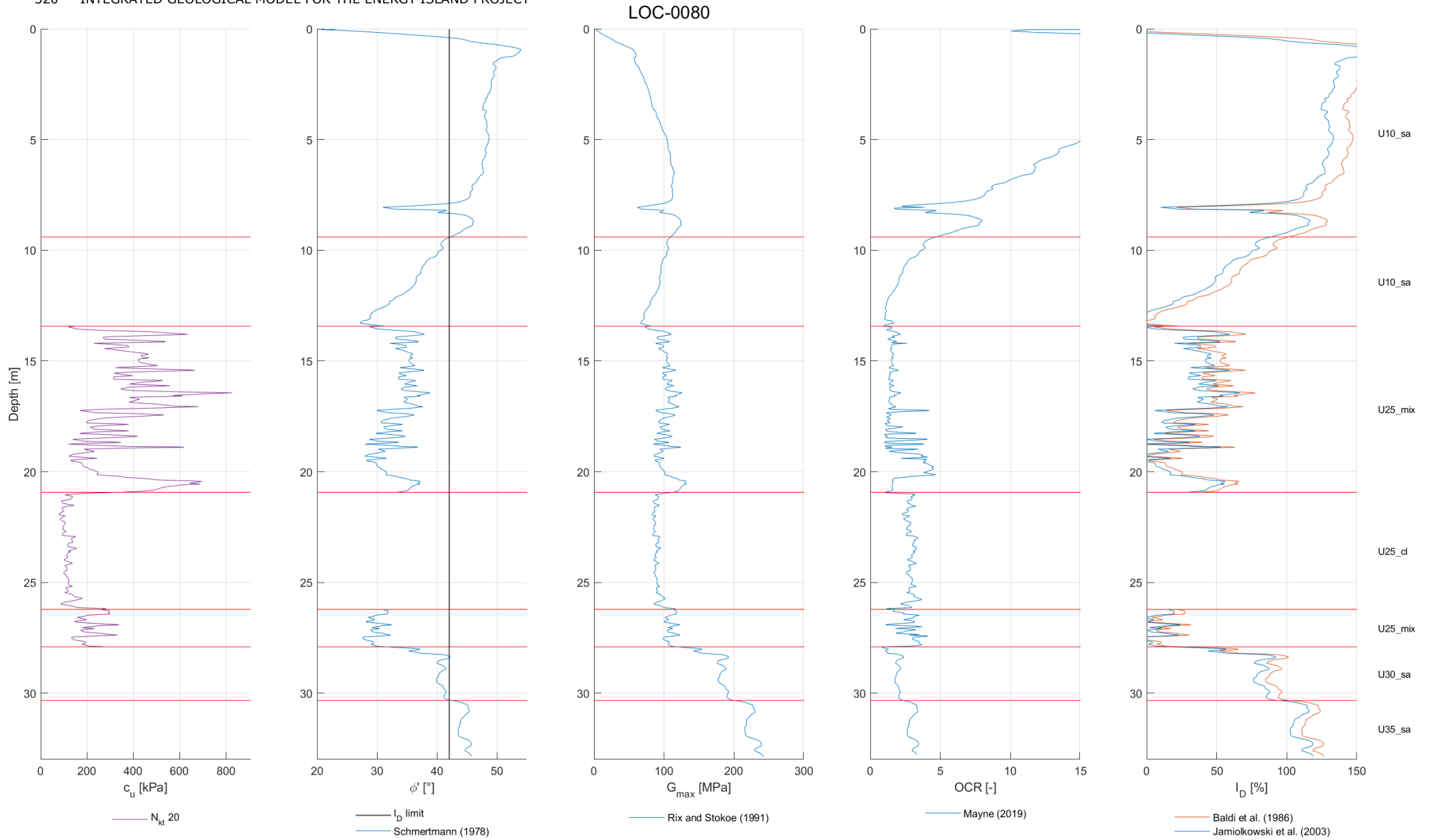
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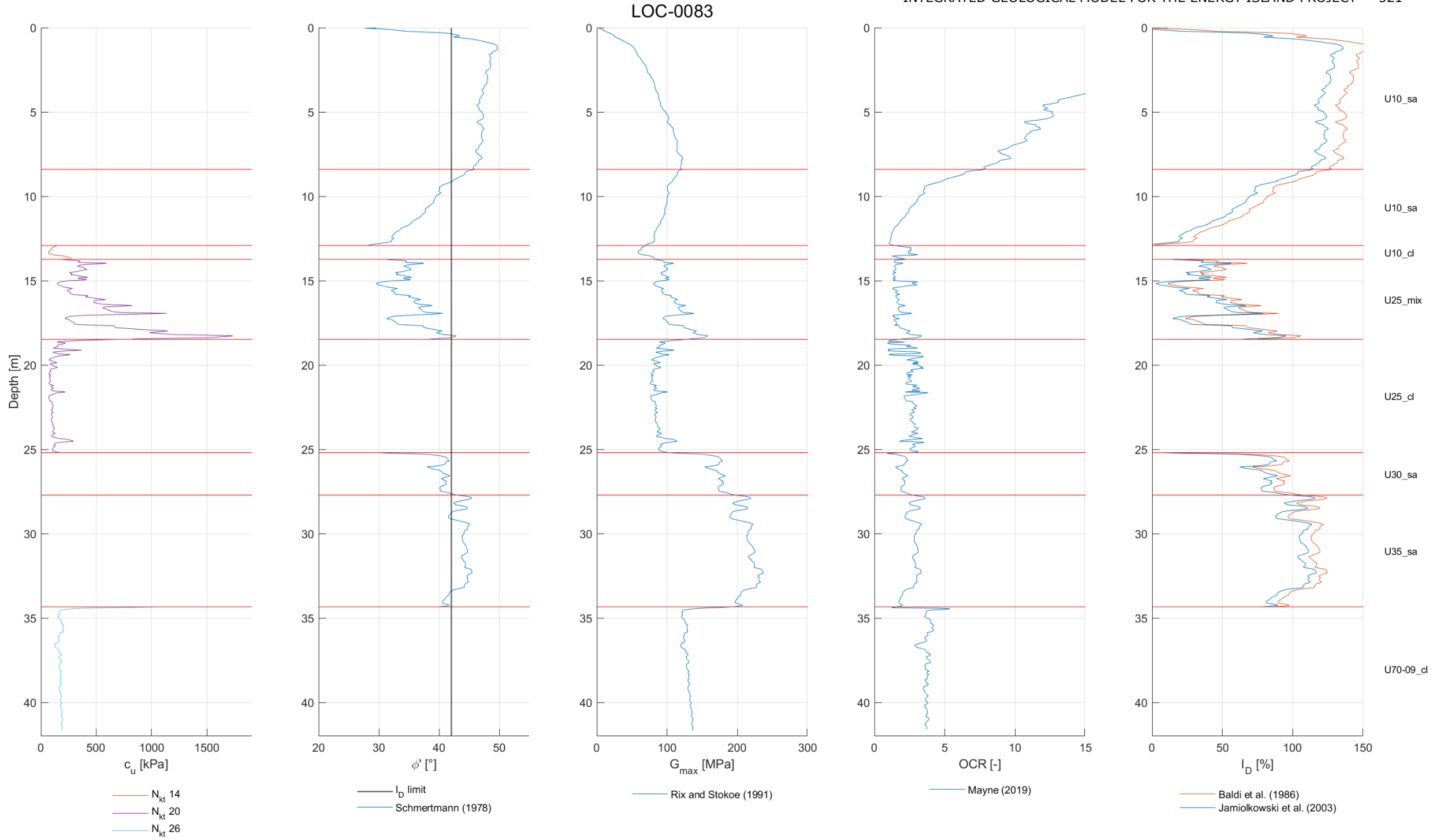


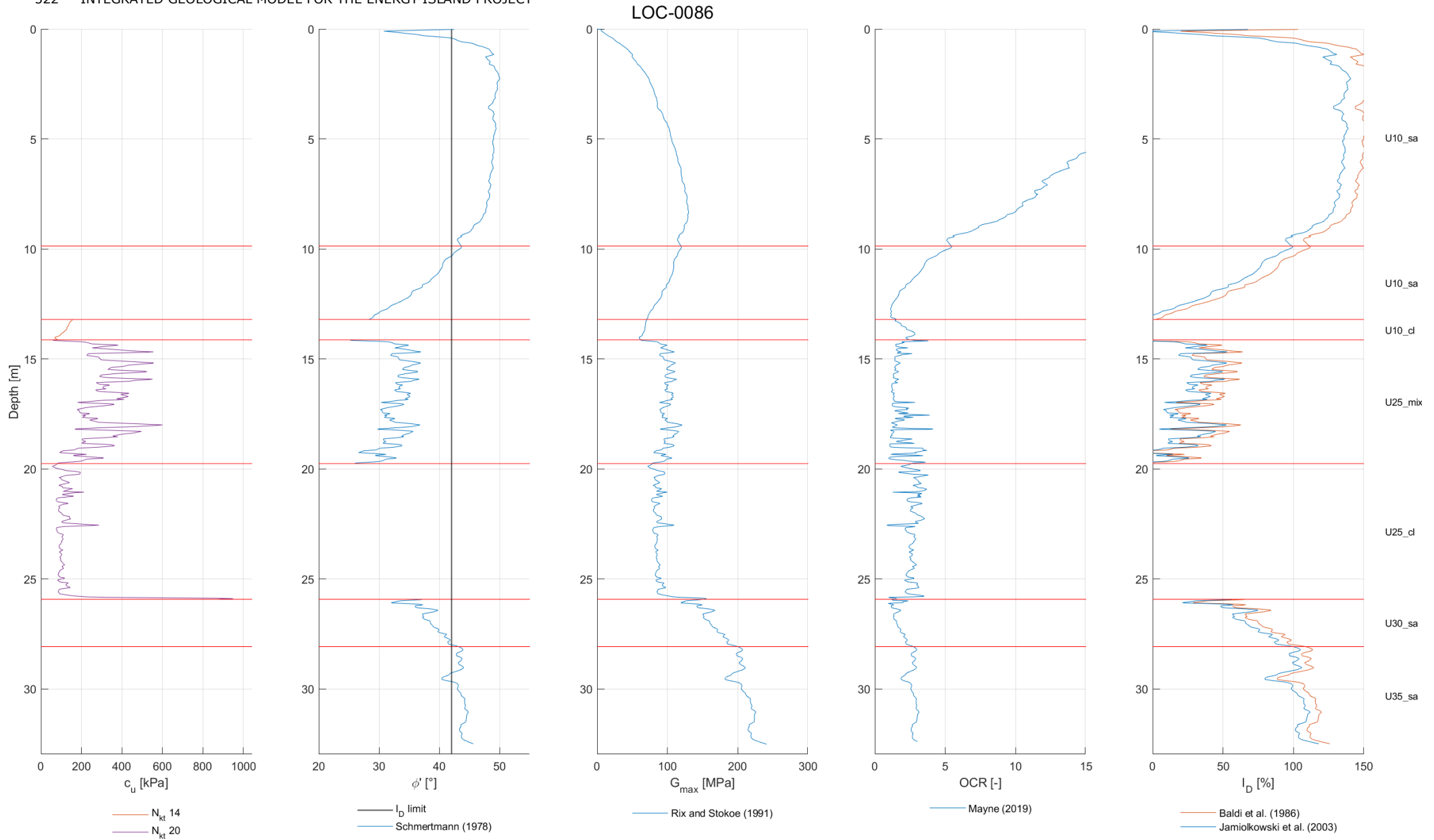


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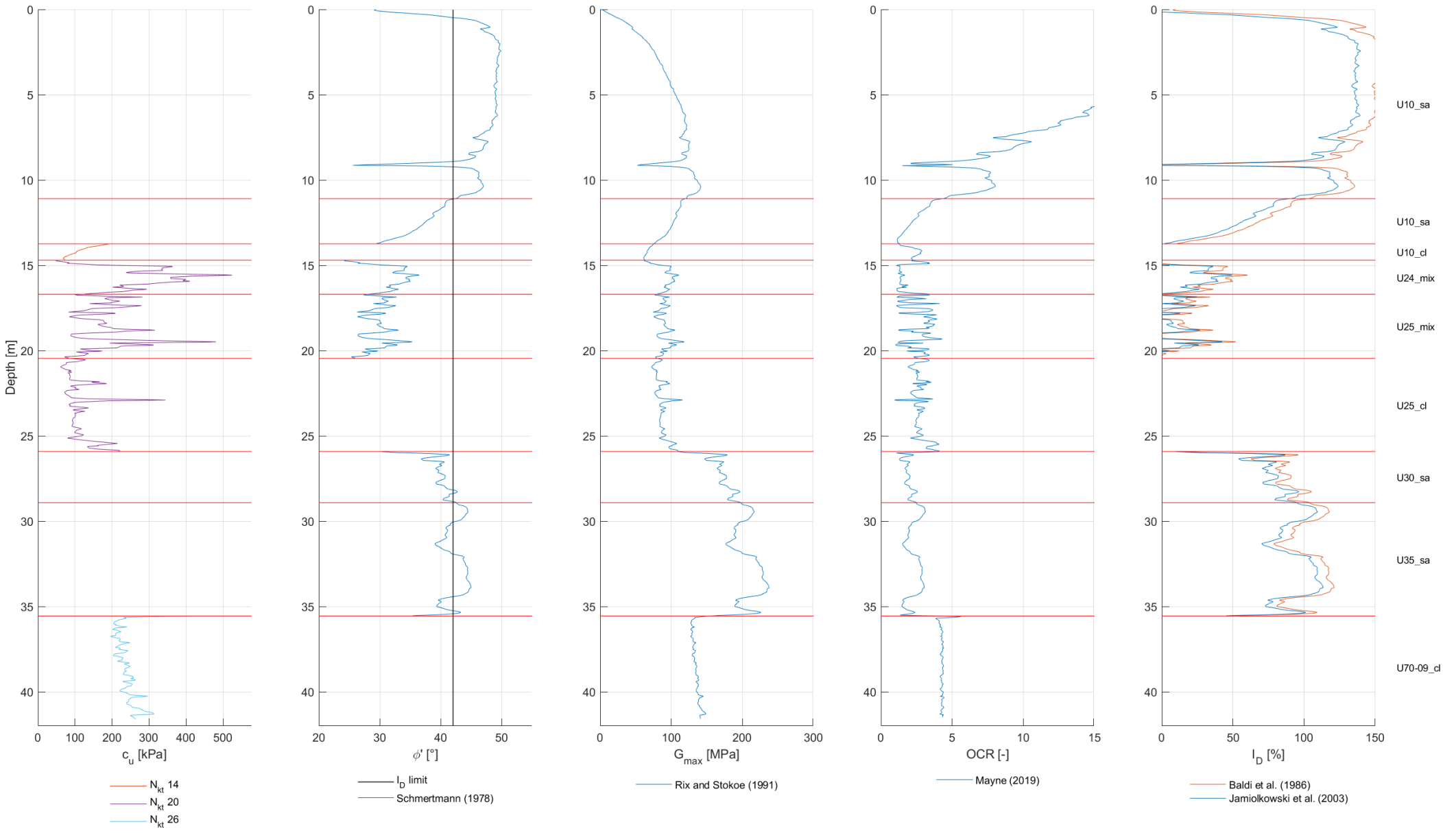


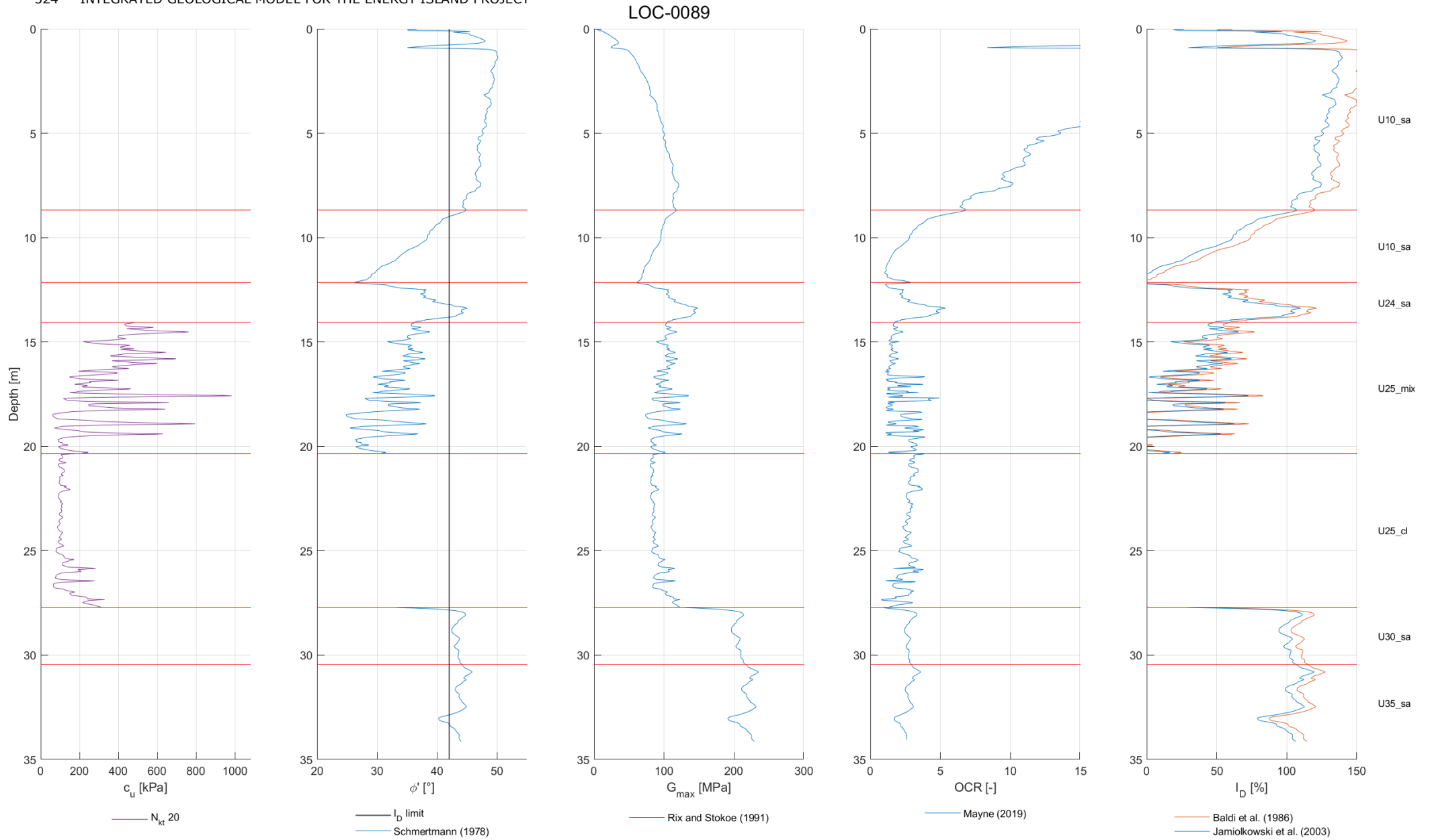




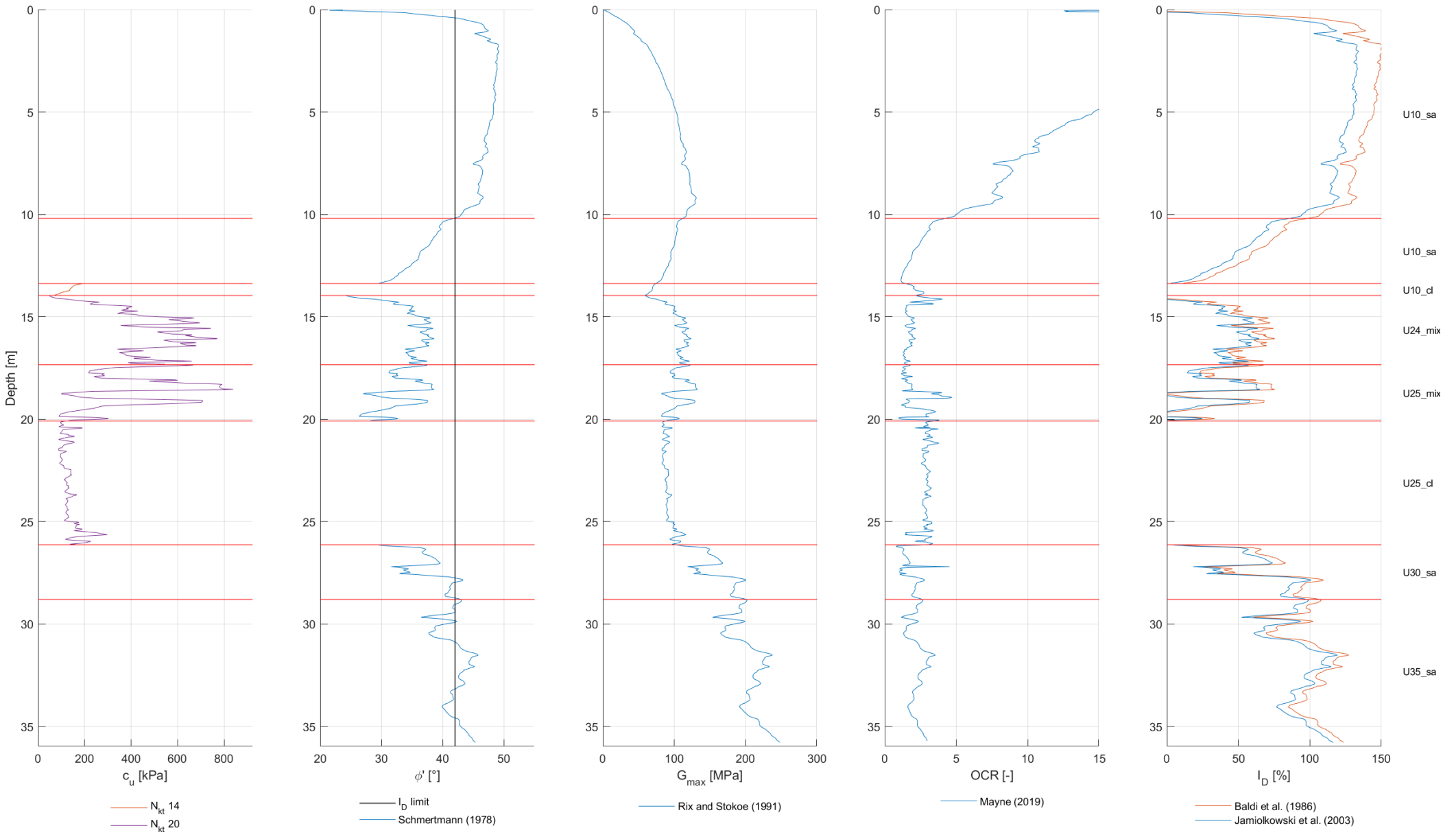
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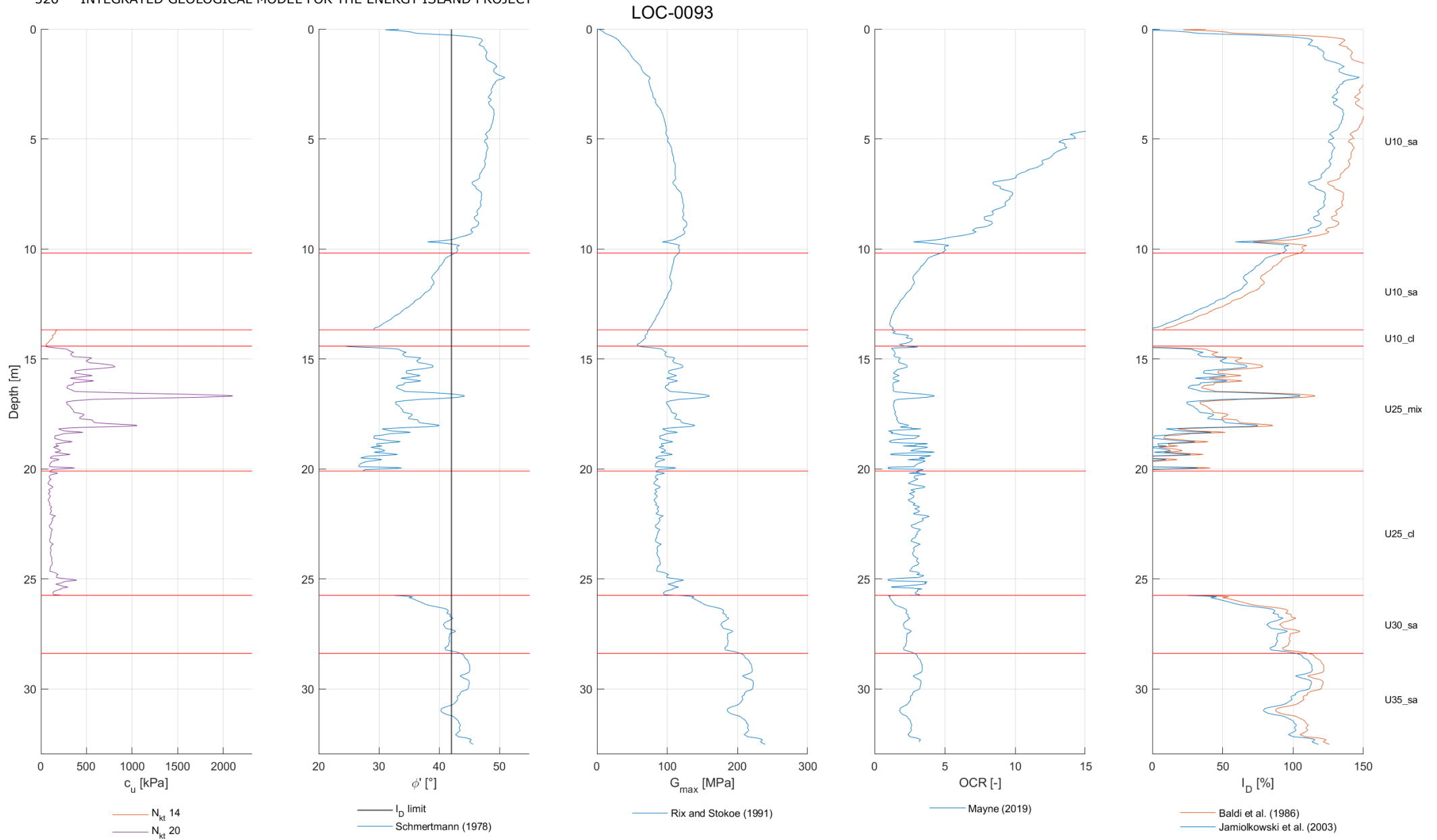
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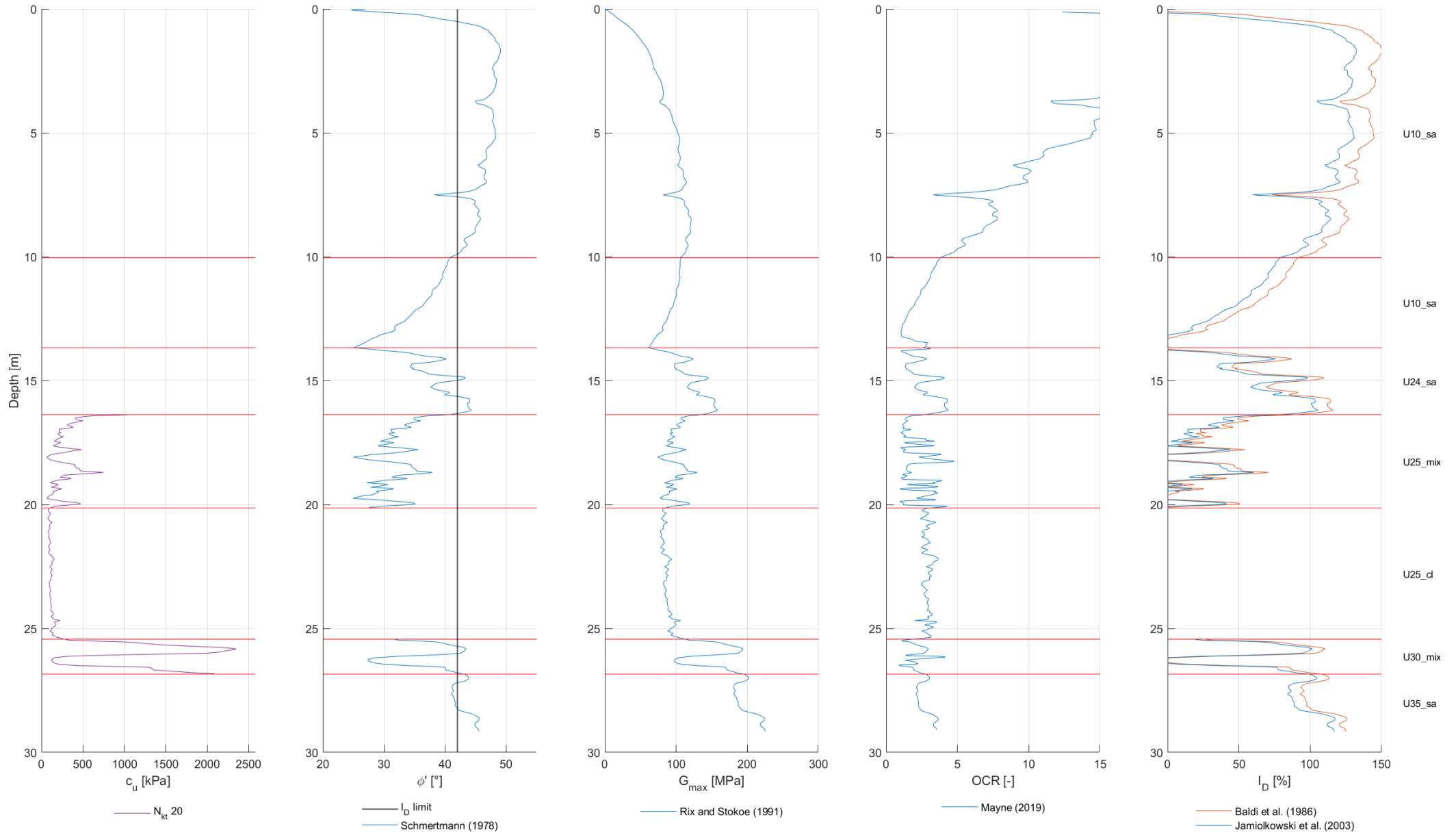
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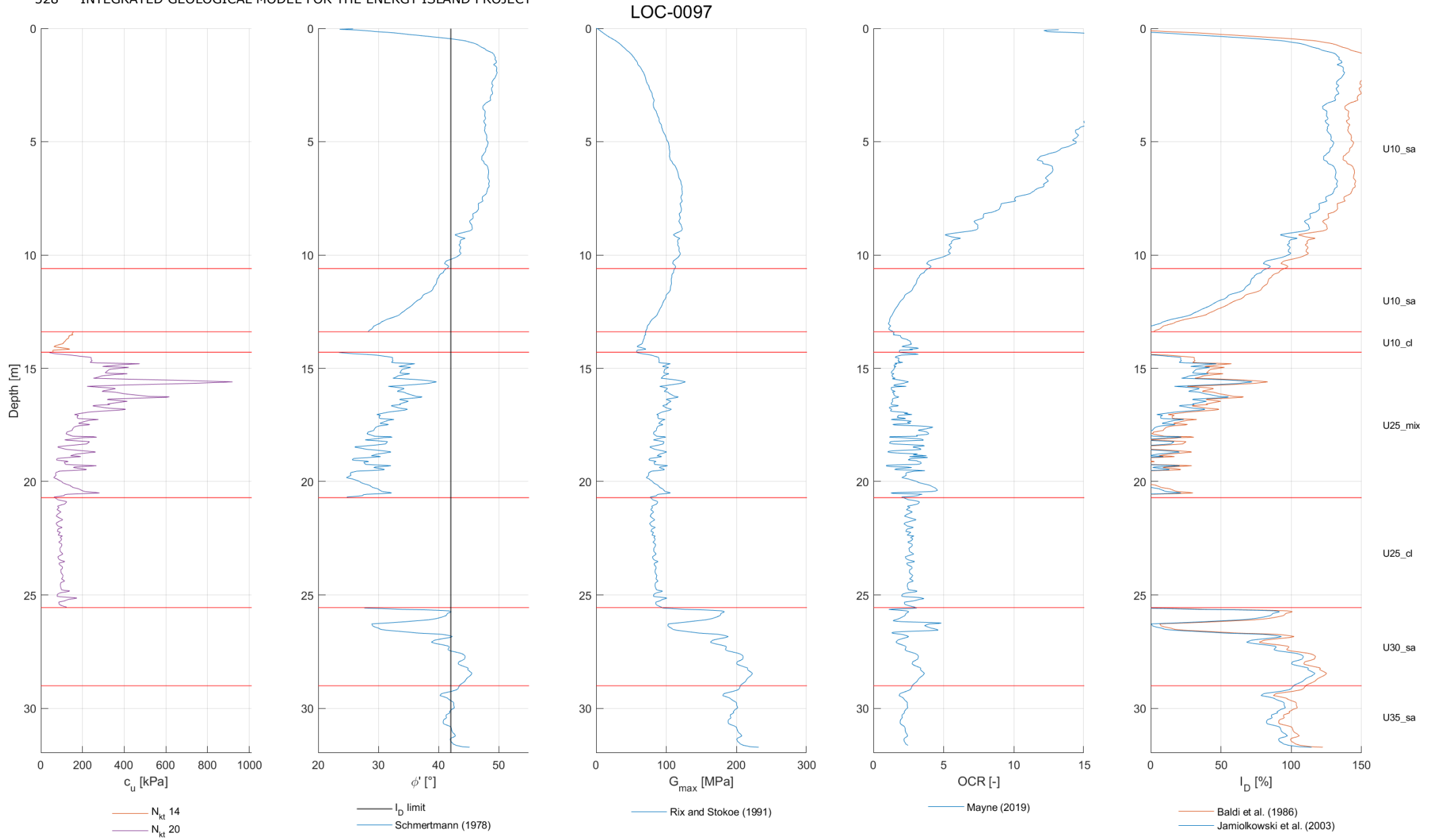




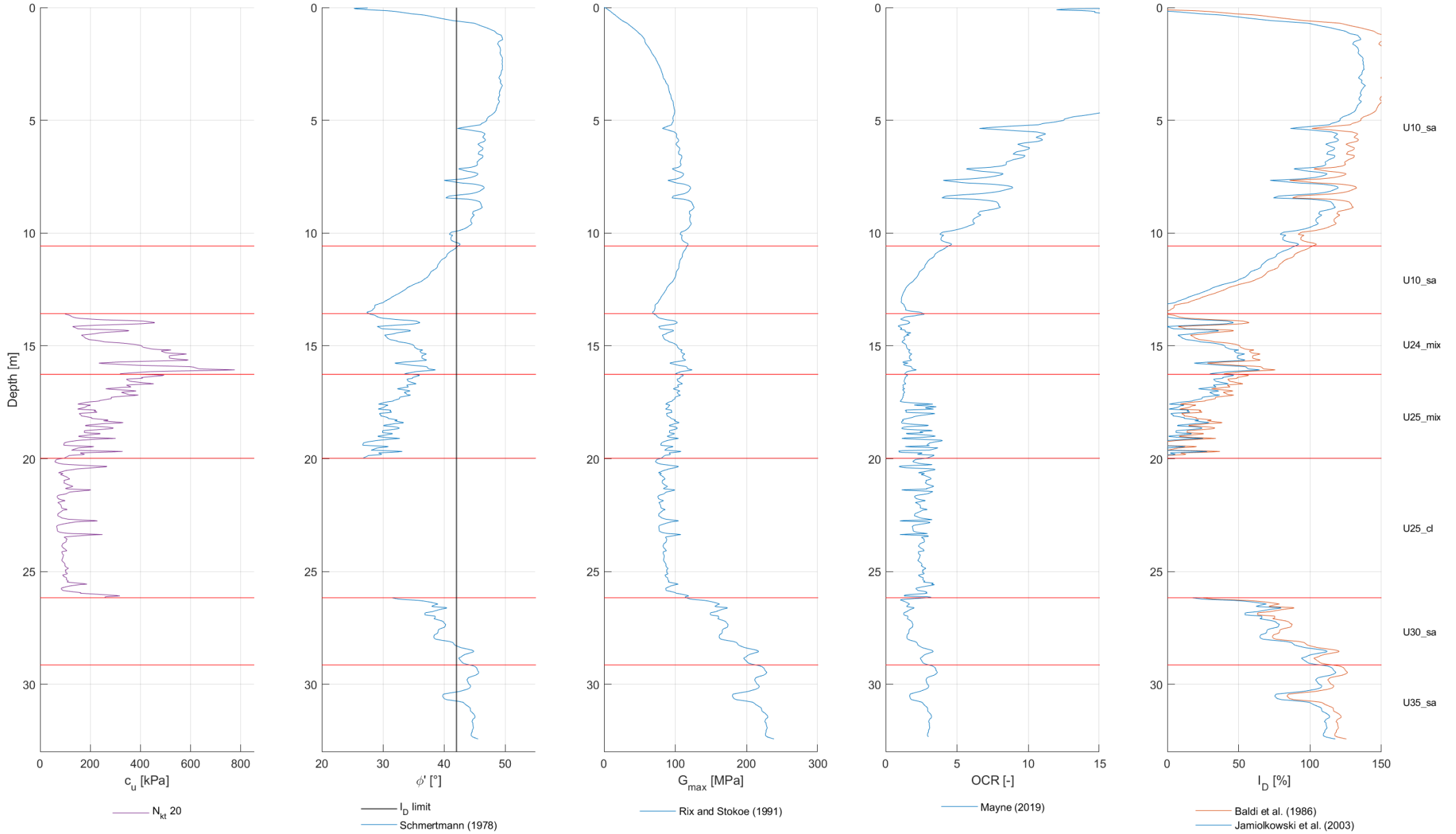
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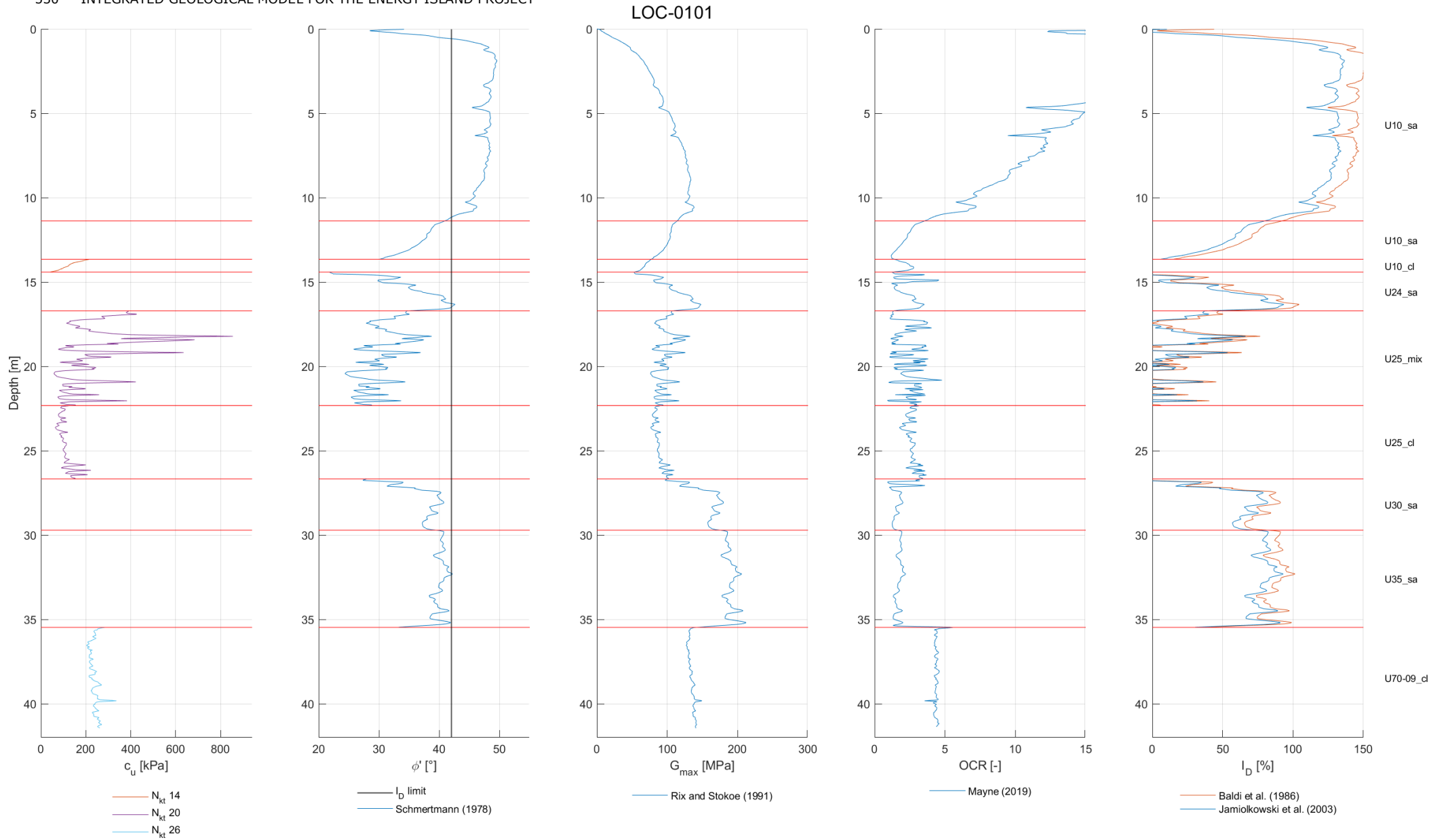
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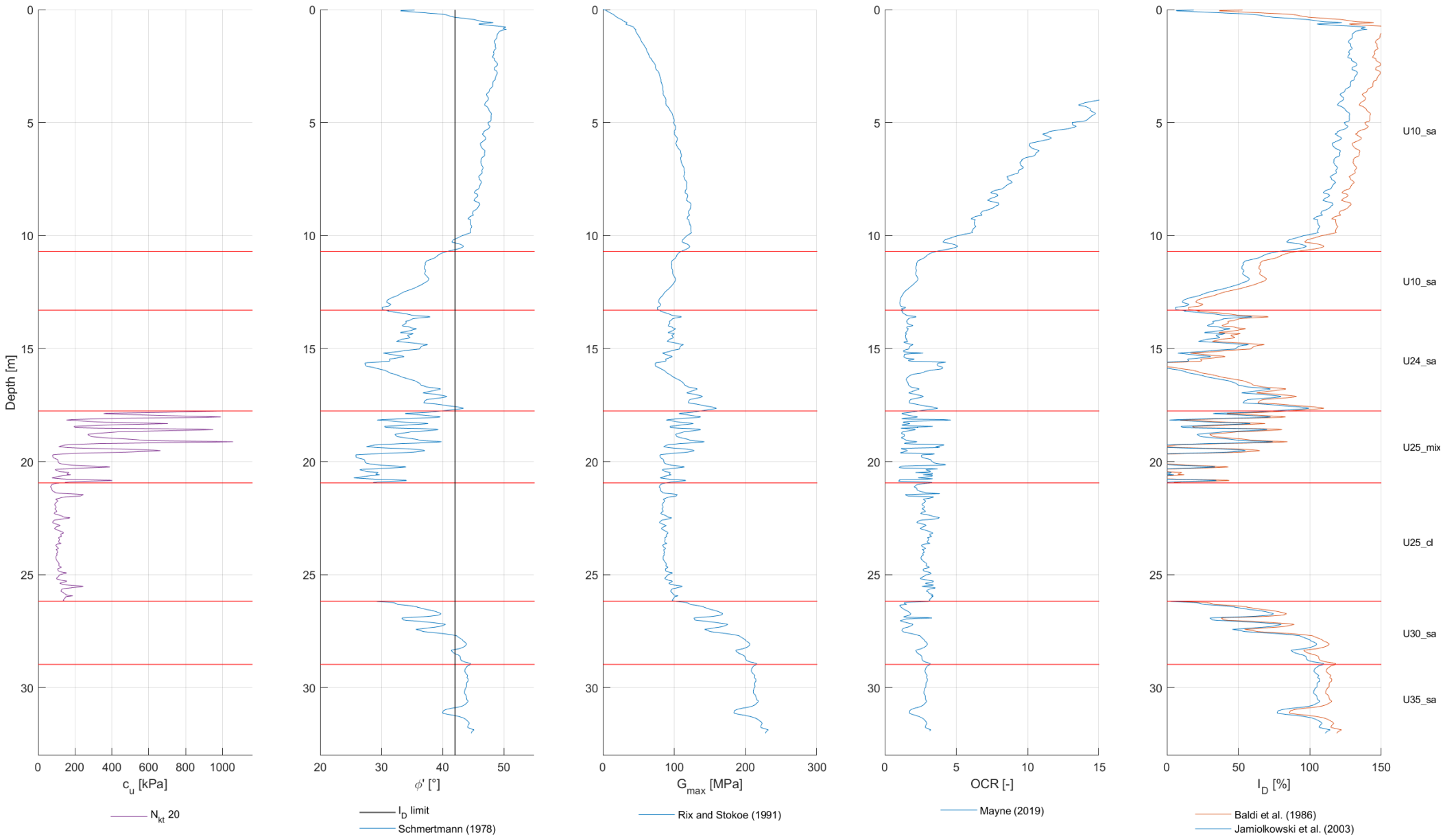


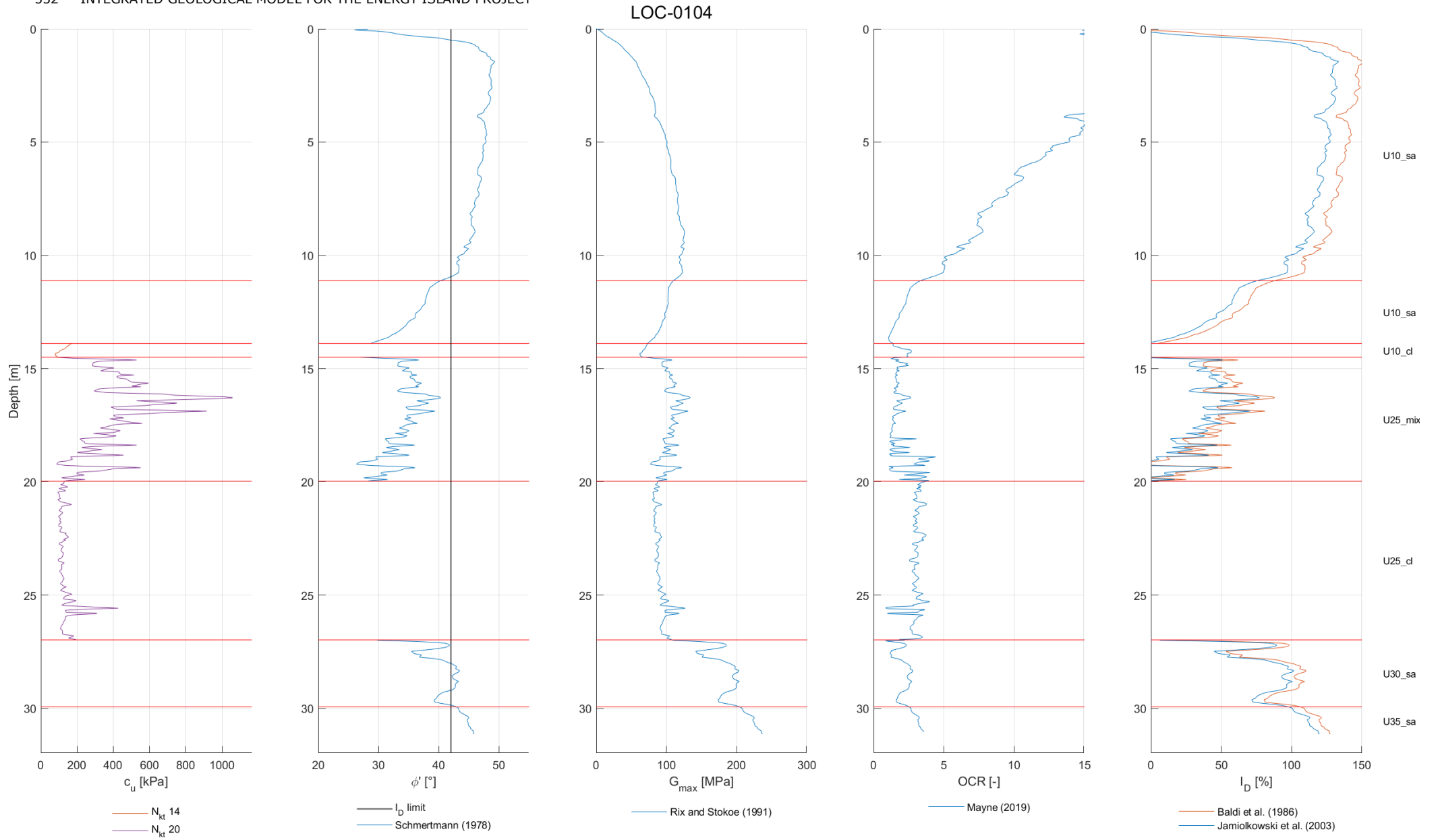
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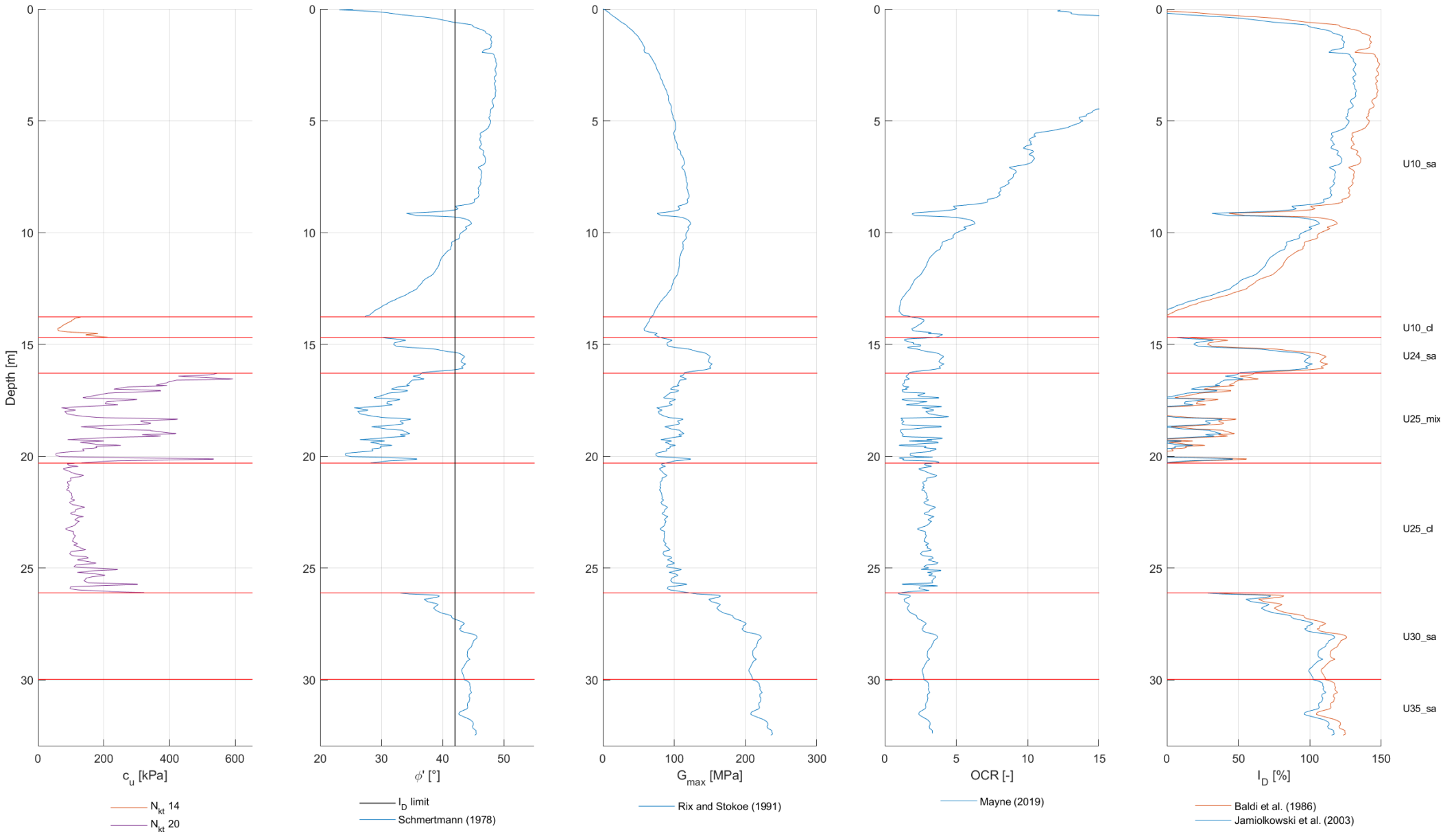


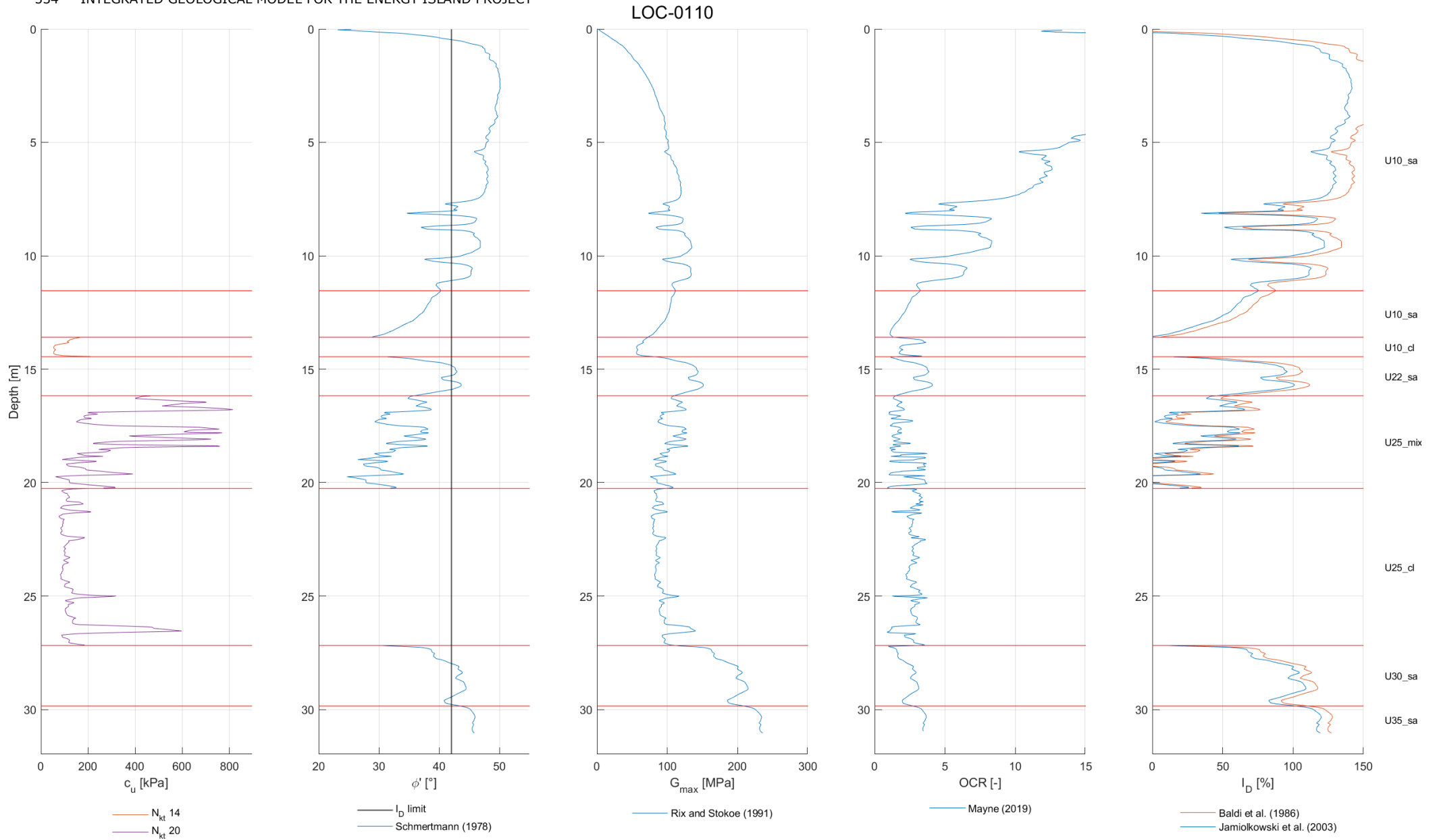
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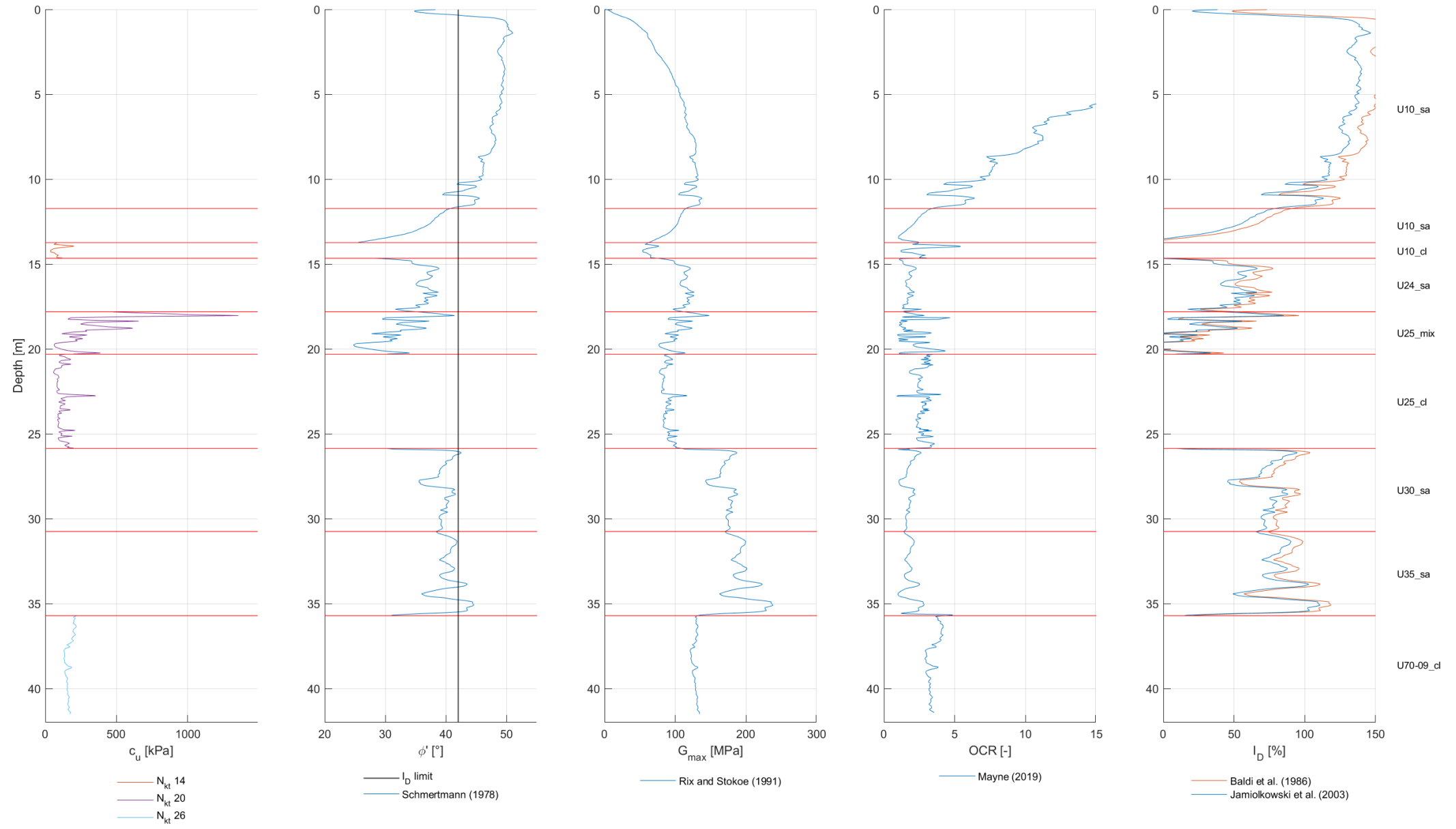


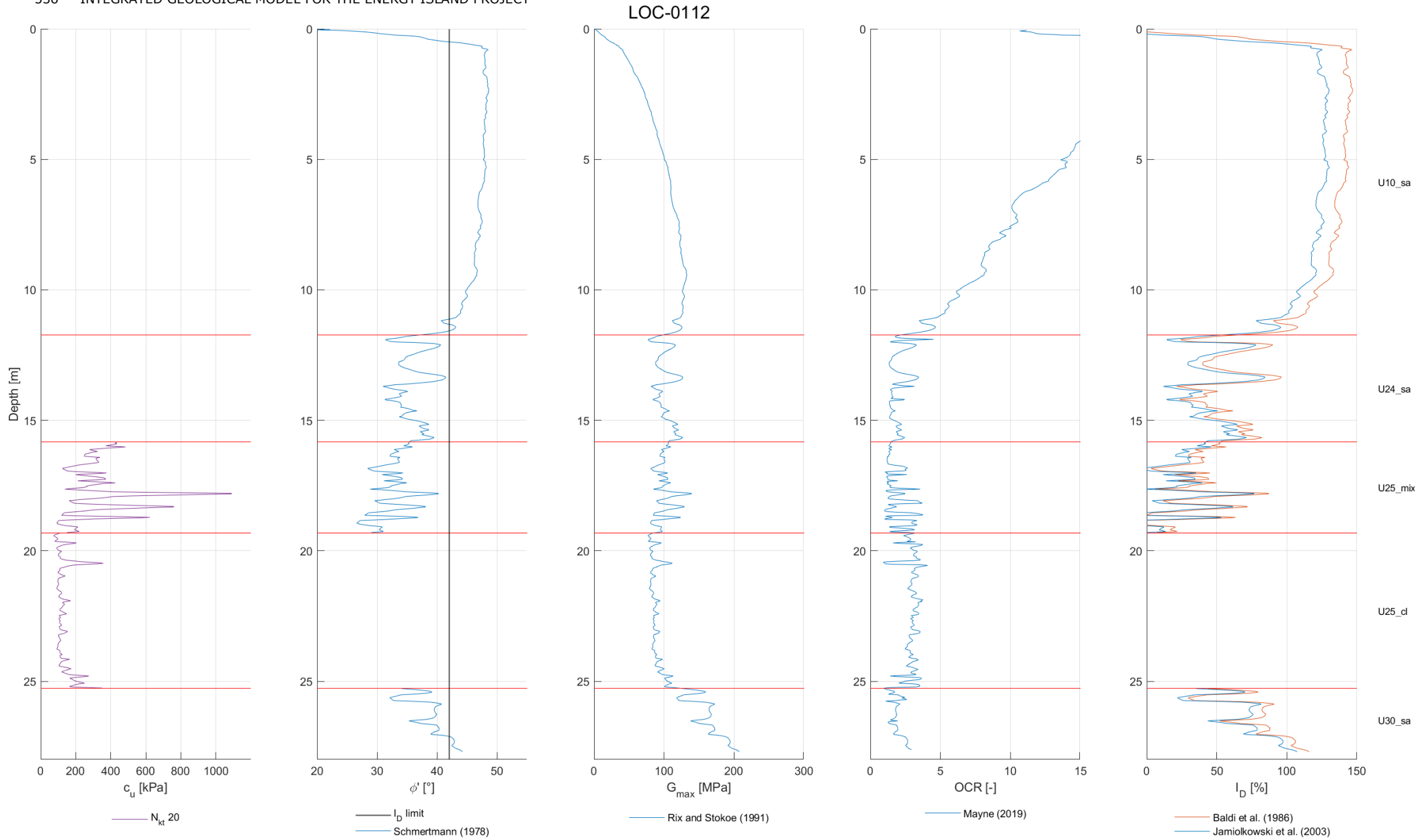
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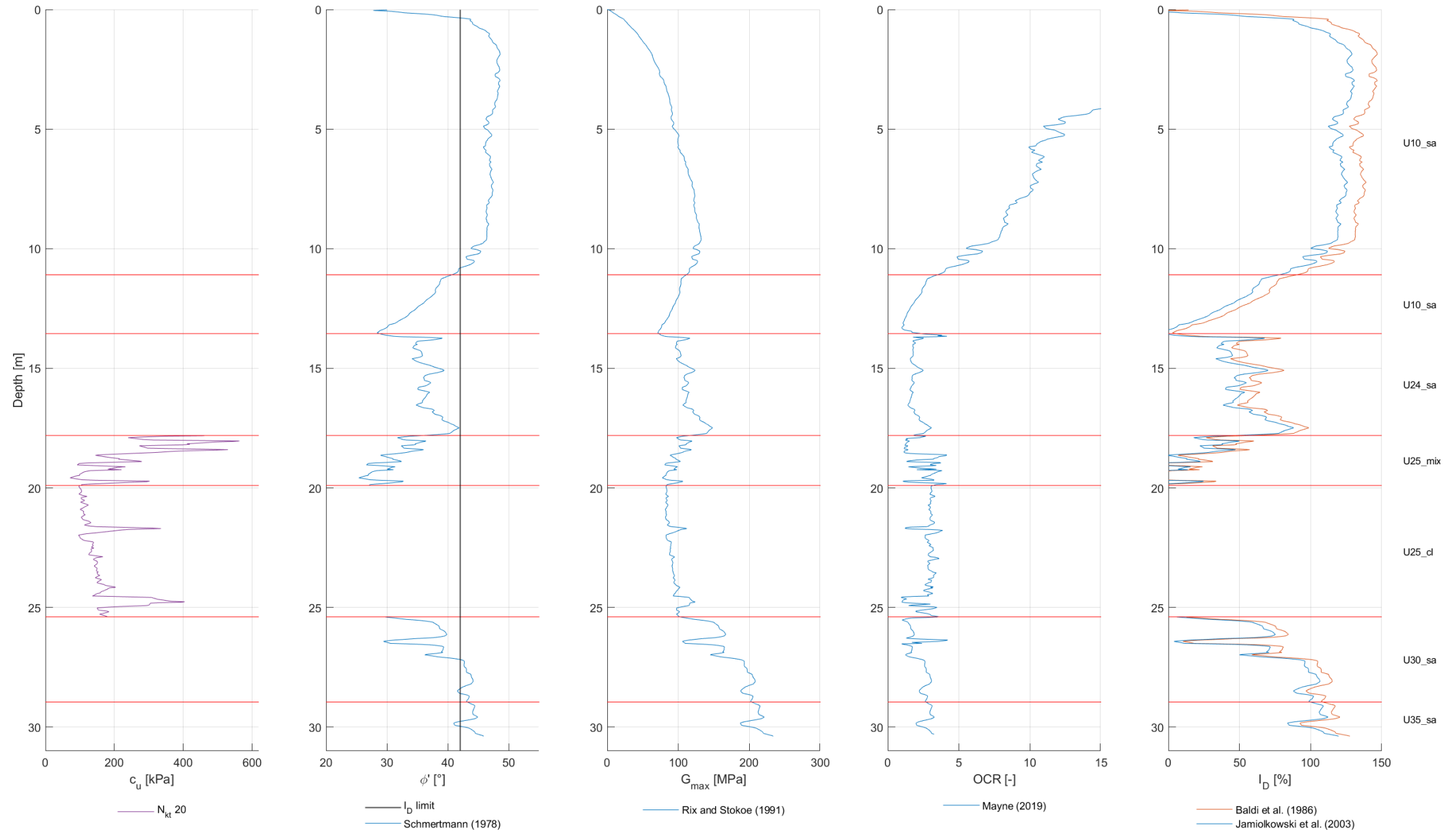


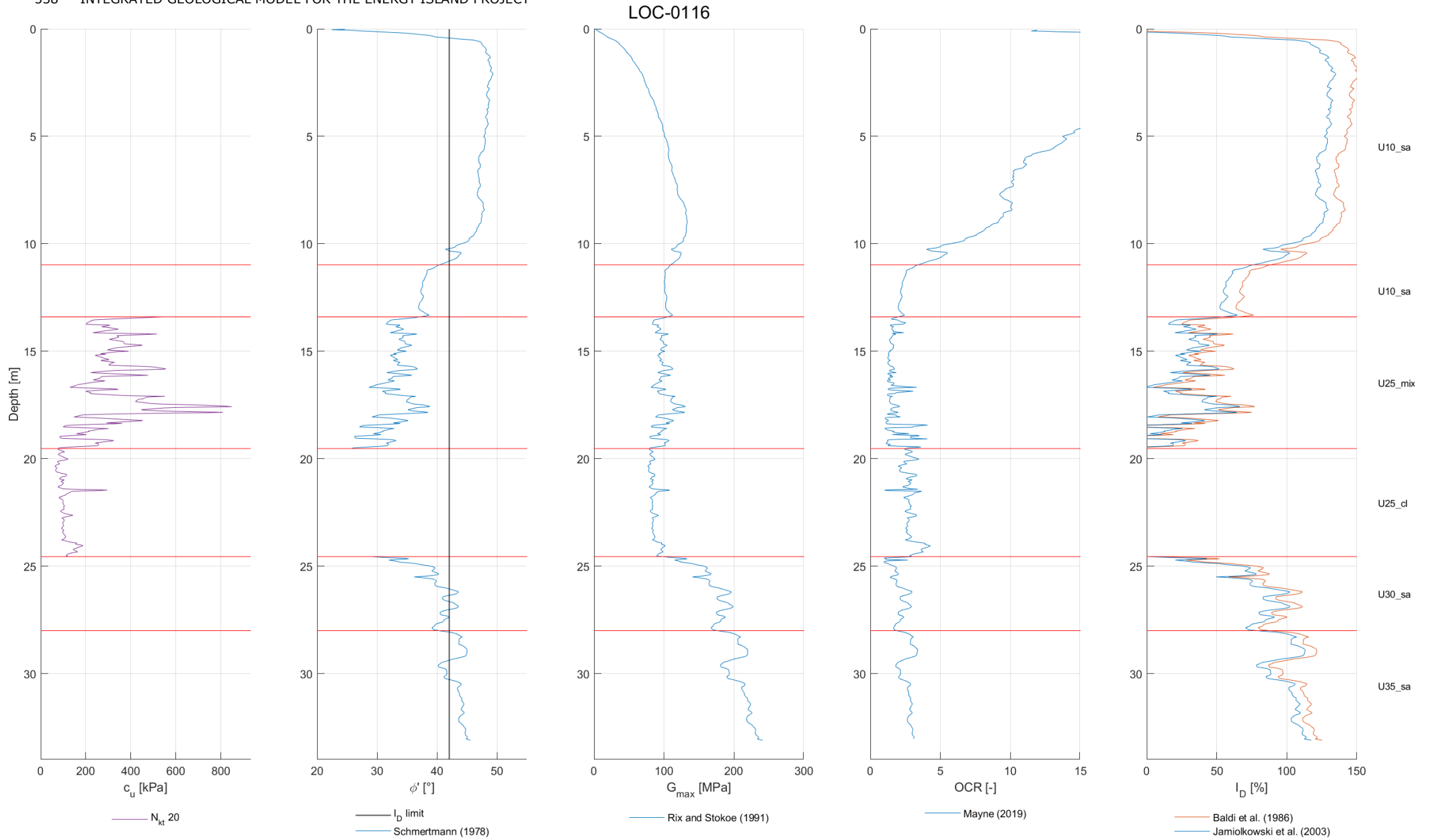
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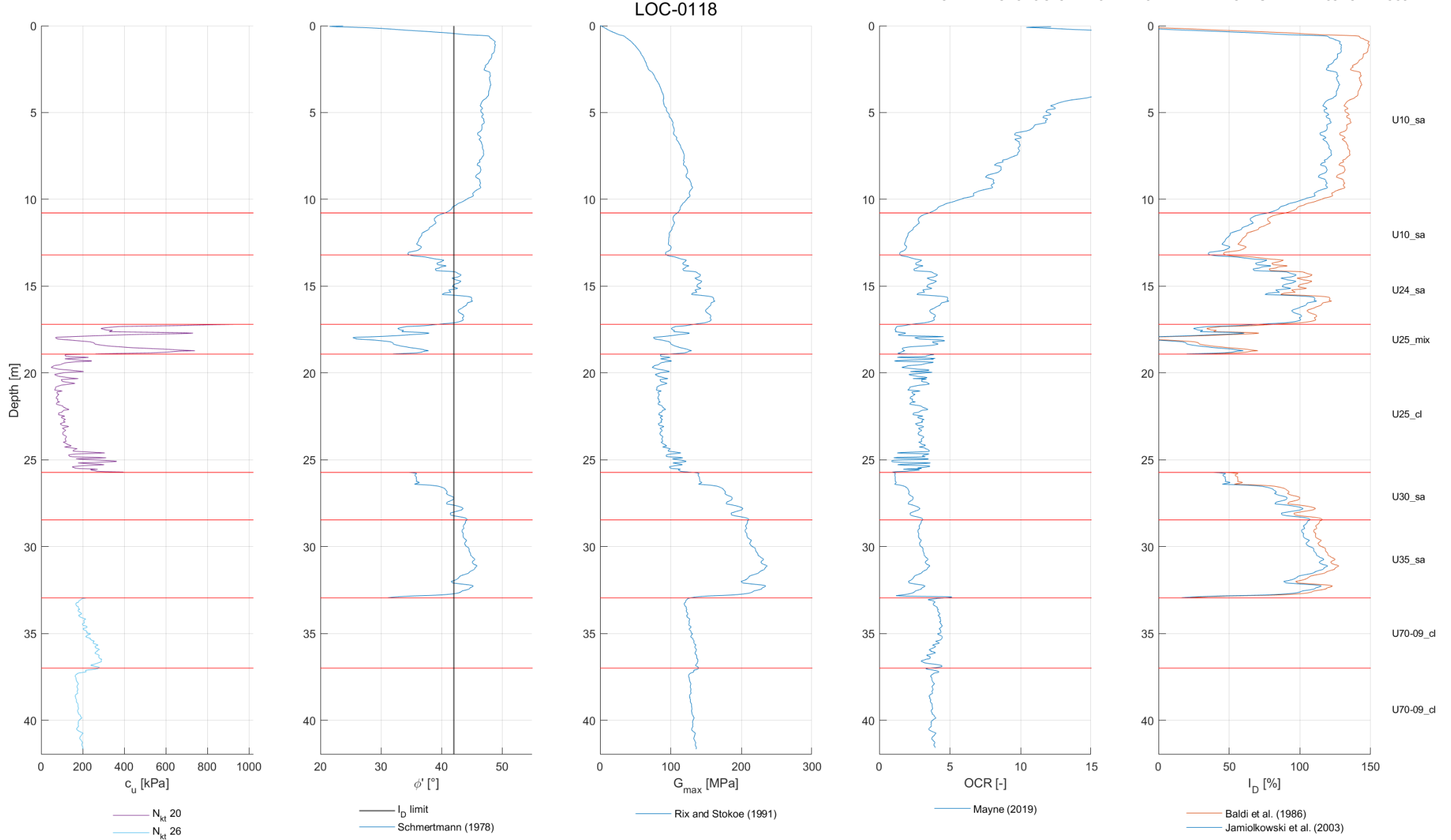


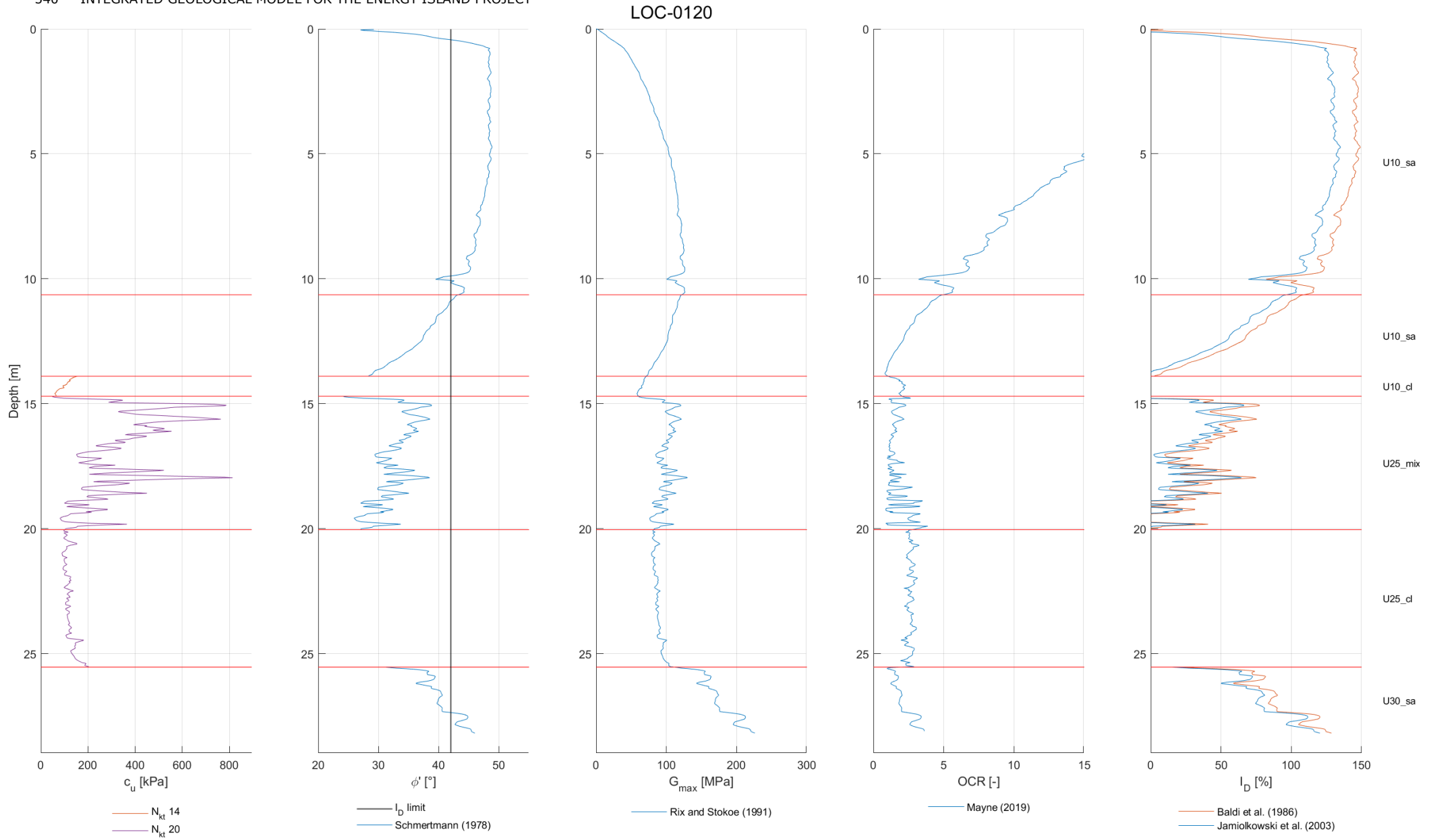


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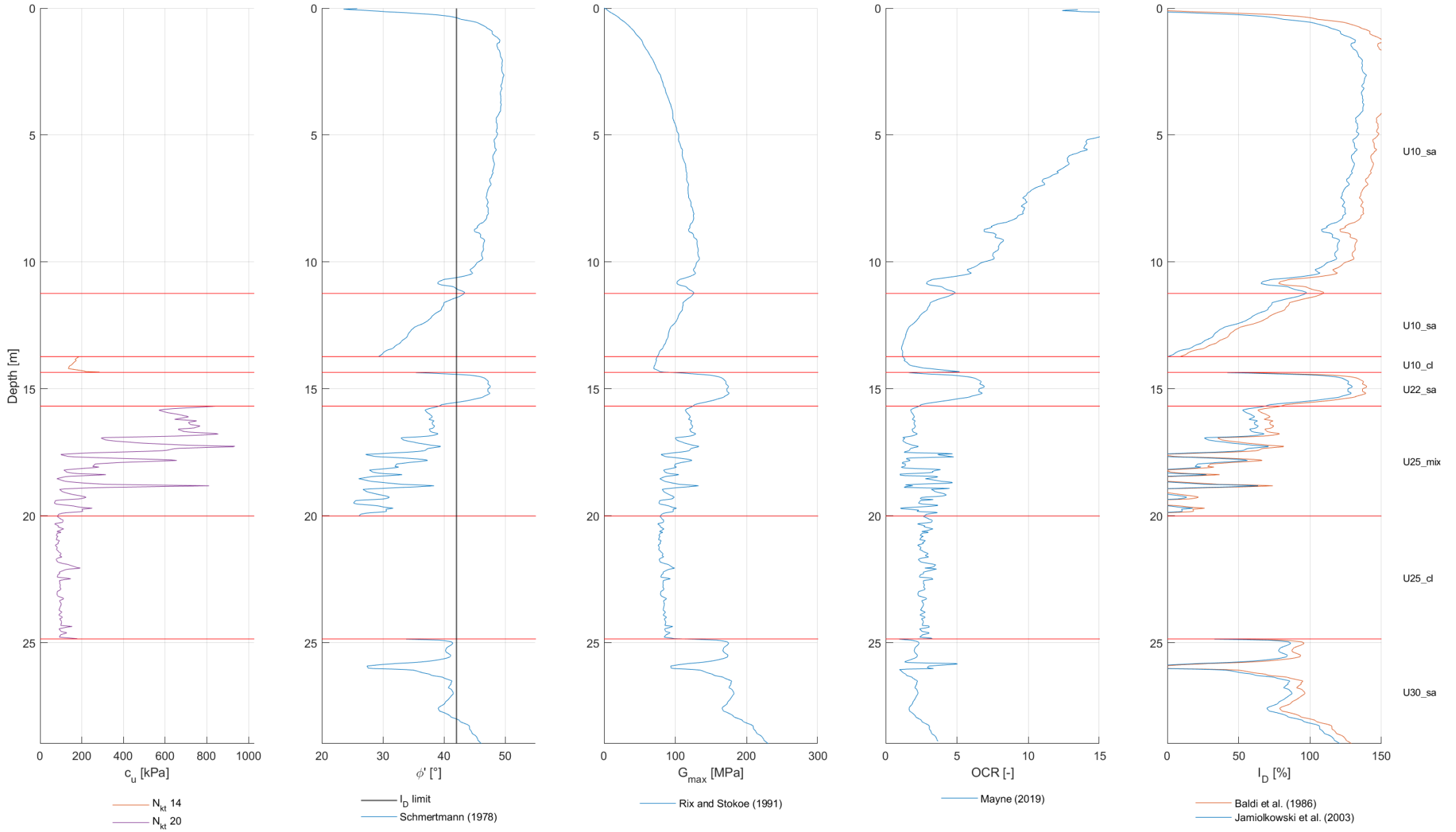


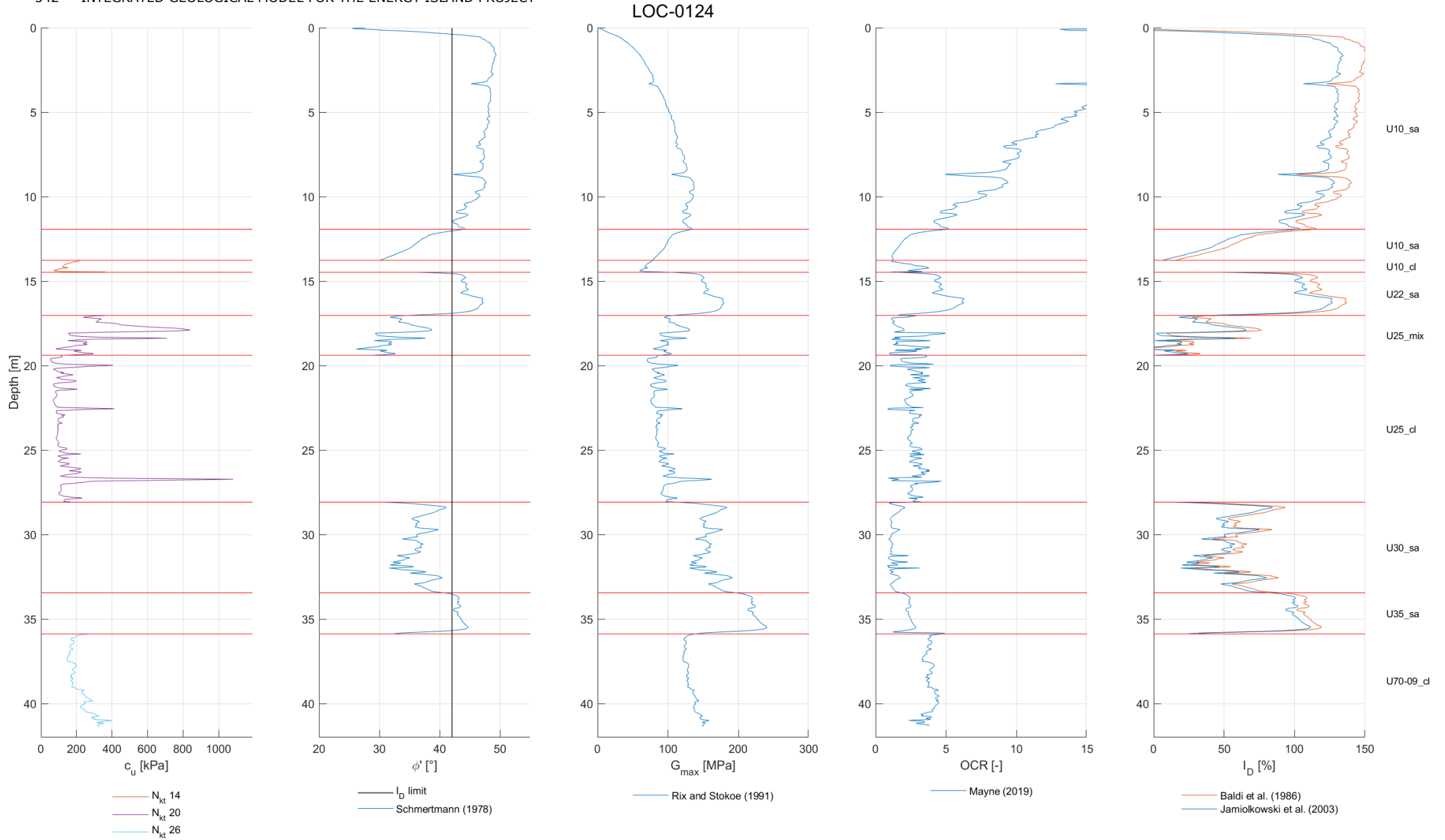




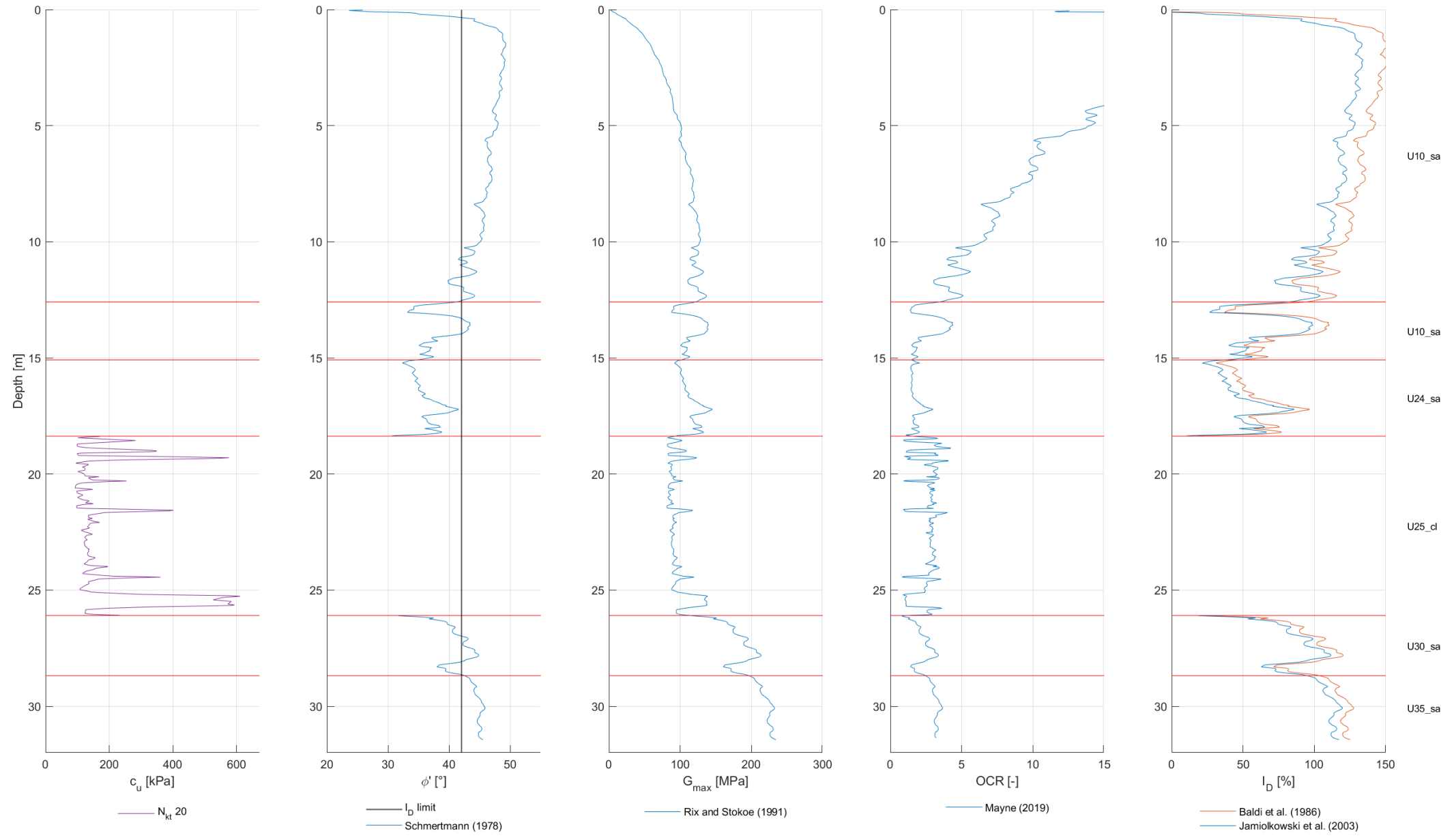


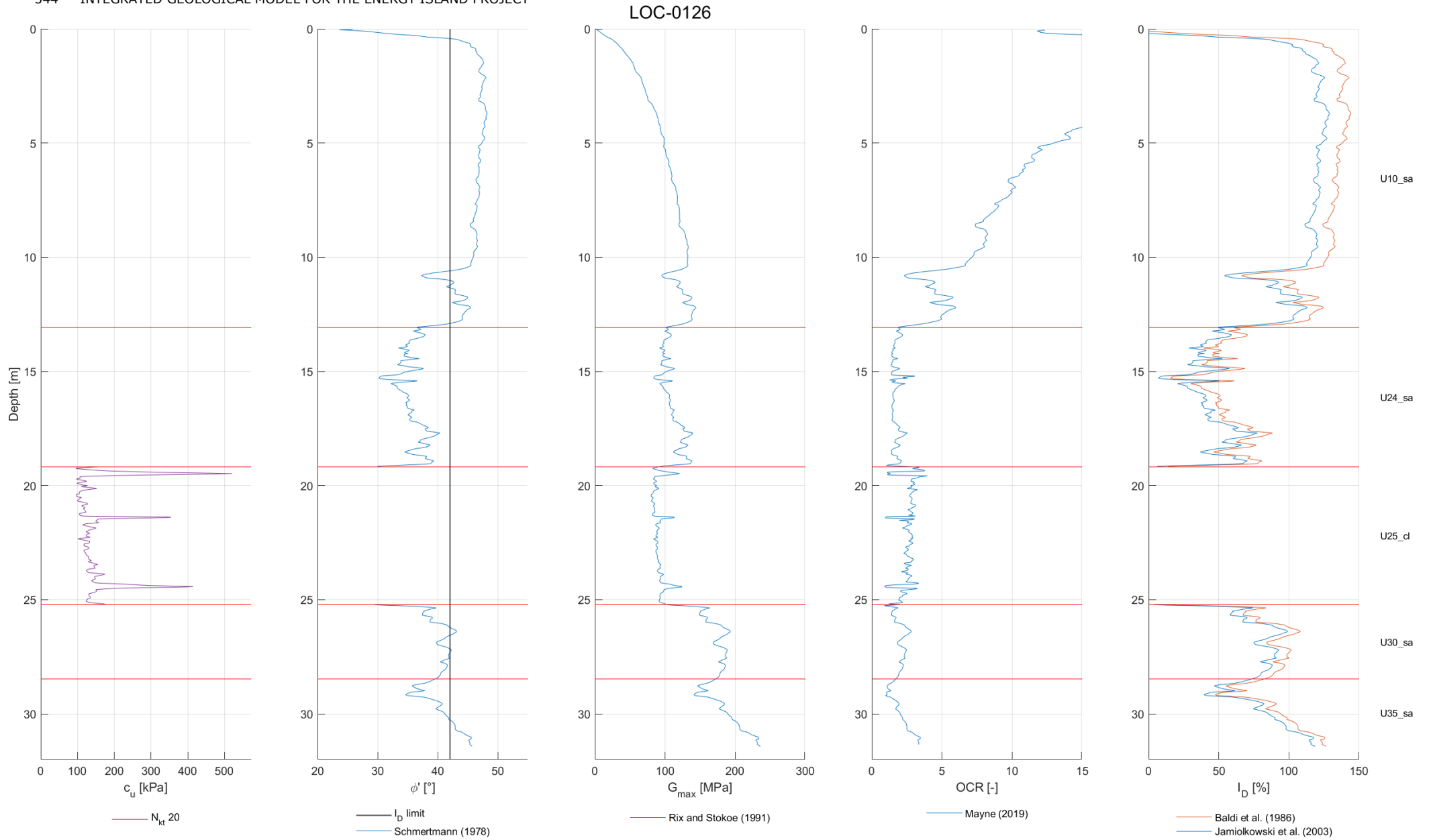
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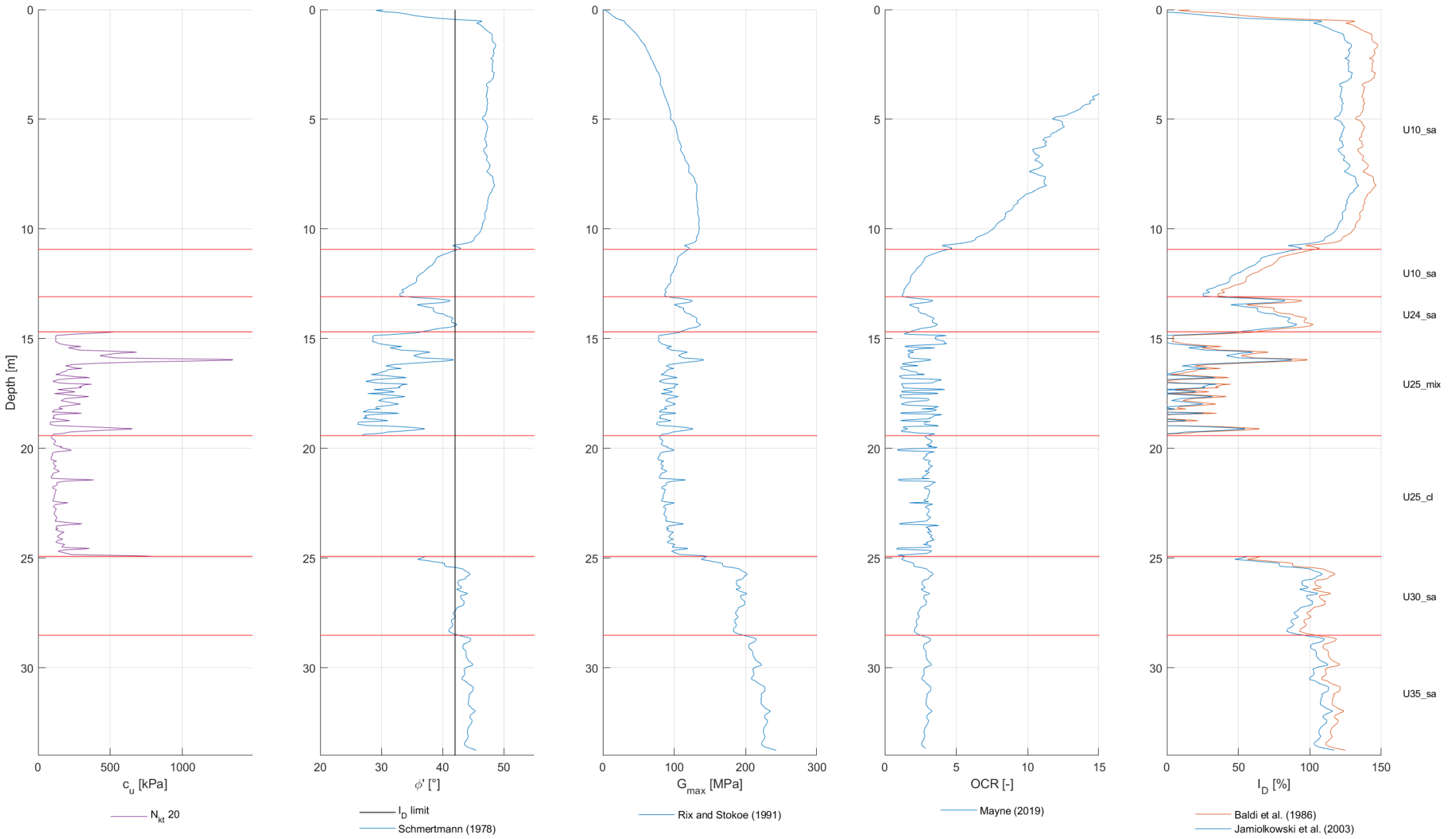


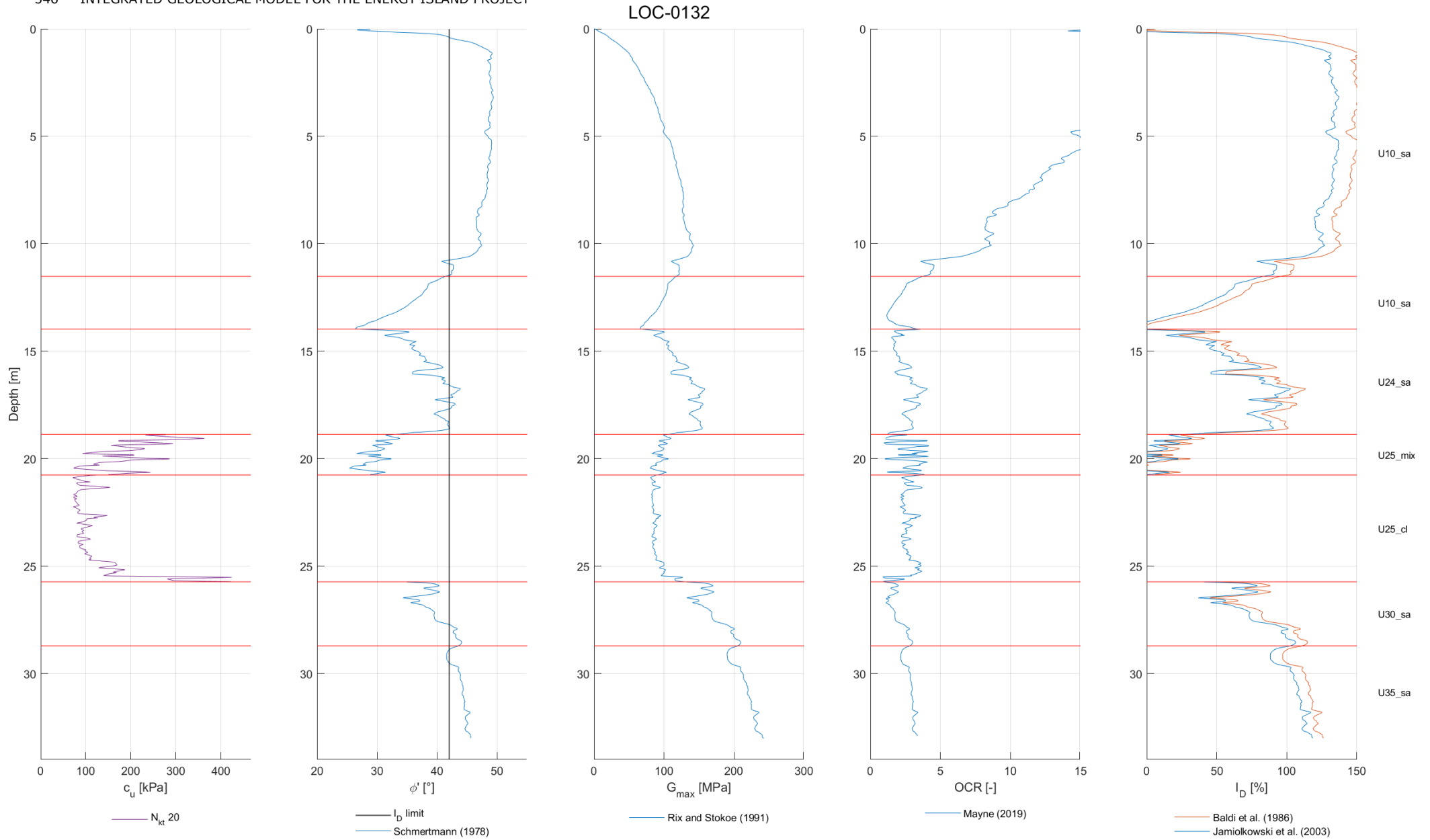
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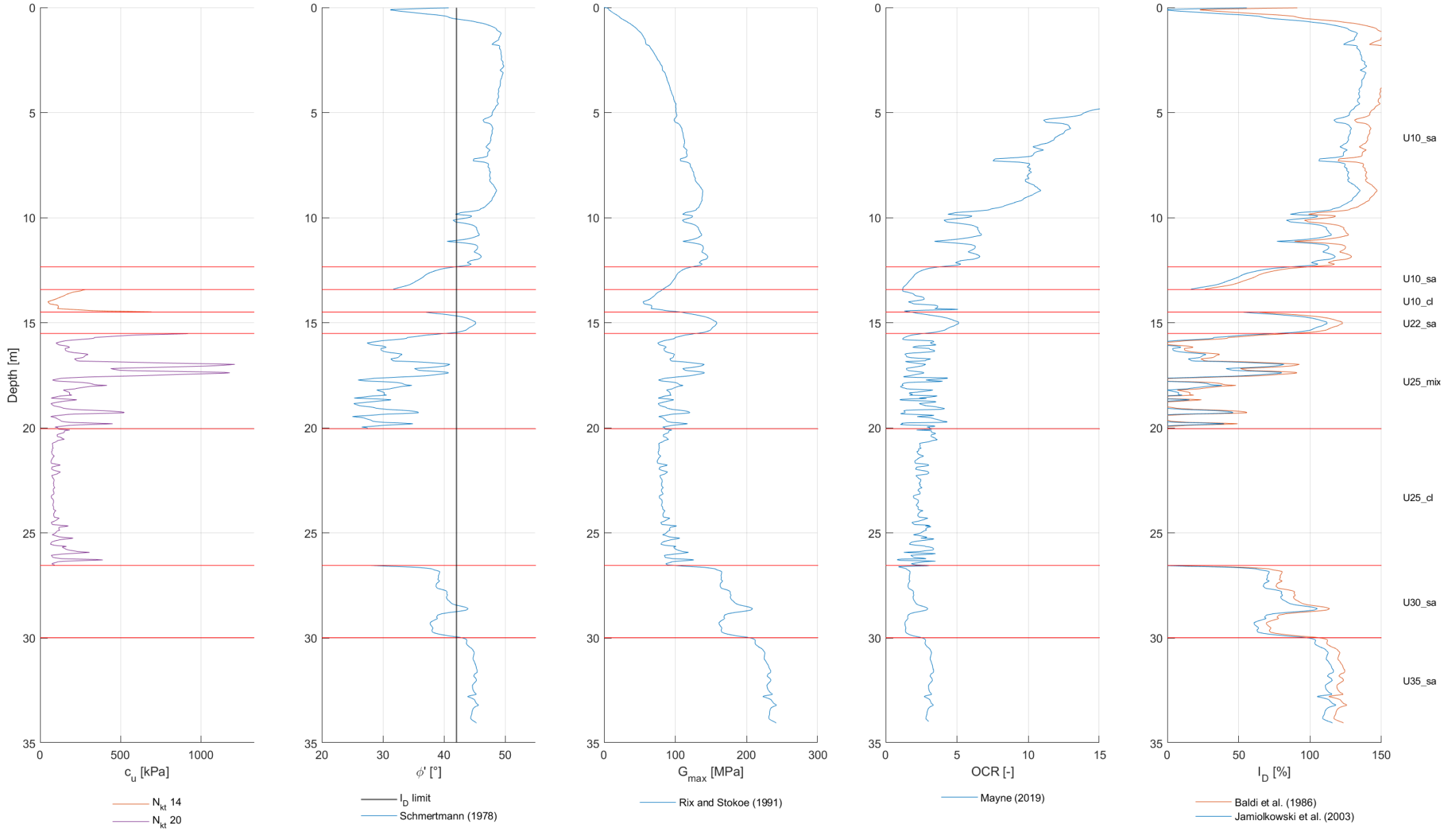


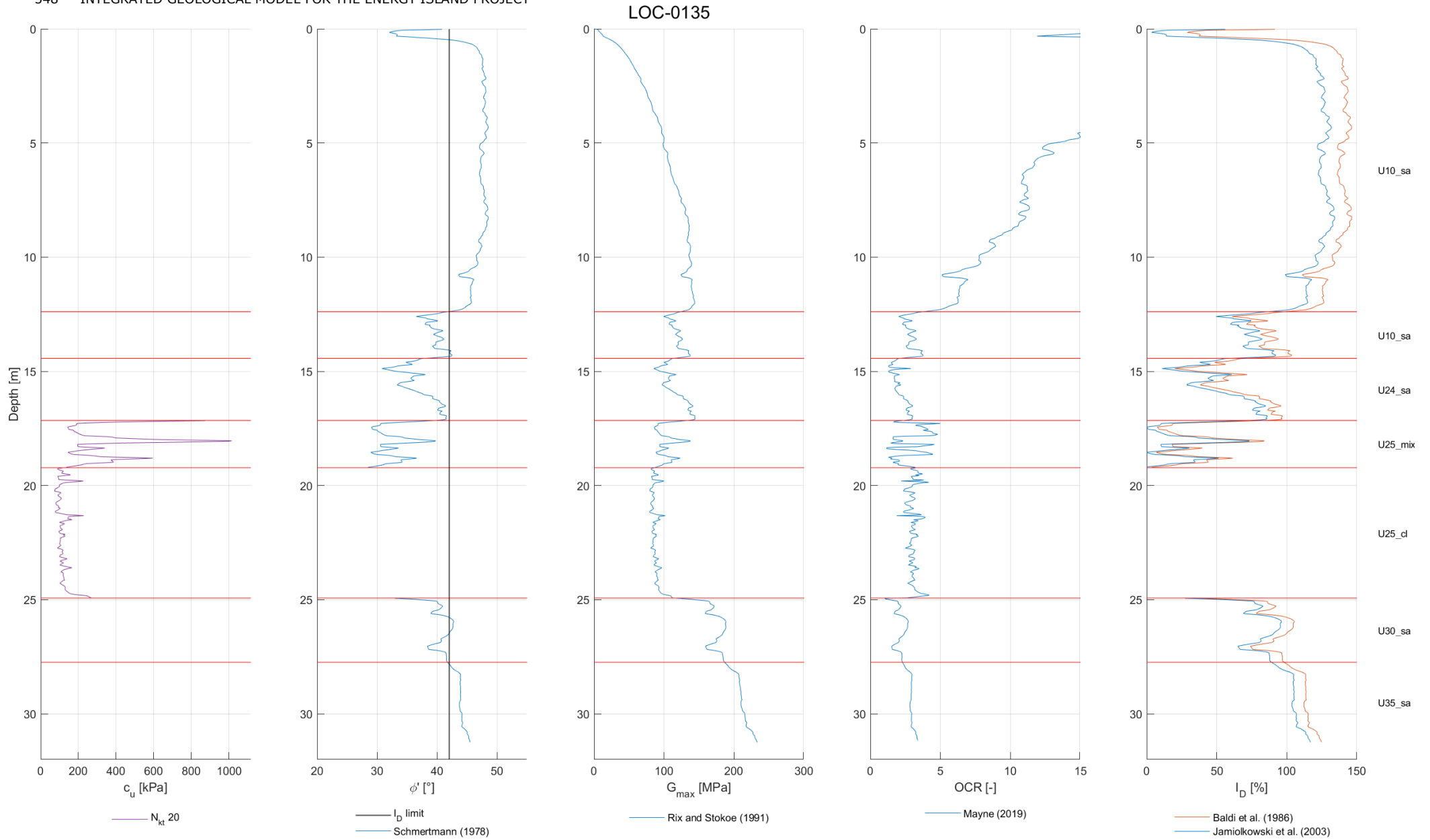
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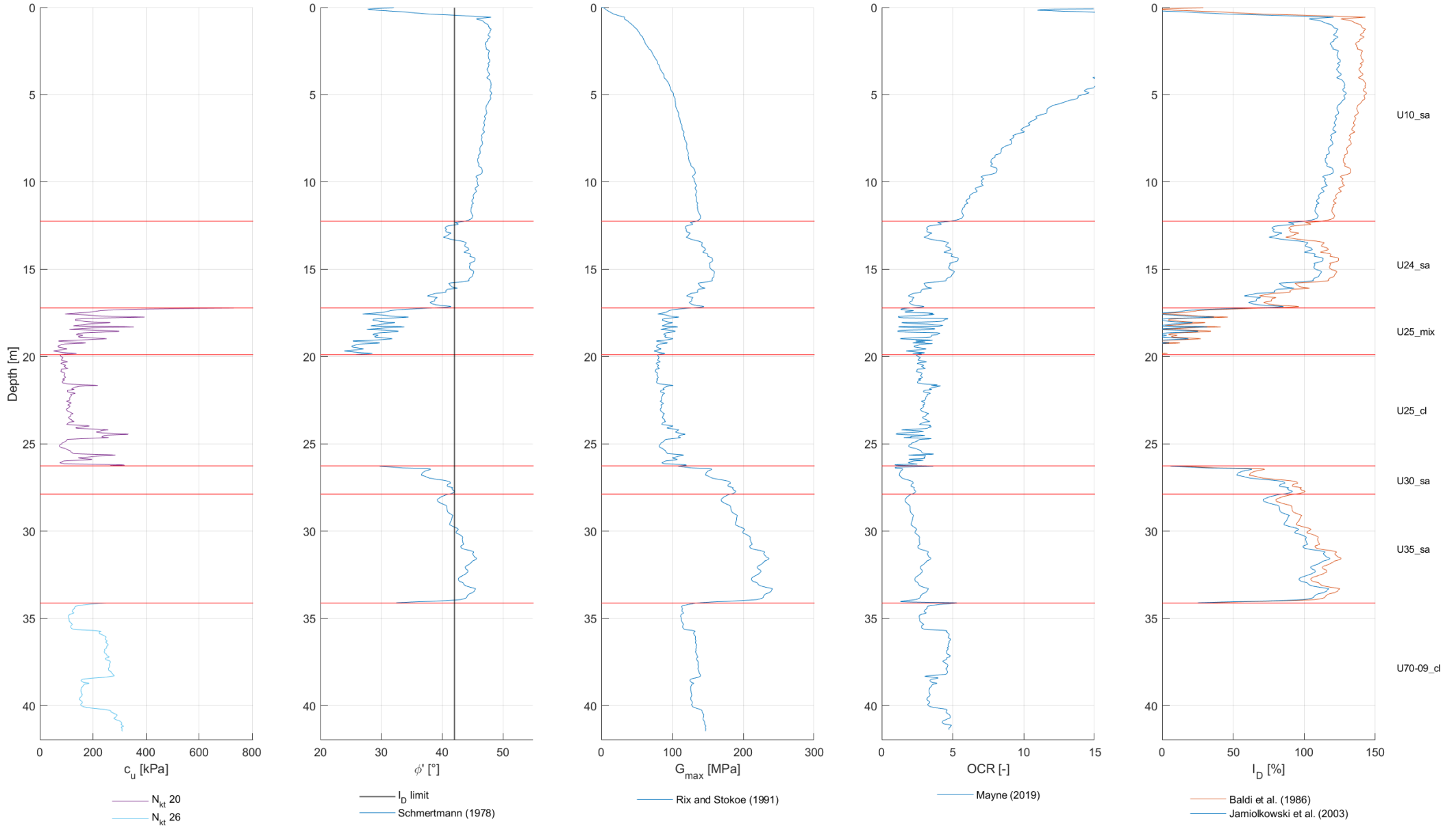


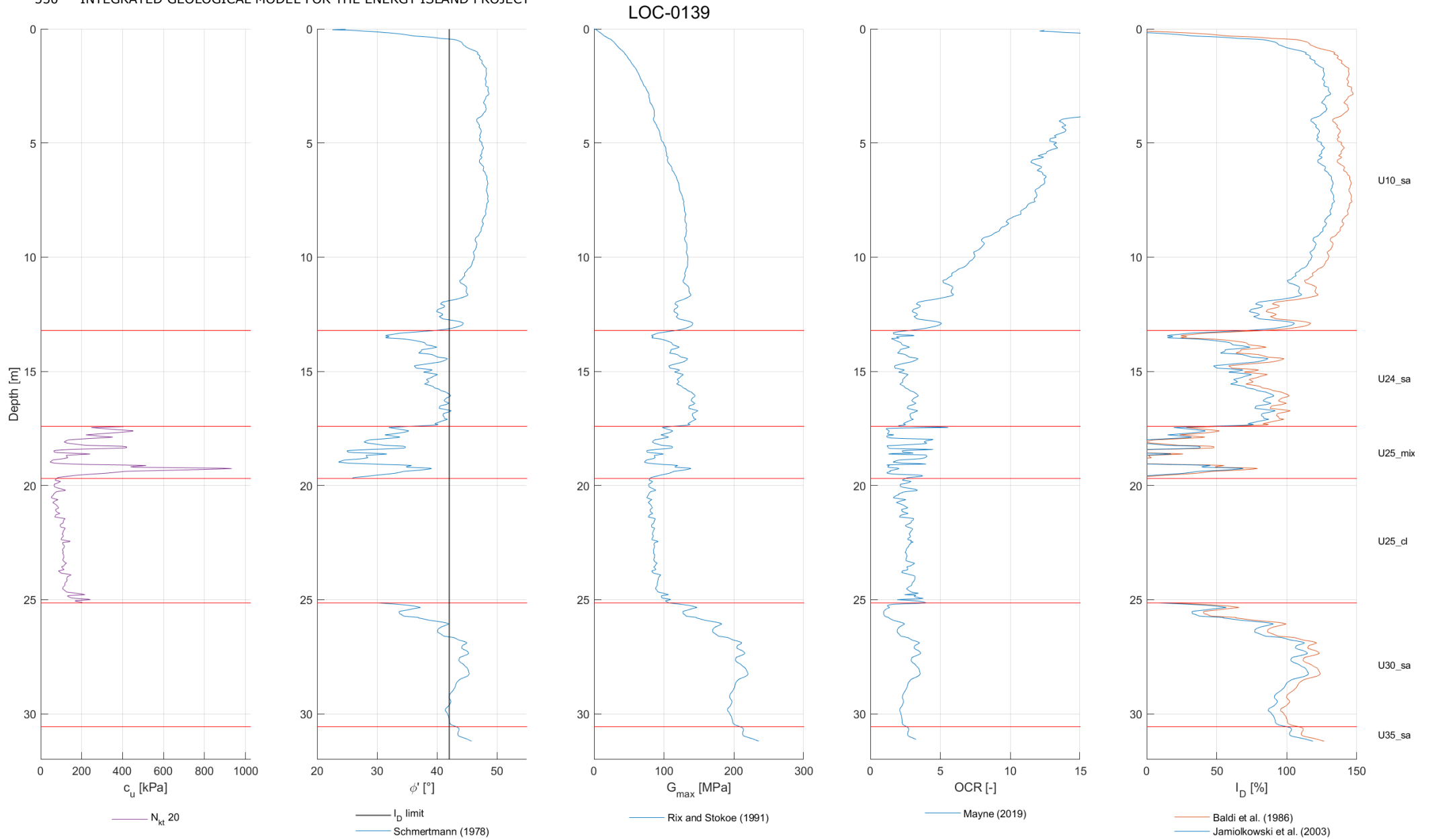
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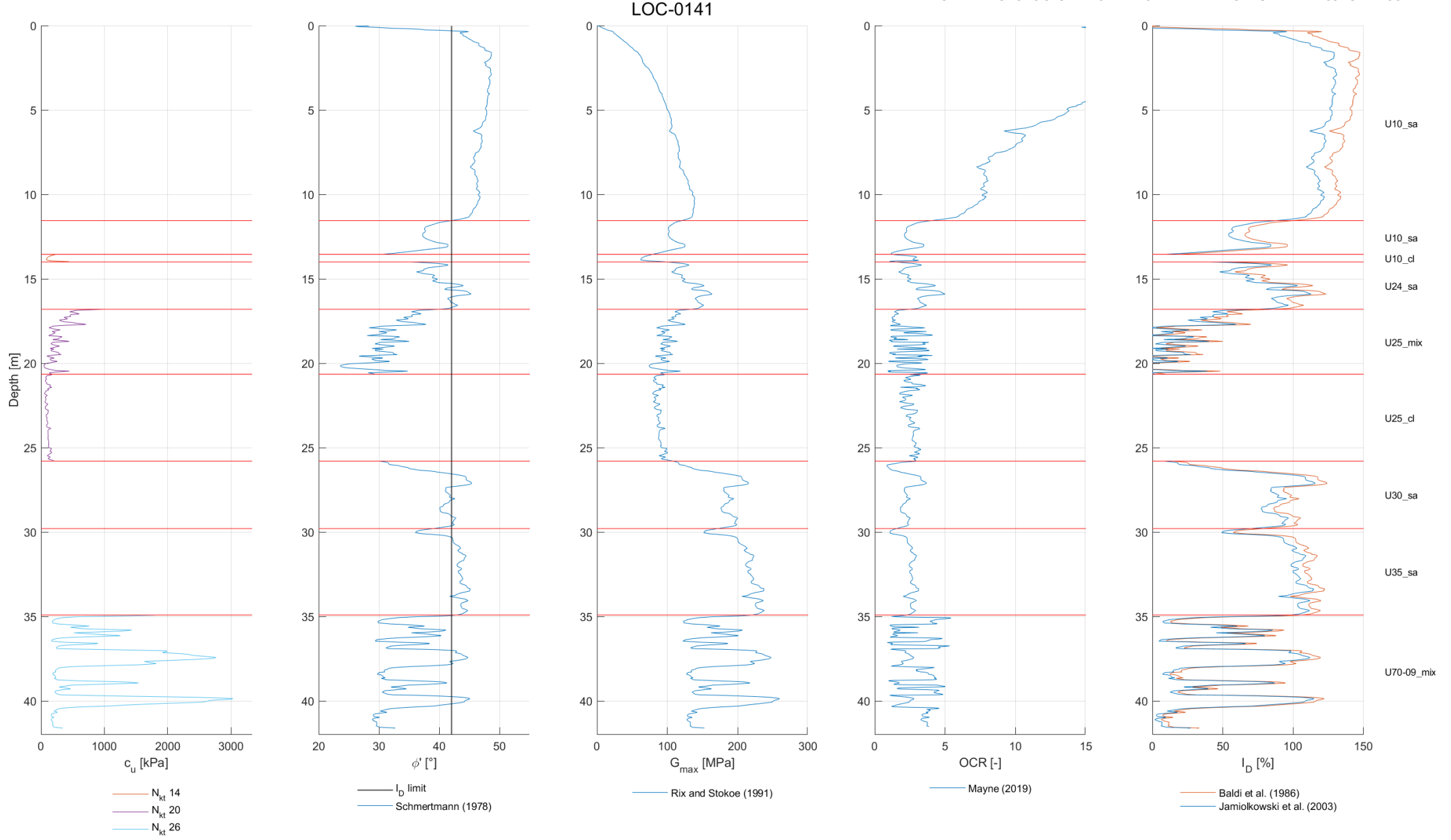


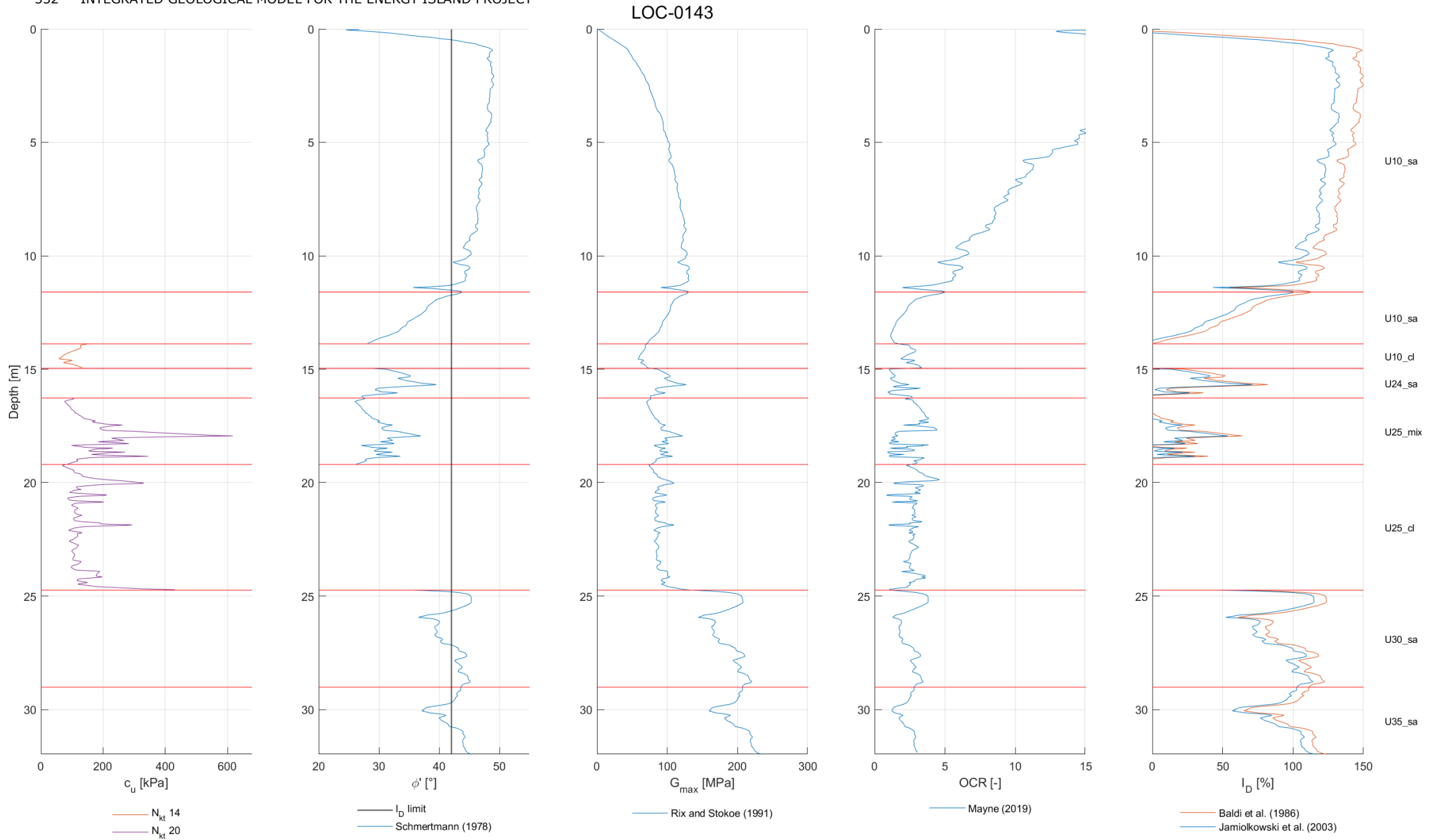


LOC-0137

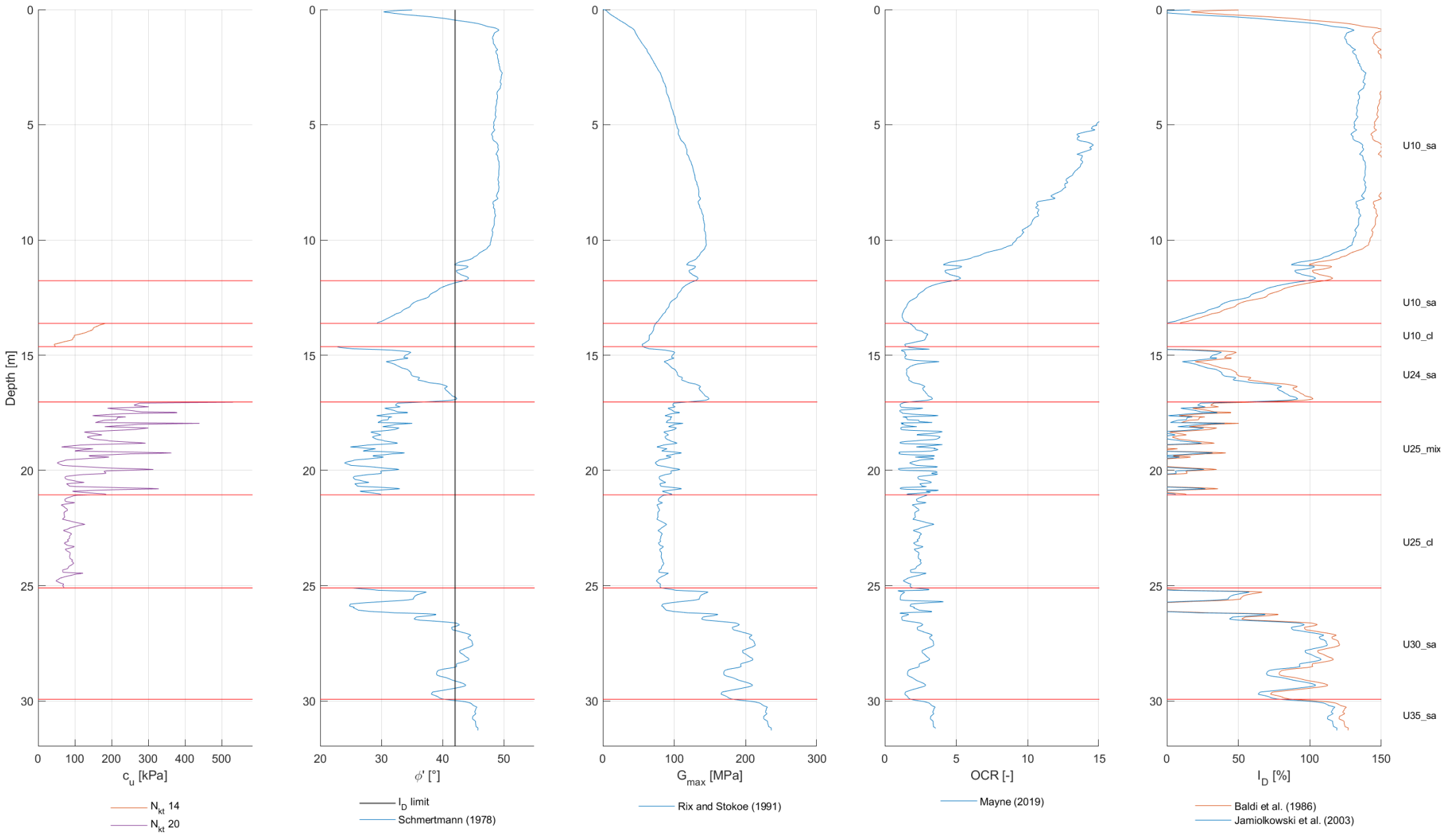


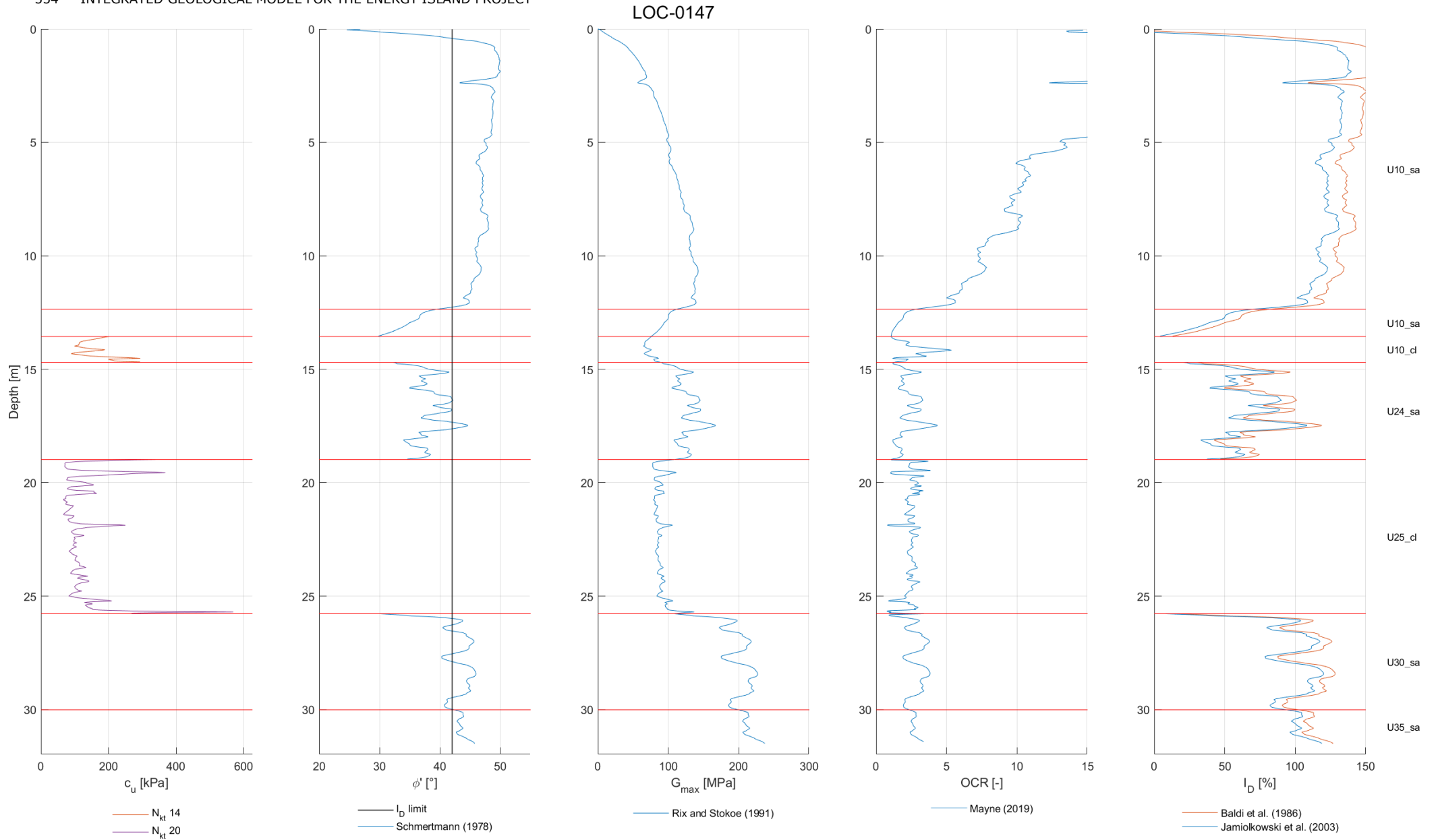




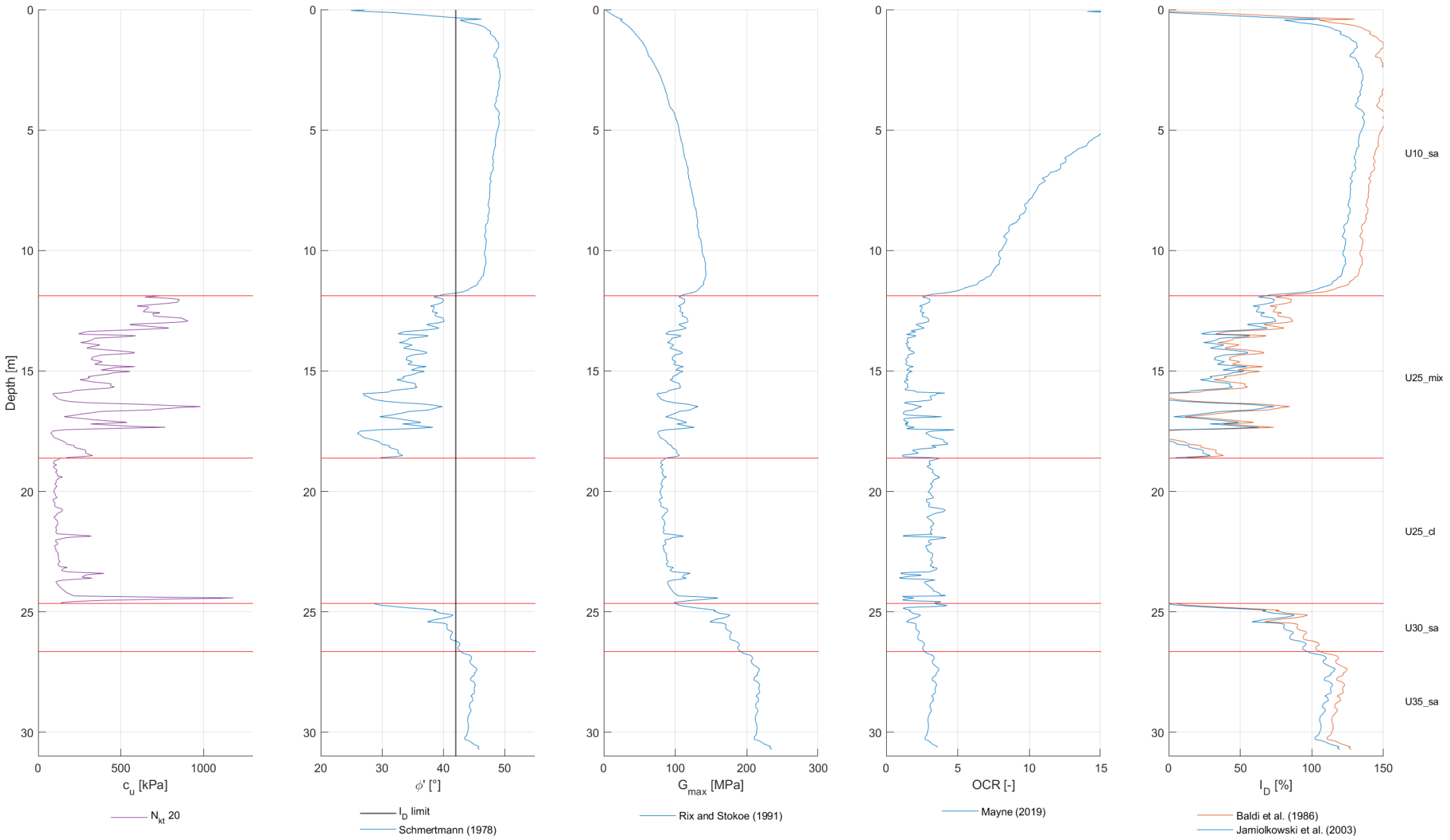


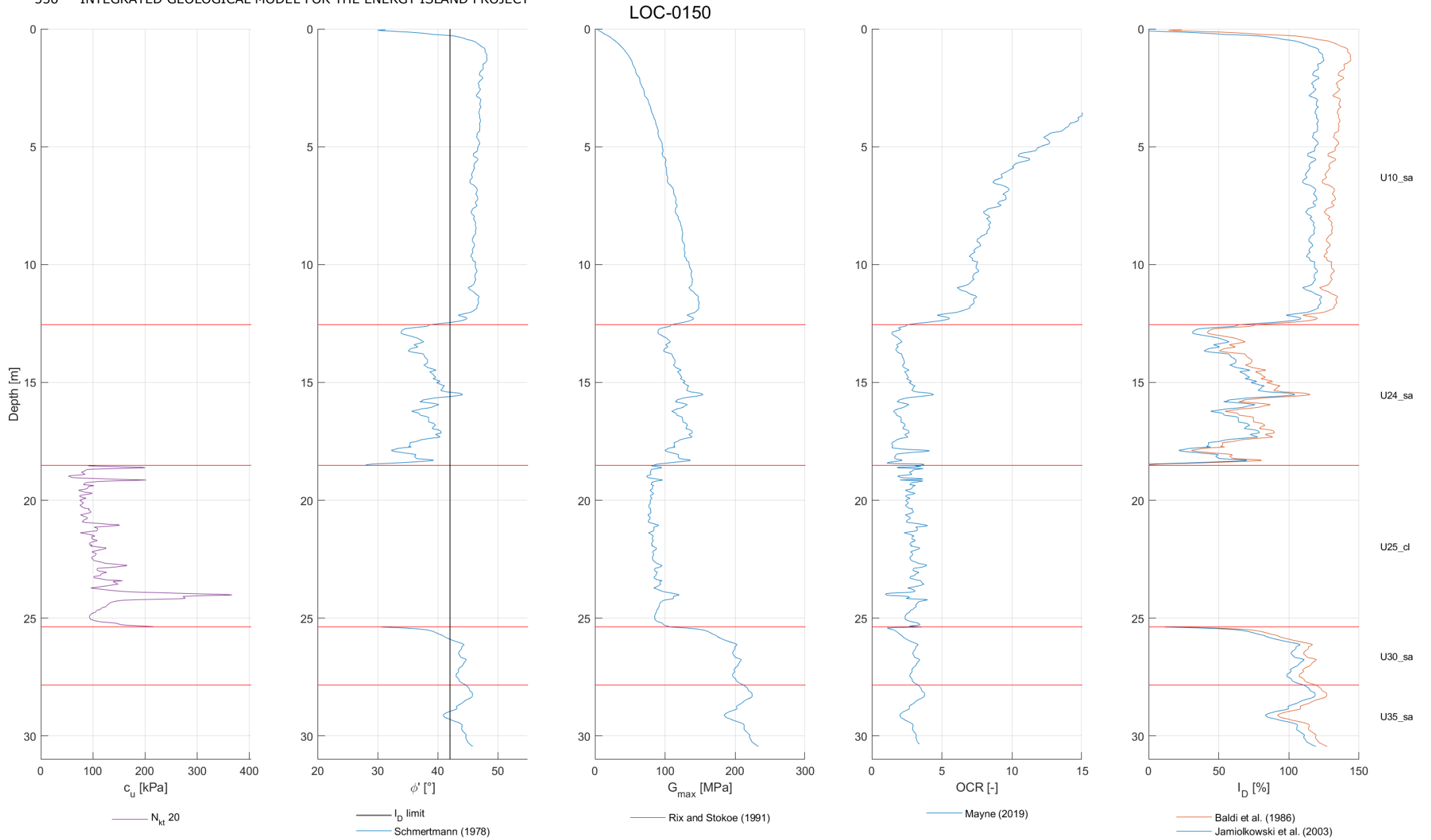
LOC-0145



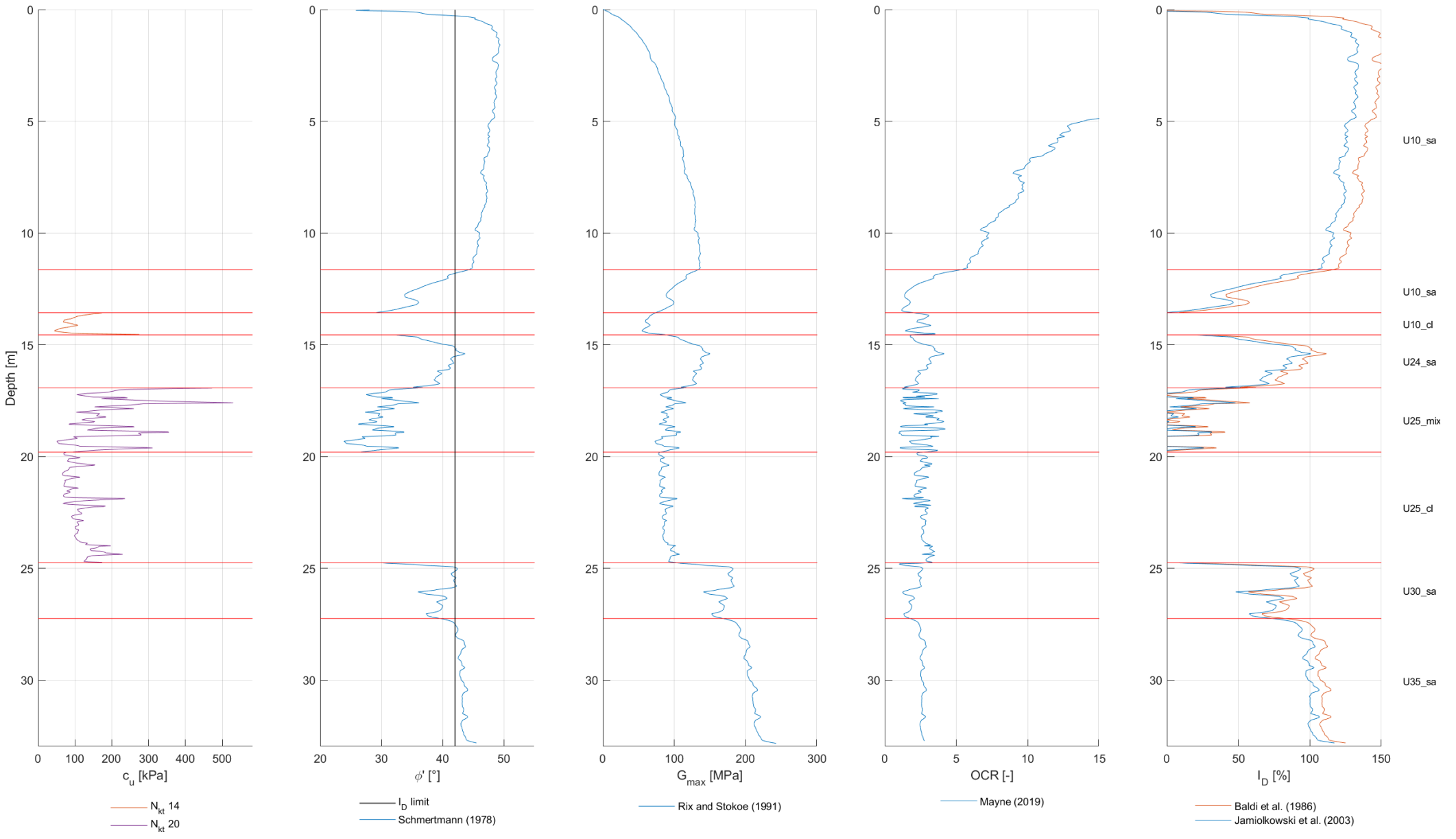


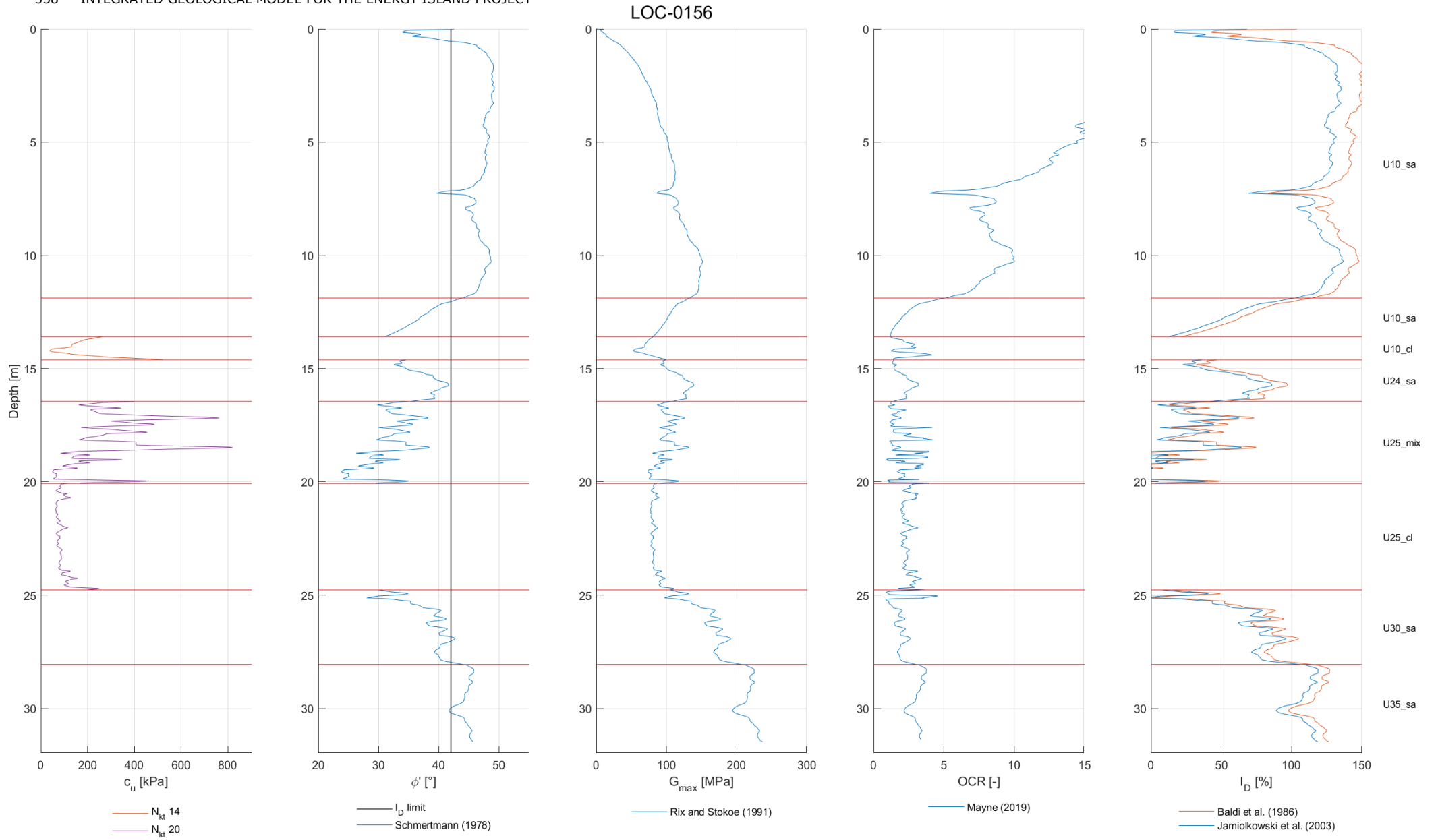
LOC-0148



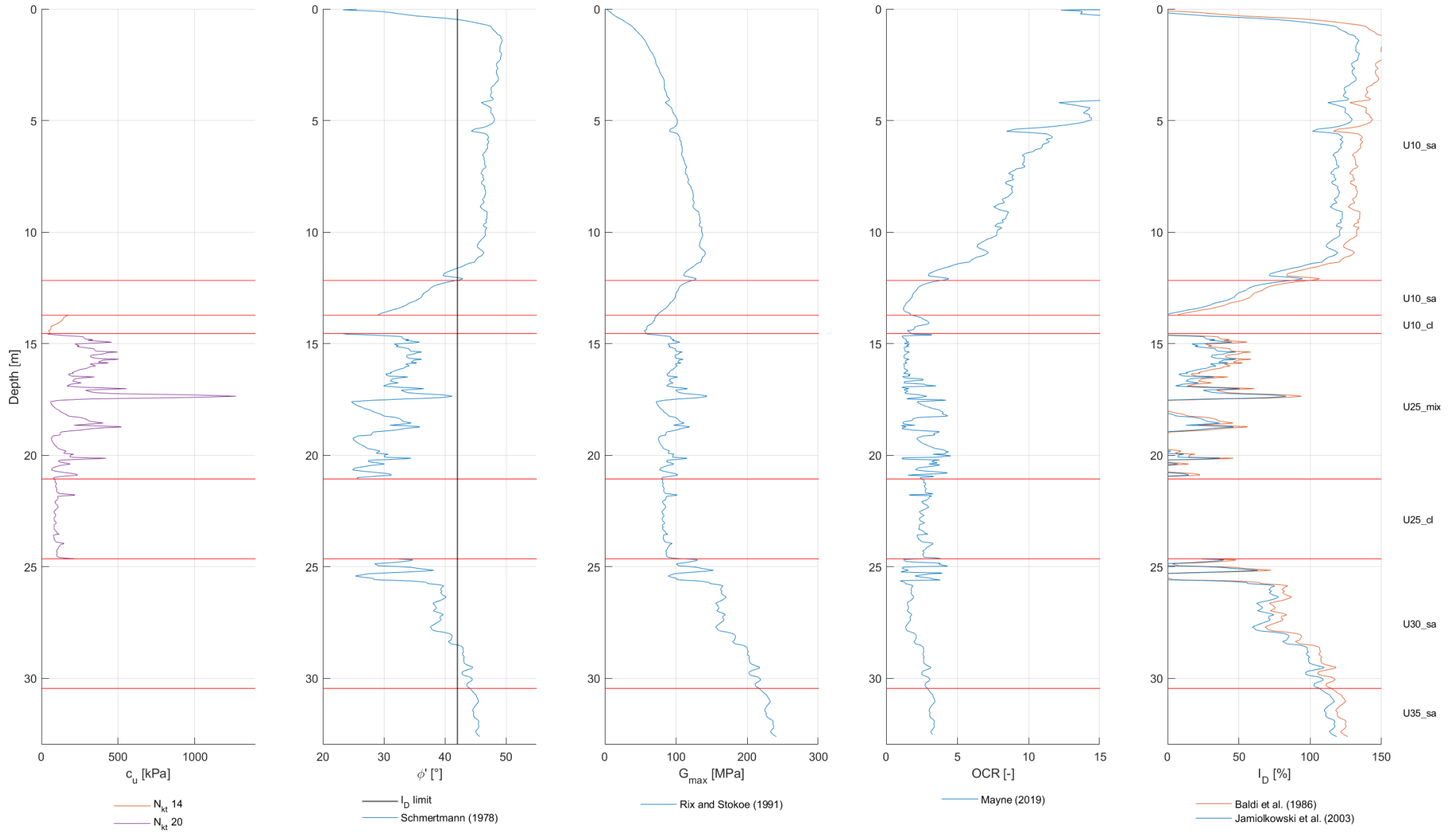


LOC-0153

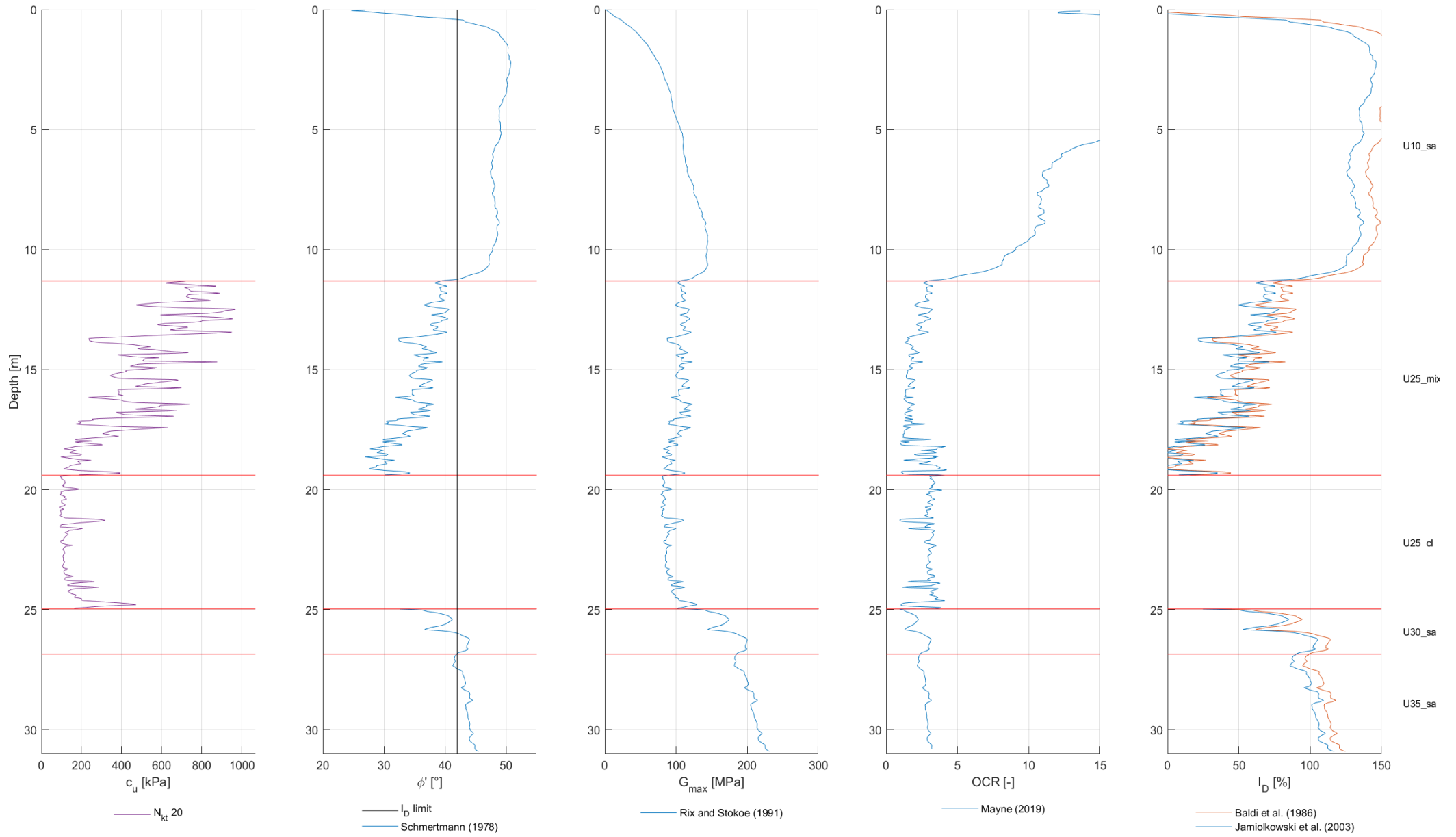




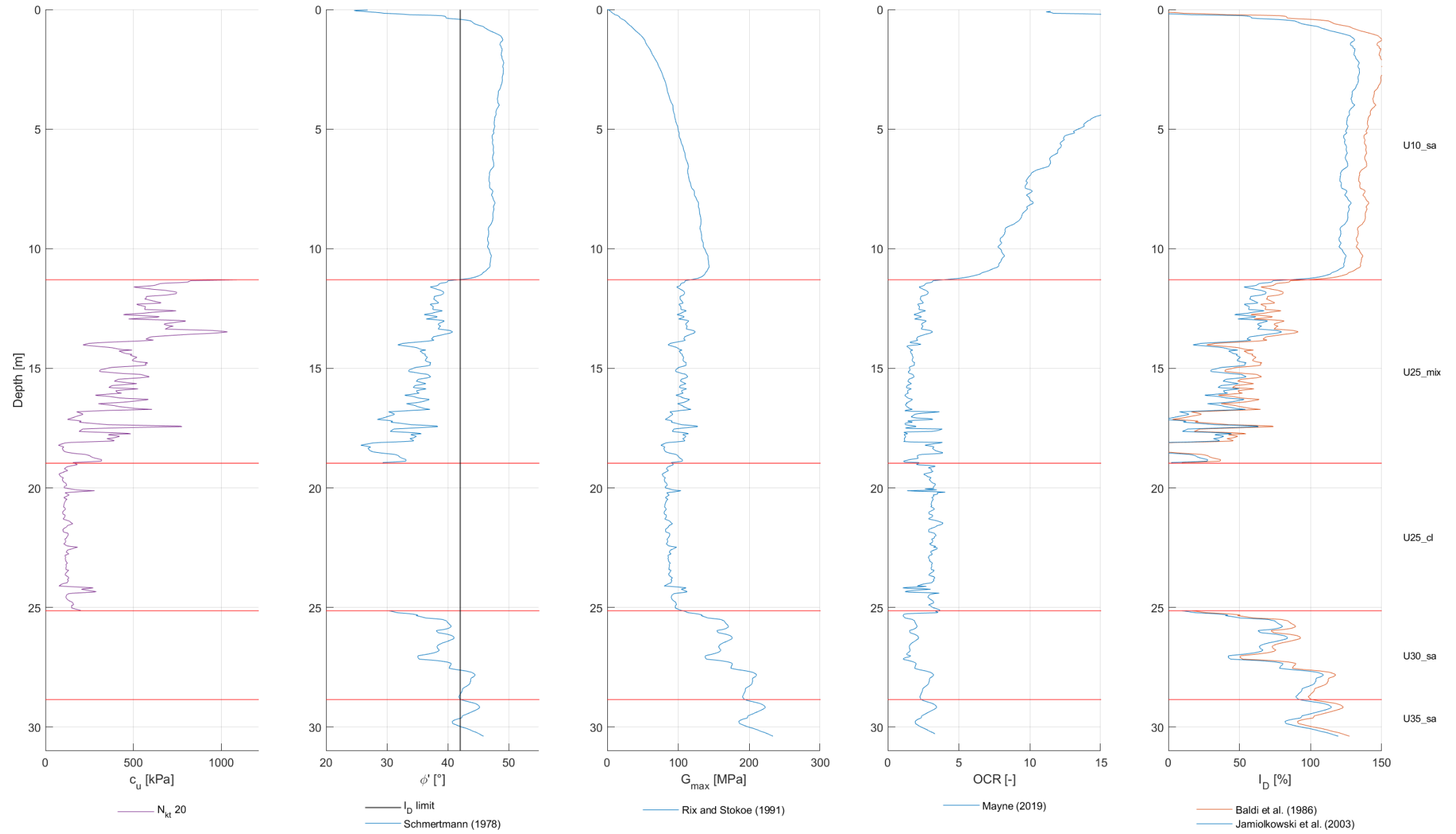
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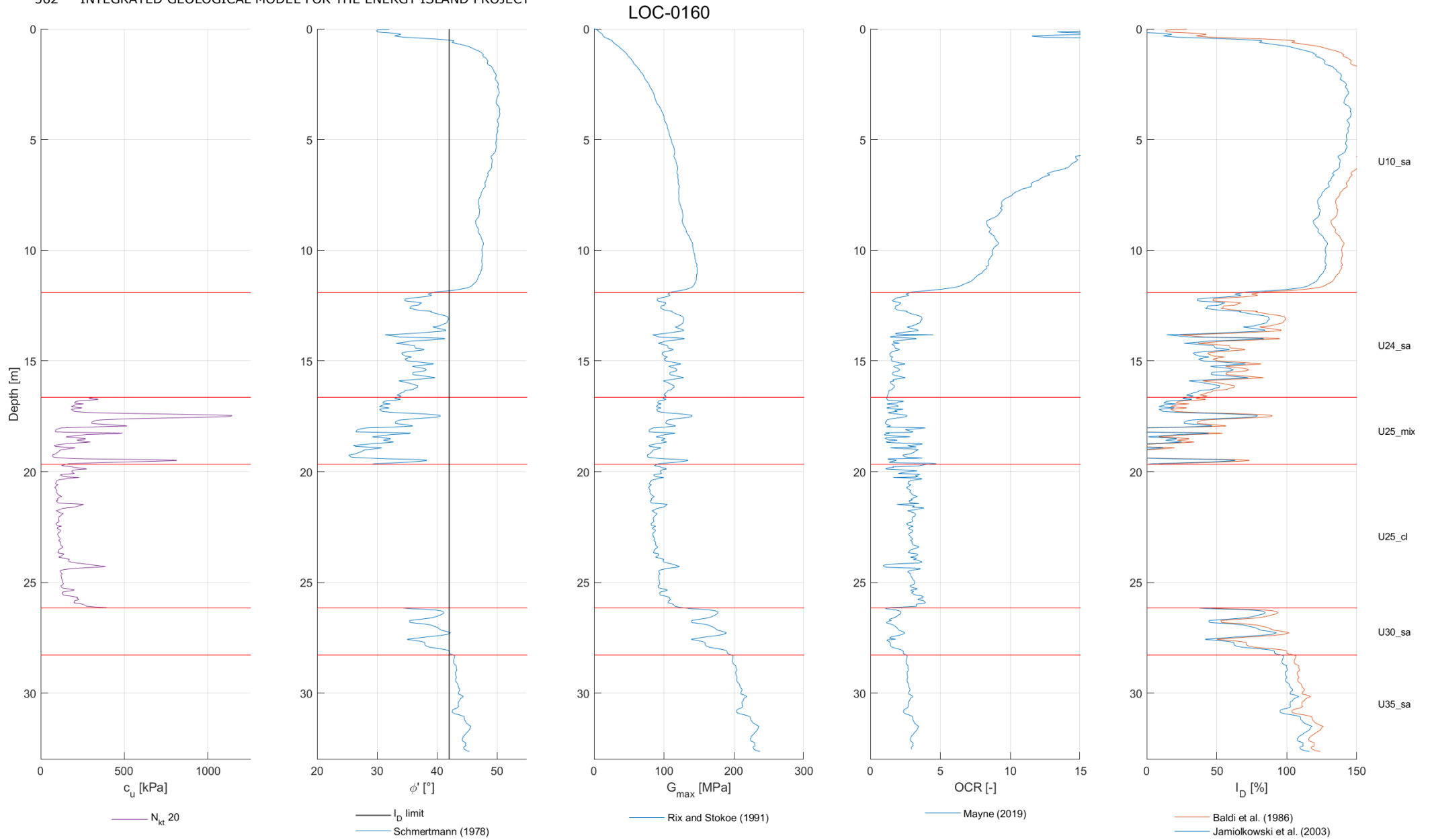


LOC-0158

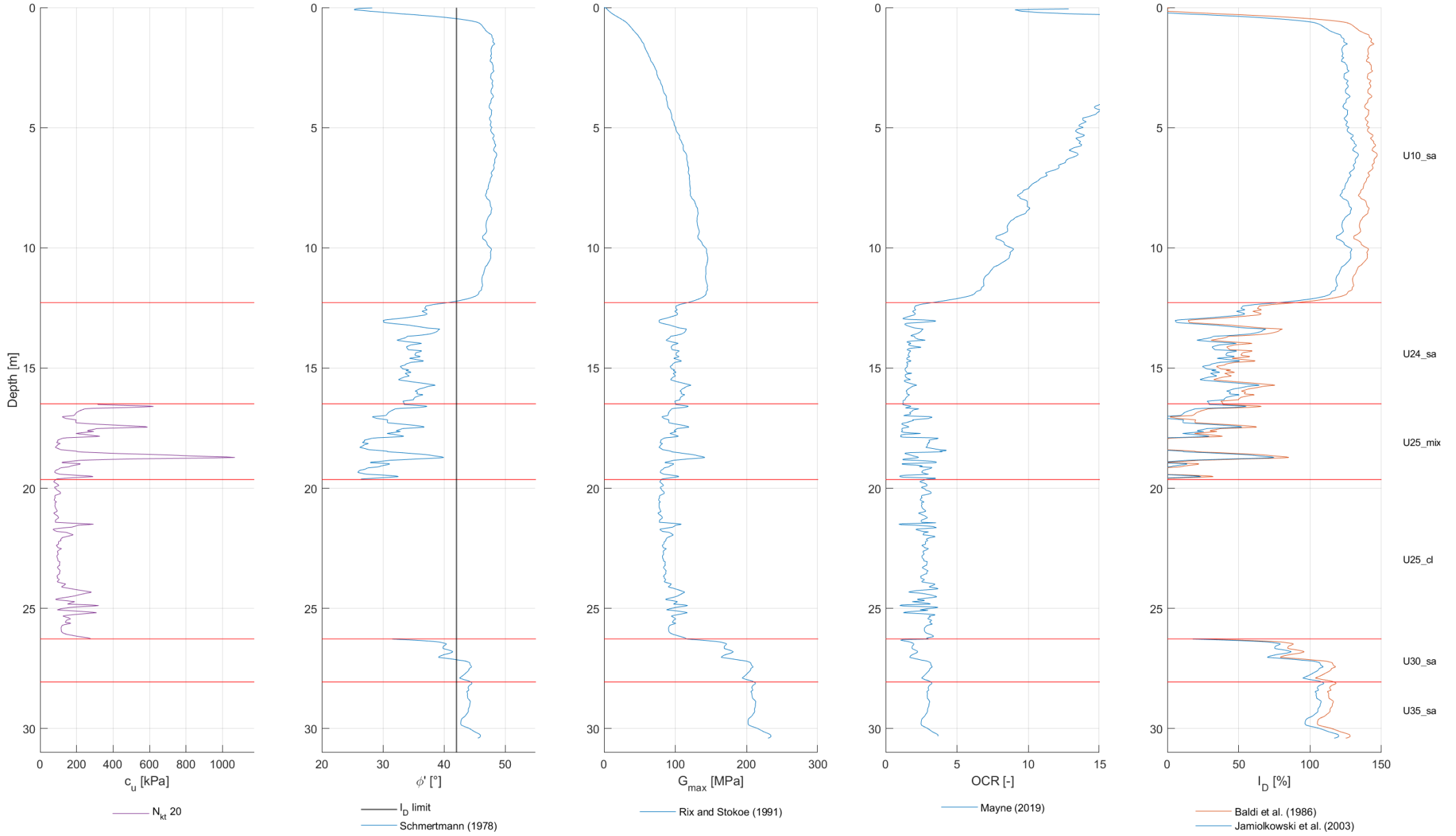


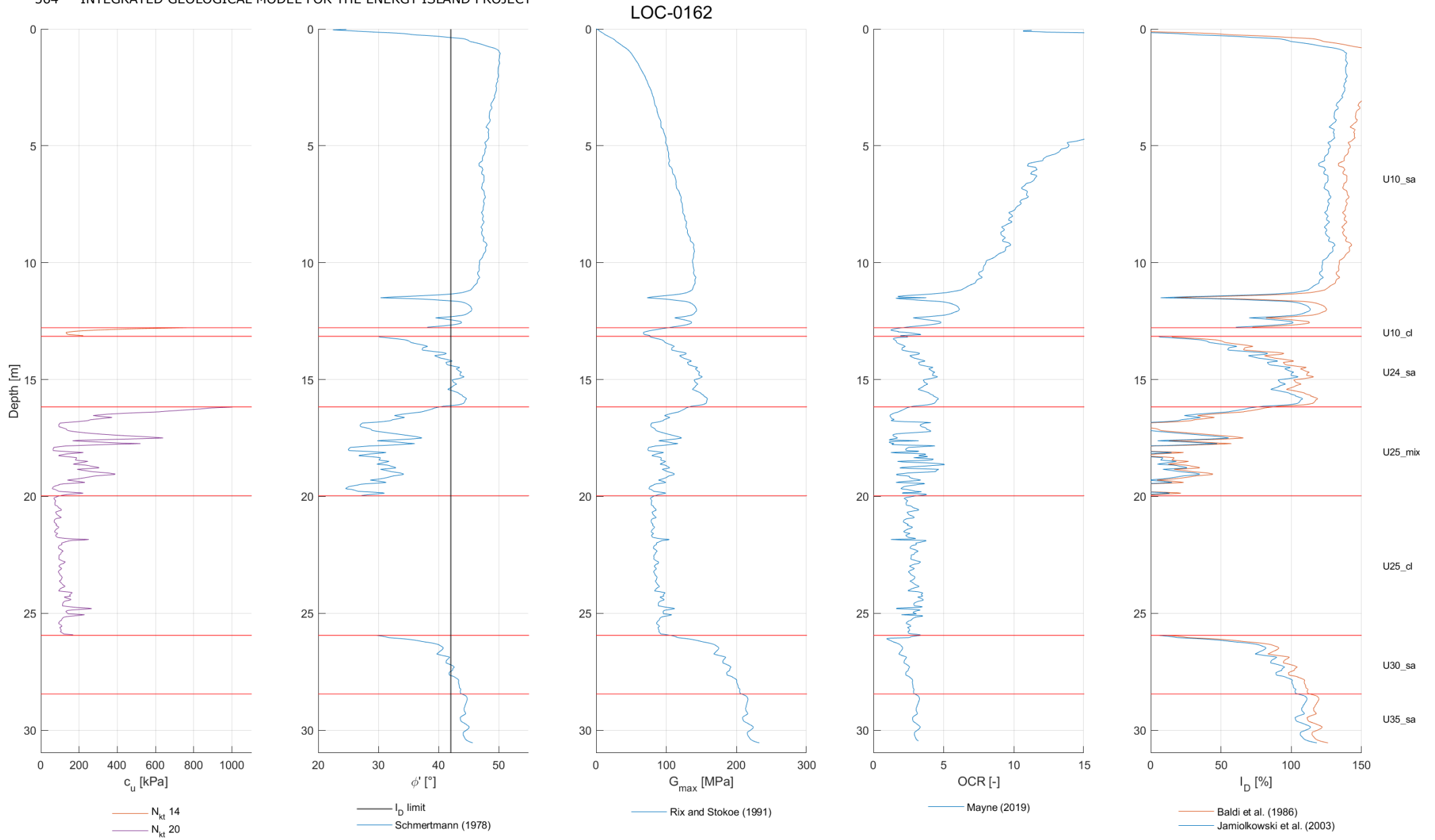
LOC-0159



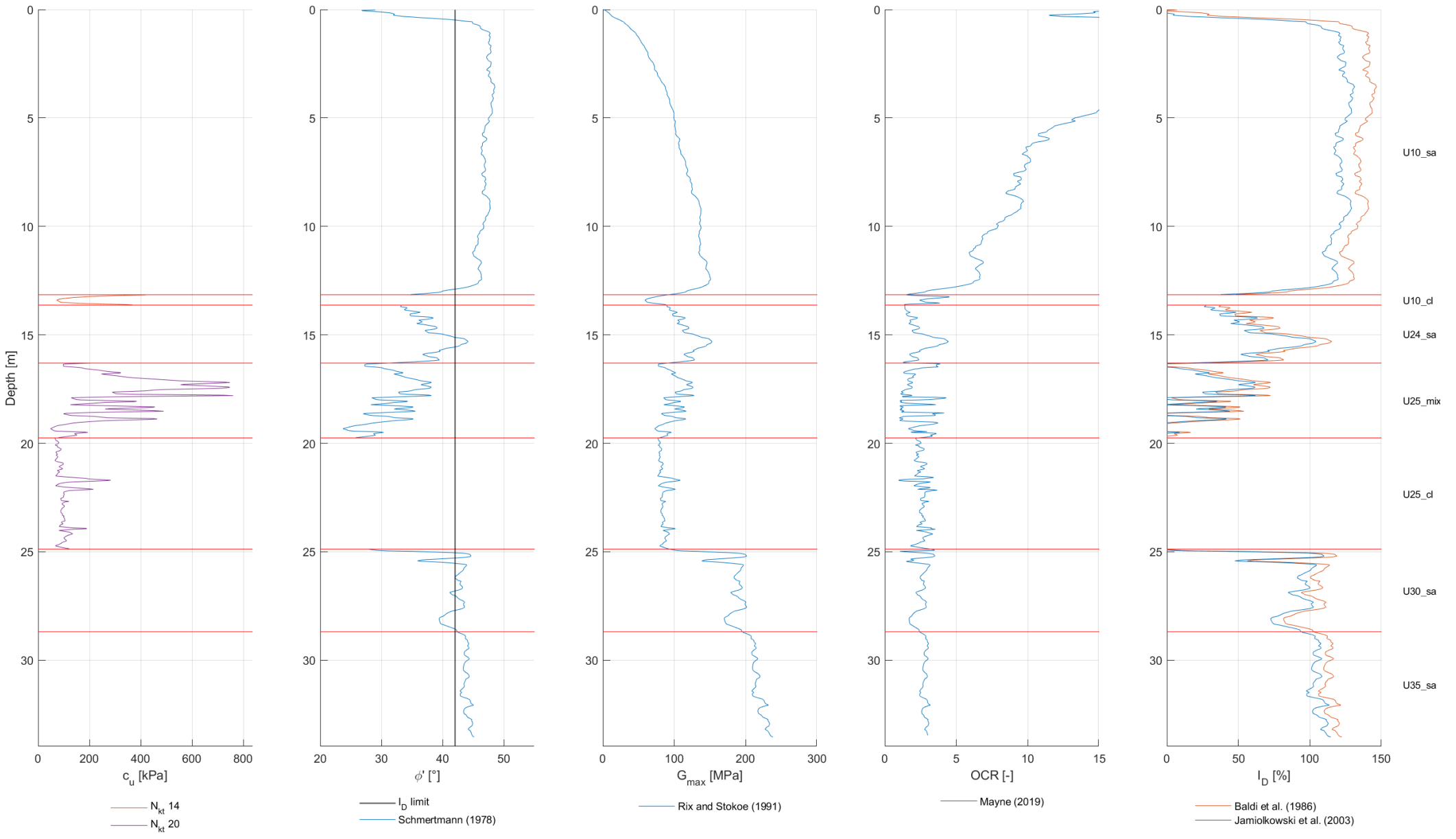


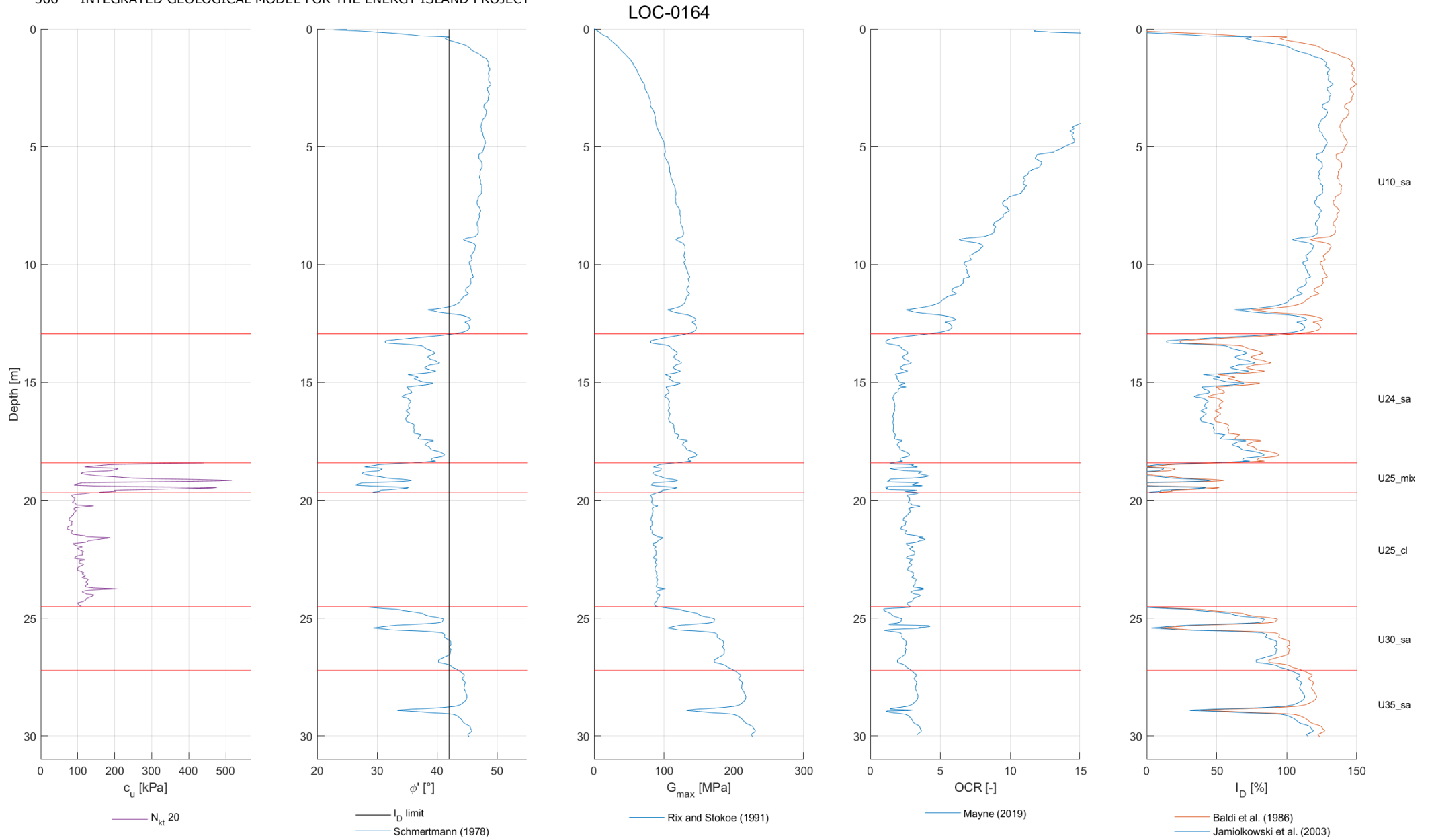
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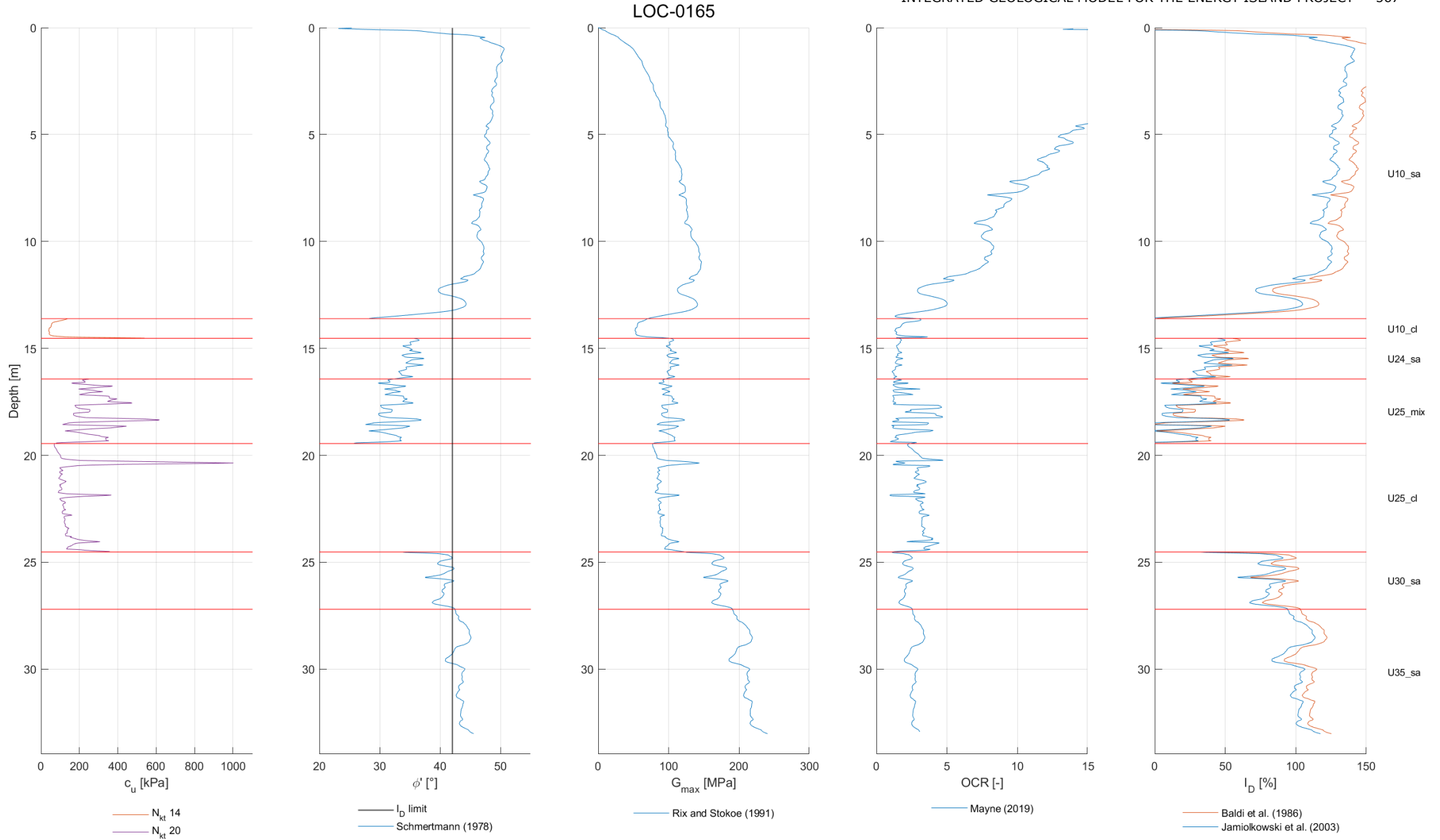


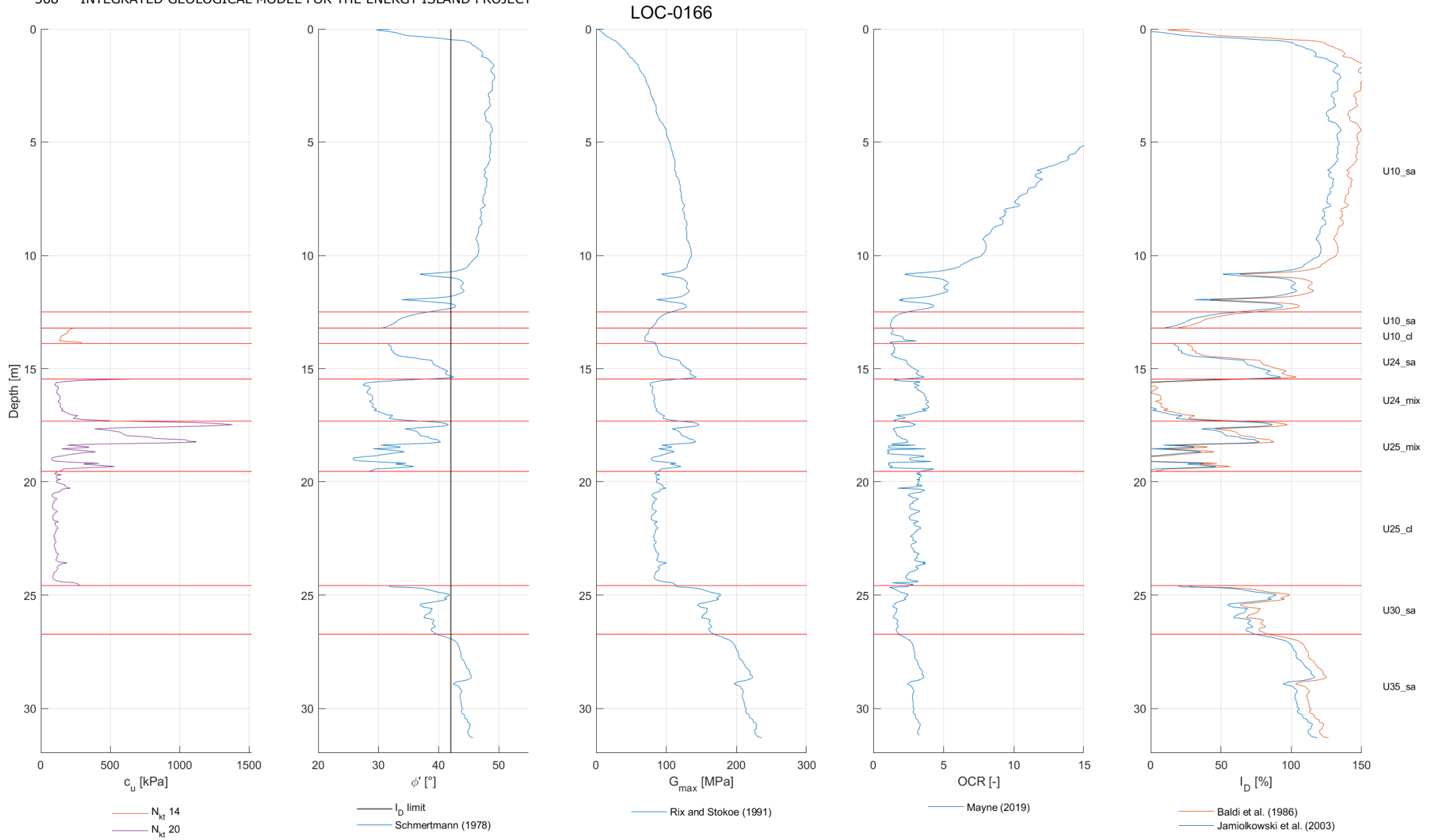


LOC-0163

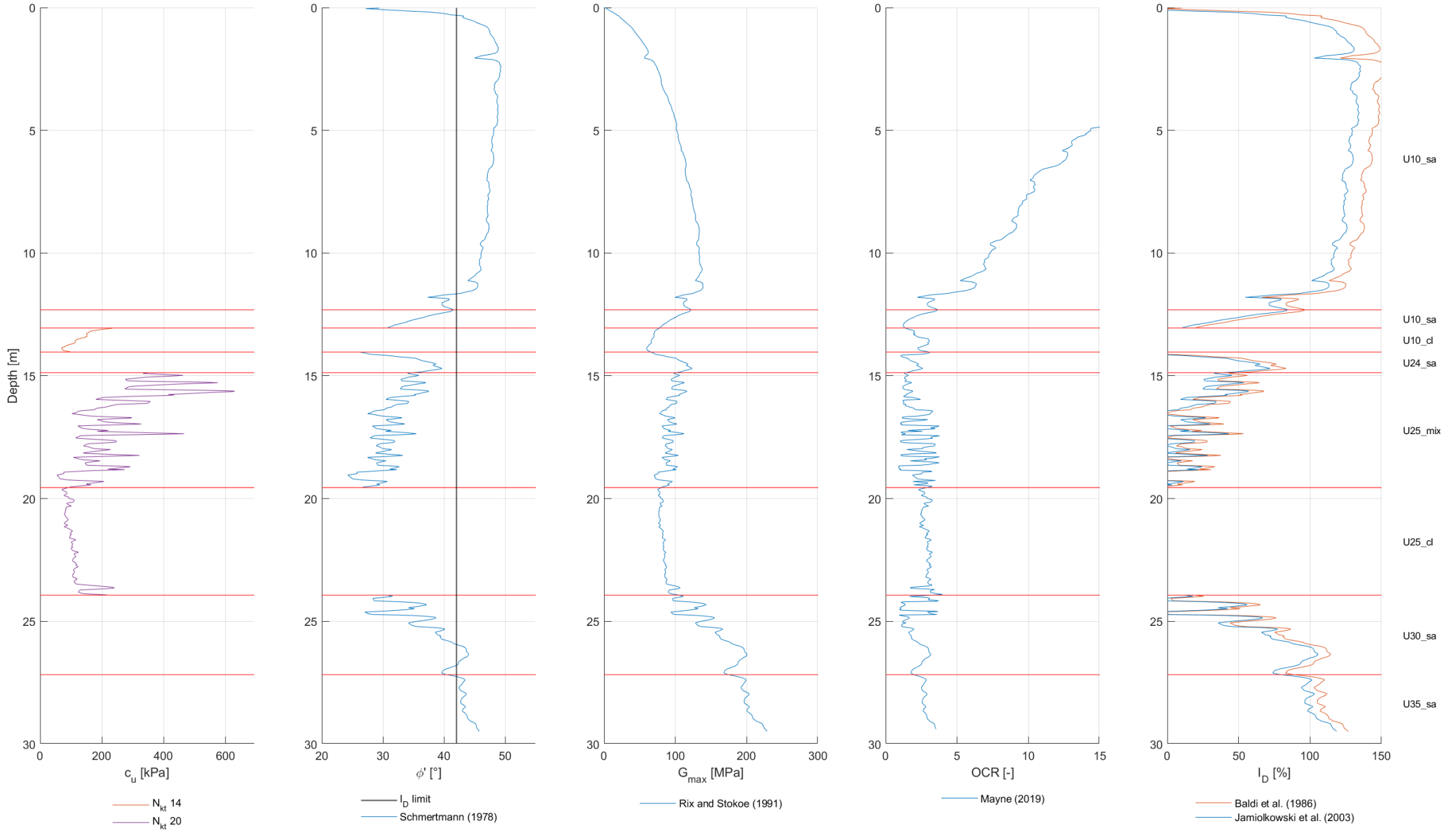


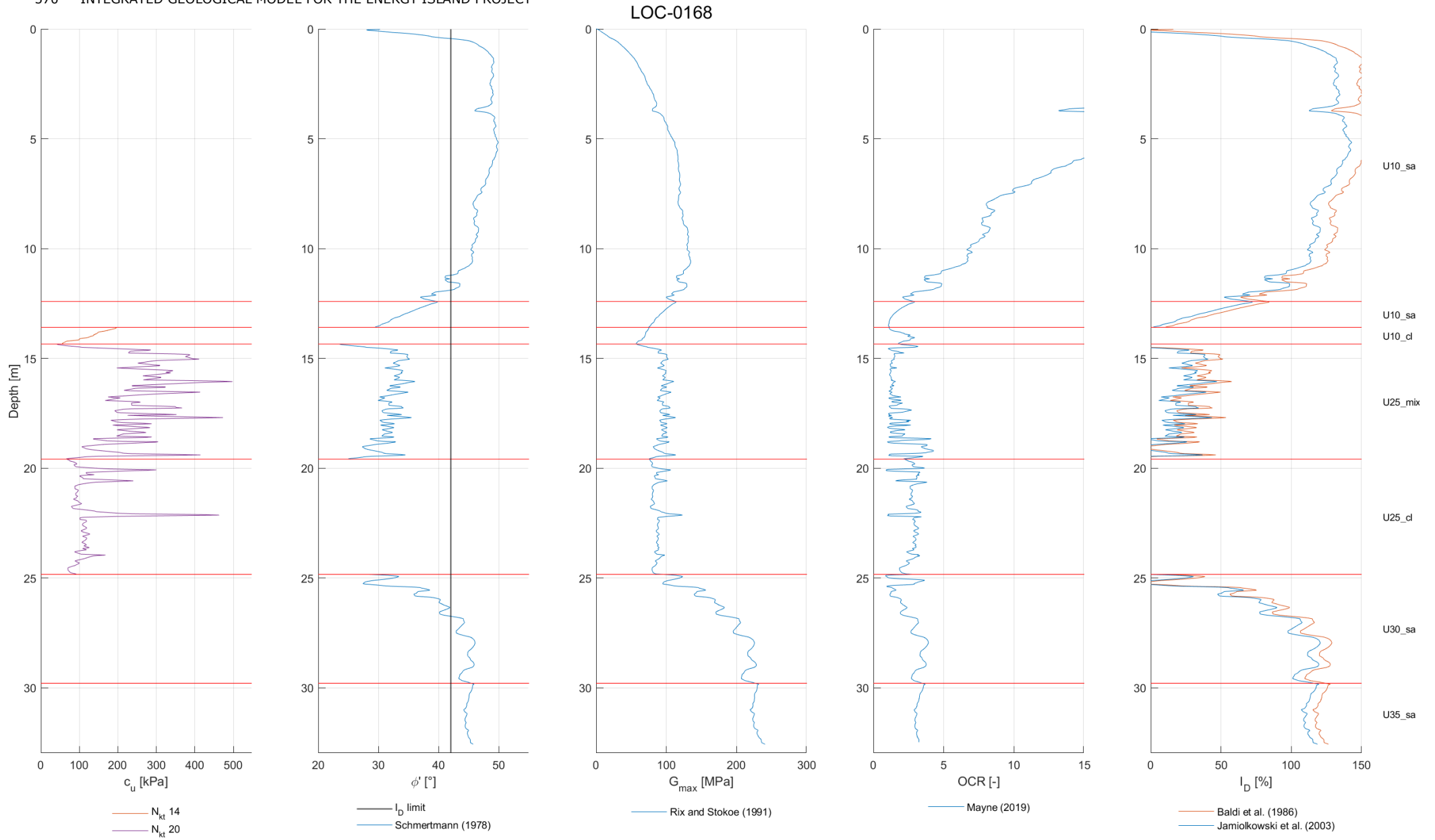




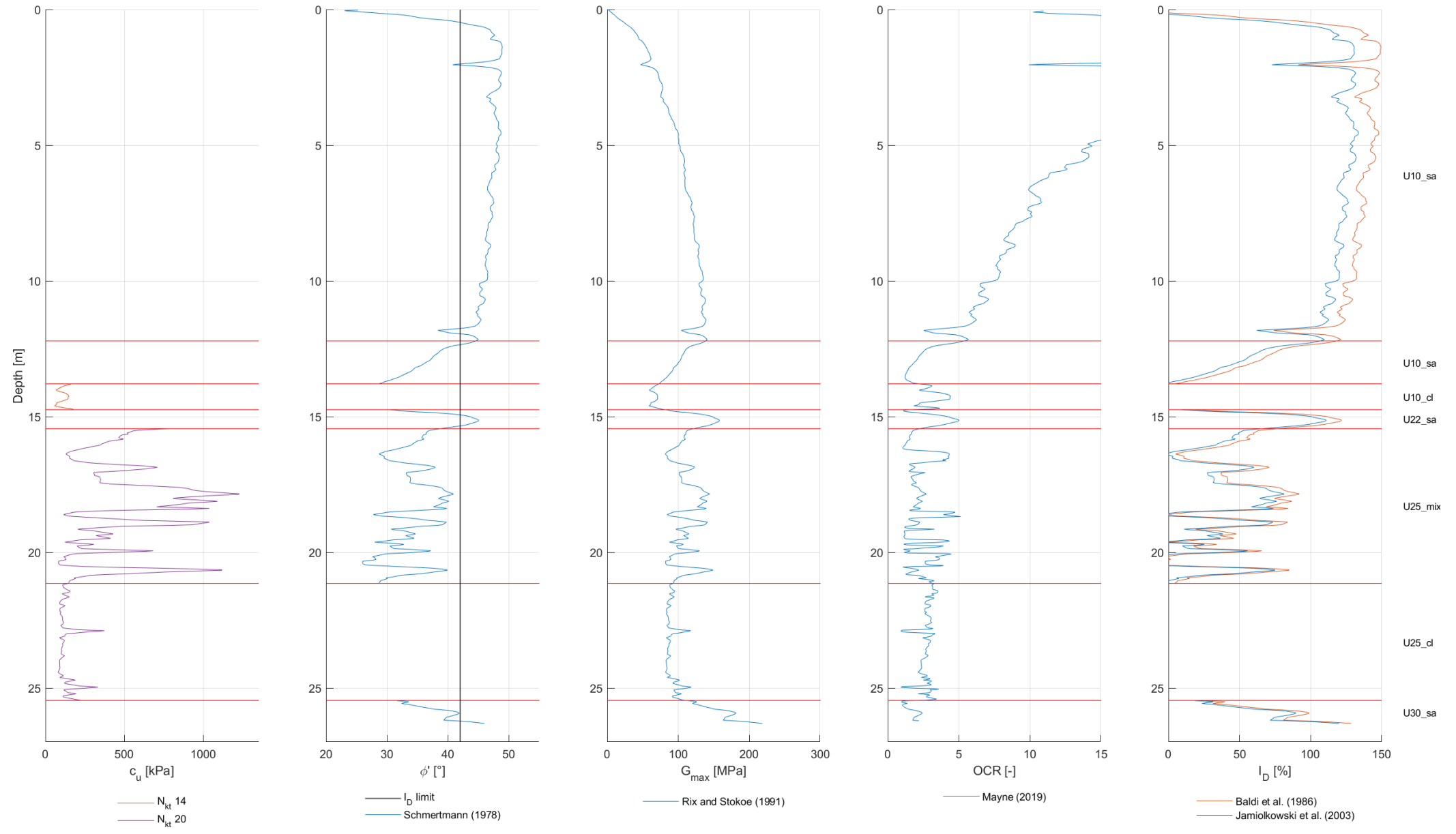


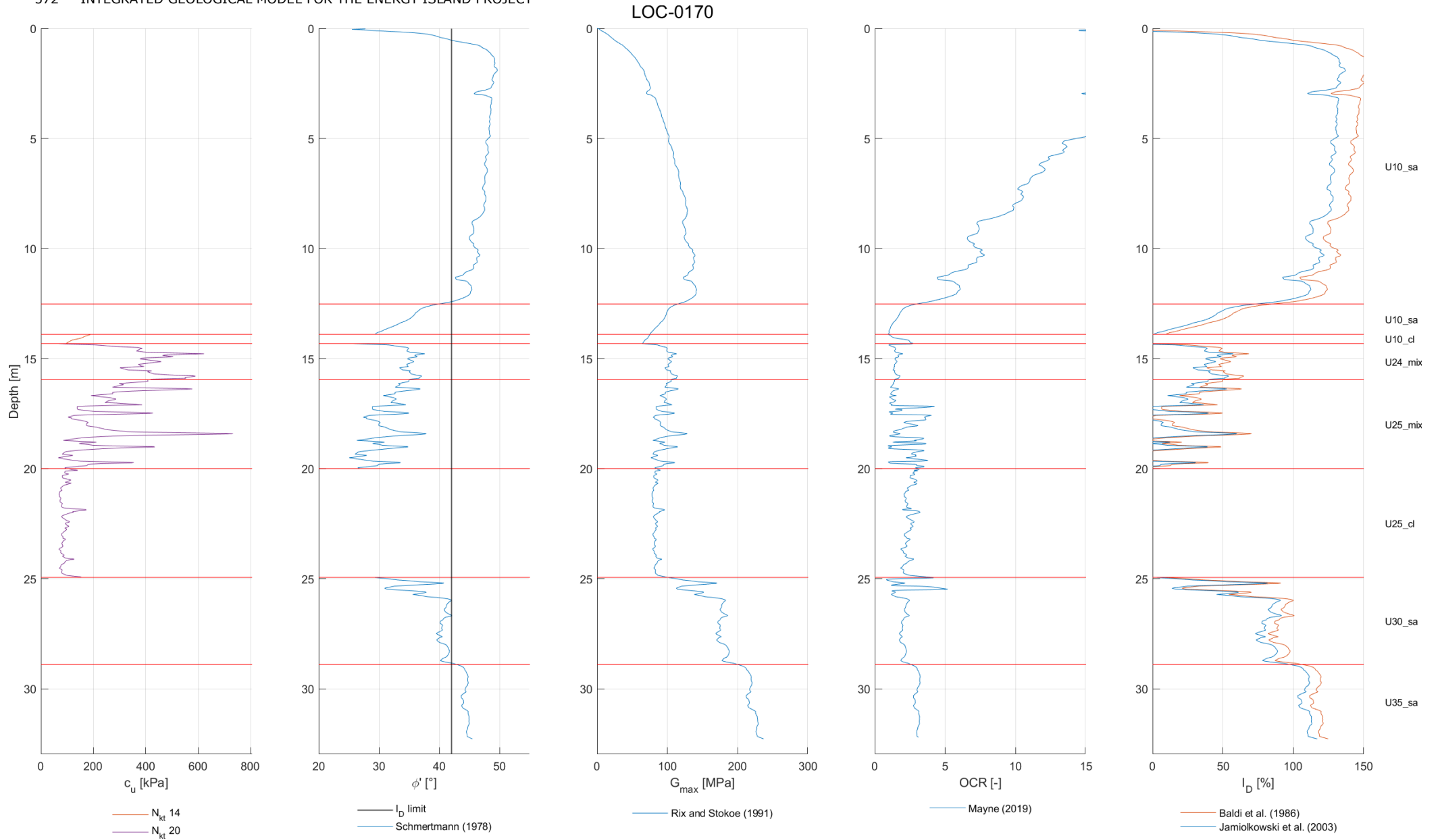
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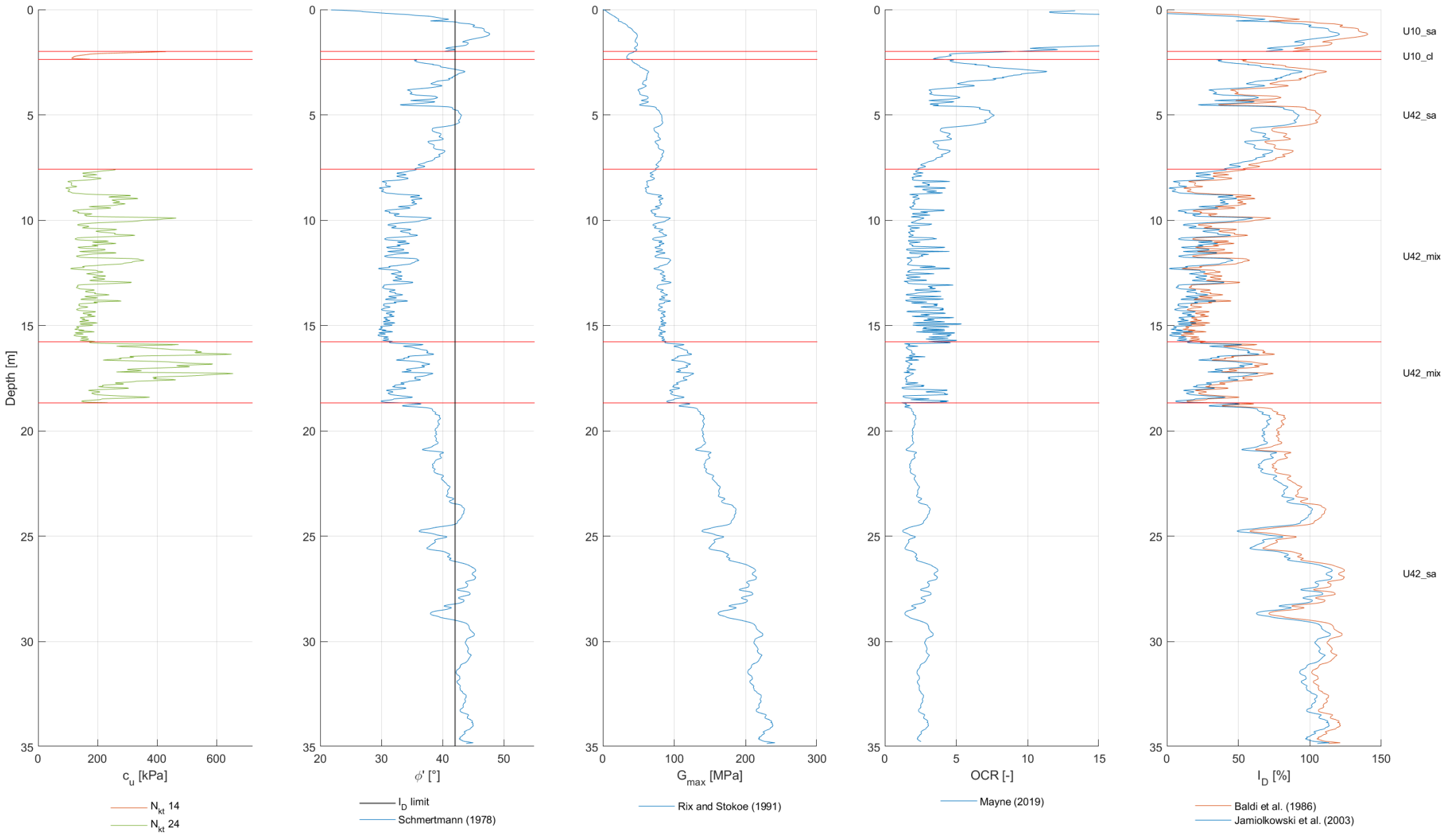


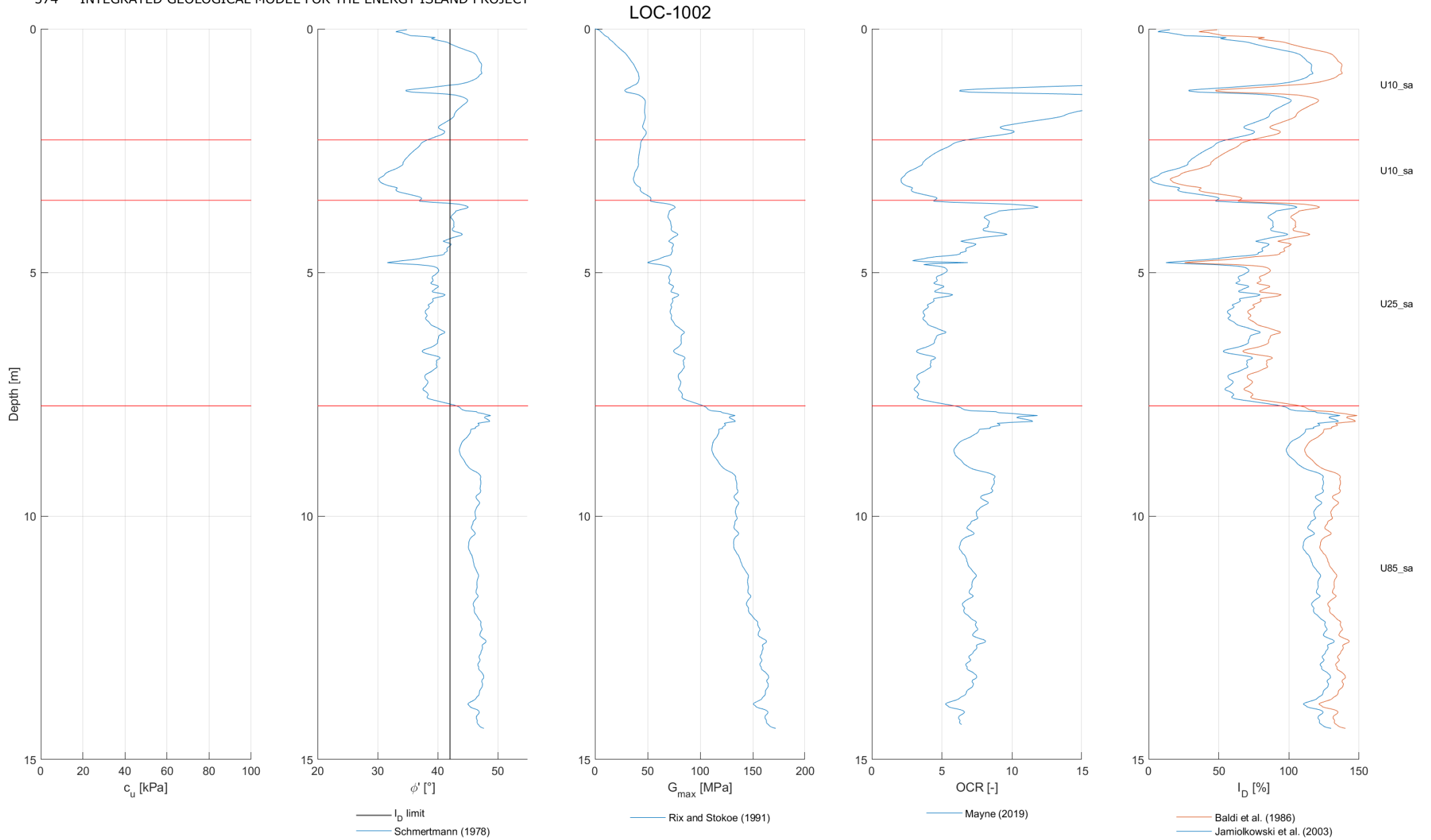
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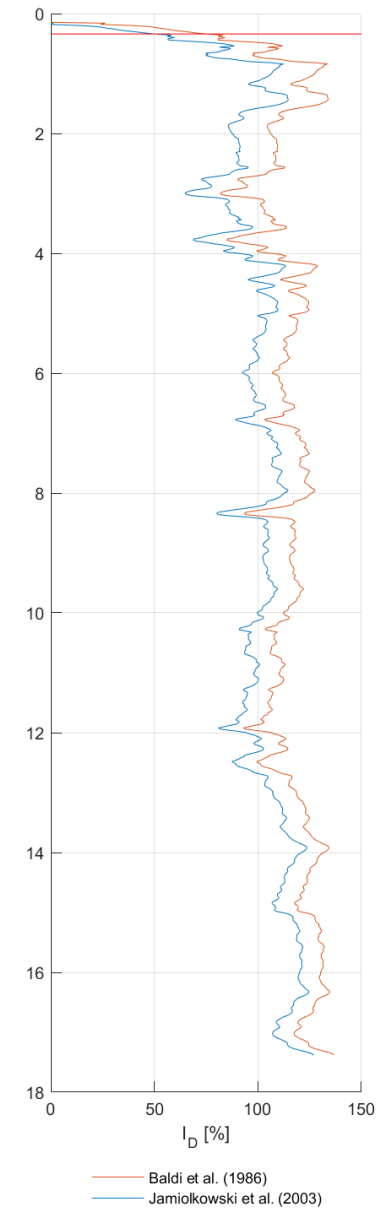
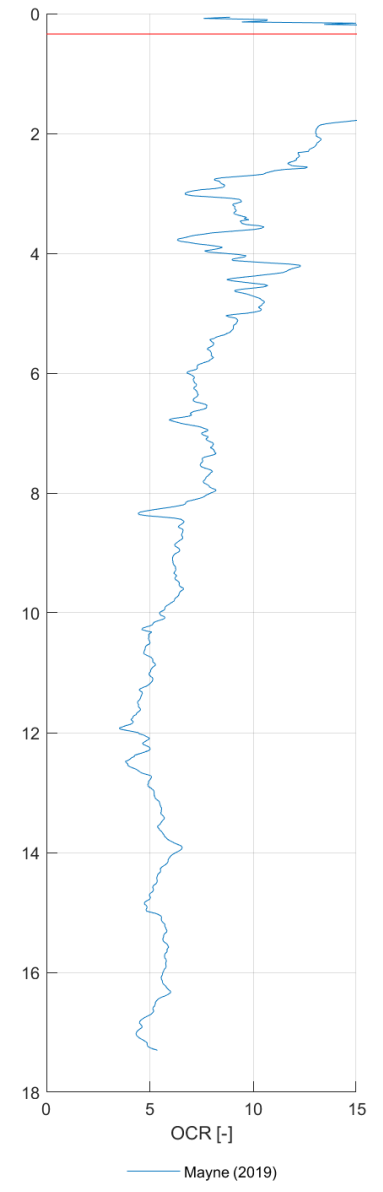
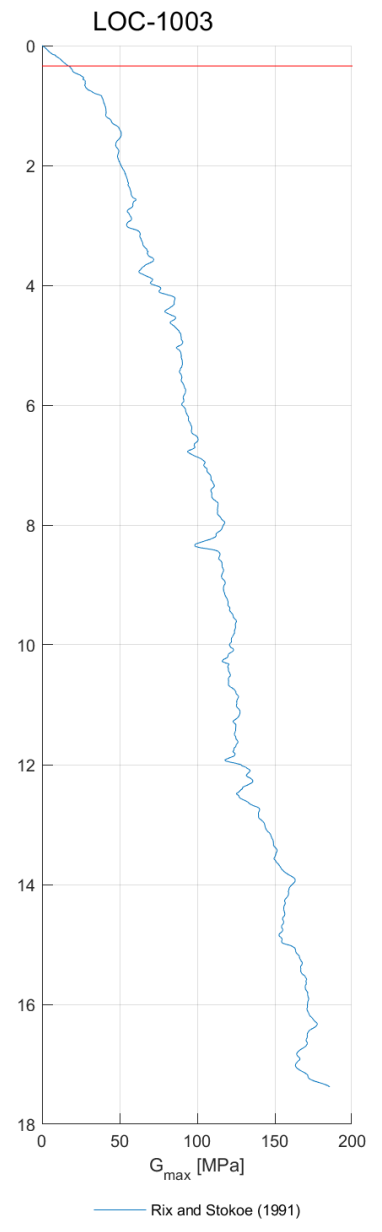
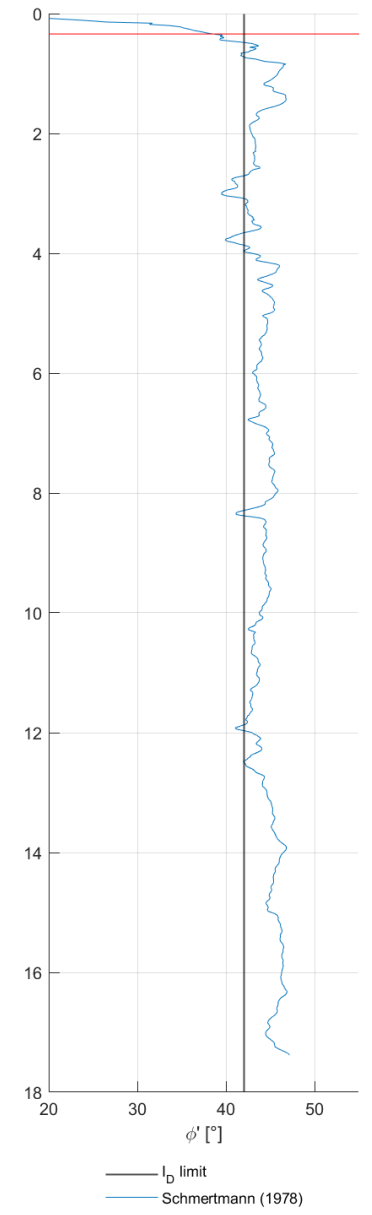
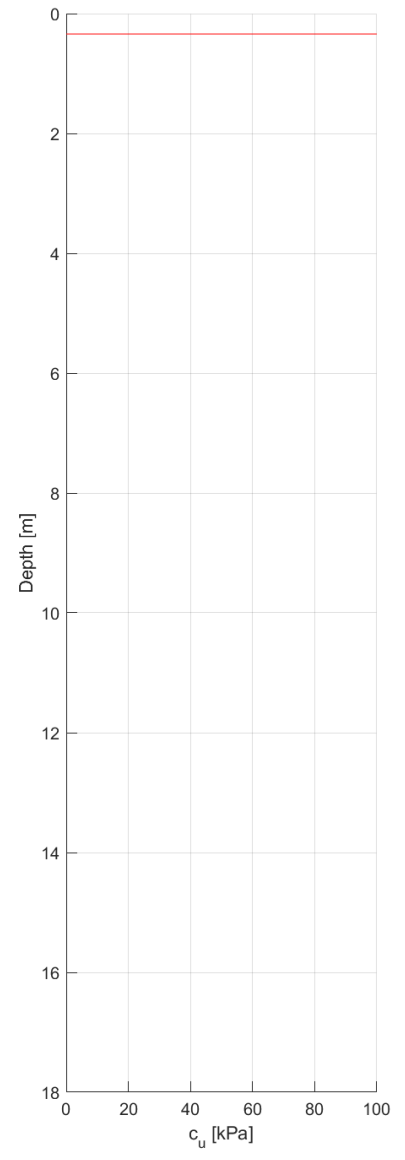




LOC-1001

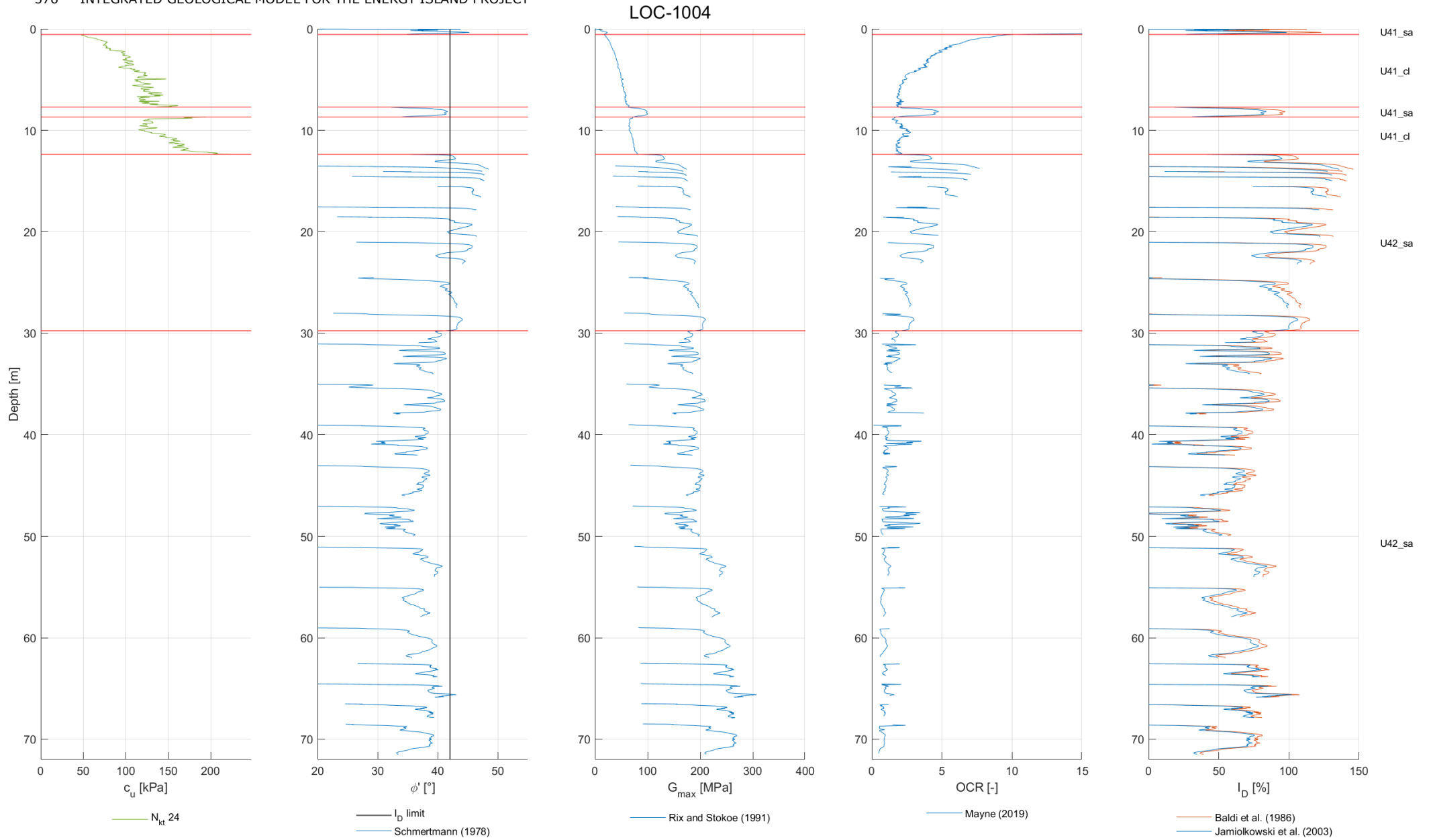


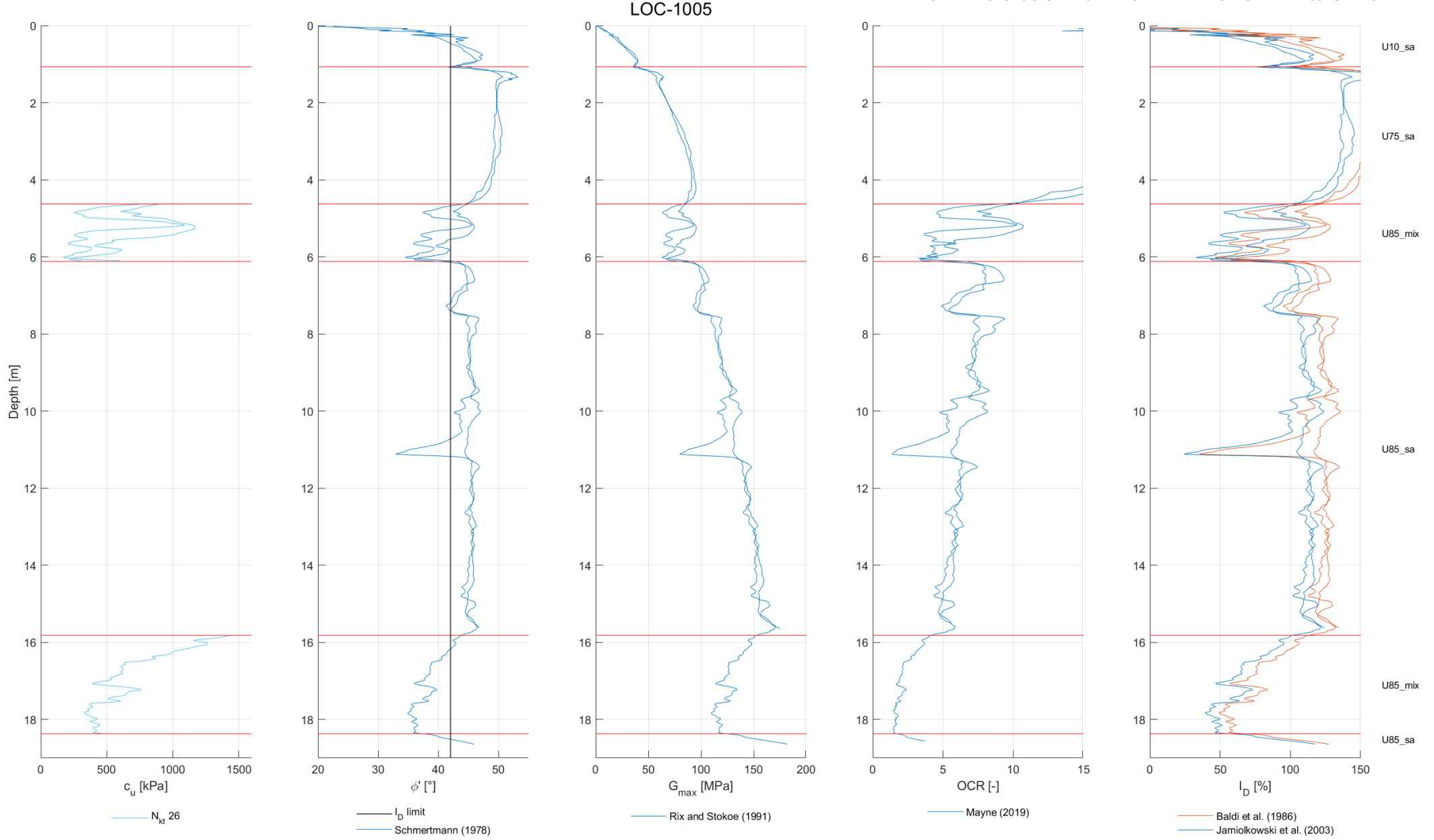


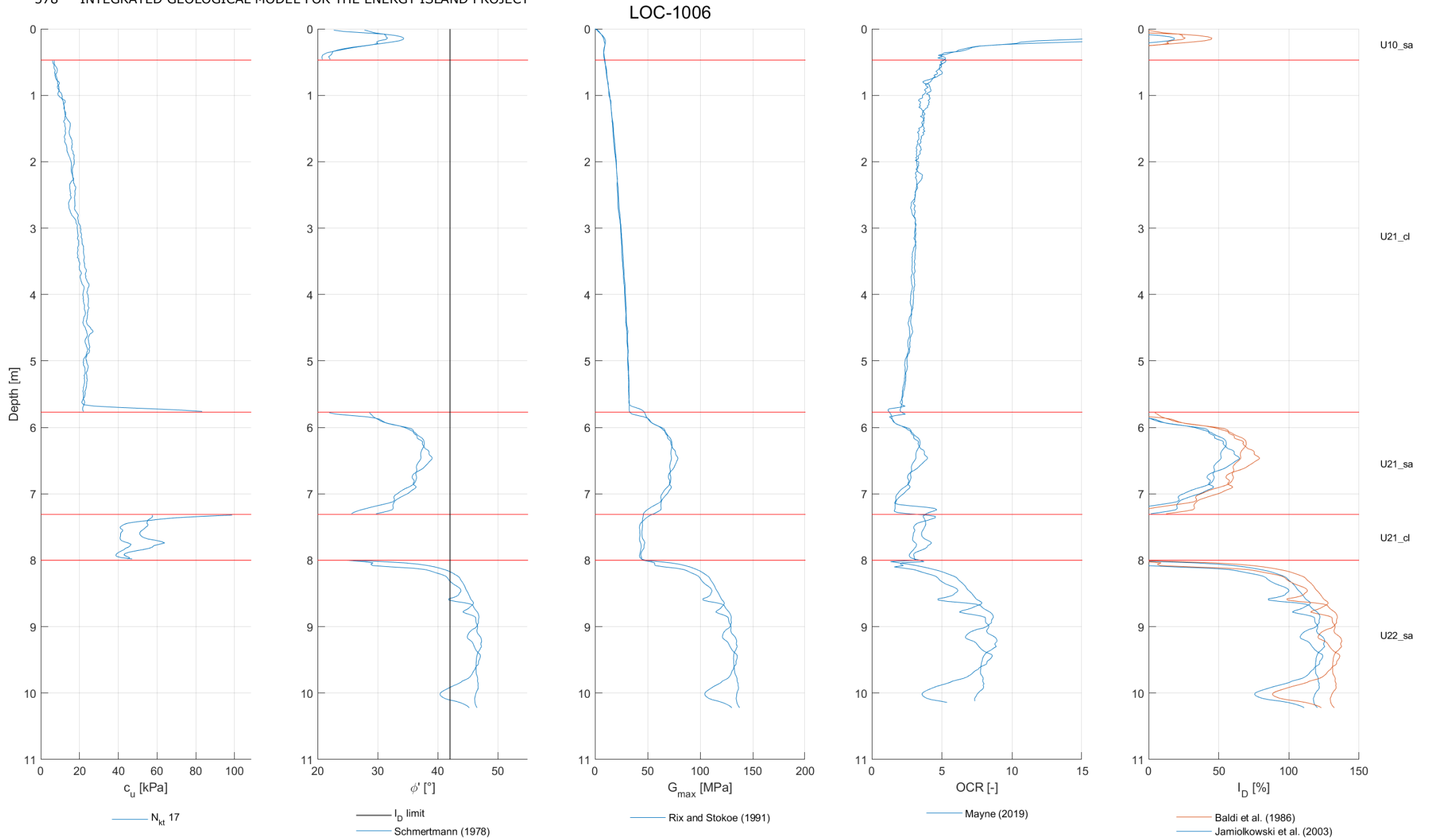


U10_sa

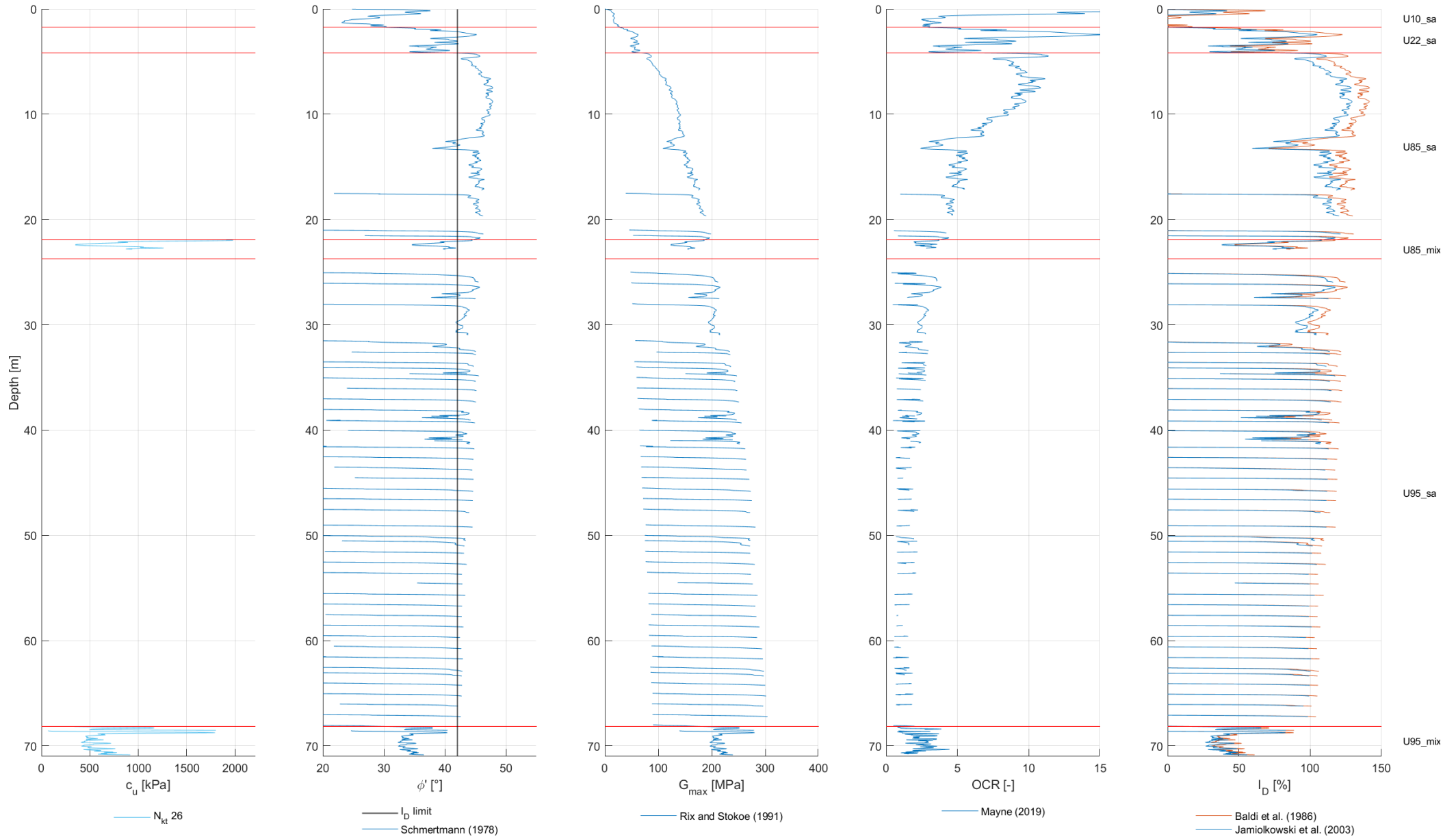
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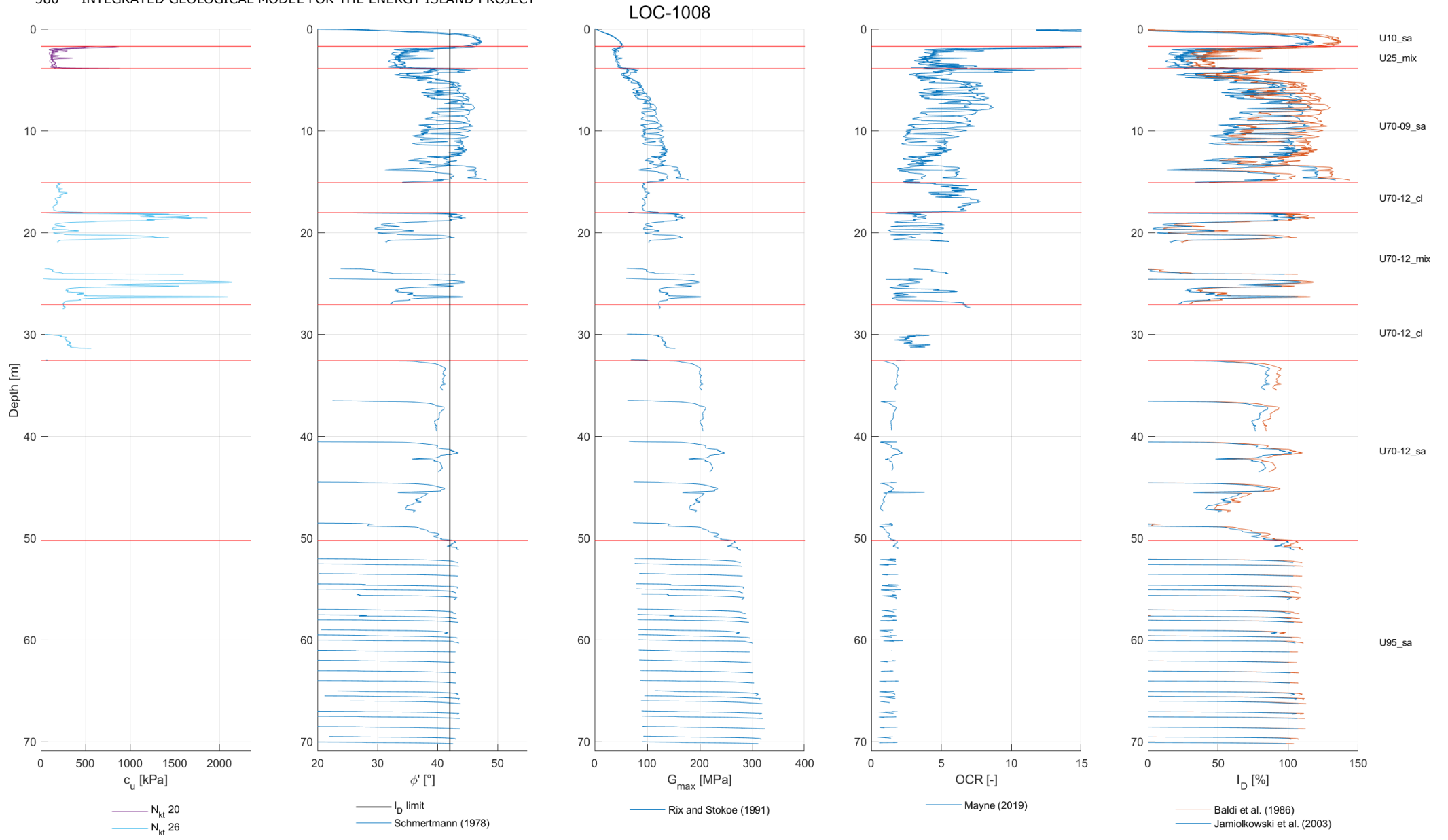


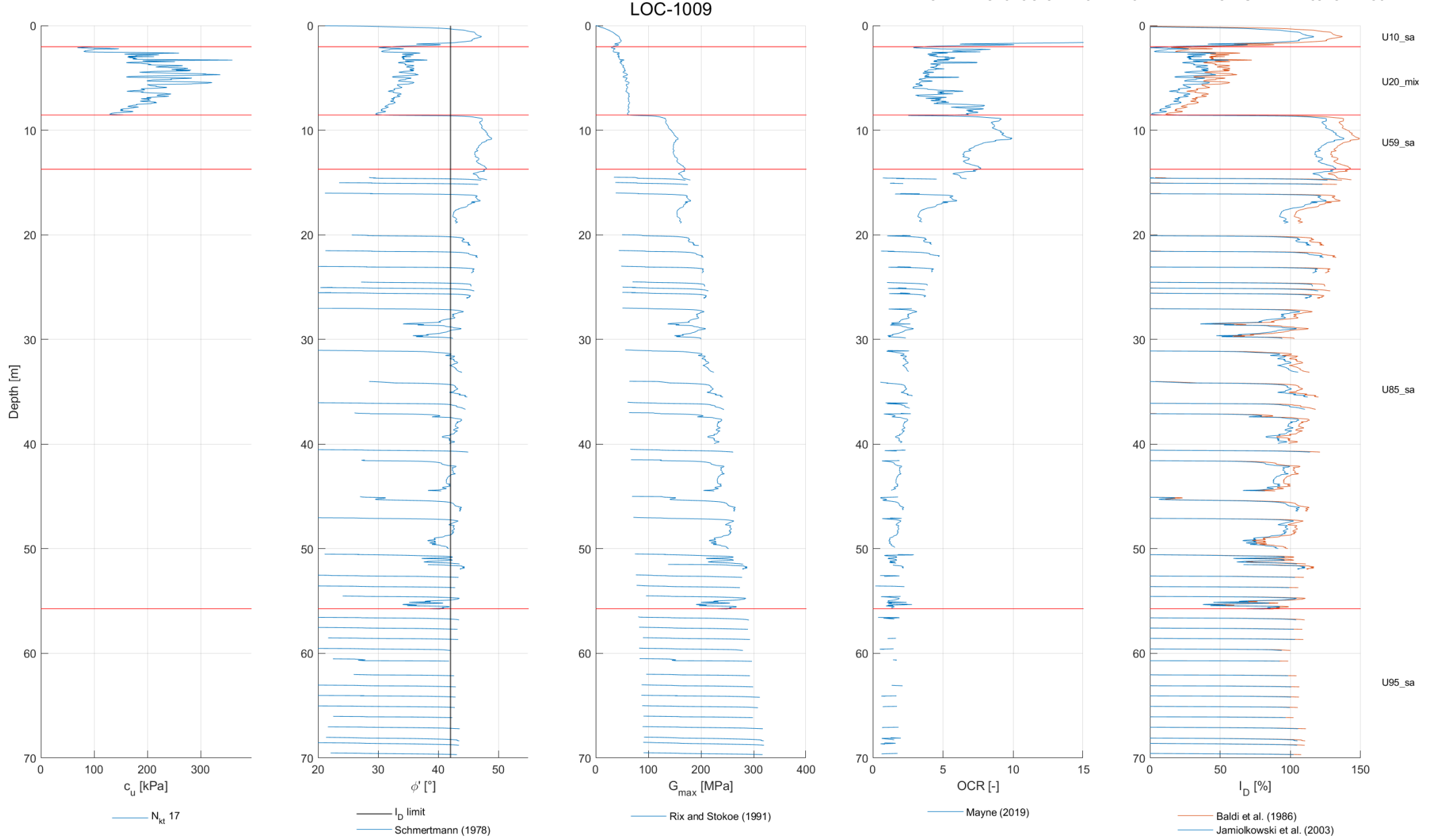


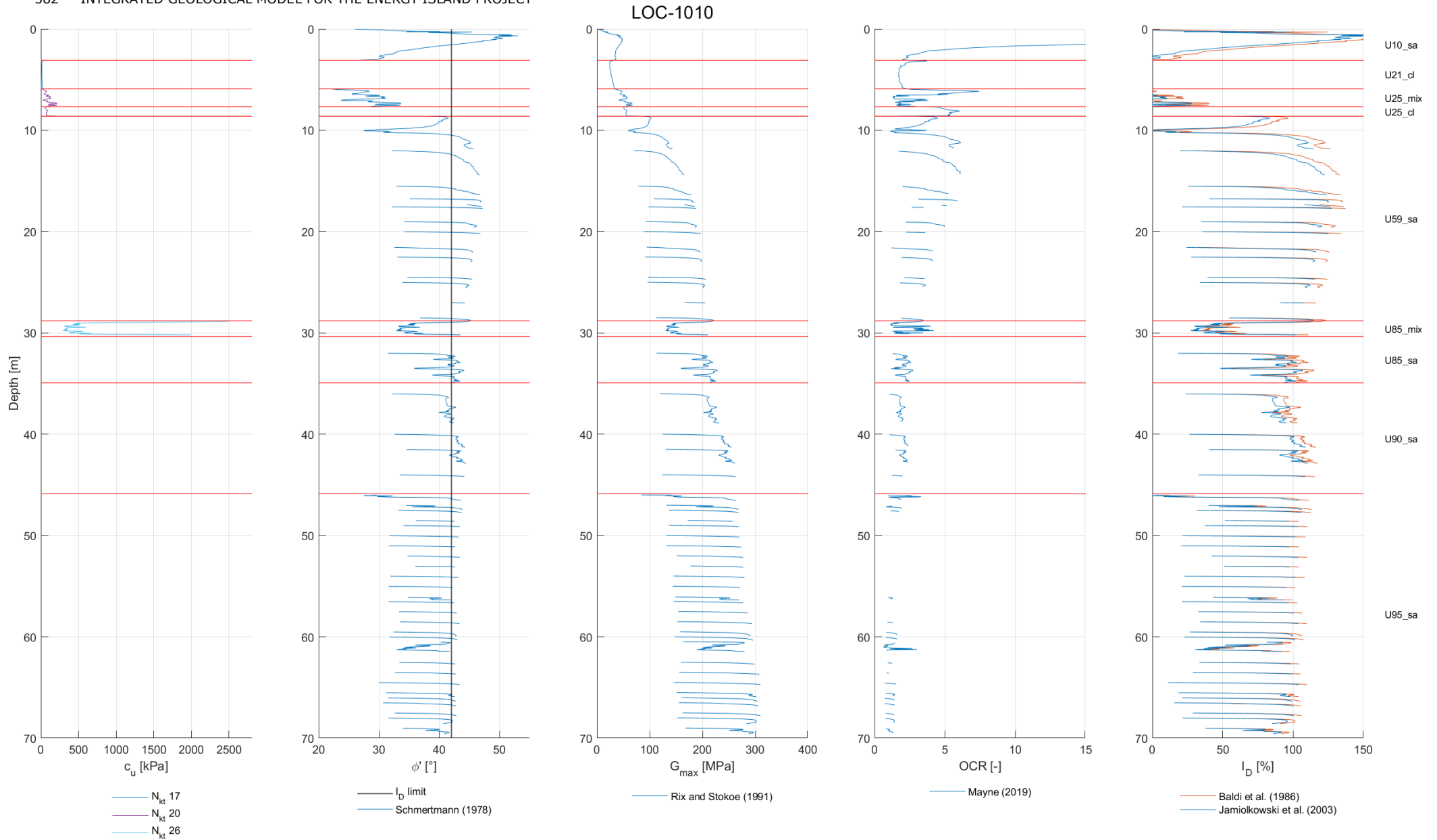


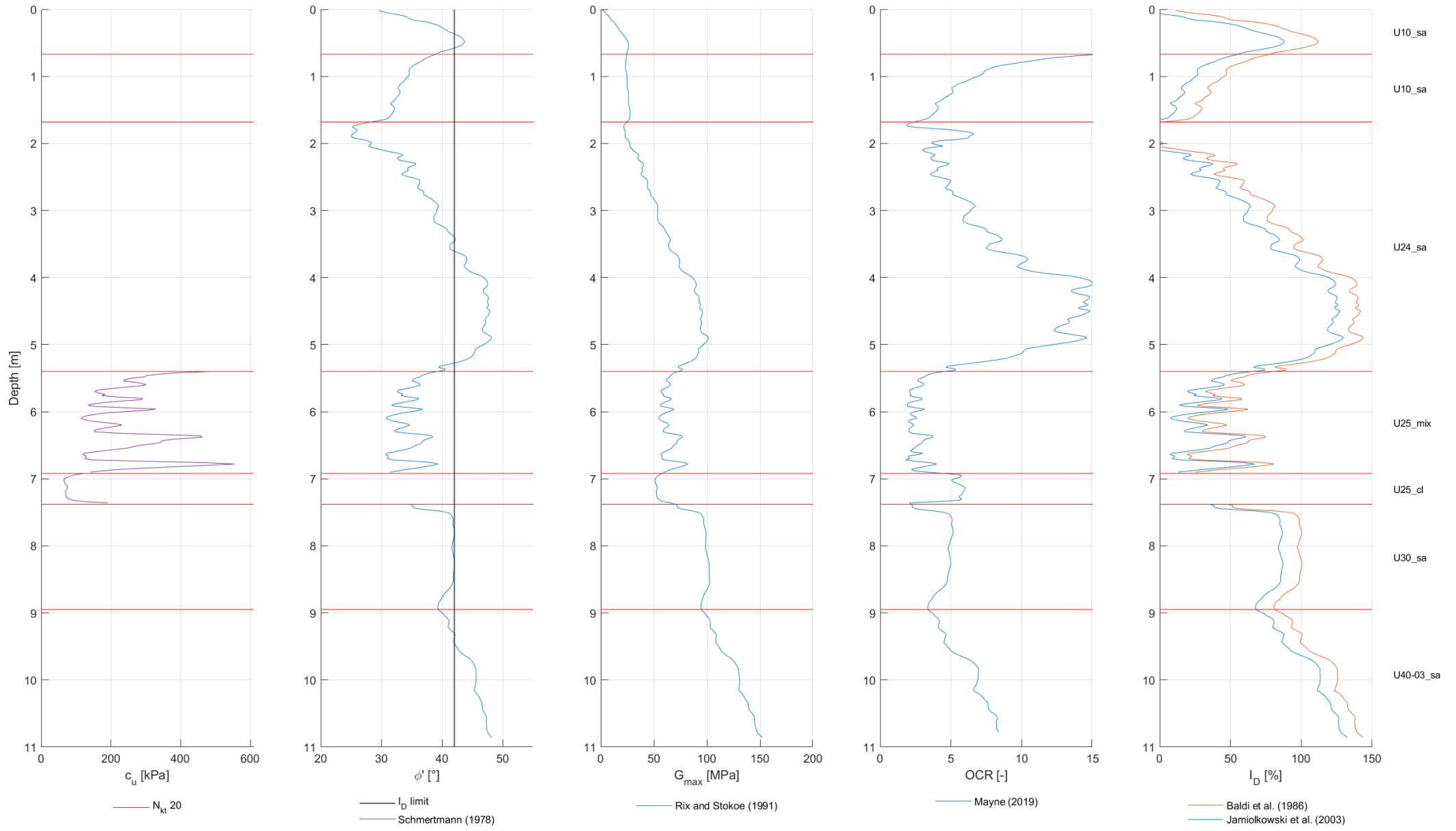
LOC-1007

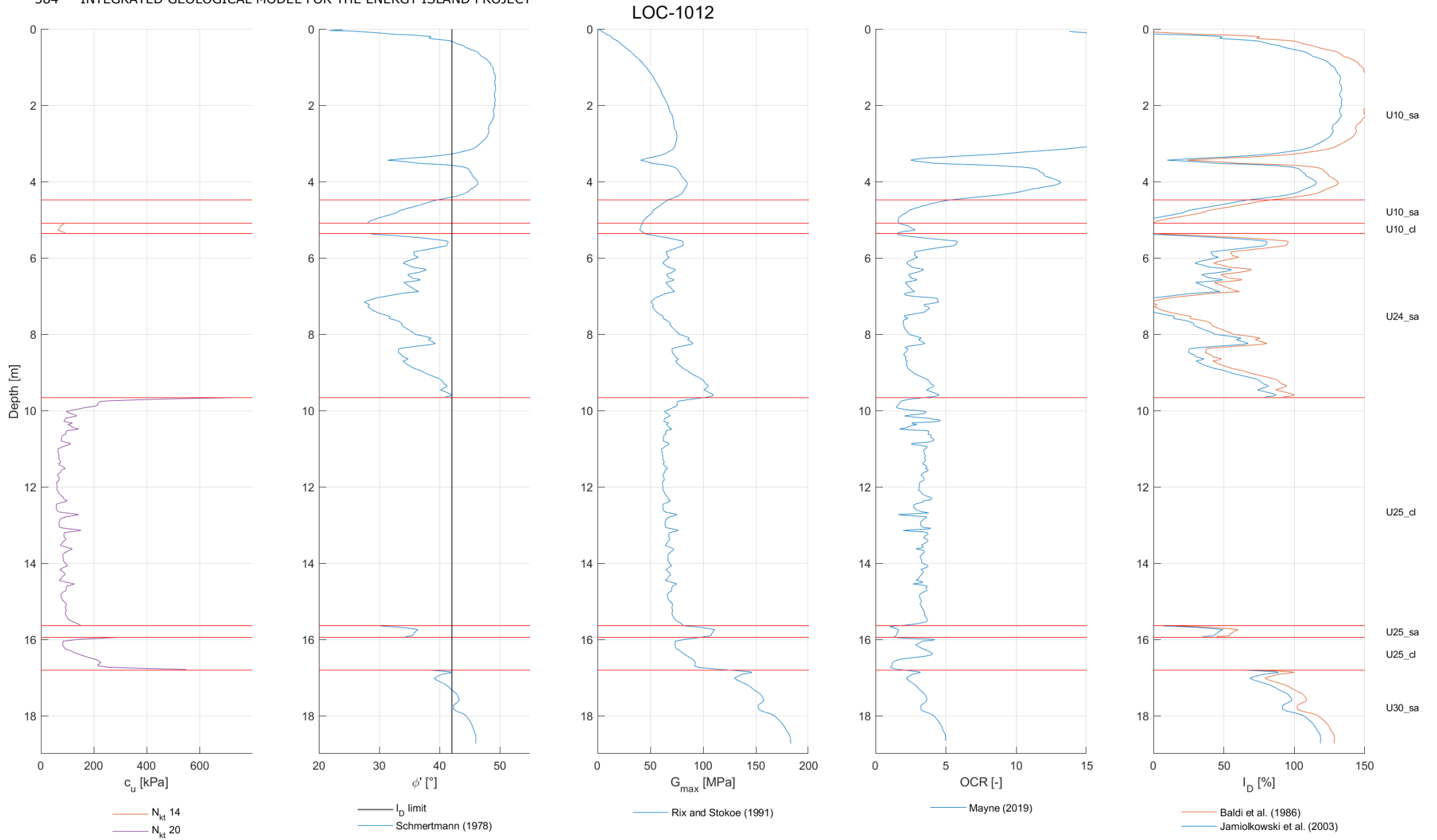




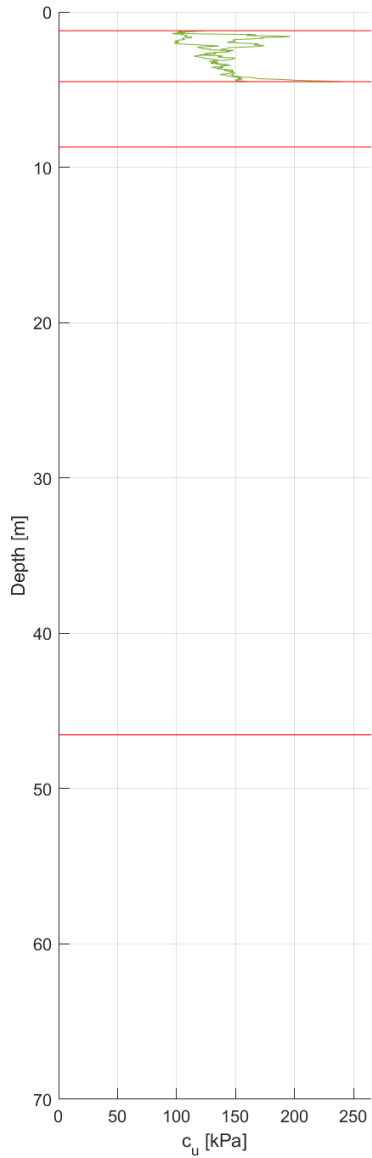




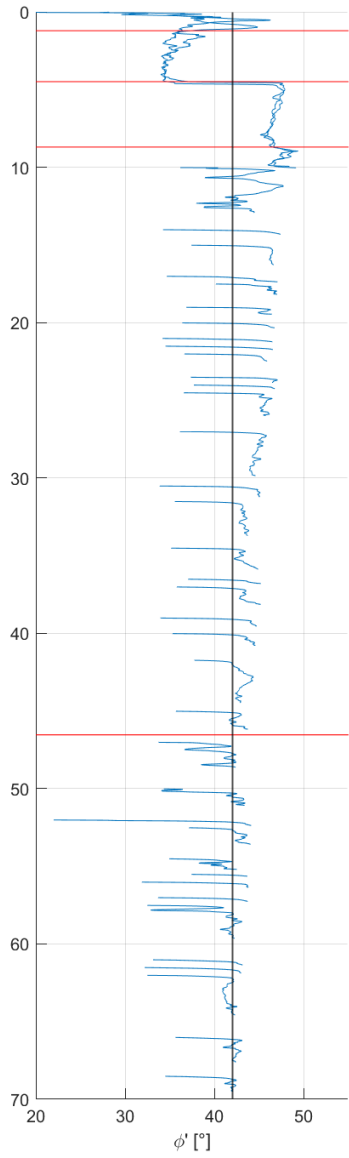




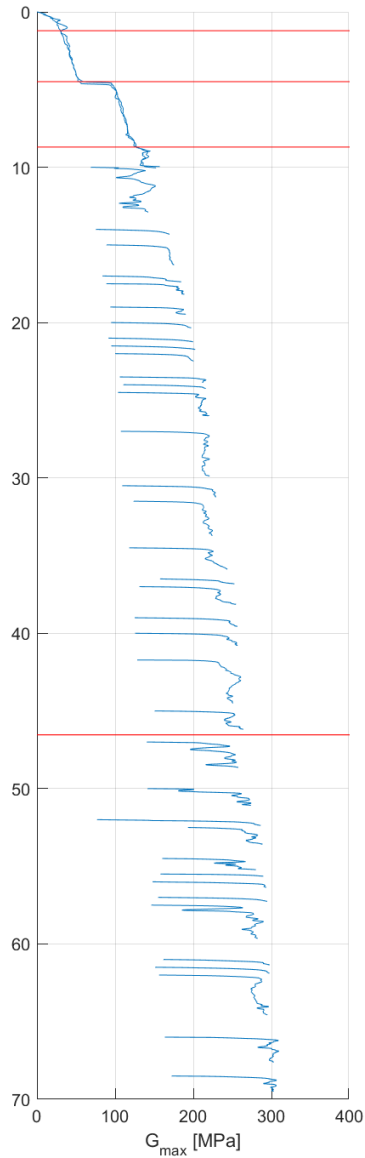
LOC-1013



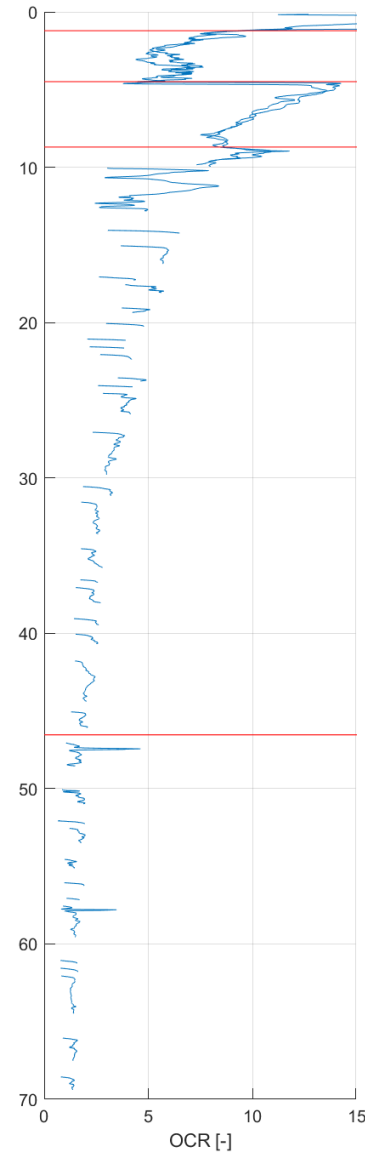
N_{kt} 24



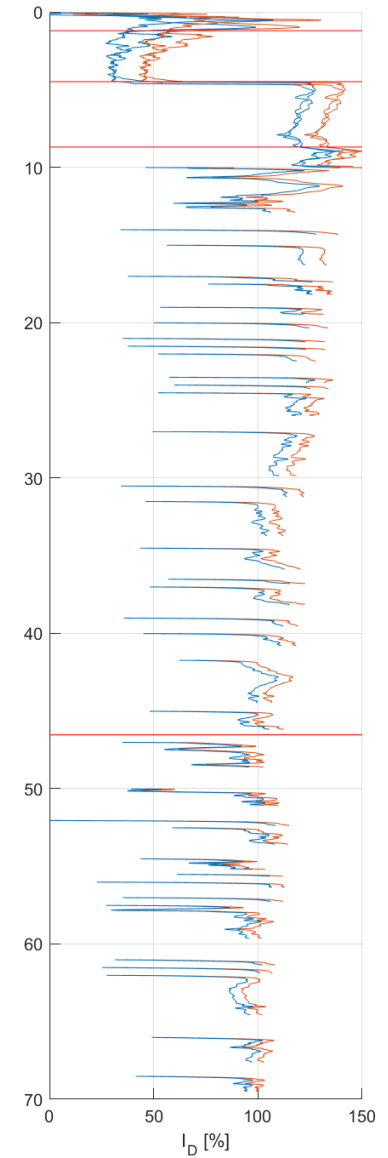
I_D limit
Schmertmann (1978)



Rix and Stokoe (1991)



Mayne (2019)



Baldi et al. (1986)
Jamiolkowski et al. (2003)

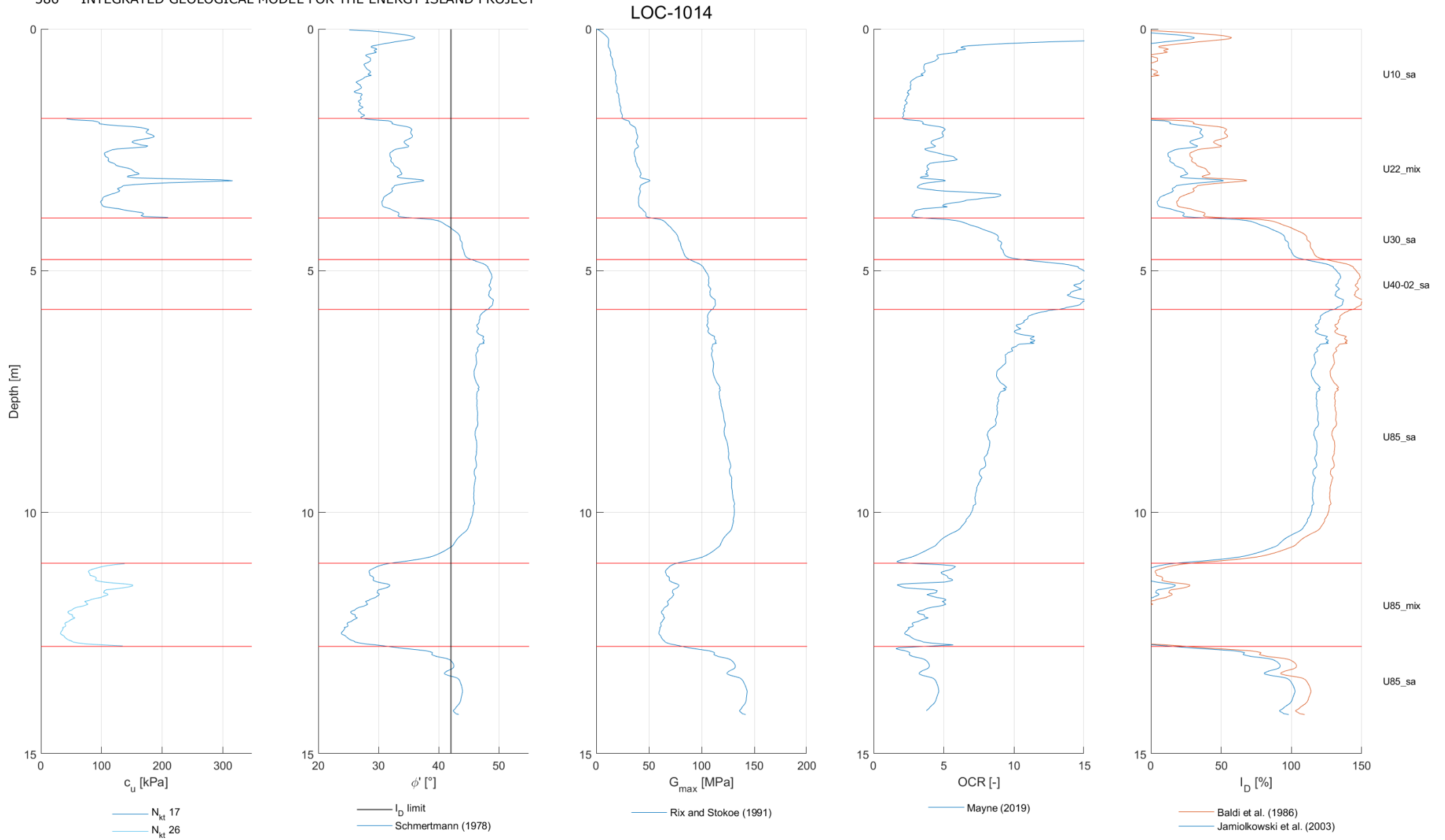
U59_sa

U59_mix

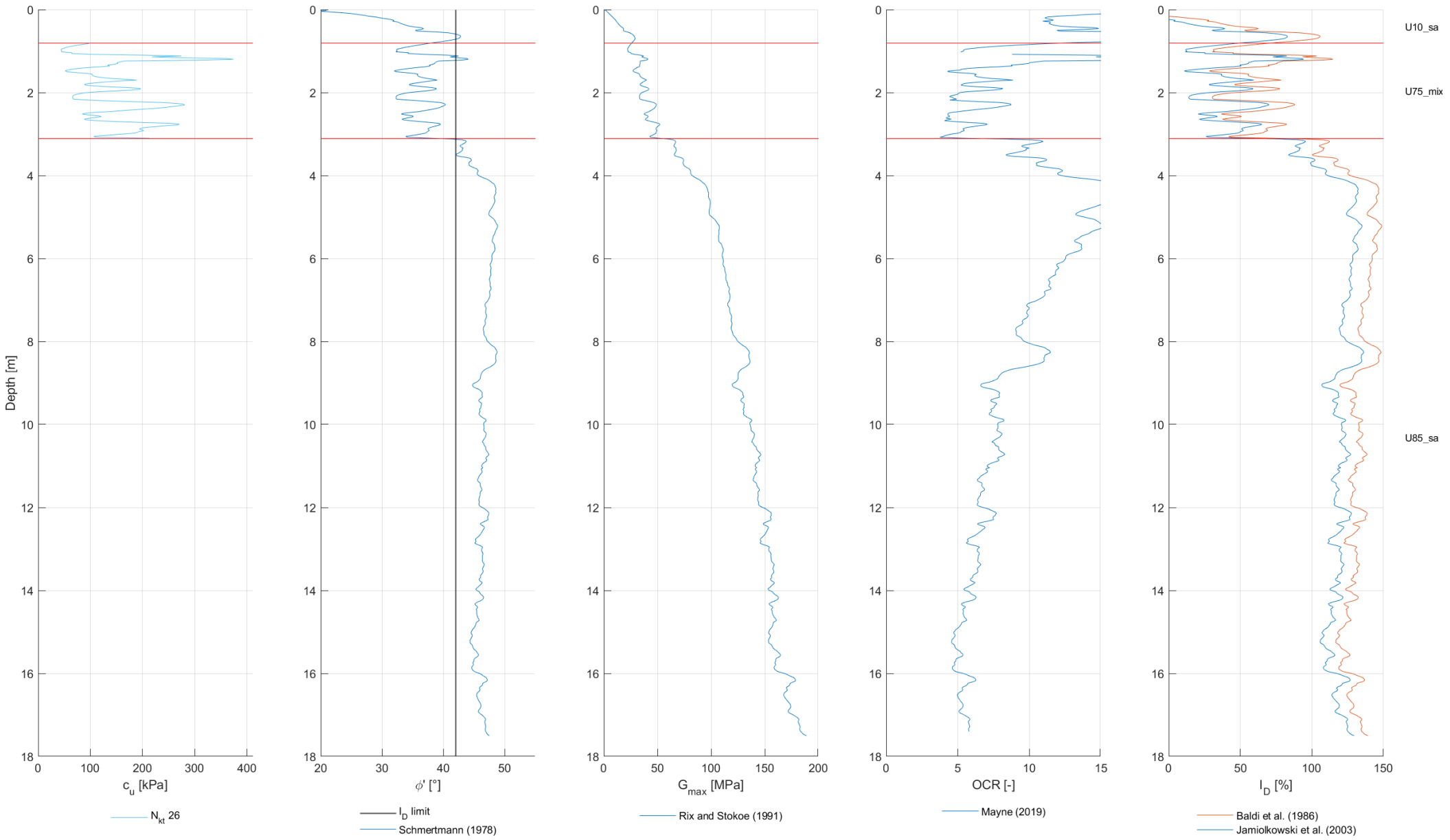
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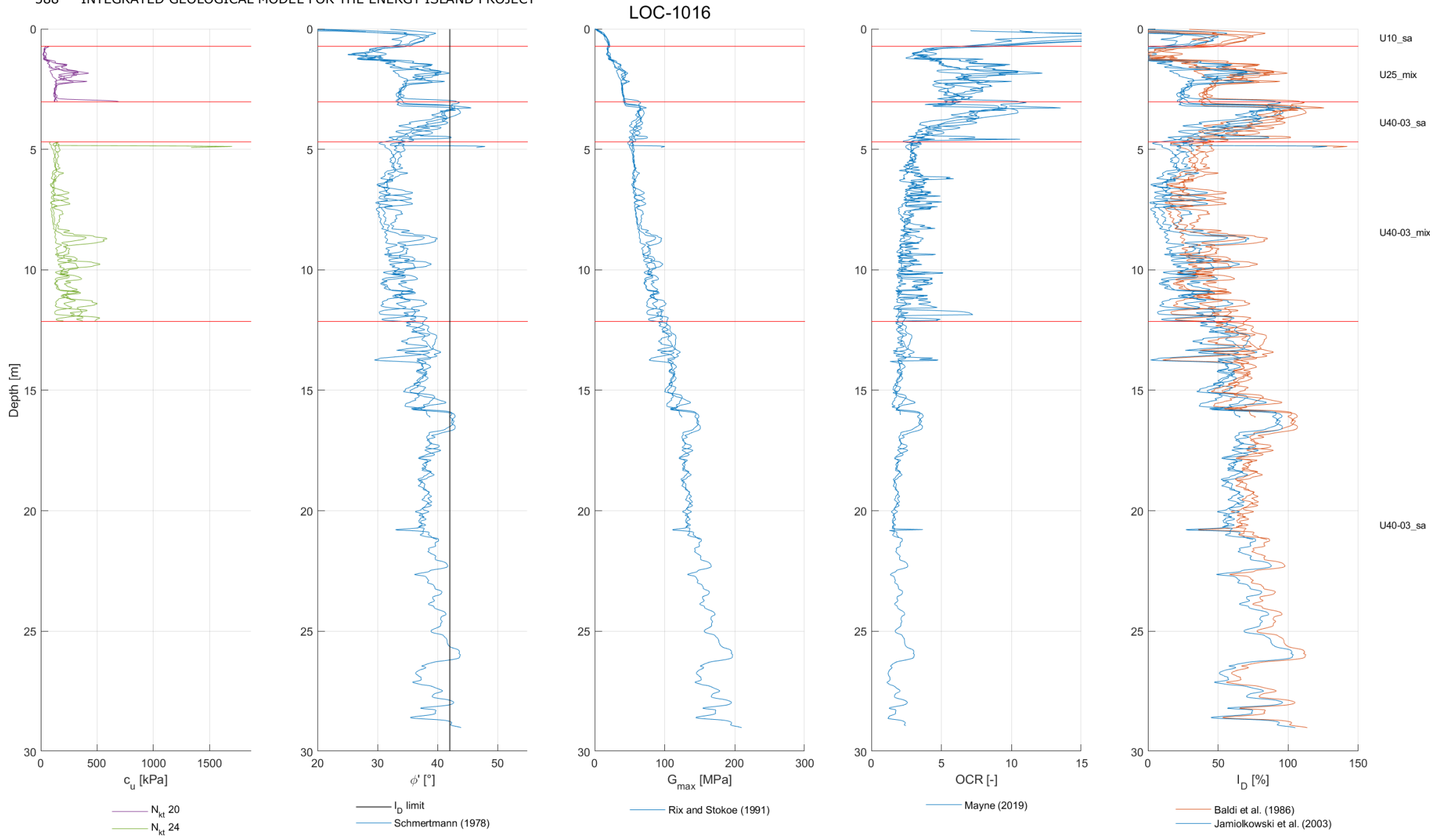
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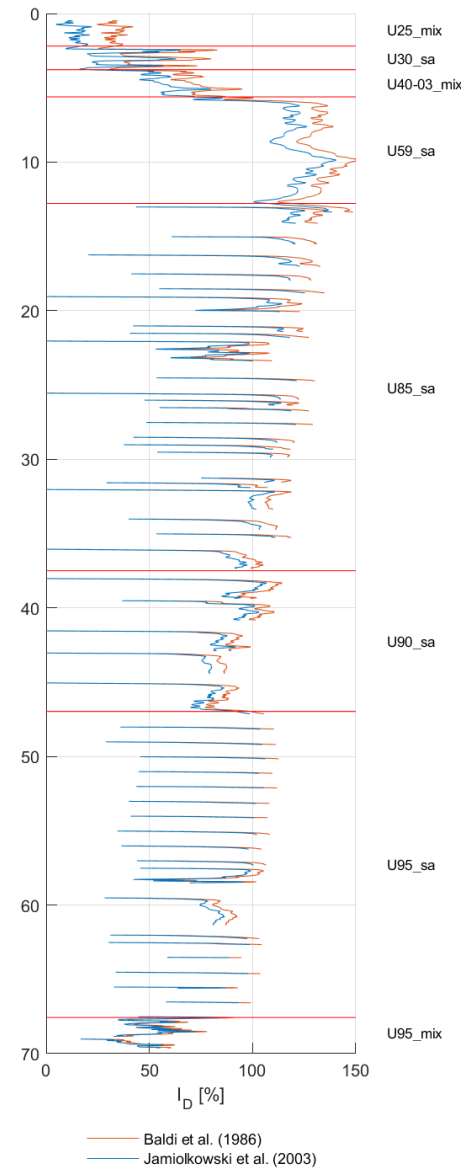
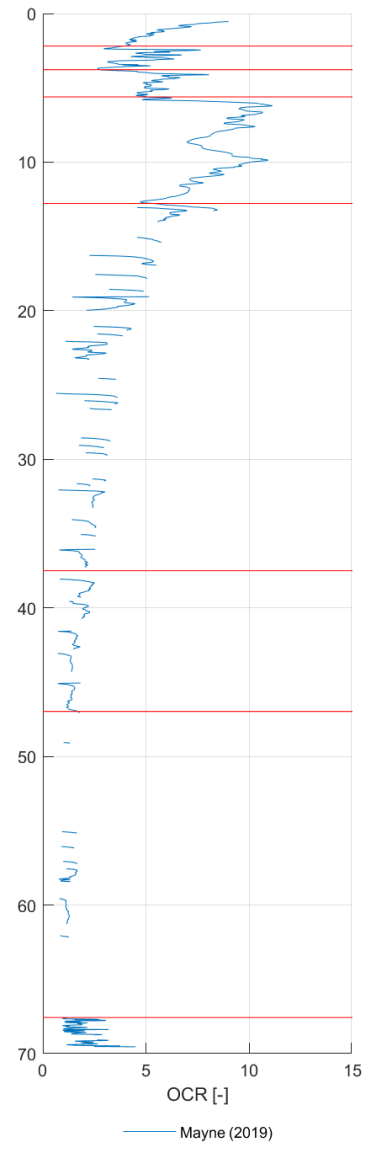
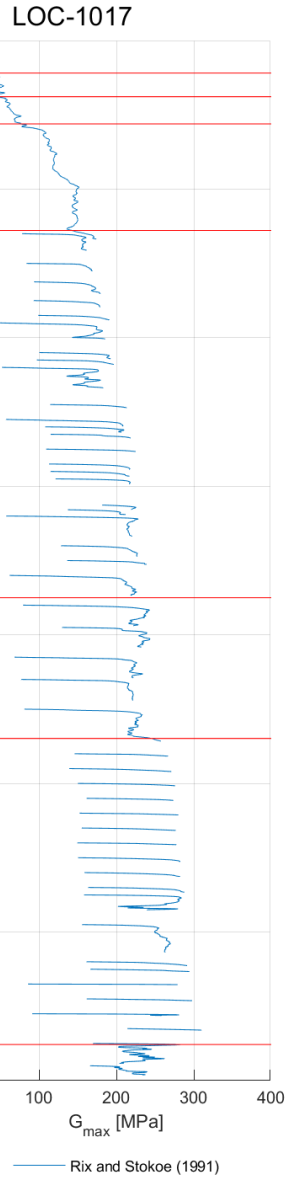
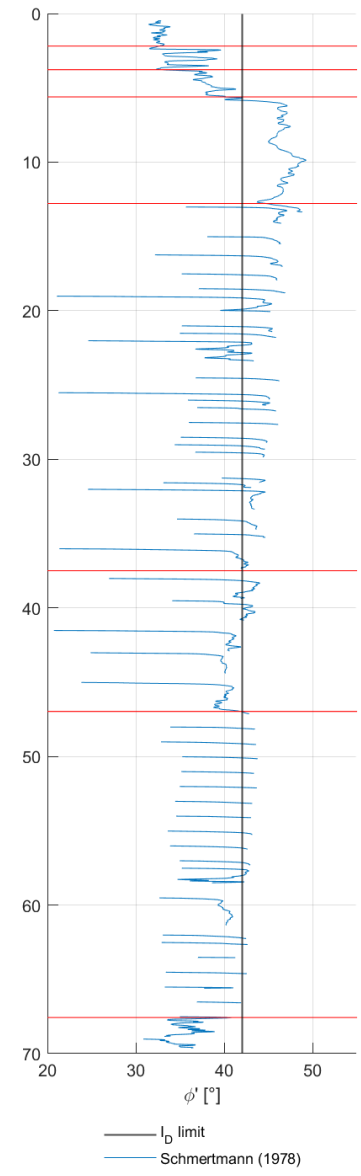
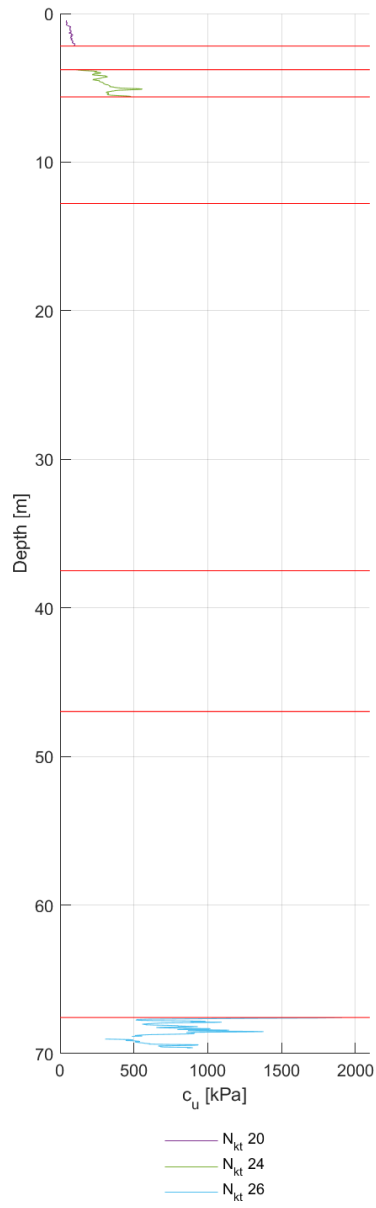
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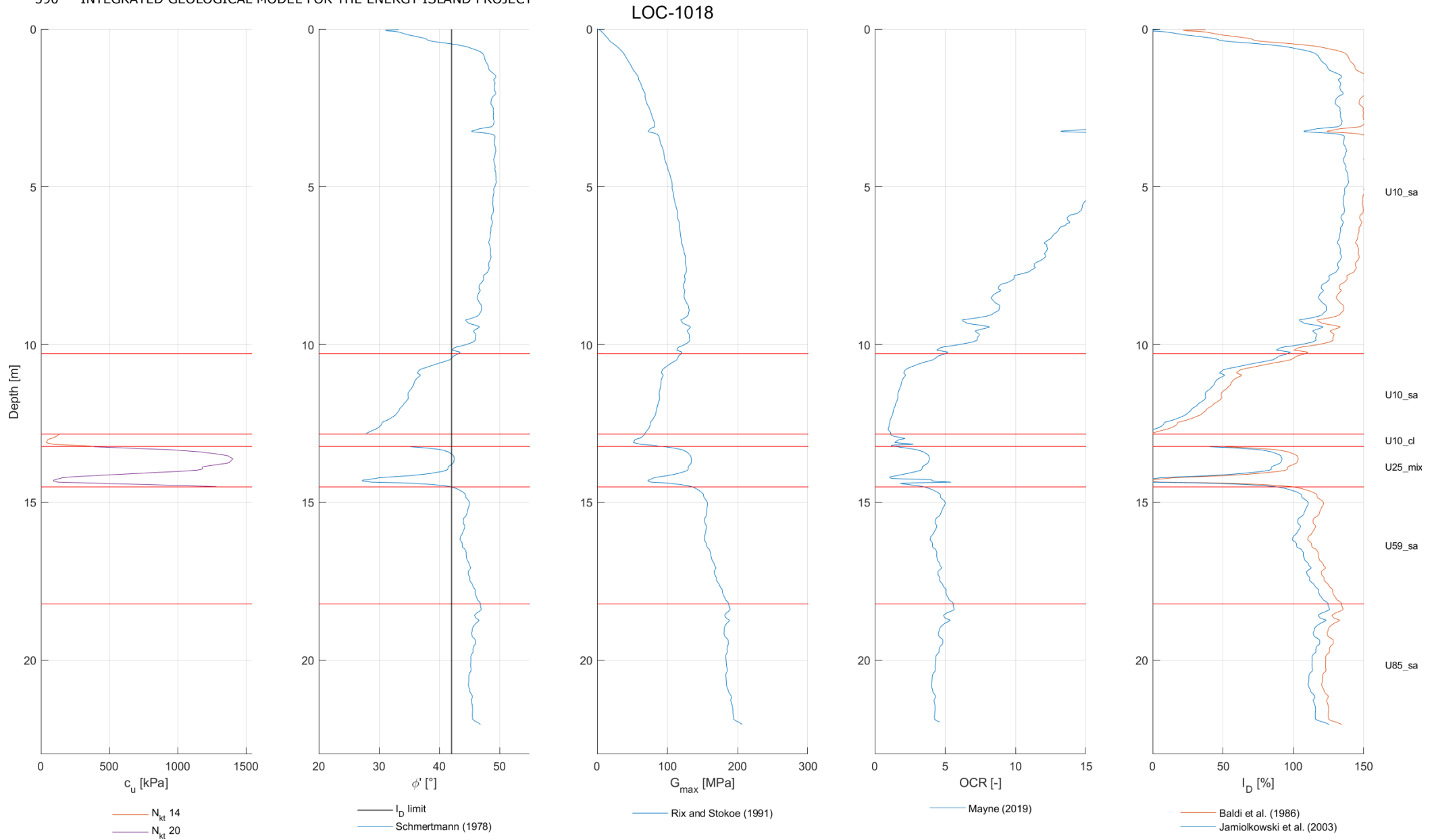
LOC-1015



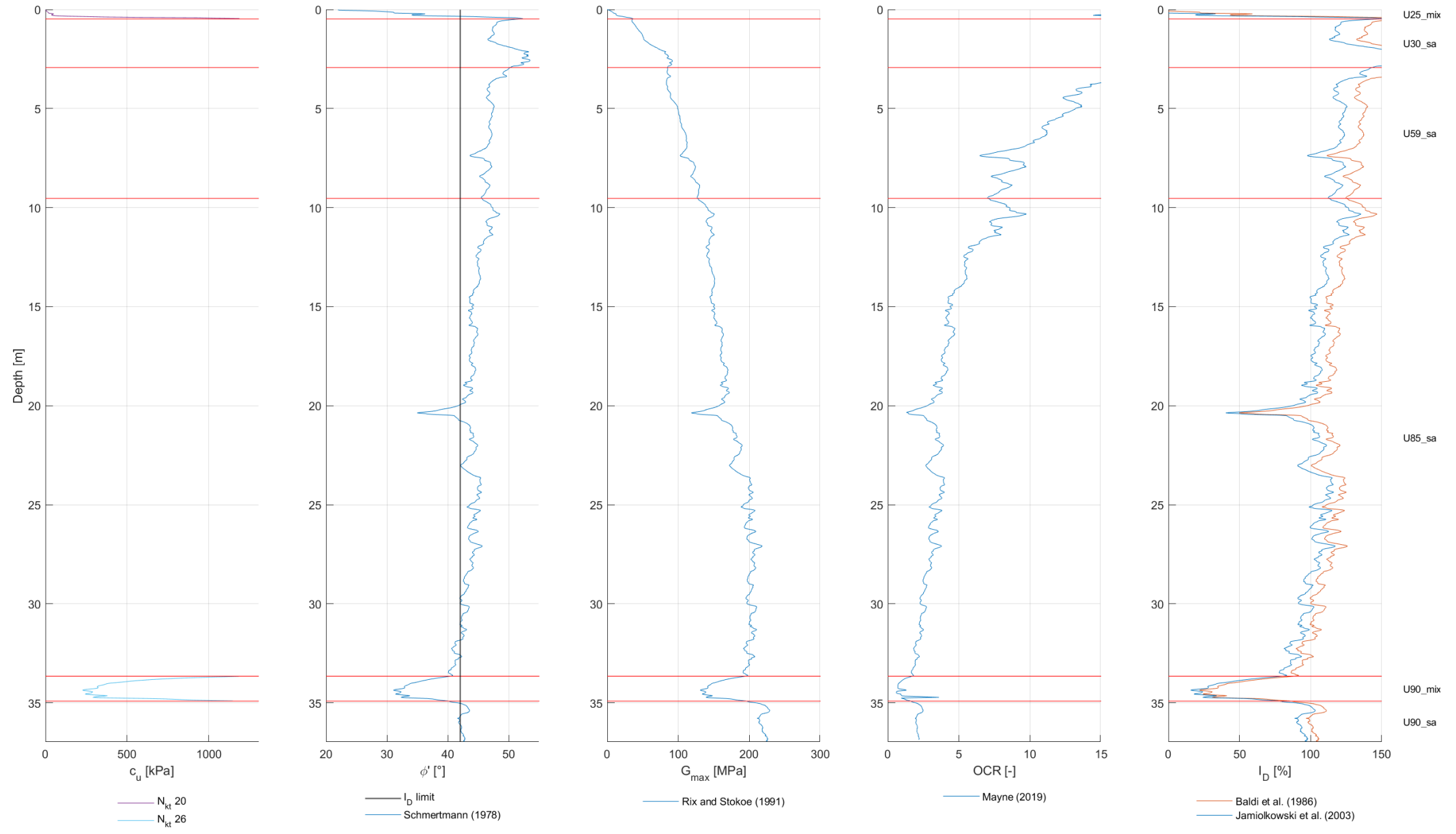


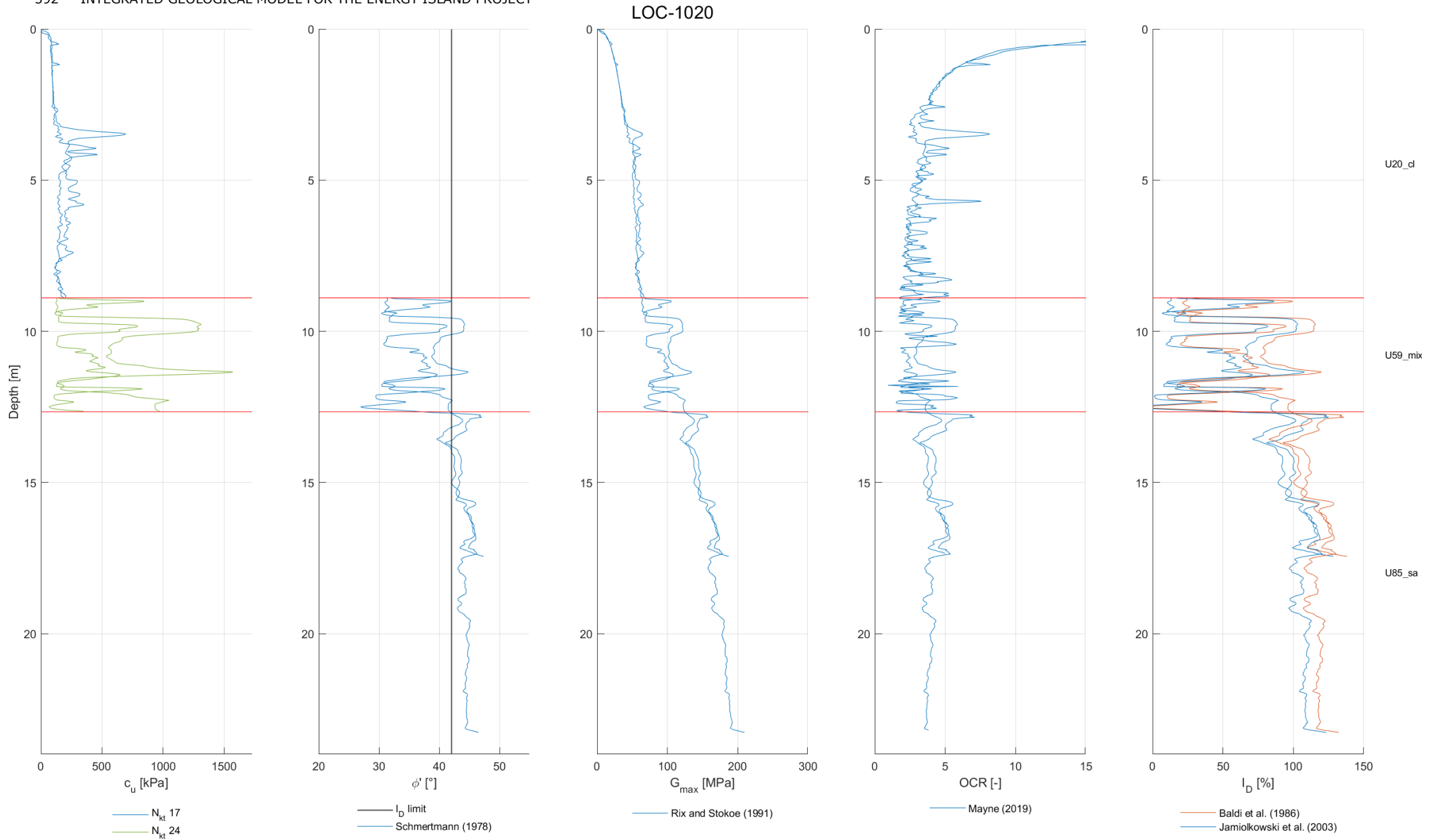


U25_mix
U30_sa
U40-03_mix
U59_sa
U85_sa
U90_sa
U95_sa
U95_mix

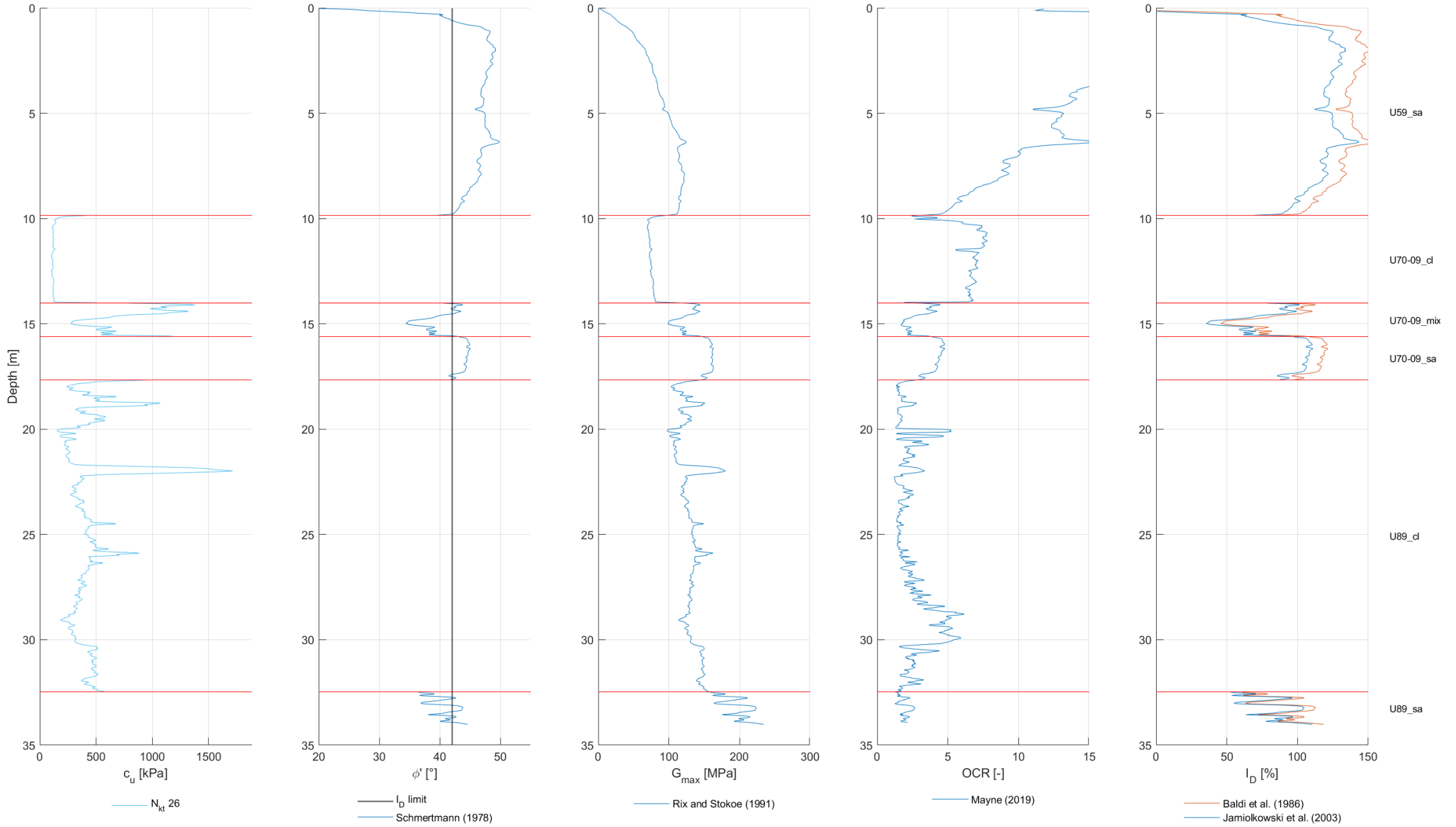


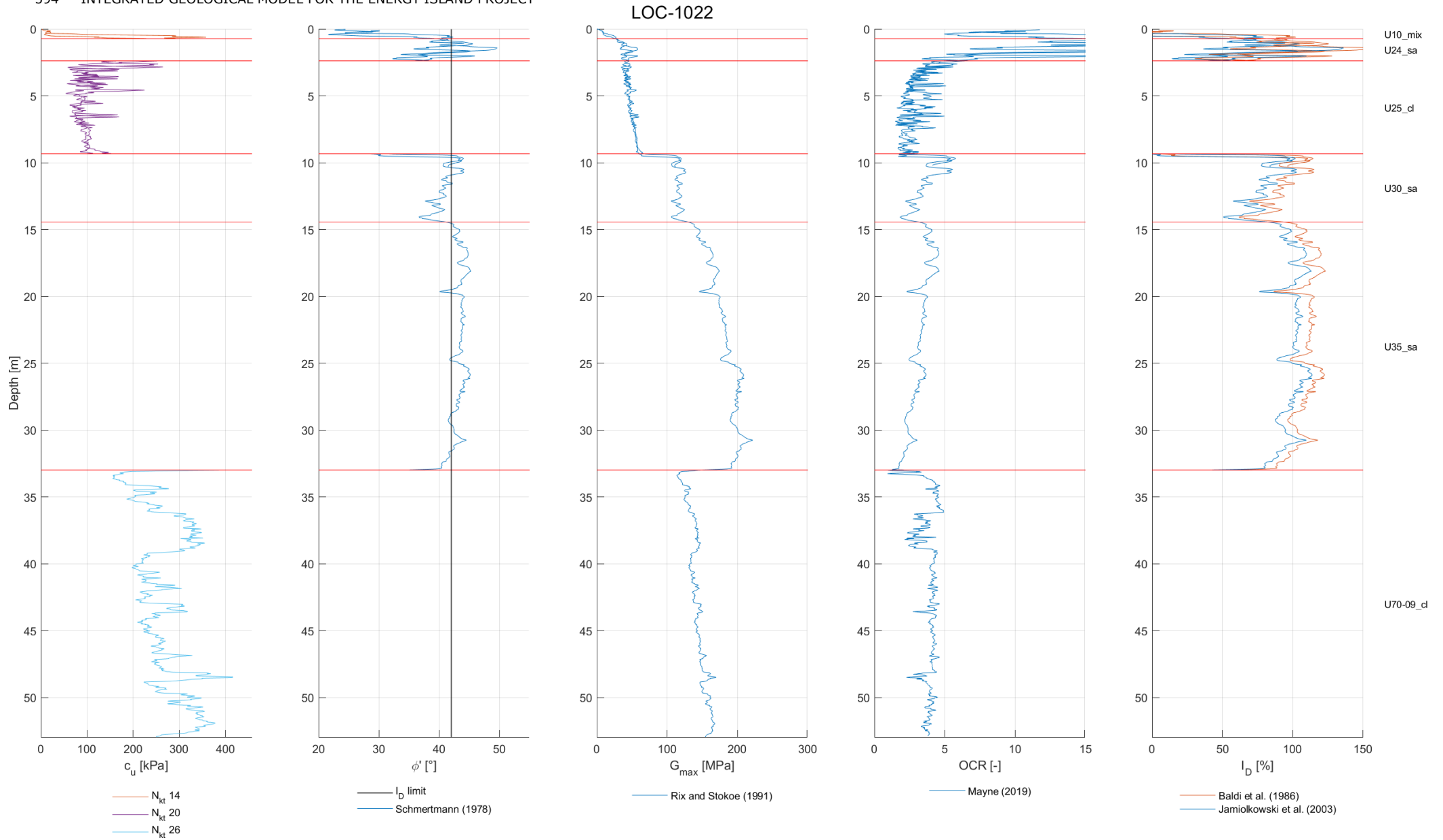
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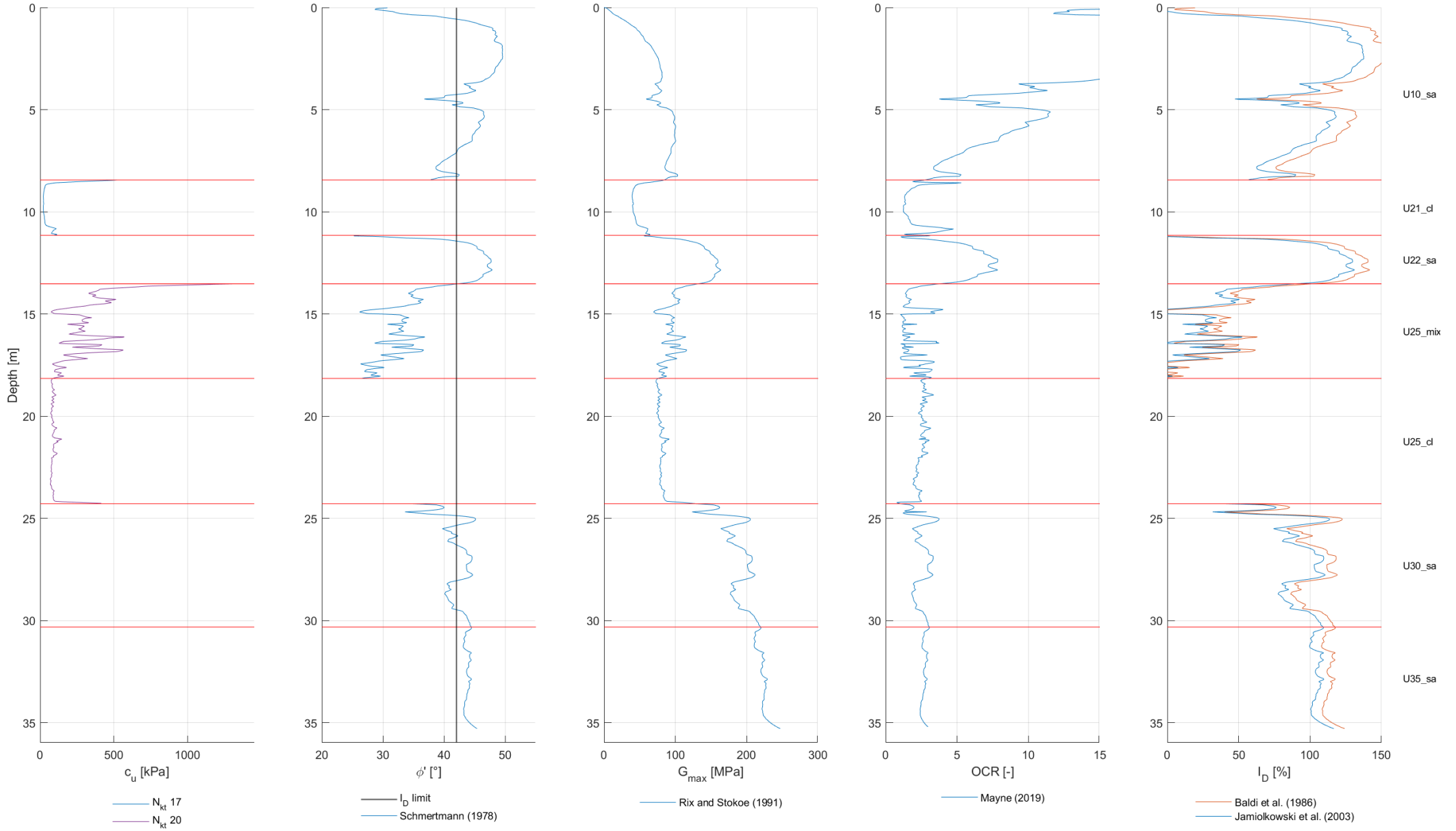


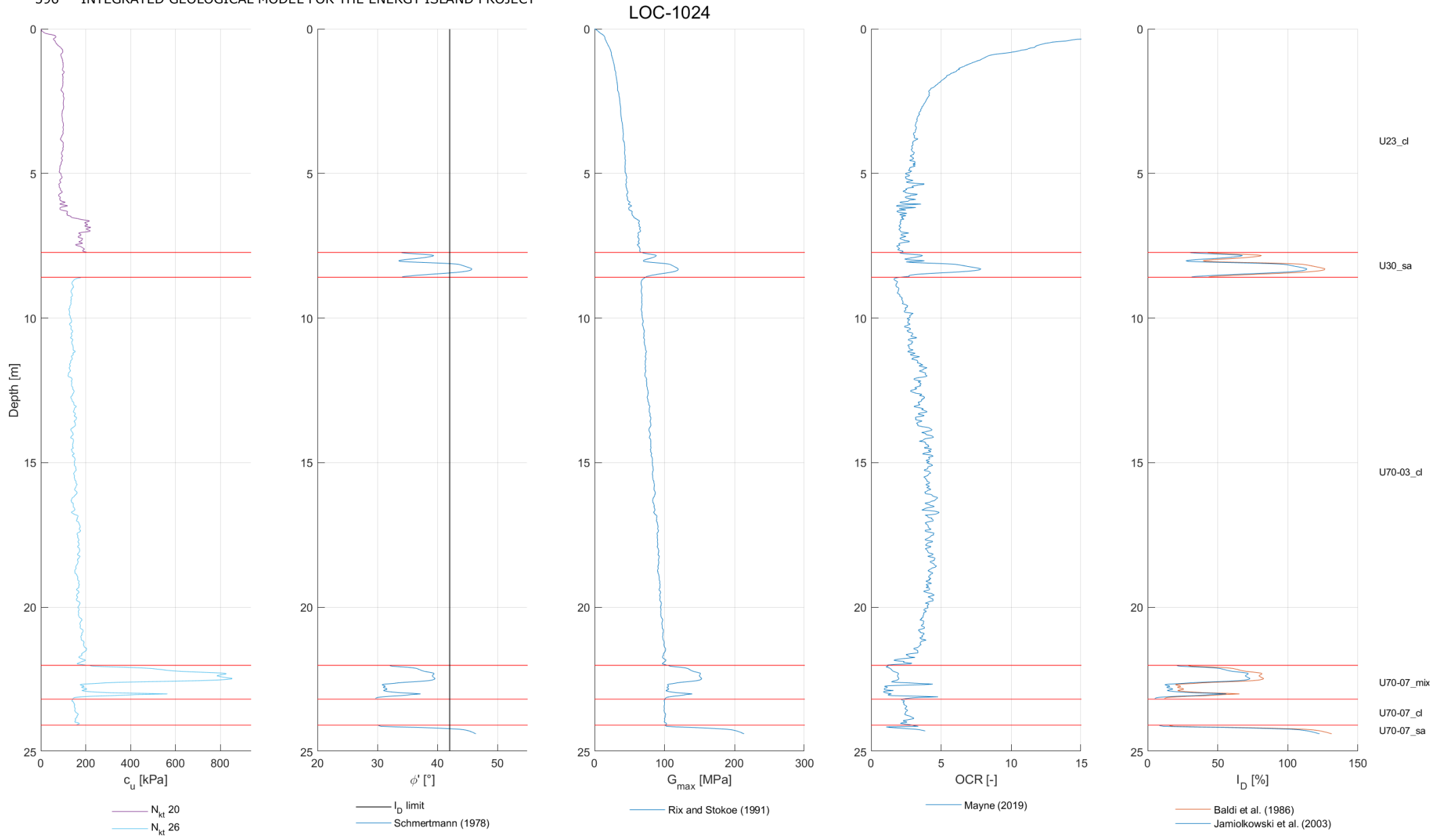
LOC-1021

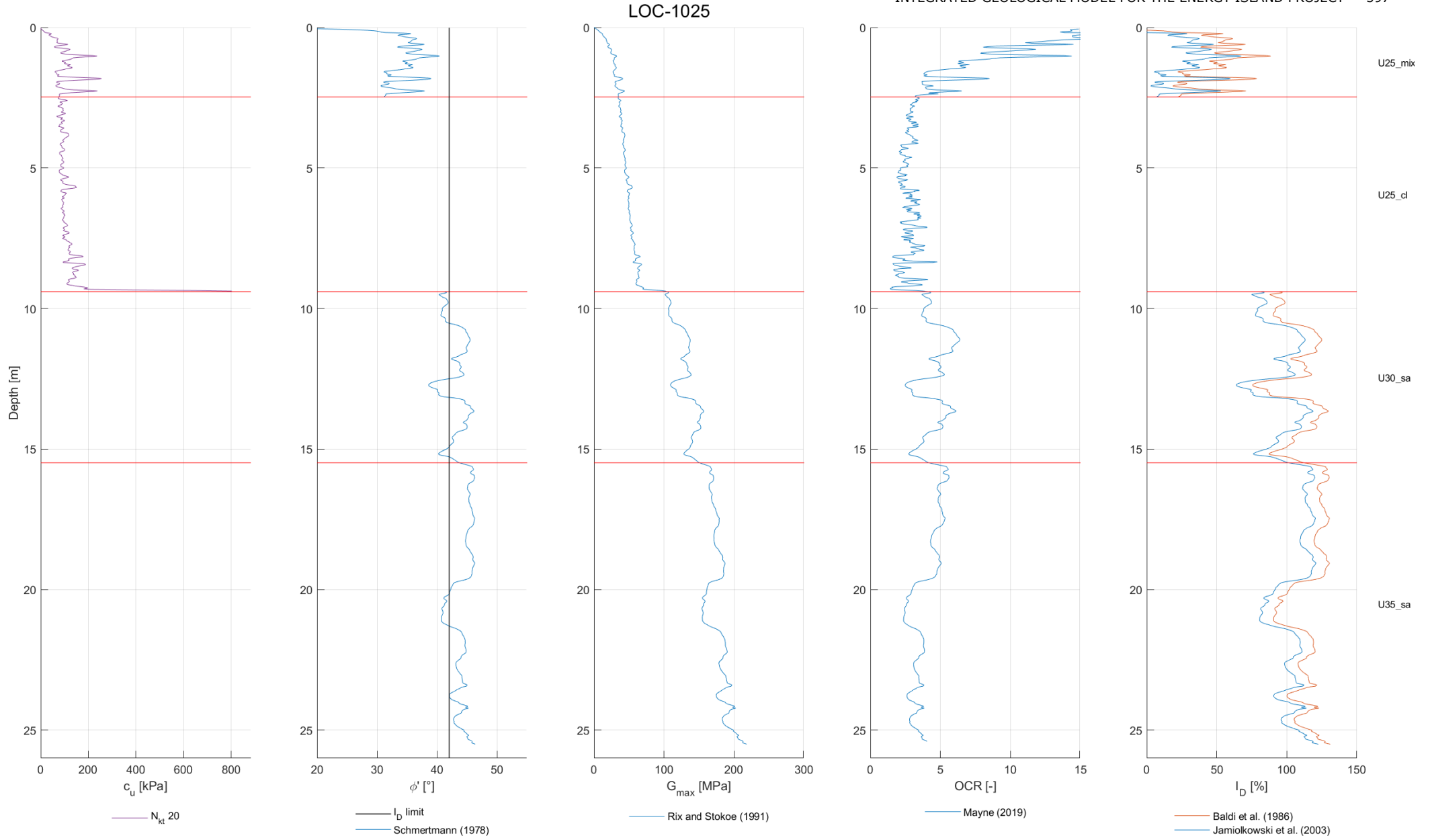


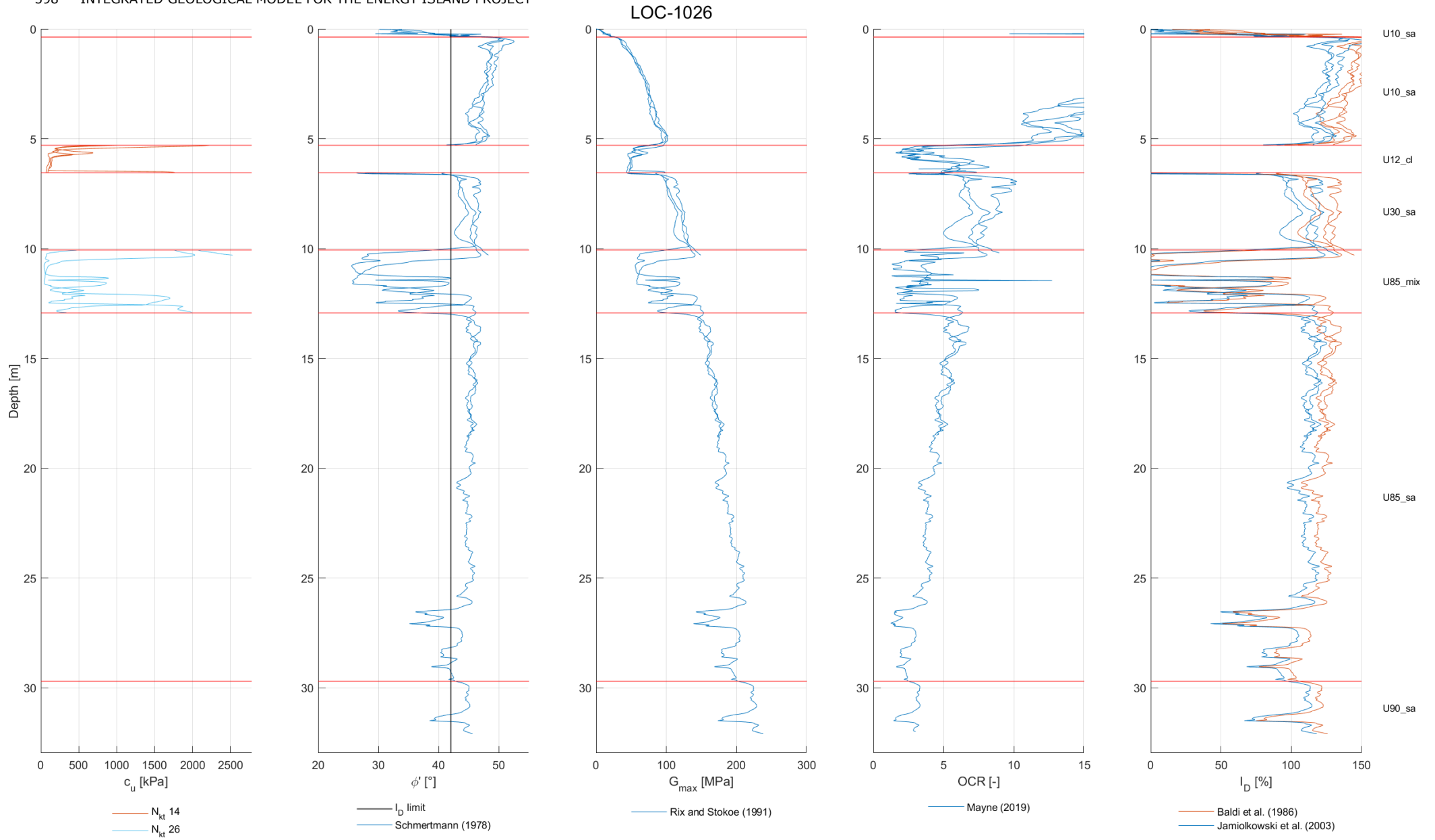


LOC-1023

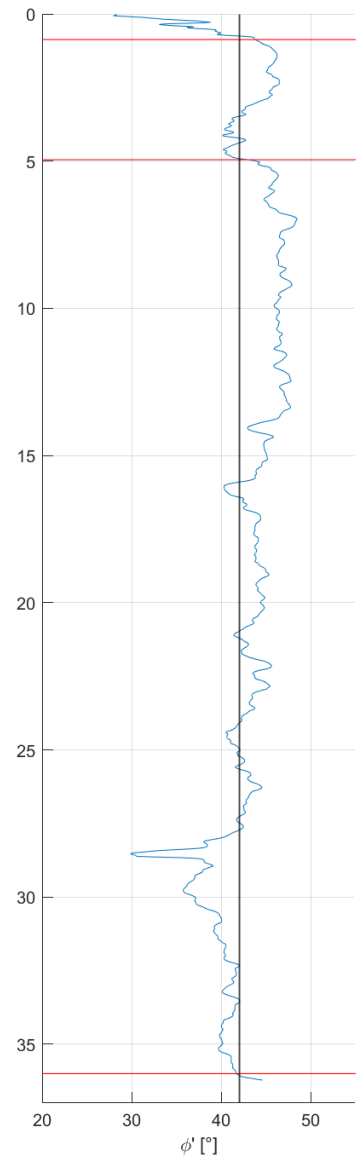
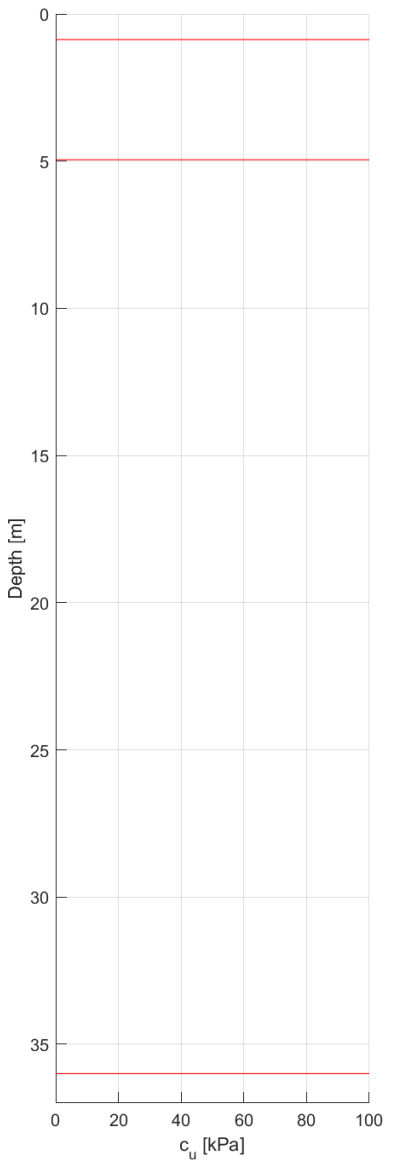




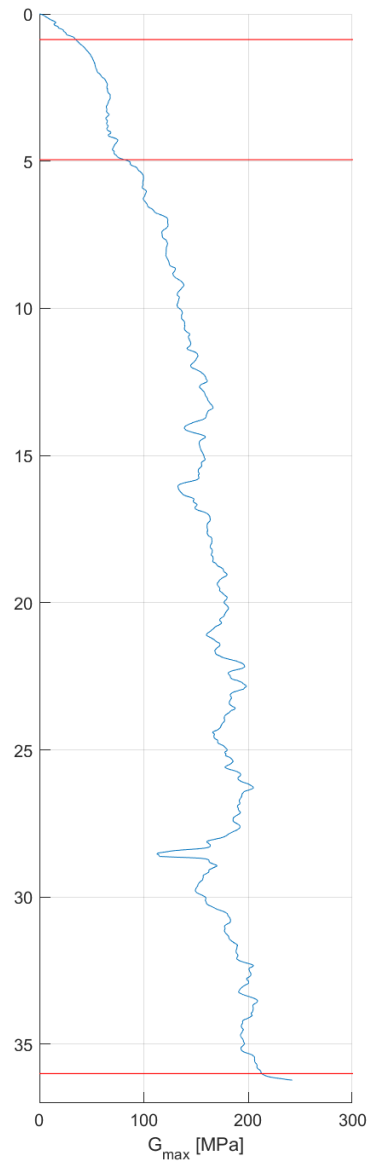




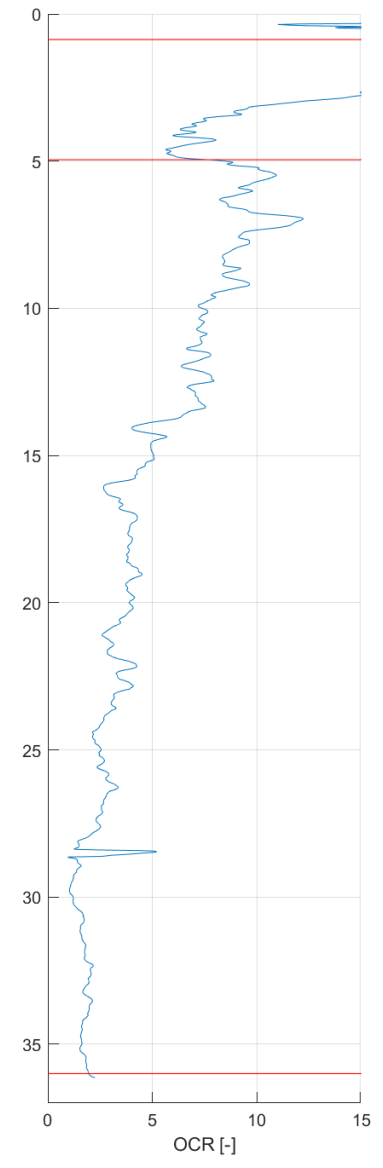
LOC-1027



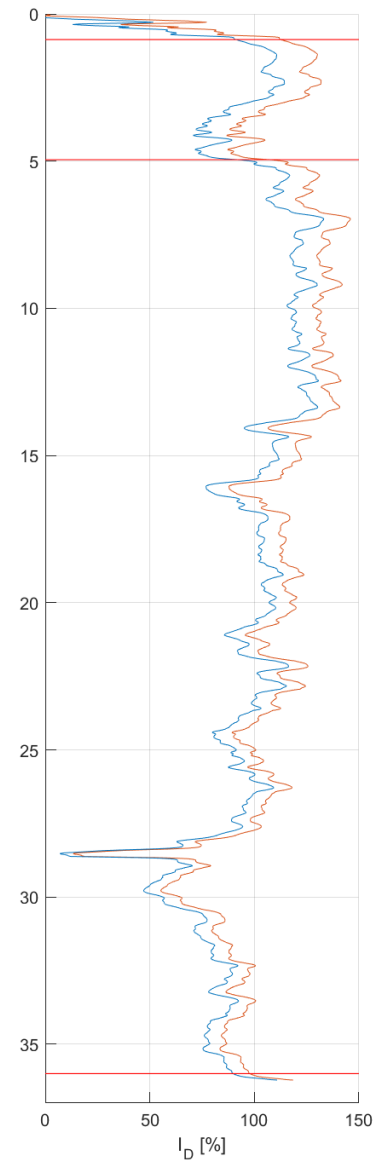
— I_D limit
 — Schmertmann (1978)



— Rix and Stokoe (1991)

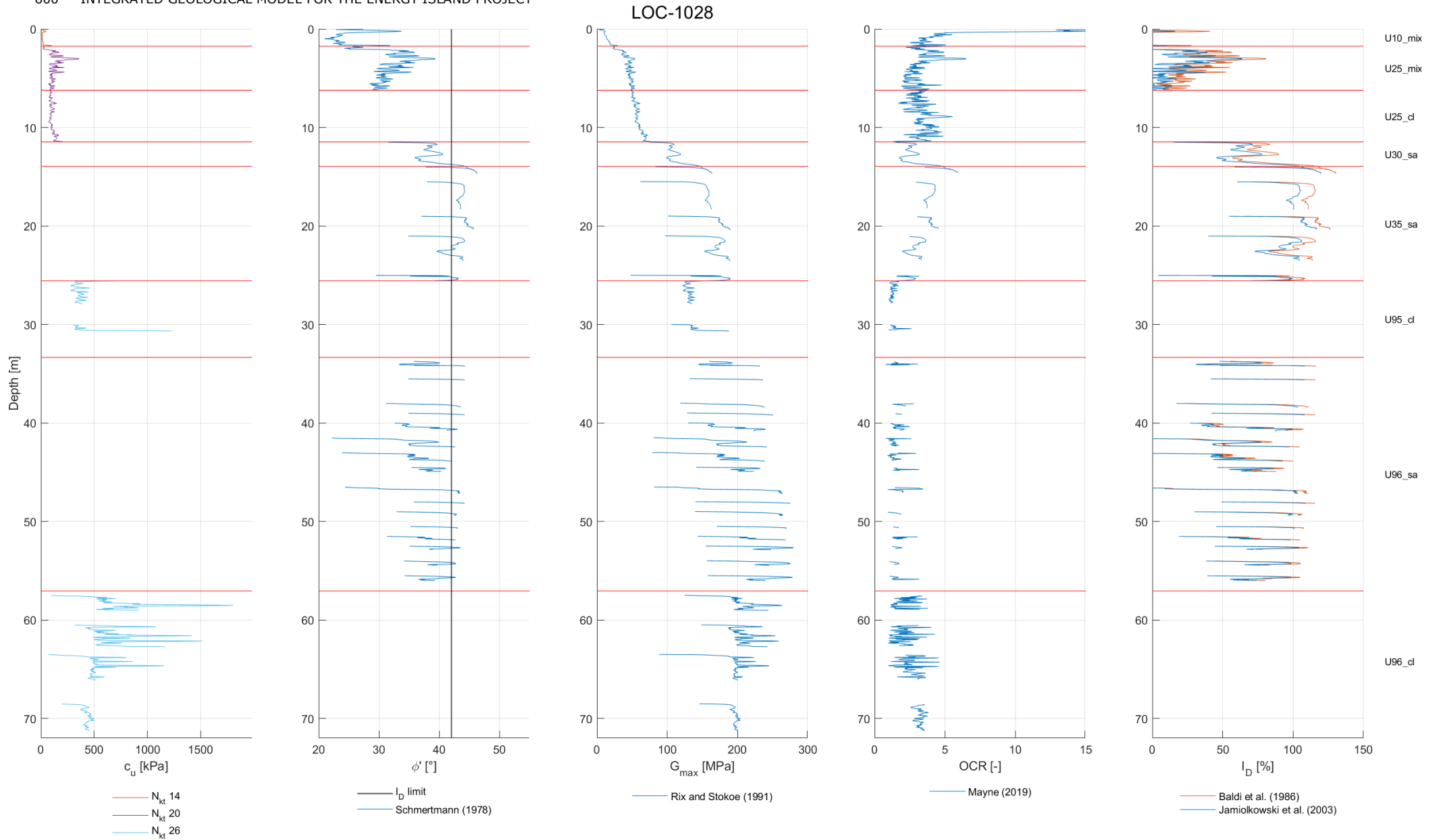


— Mayne (2019)

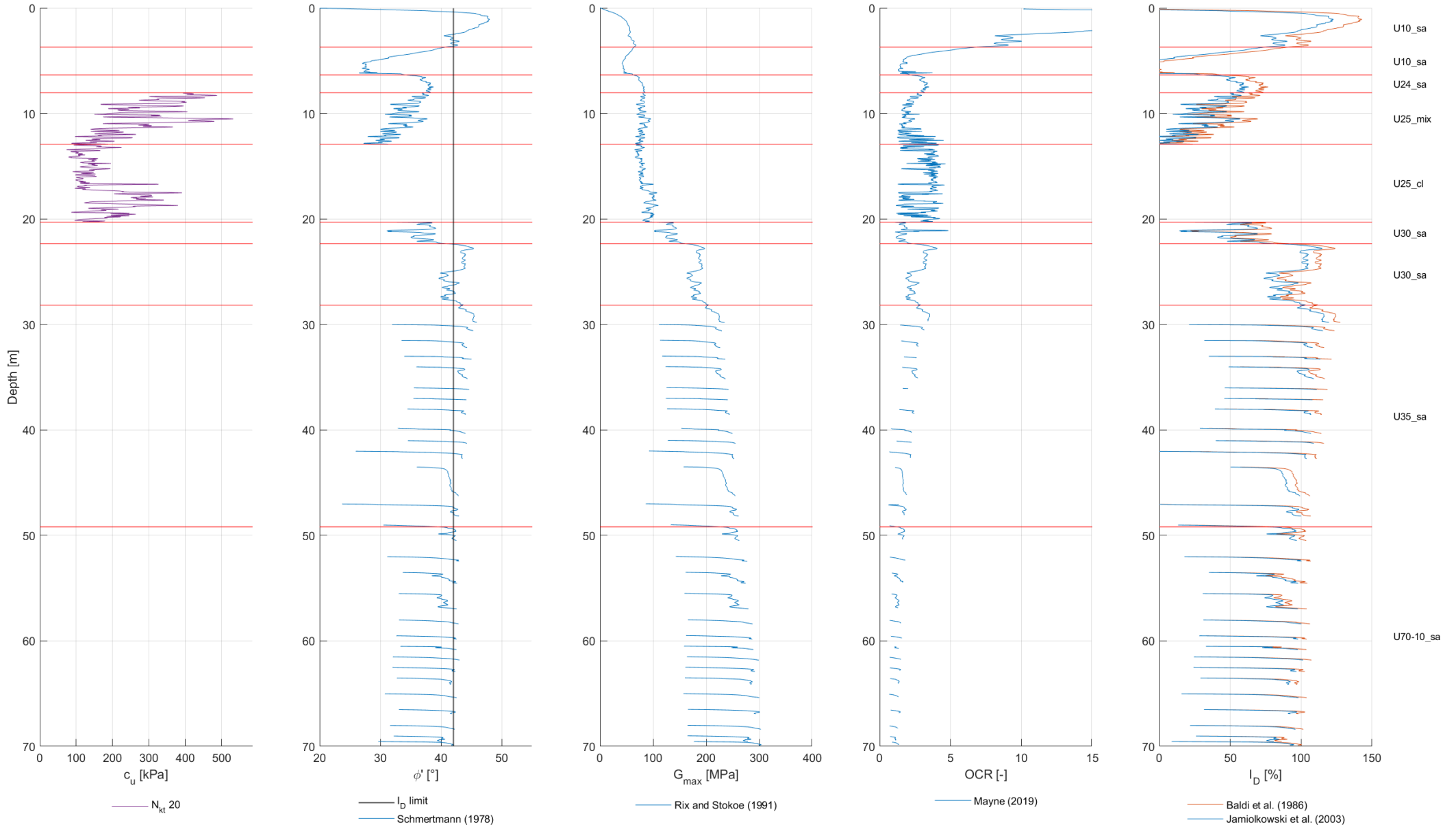


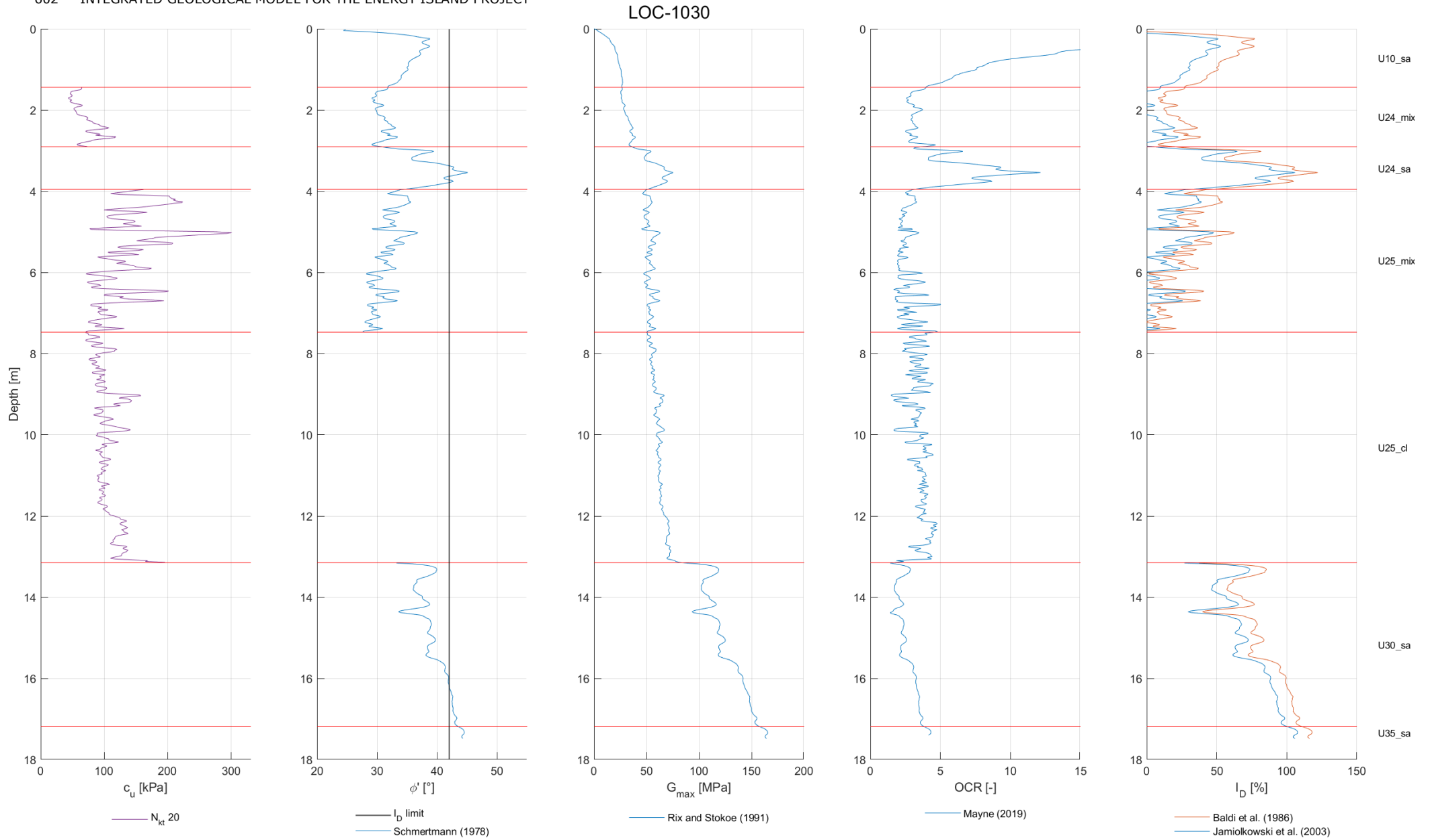
— Baldi et al. (1986)
 — Jamiolkowski et al. (2003)

U17_sa
 U17_sa
 U19_sa
 U90_sa

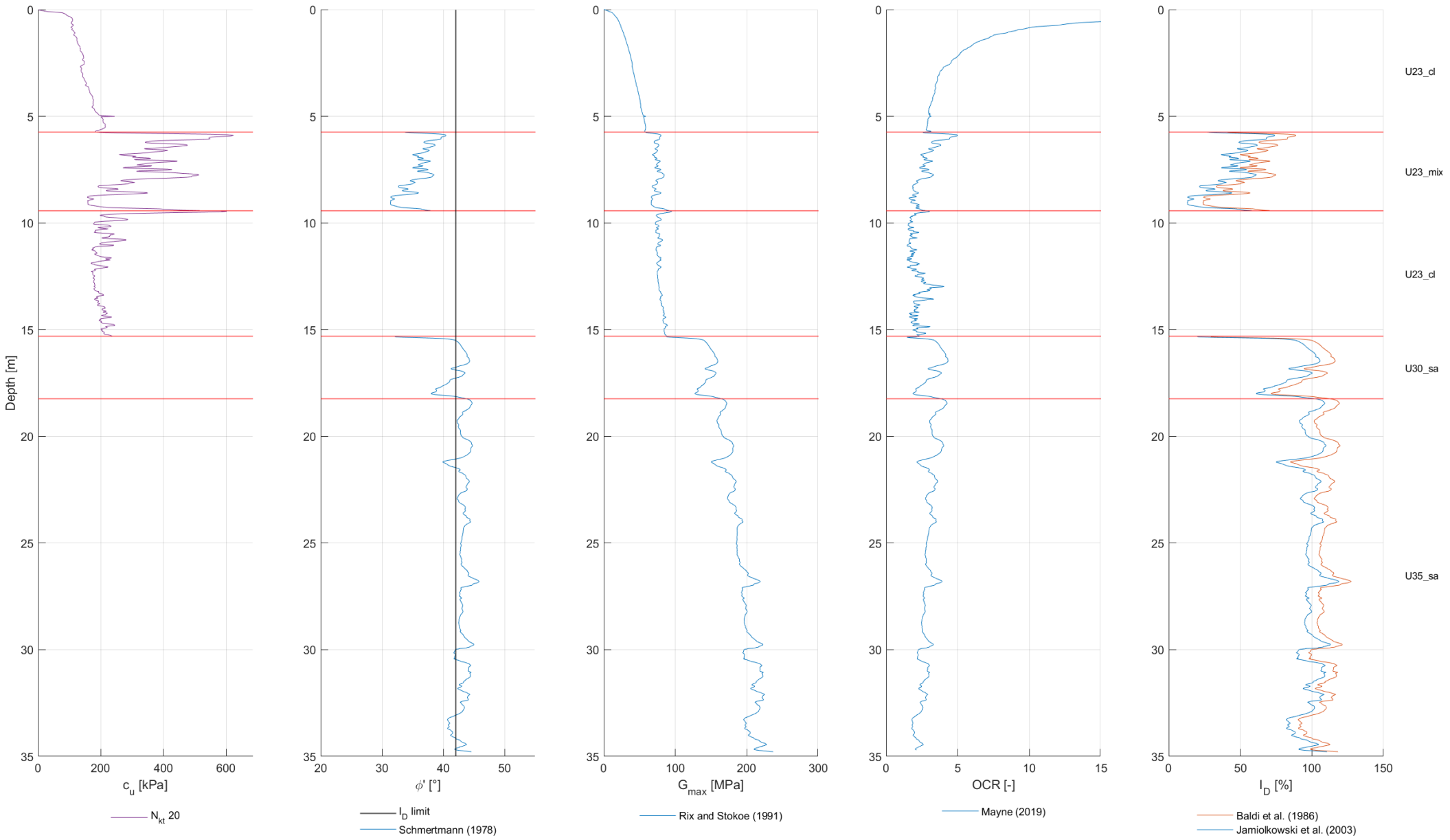


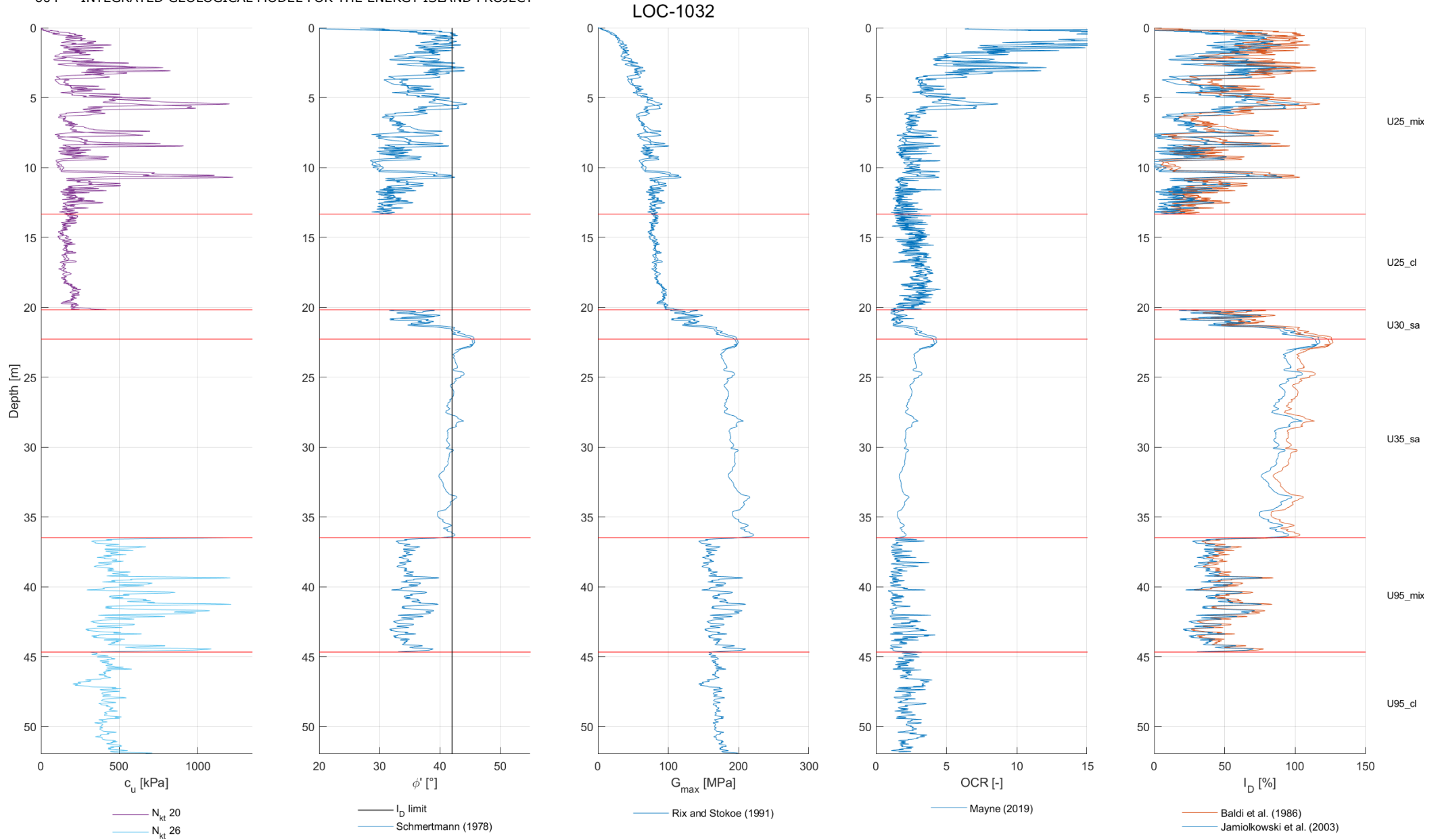
LOC-1029



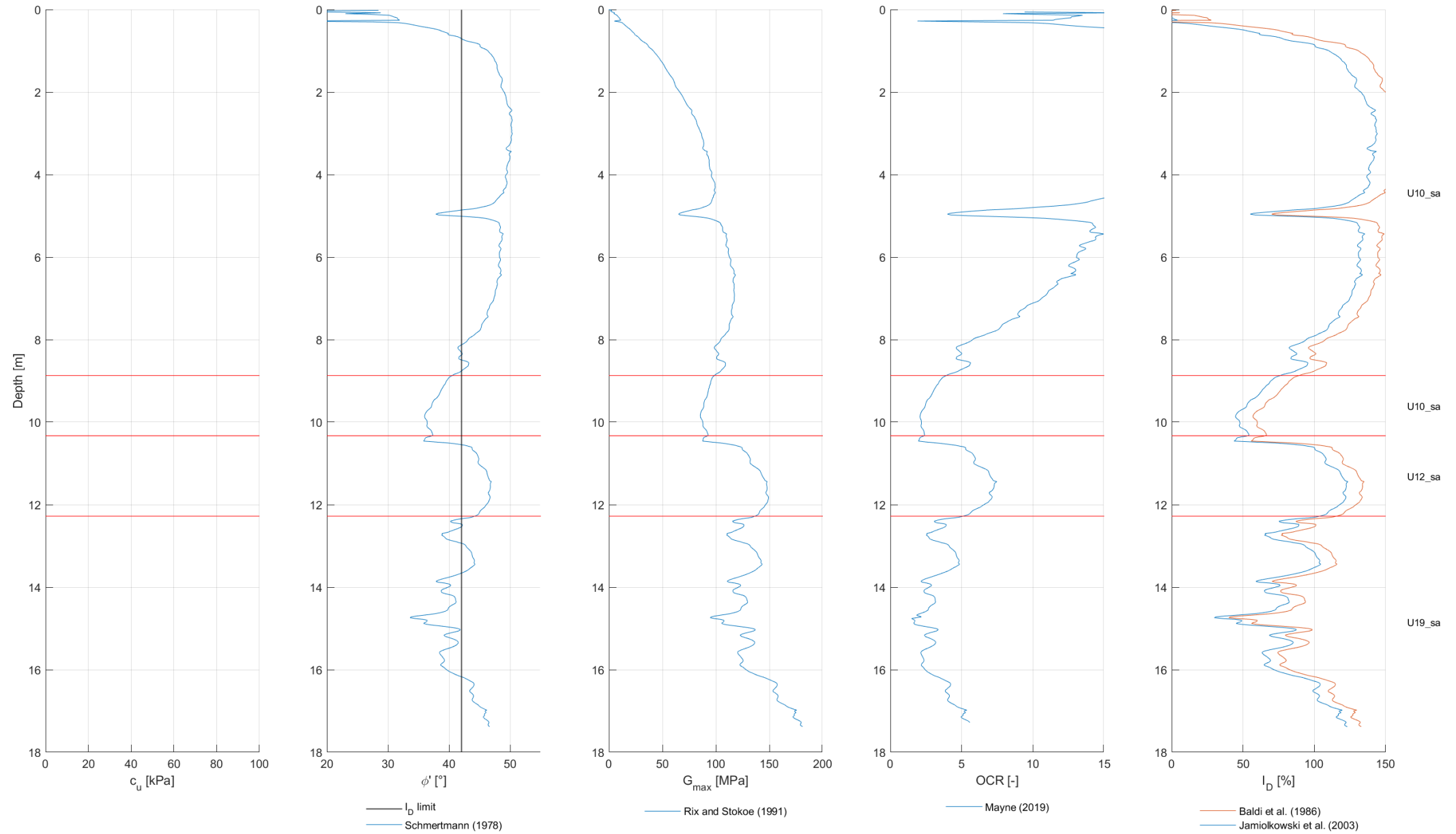


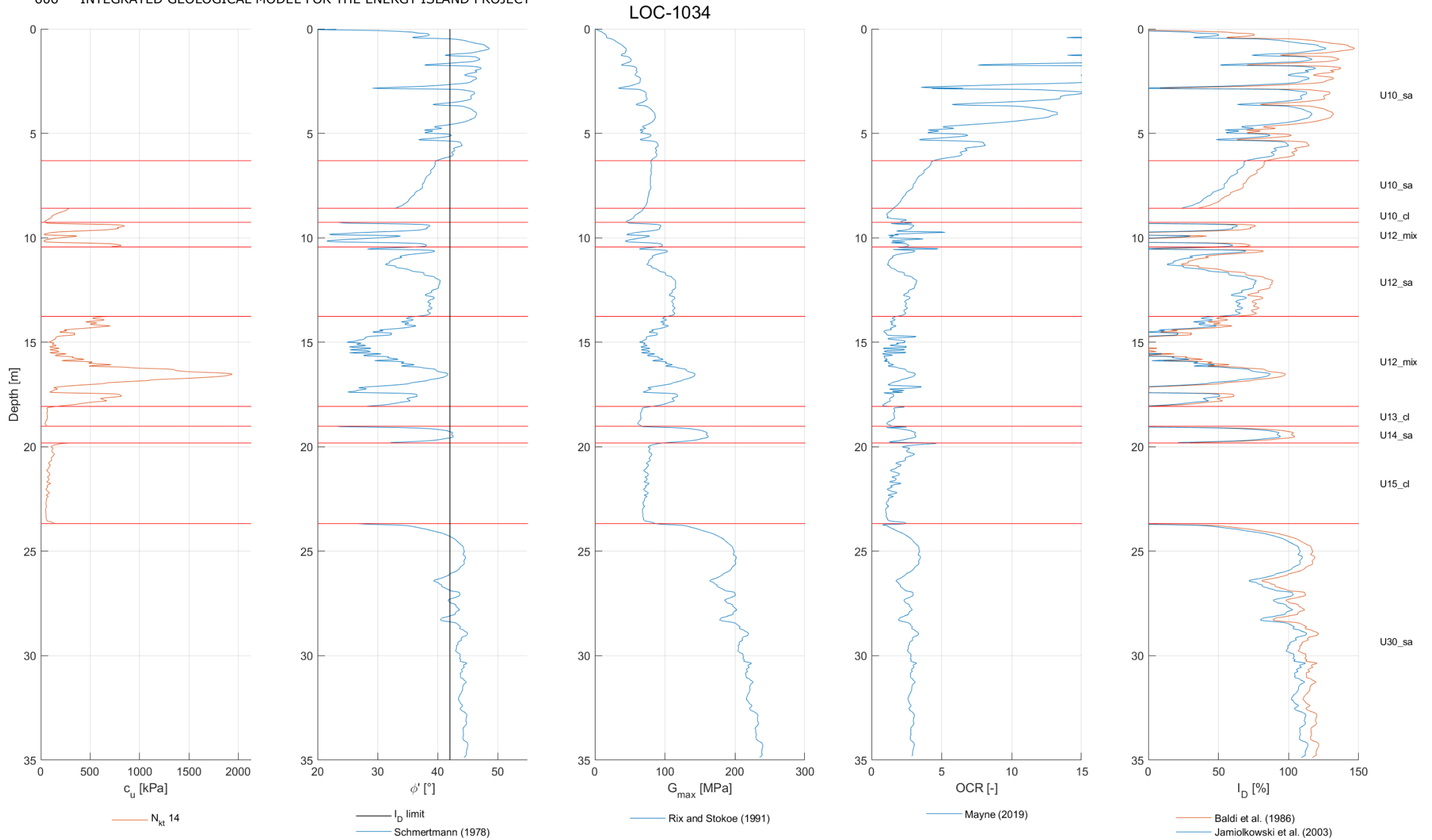
LOC-1031



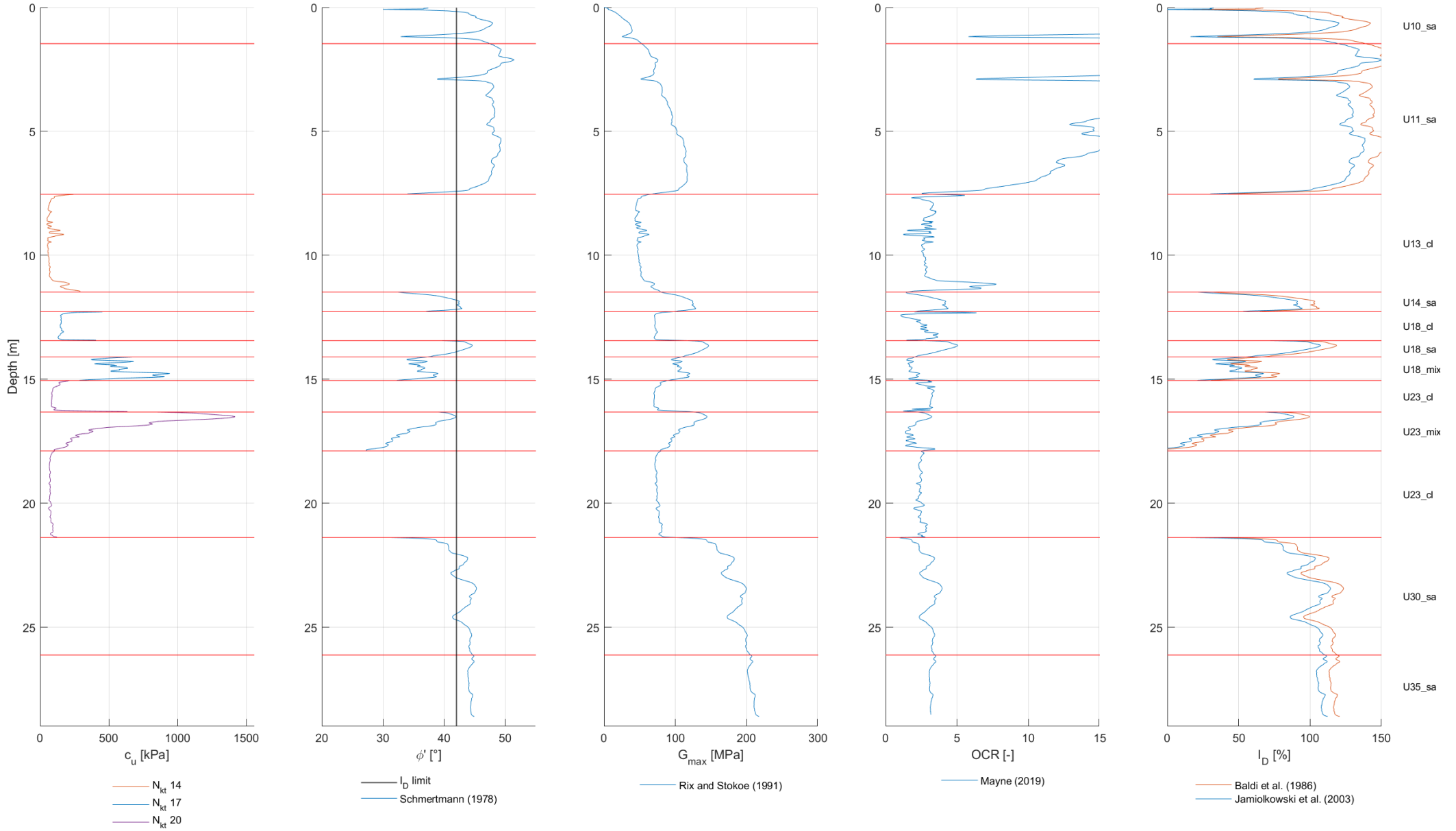


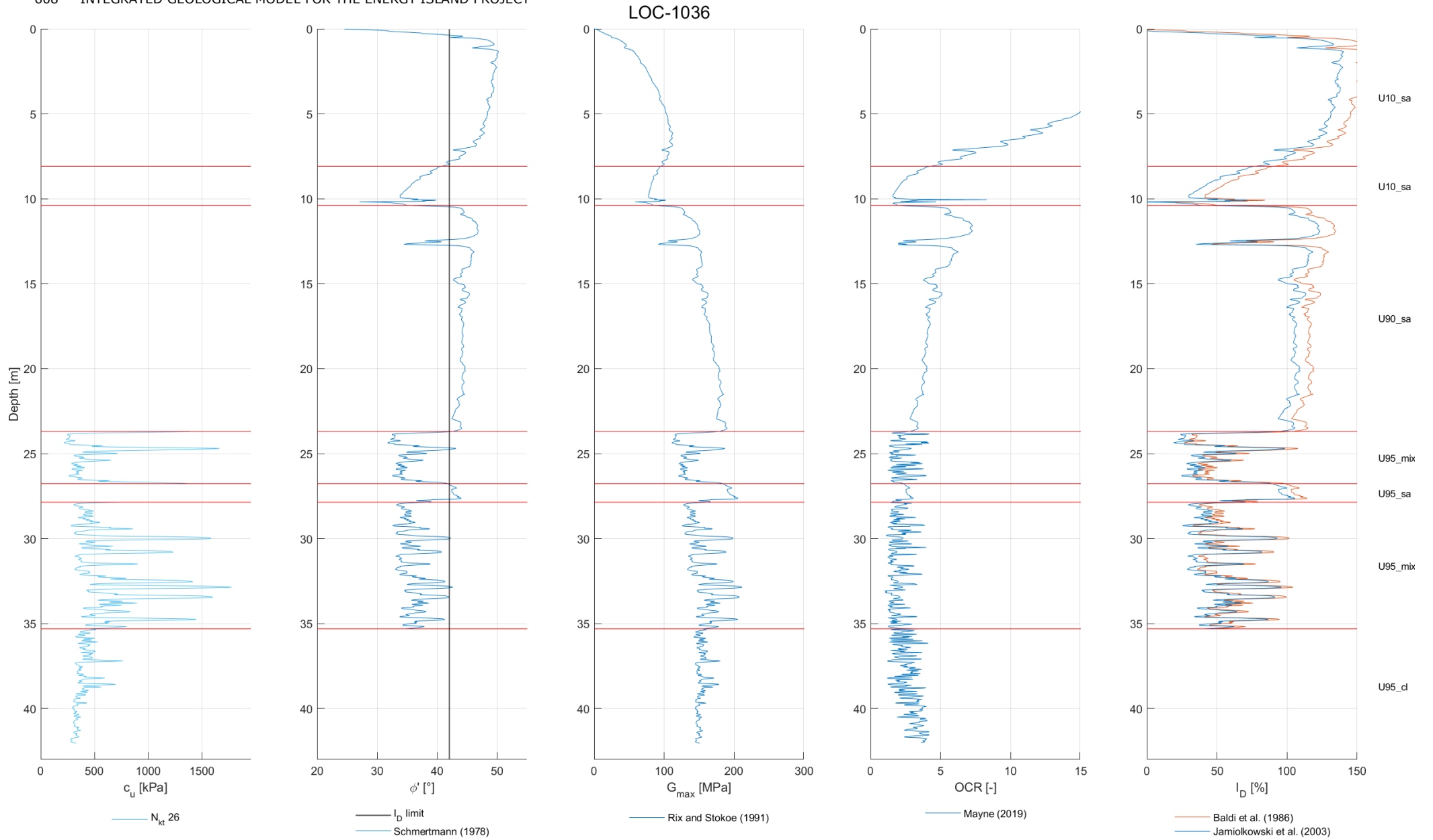
LOC-1033



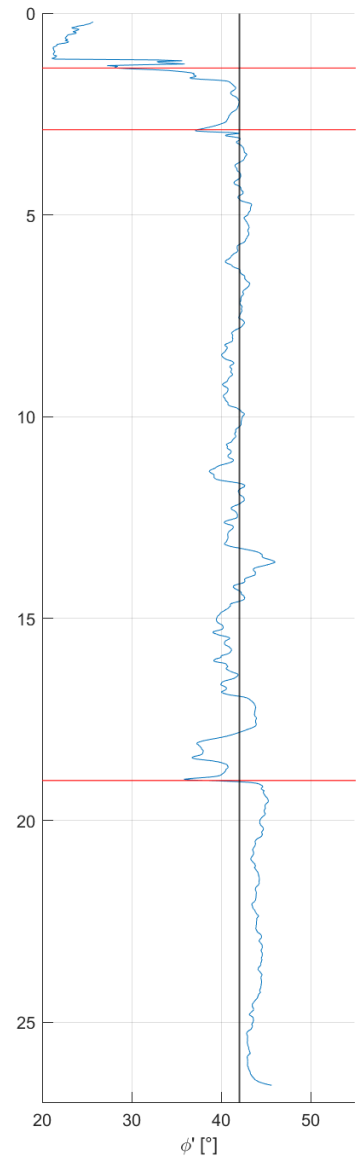
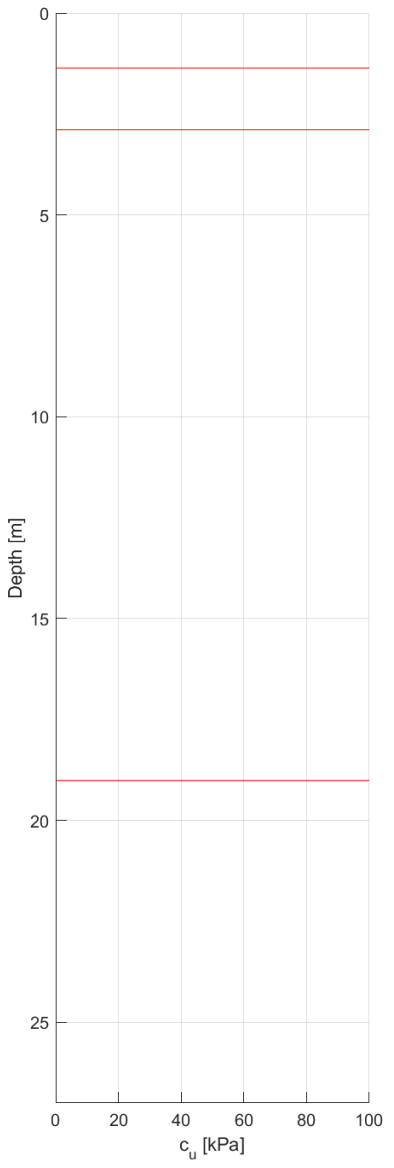


LOC-1035

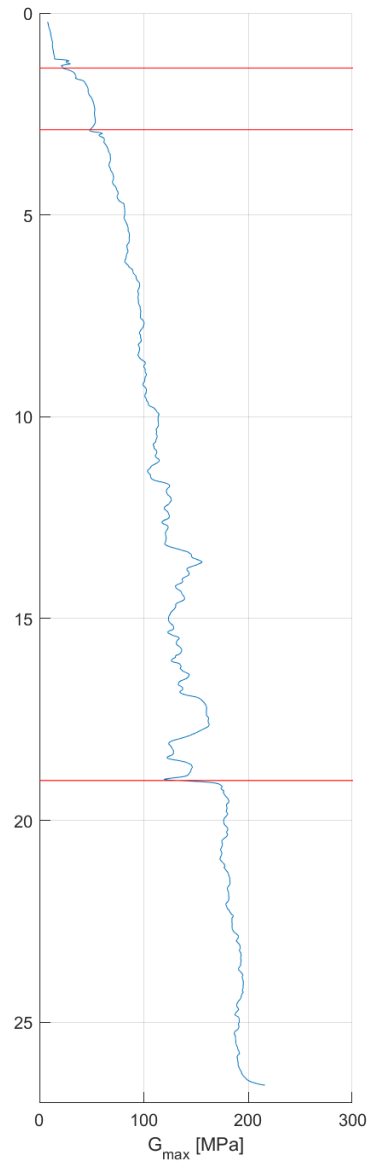




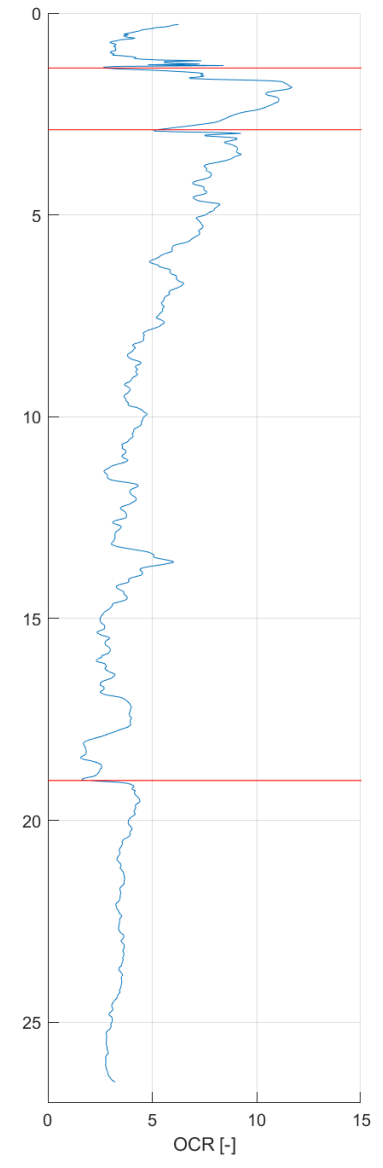
LOC-1037



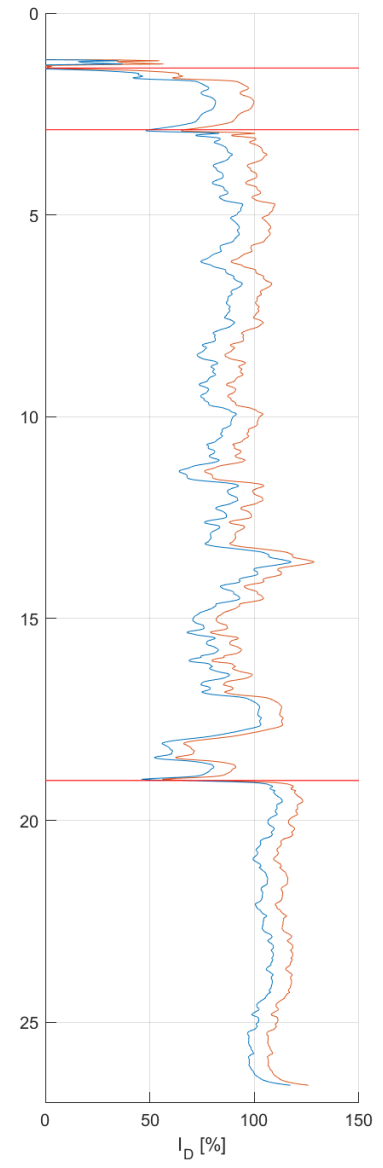
— I_D limit
 — Schmertmann (1978)



— Rix and Stokoe (1991)

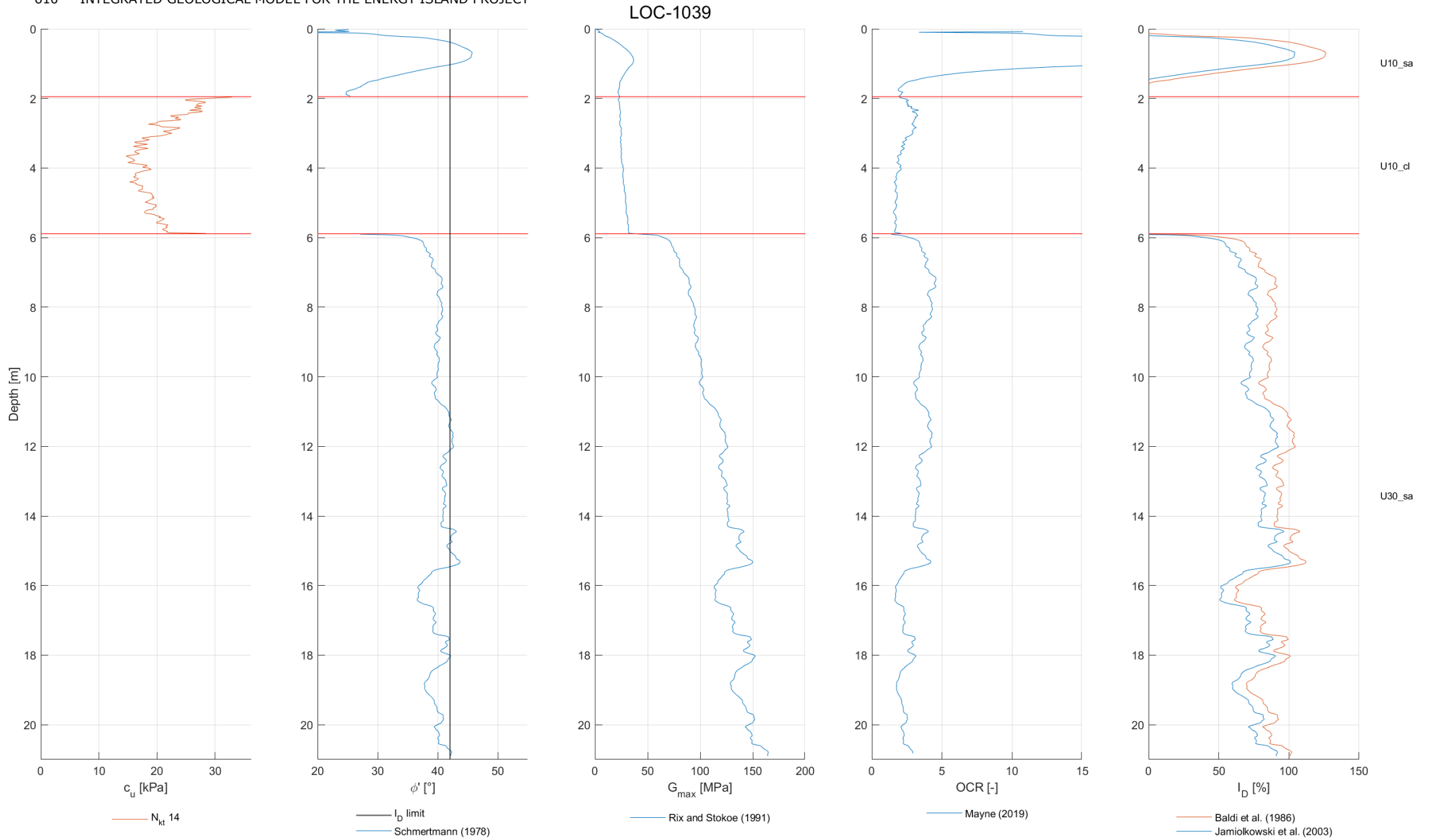


— Mayne (2019)



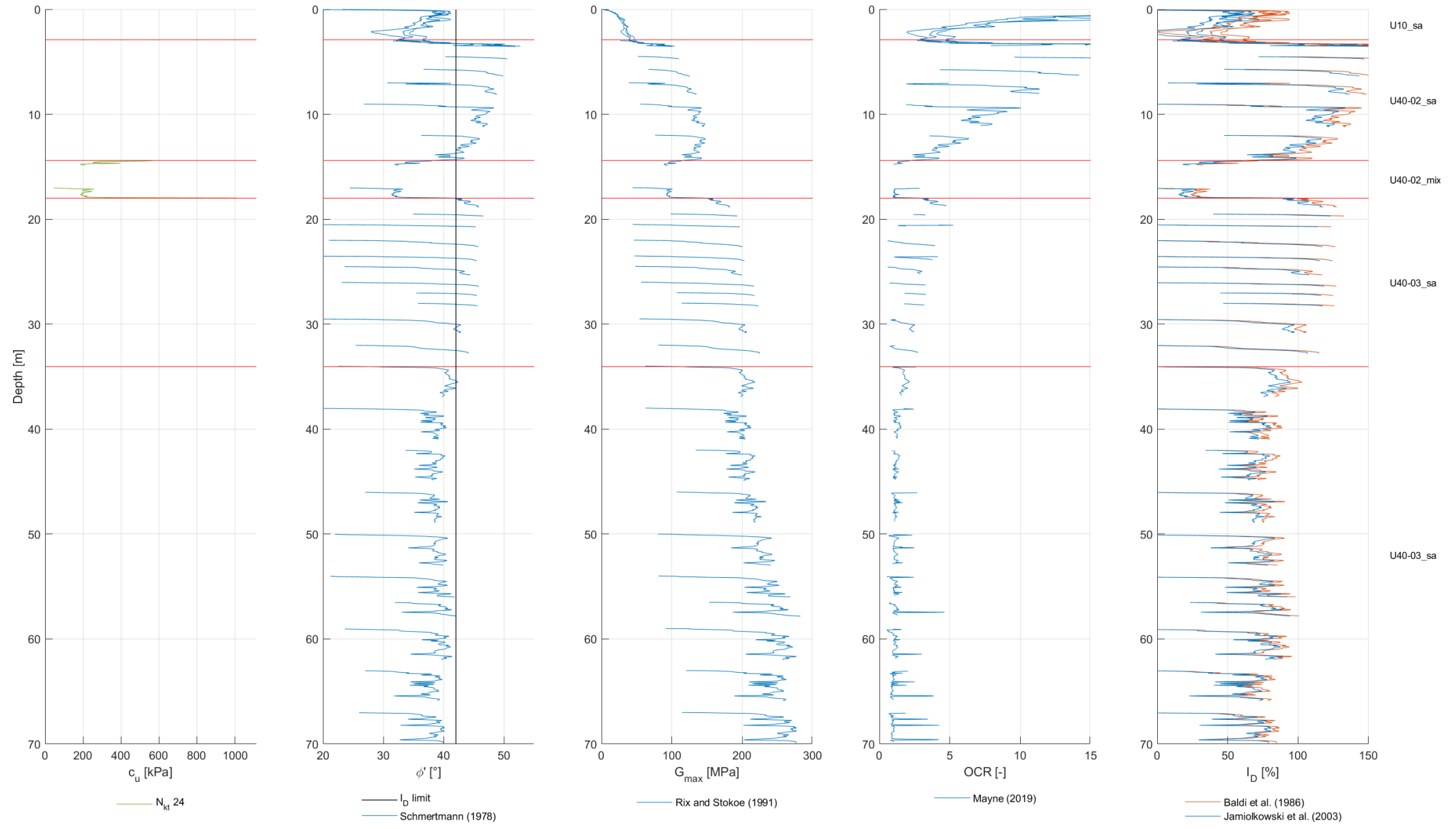
— Baldi et al. (1986)
 — Jamiolkowski et al. (2003)

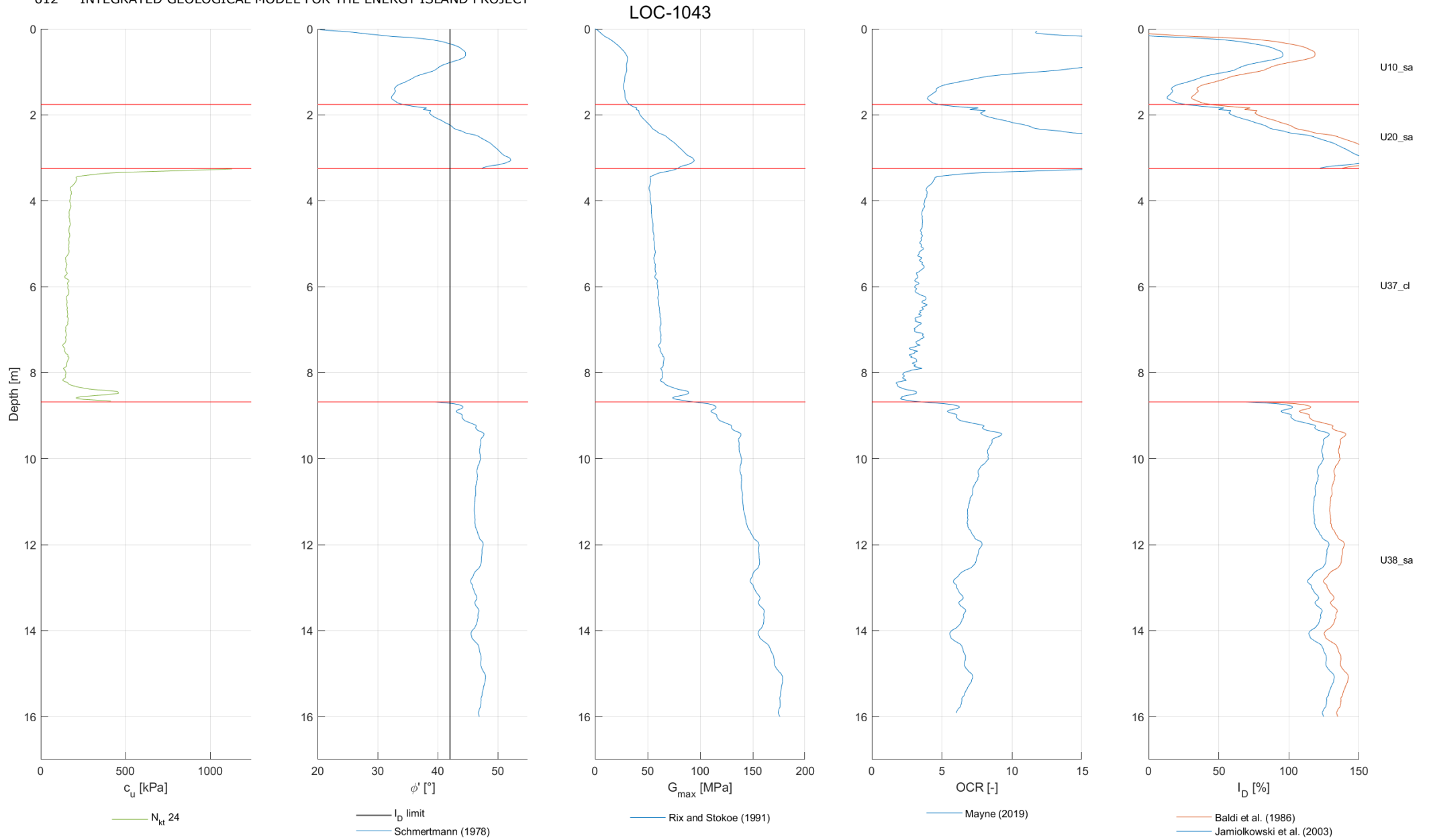
U10_sa
 U23_sa
 U30_sa
 U35_sa

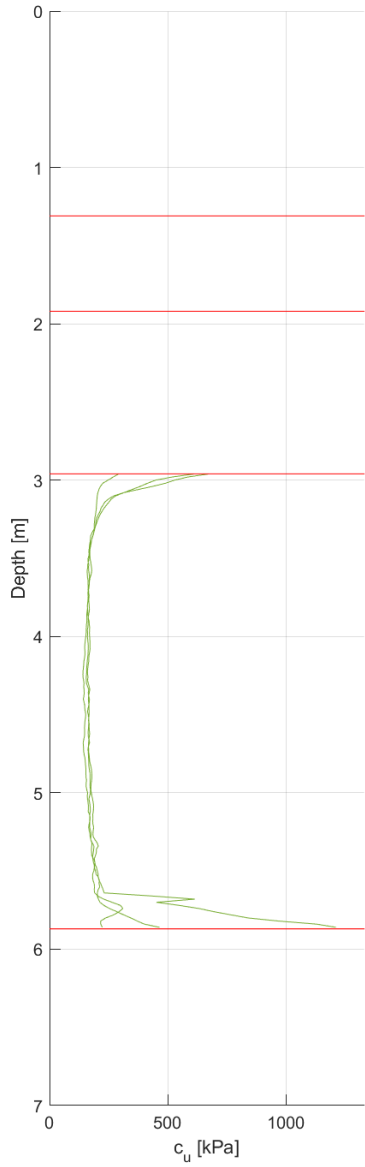


INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT

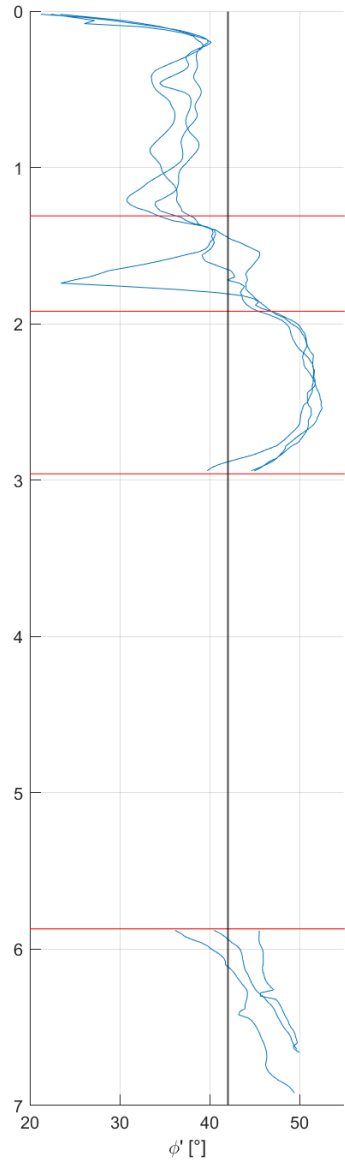
LOC-1042





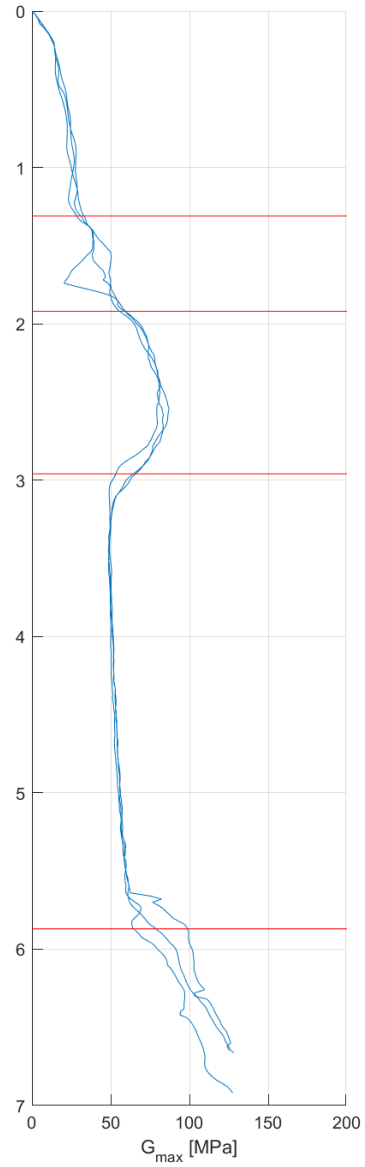


N_{kt} 24

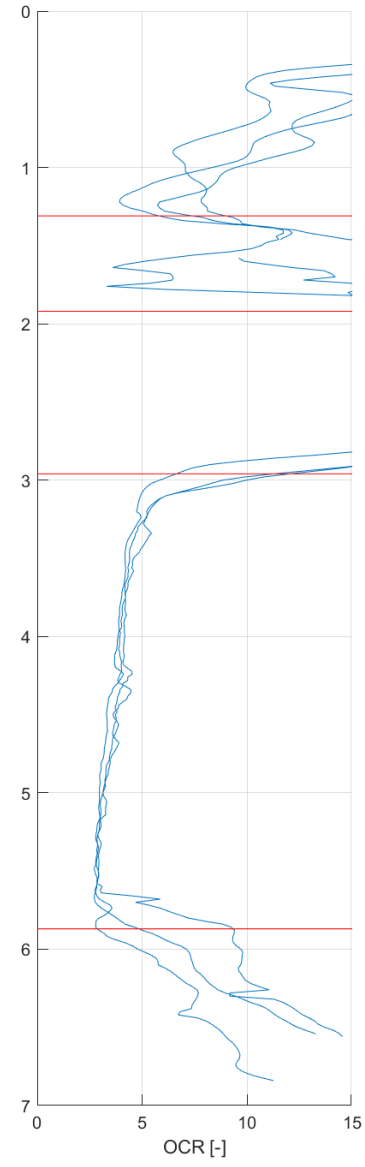


I_D limit
Schmertmann (1978)

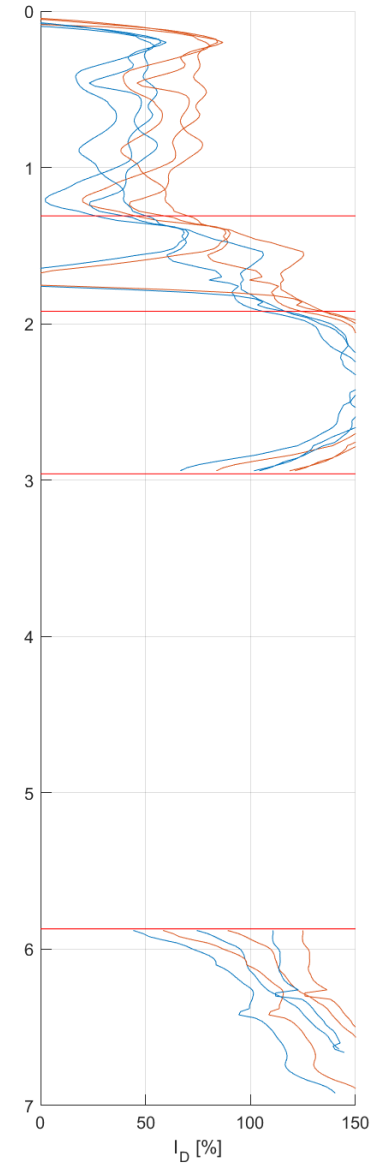
LOC-1044



Rix and Stokoe (1991)



Mayne (2019)



Baldi et al. (1986)
Jamiolkowski et al. (2003)

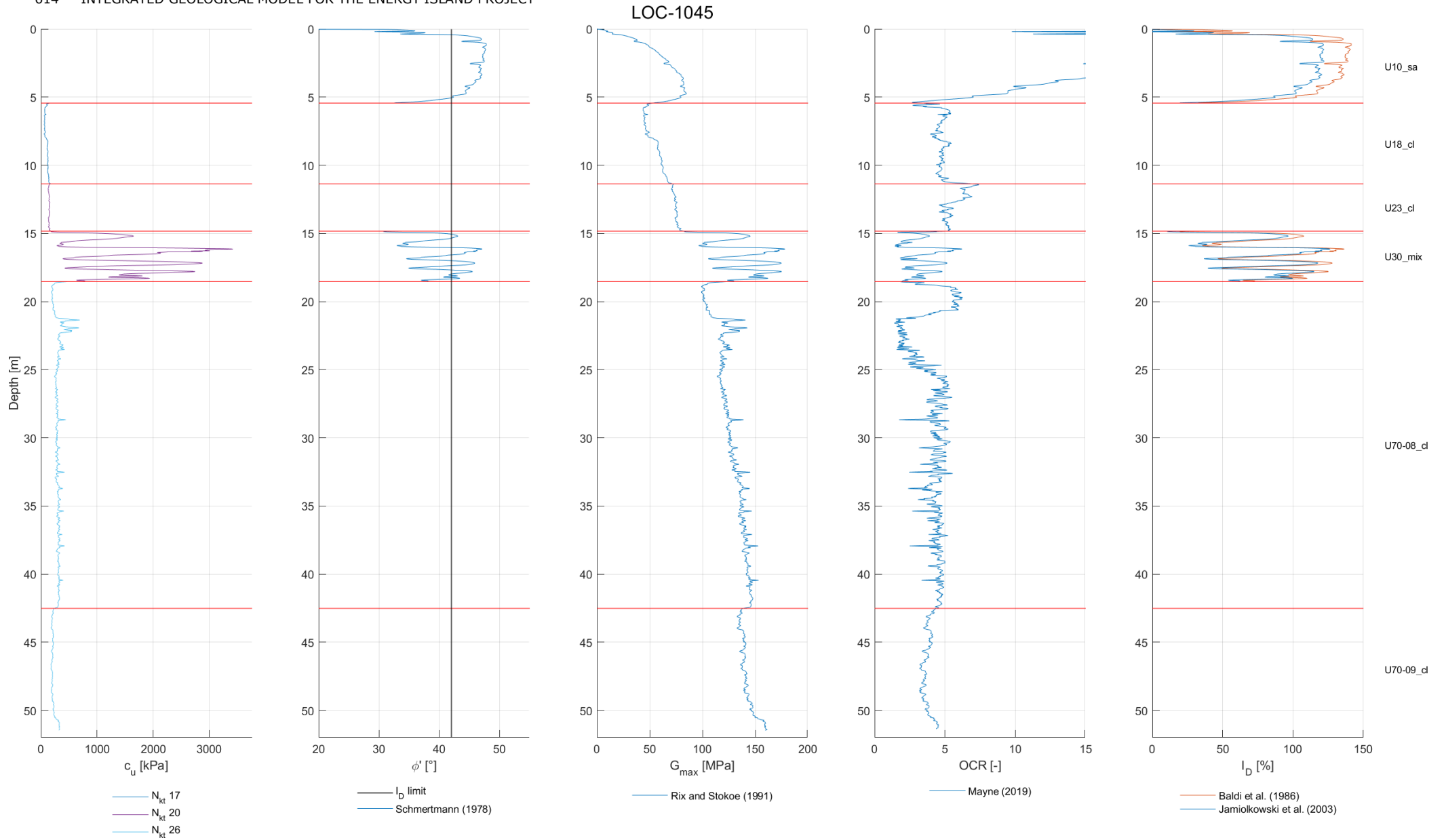
U10_sa

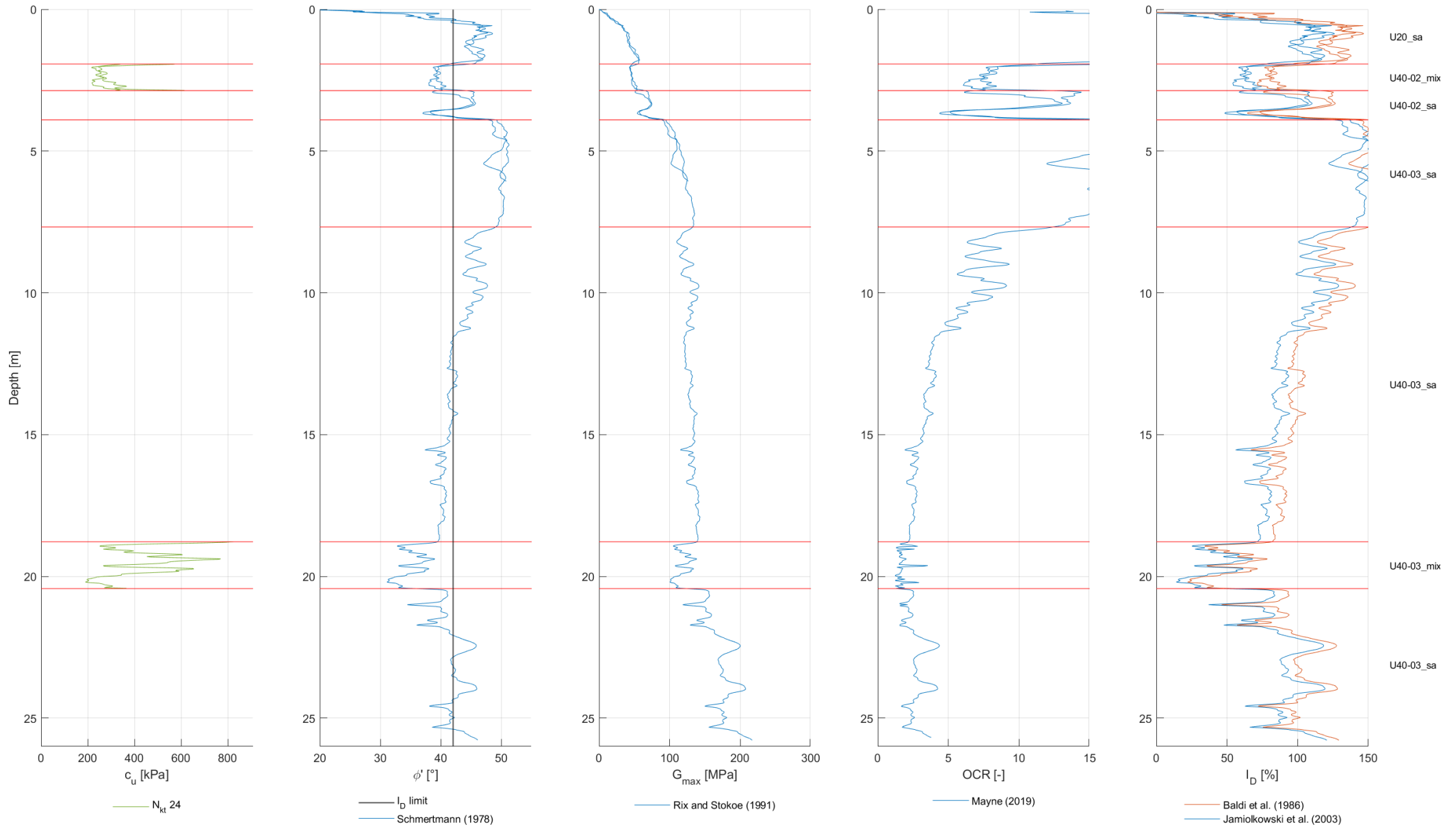
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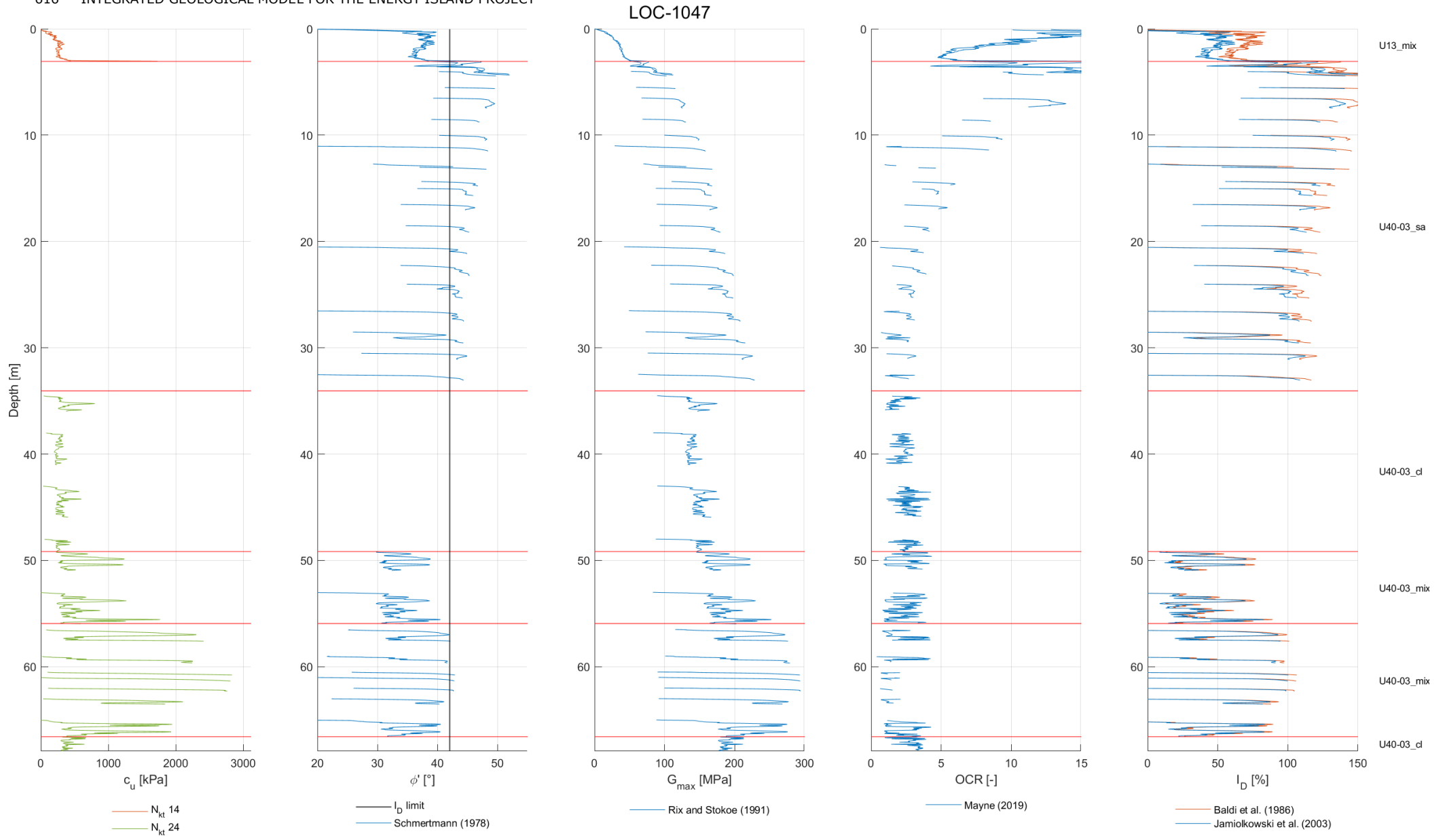
U20_sa

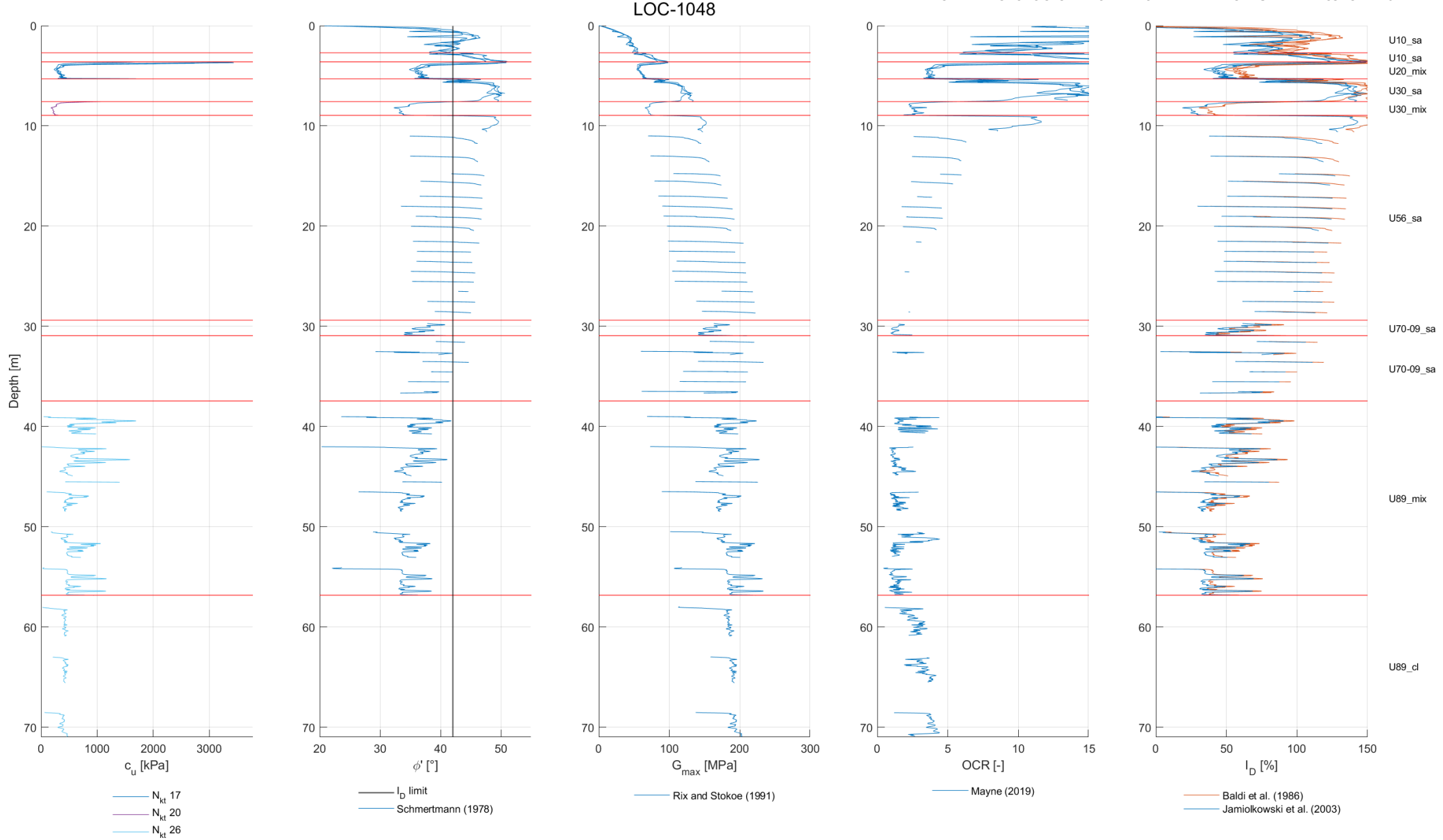
U37_cl

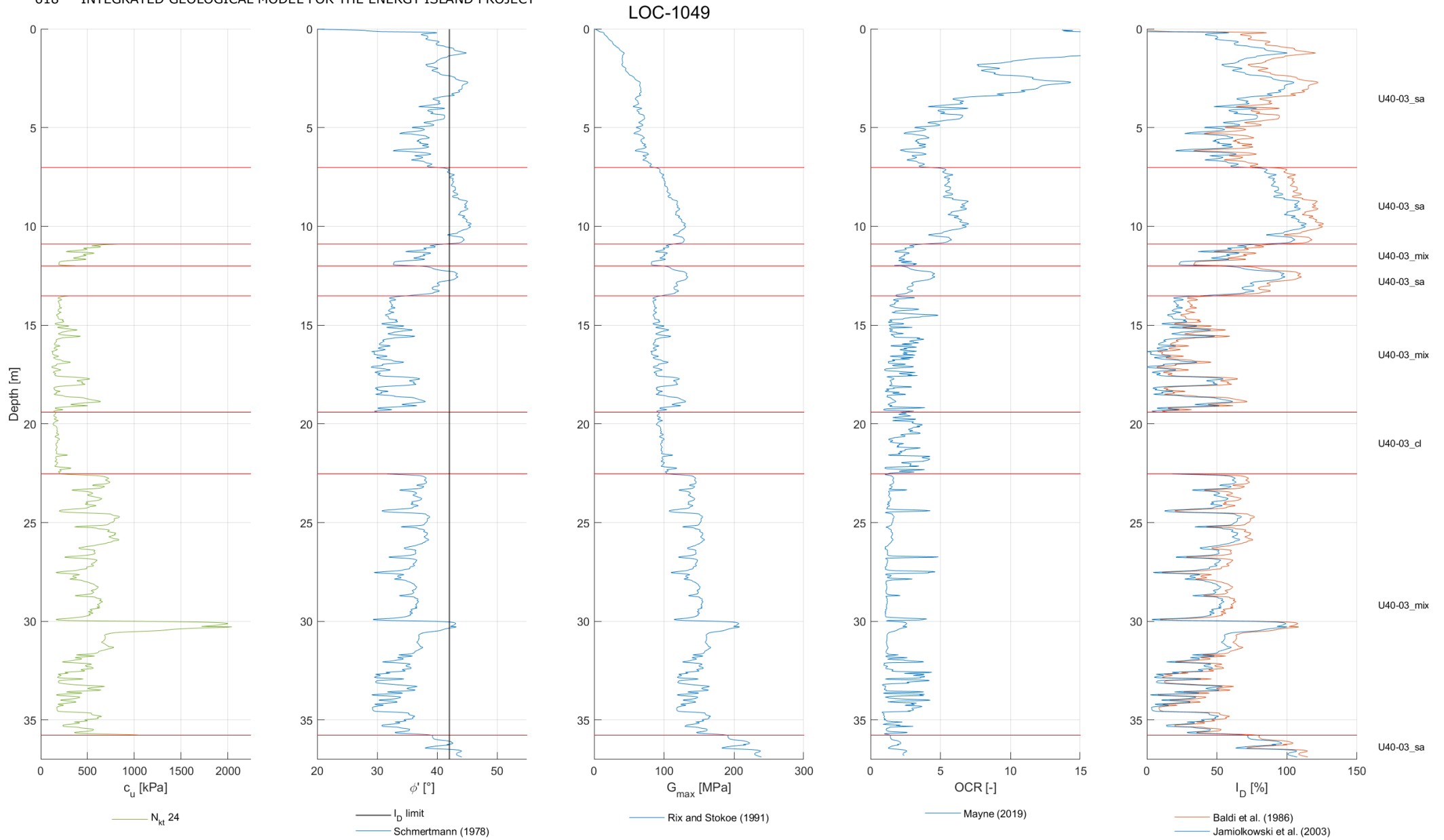
U38_sa



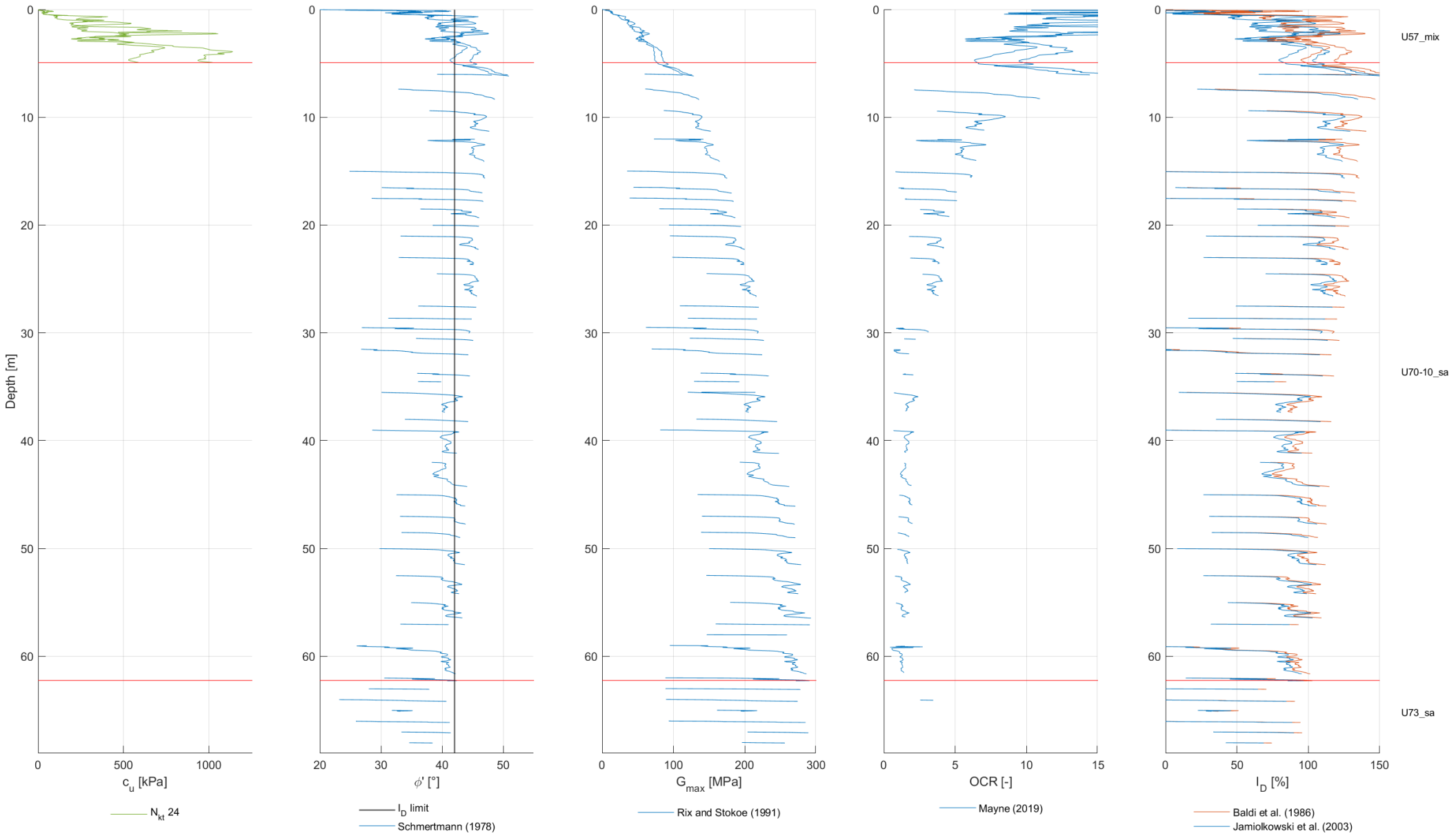


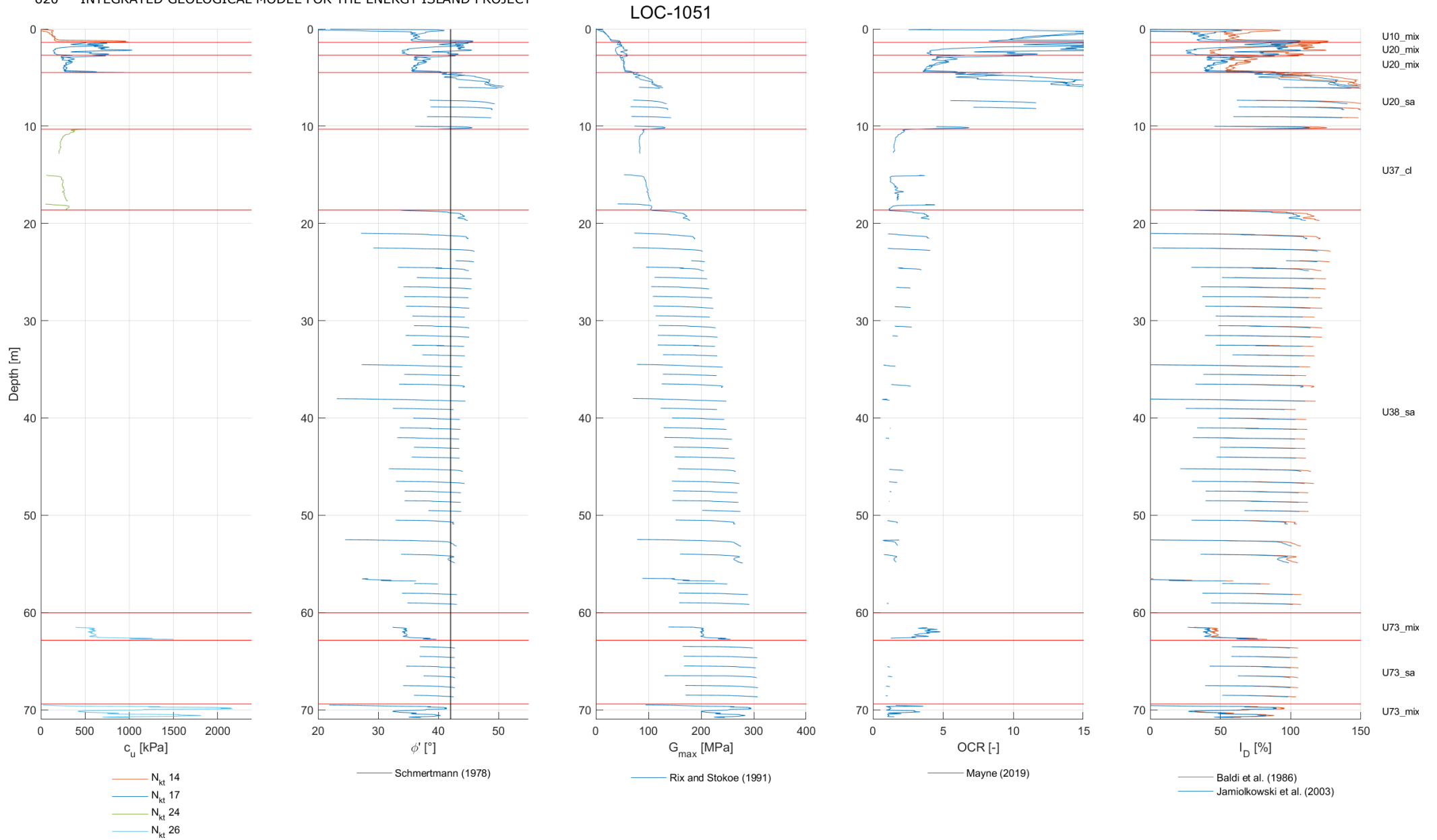


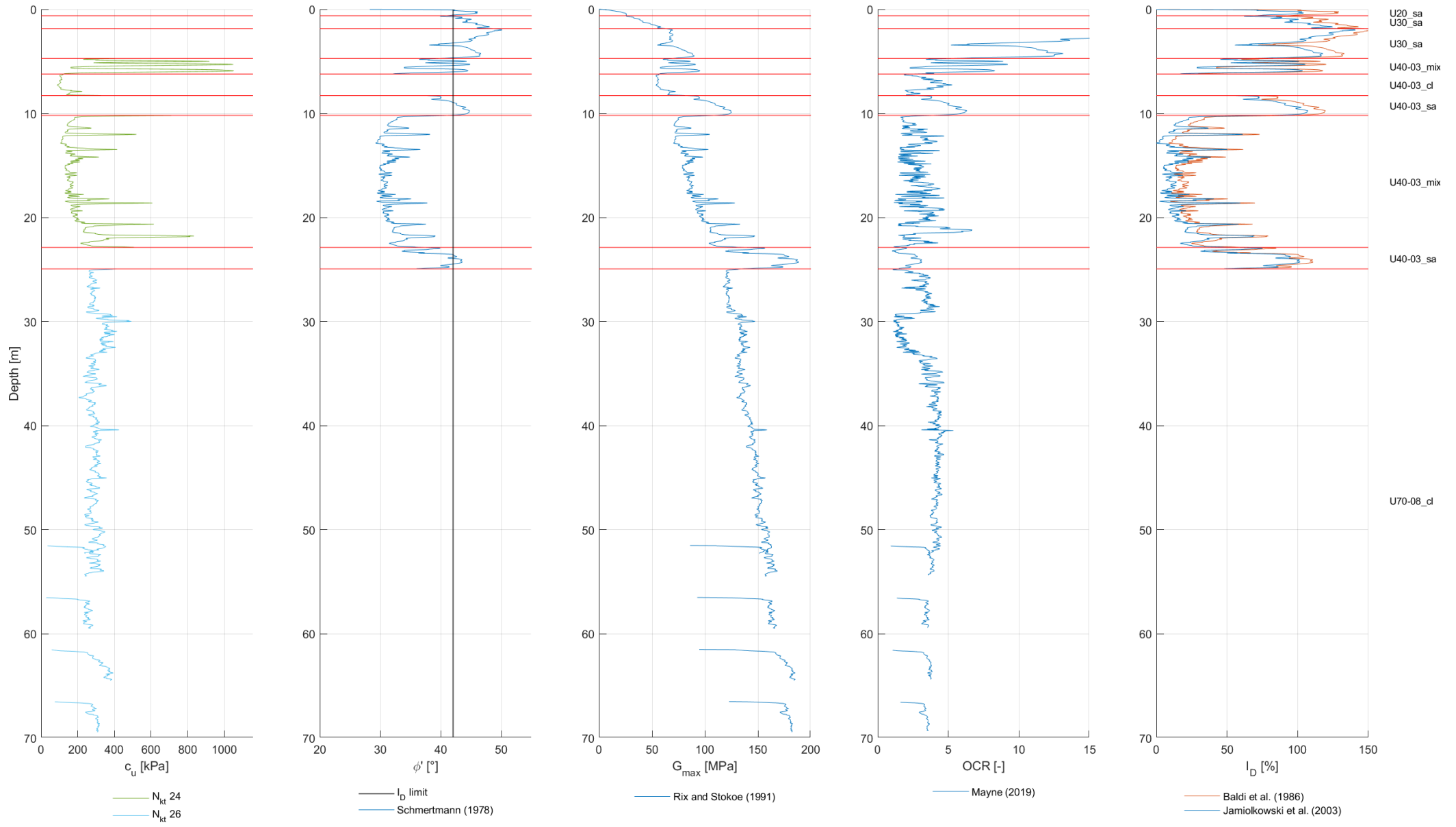


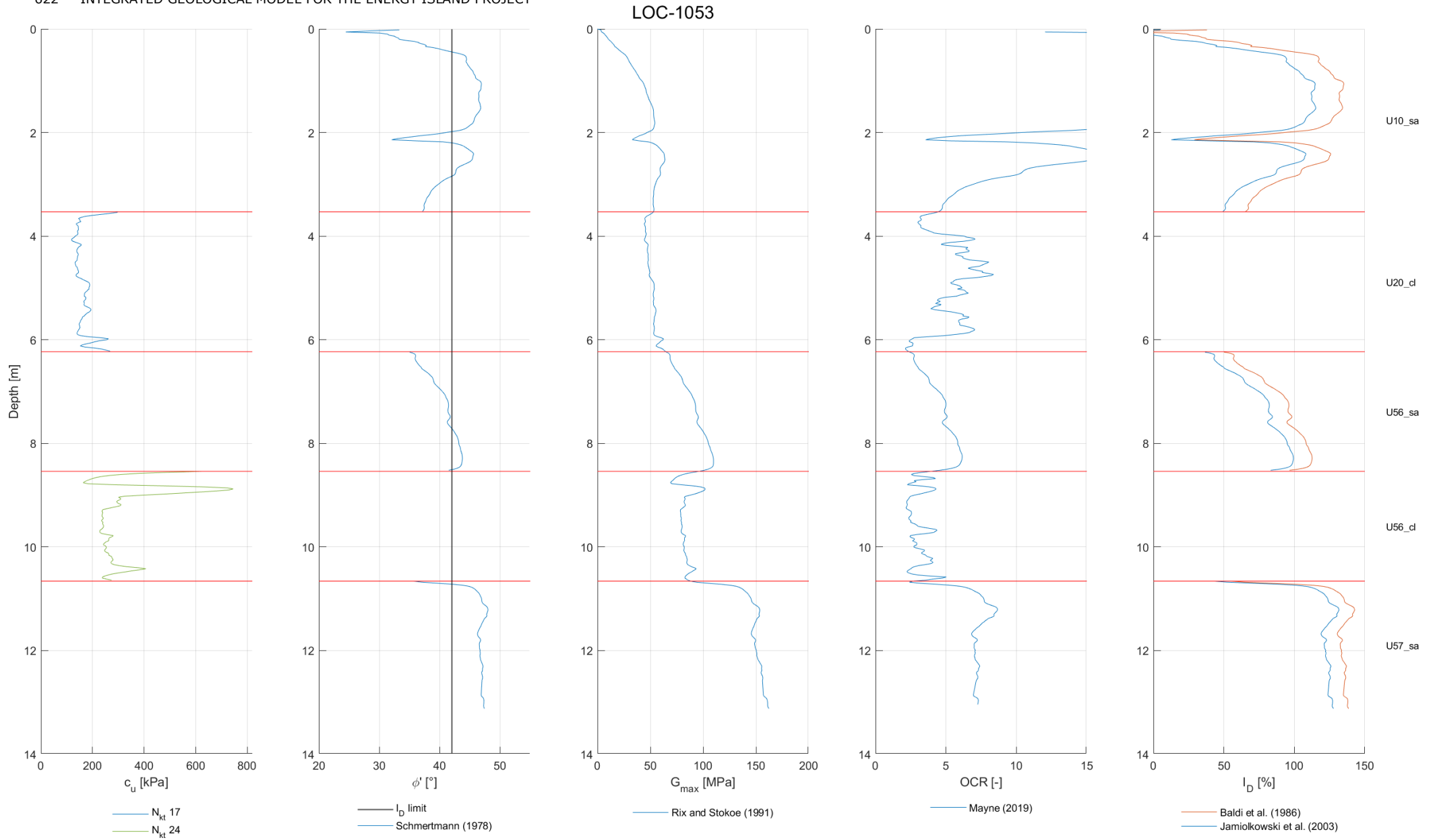


LOC-1050

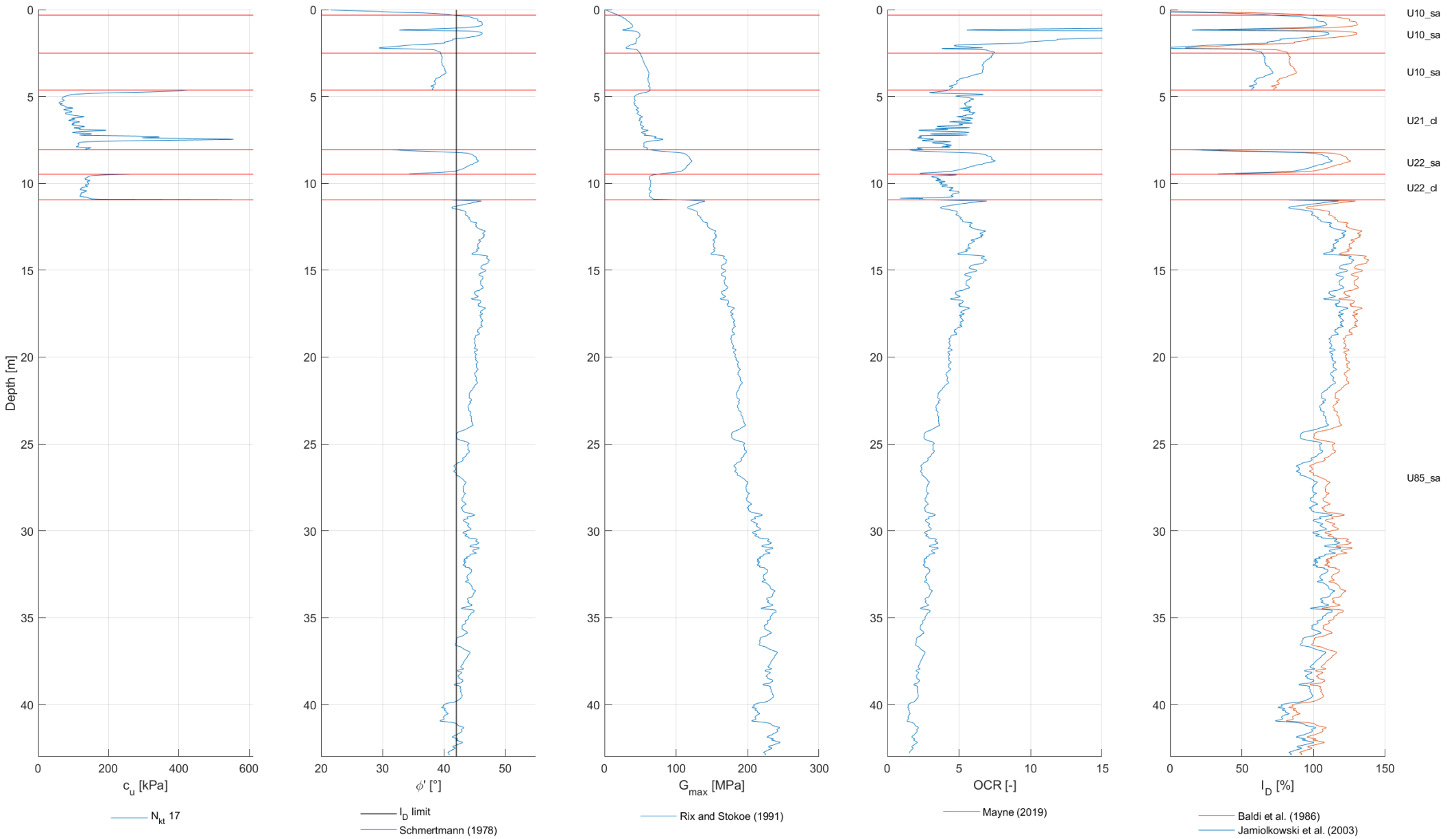


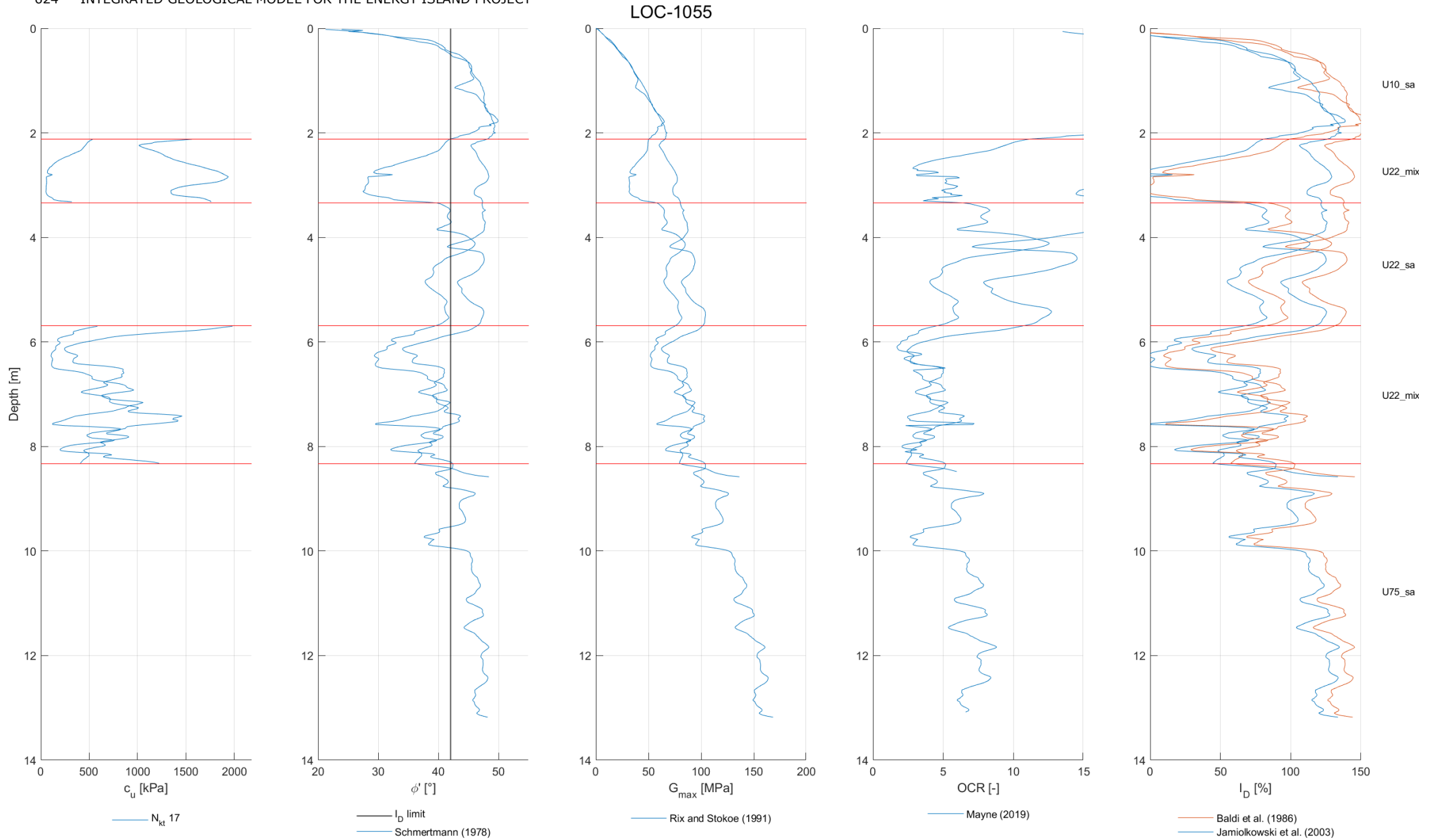




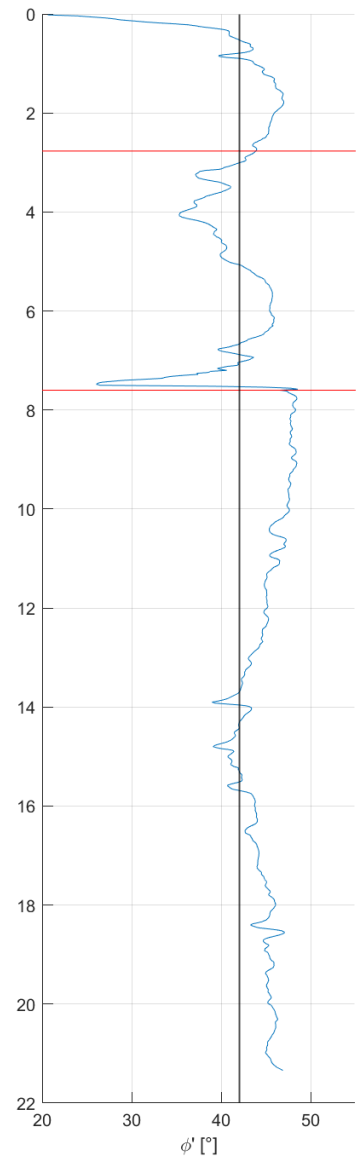
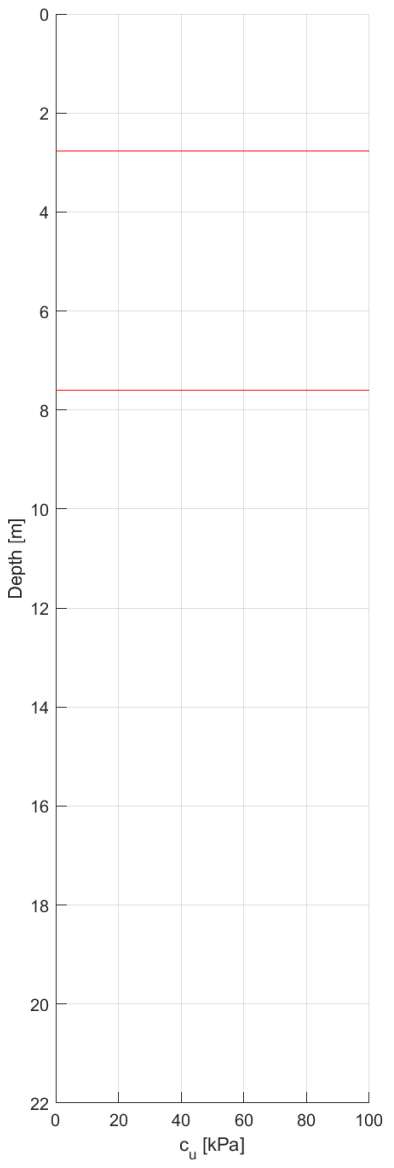


LOC-1054

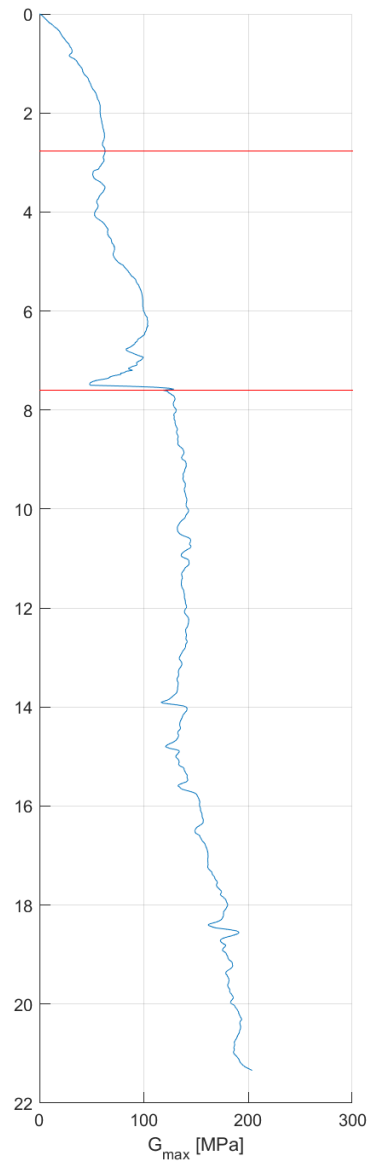




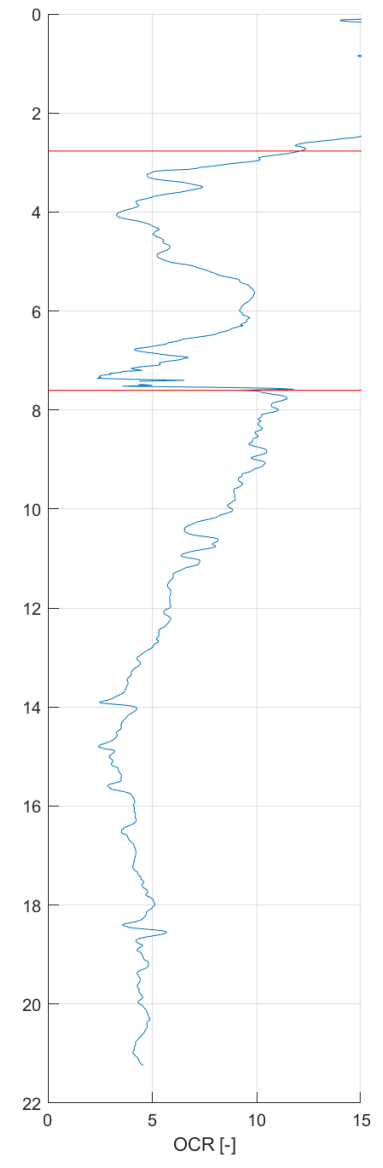
LOC-1056



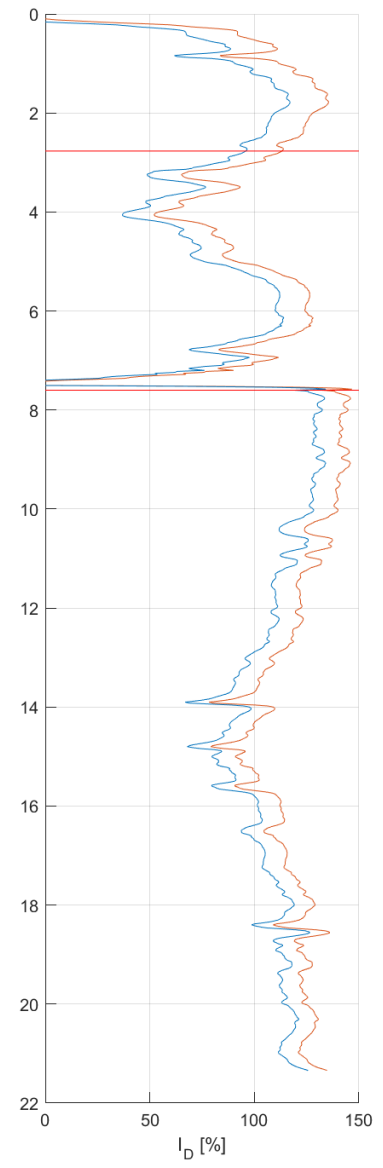
— I_D limit
 — Schmertmann (1978)



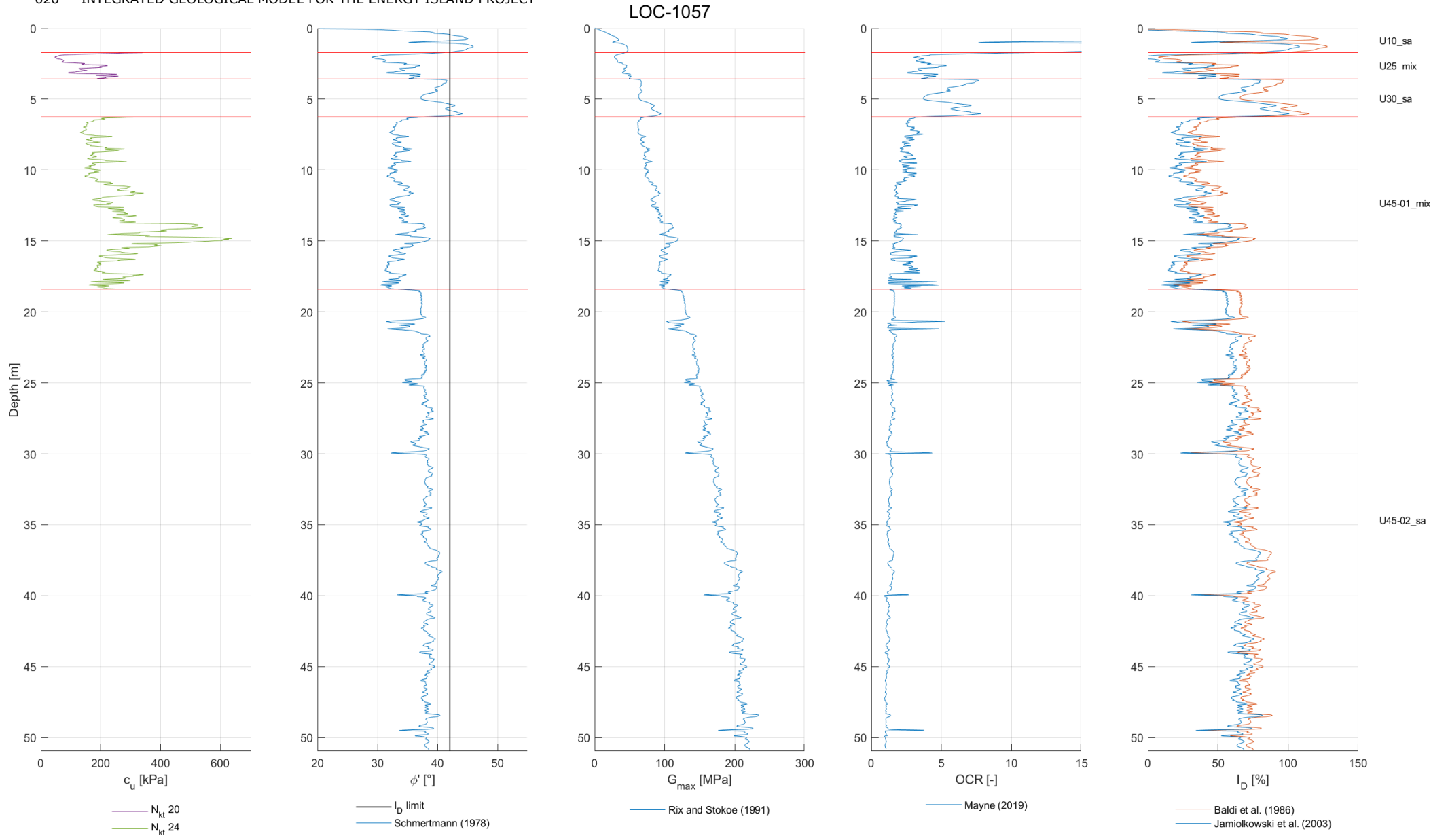
— Rix and Stokoe (1991)



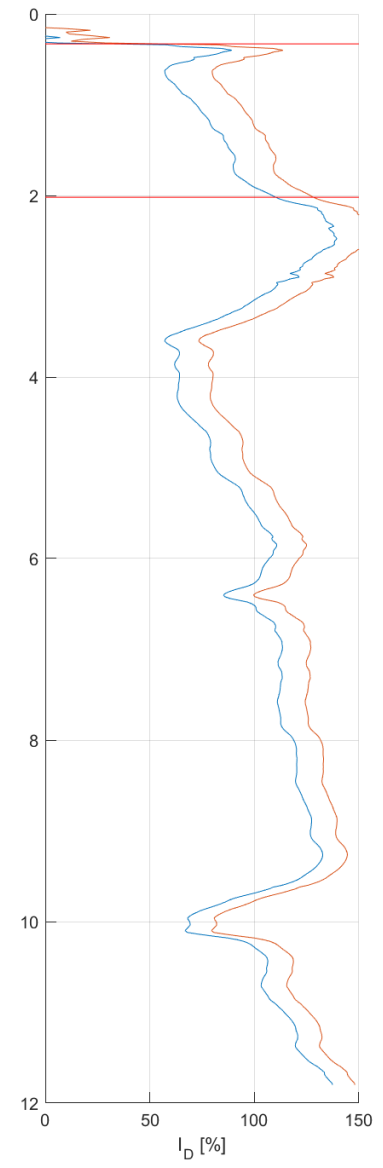
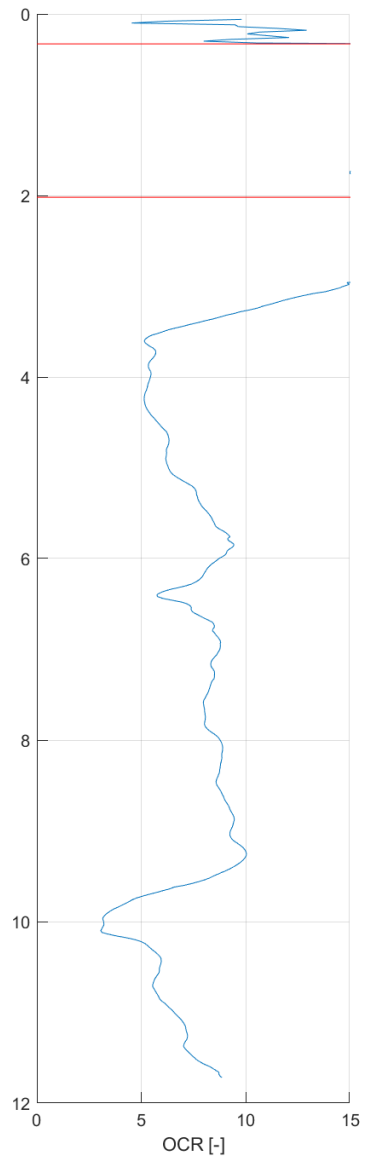
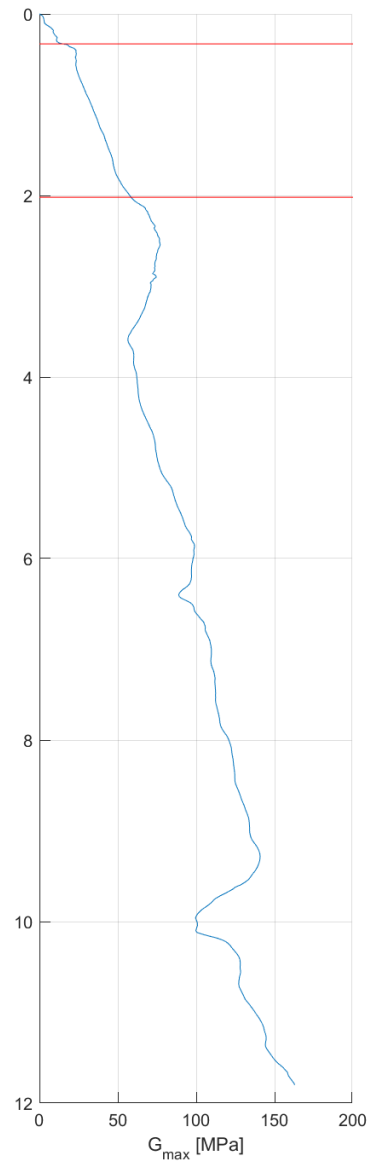
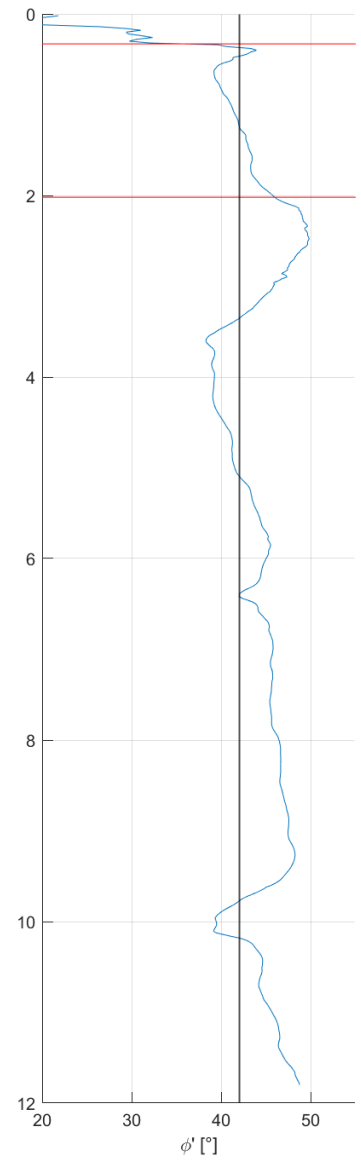
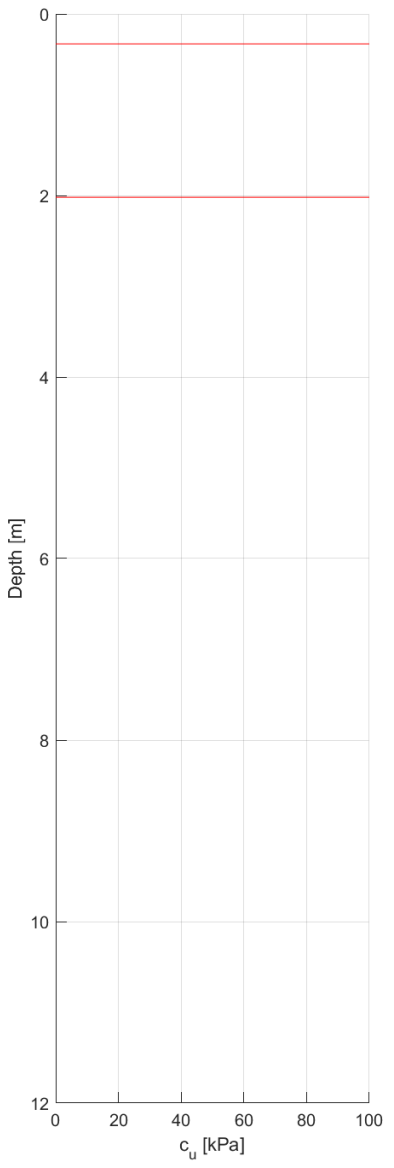
— Mayne (2019)

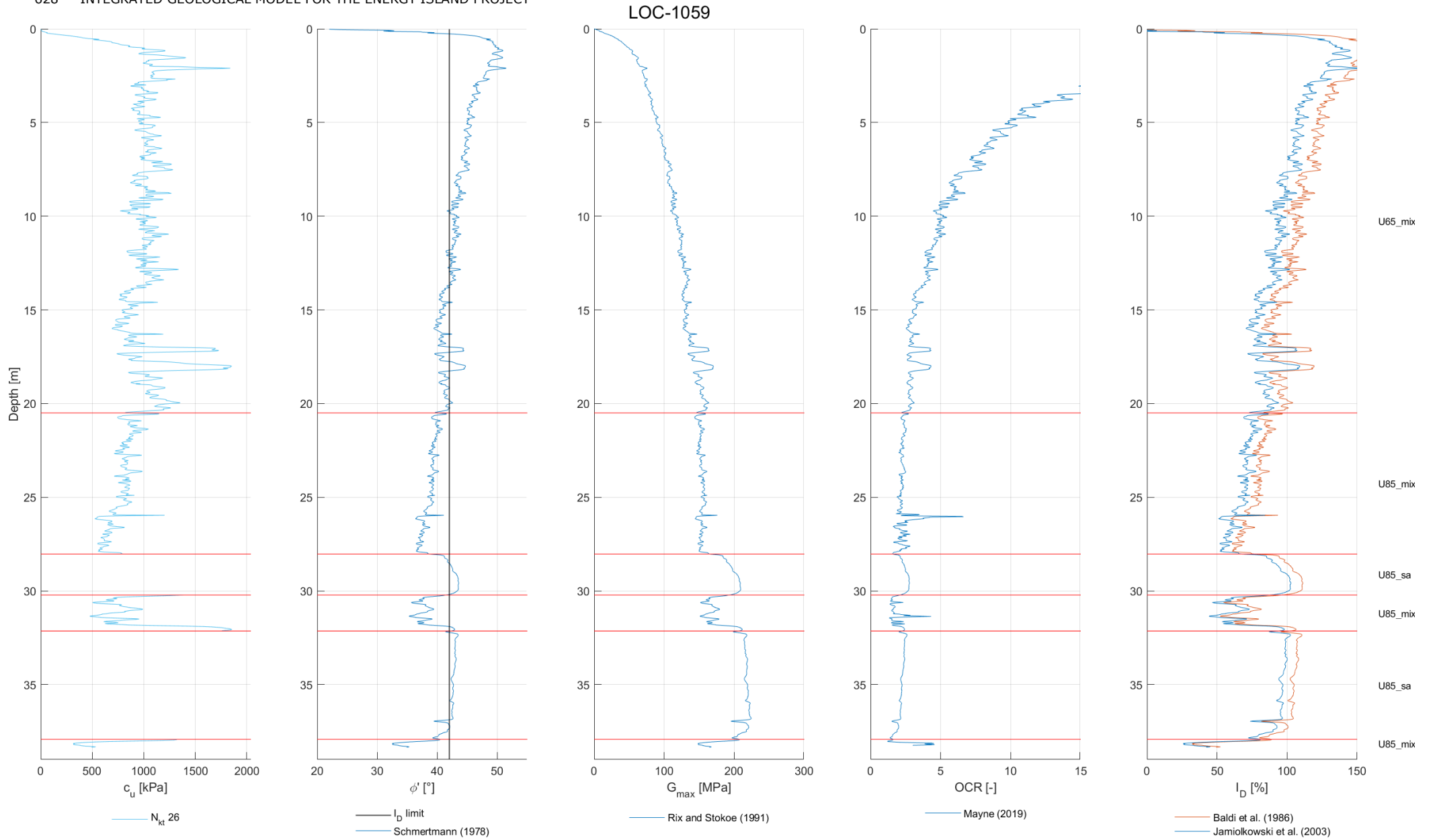


— Baldi et al. (1986)
 — Jamiolkowski et al. (2003)

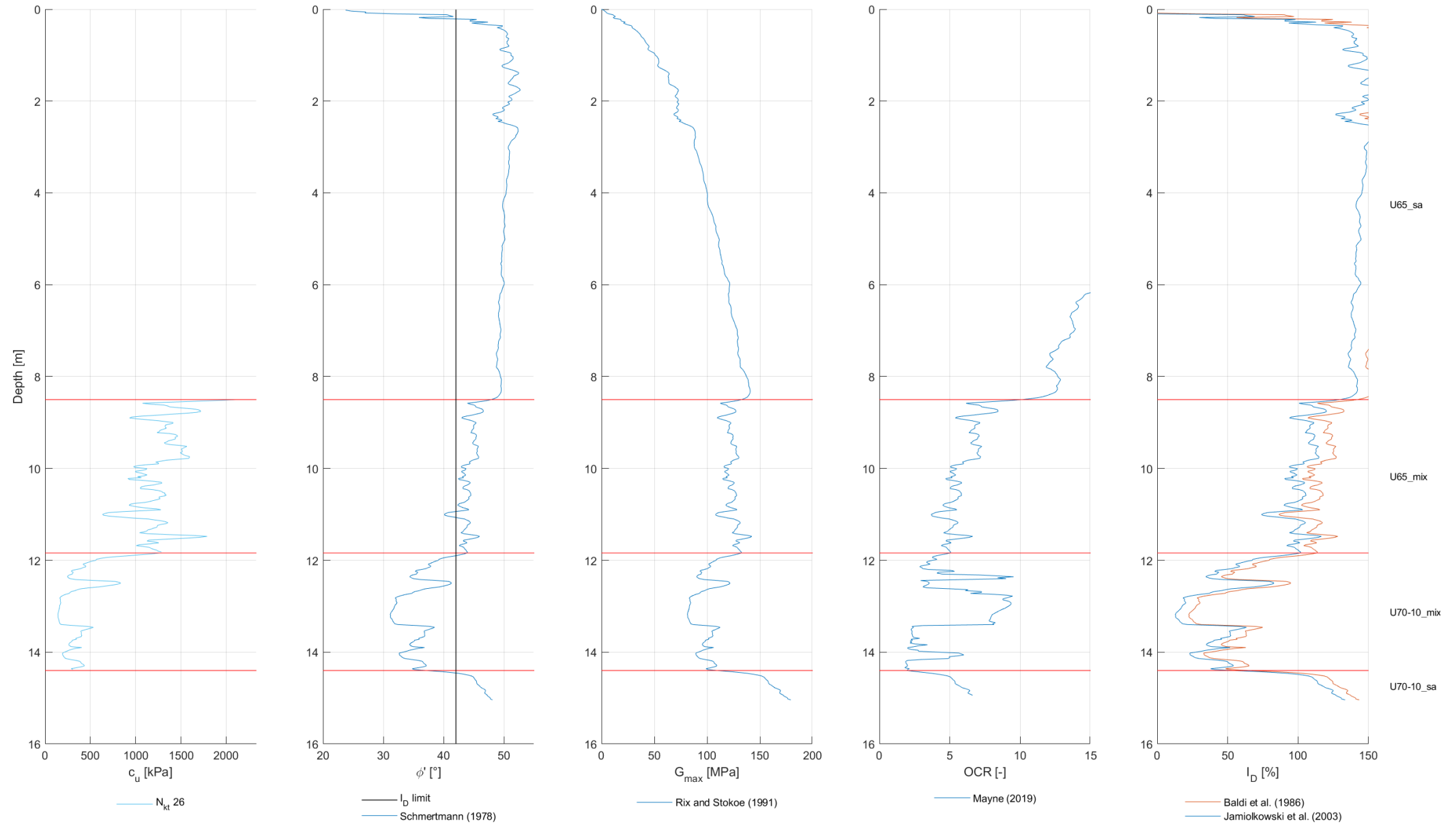


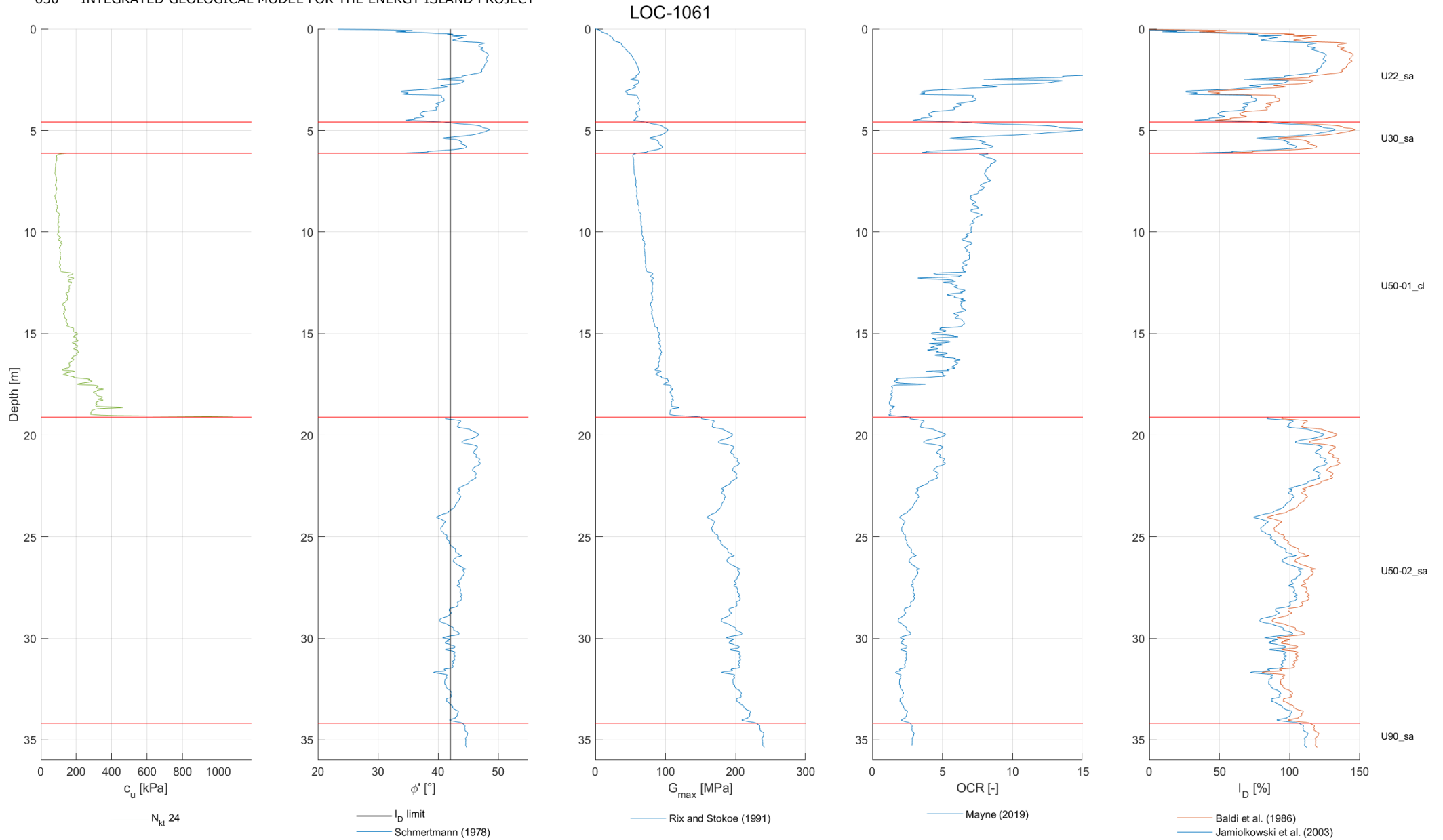
LOC-1058



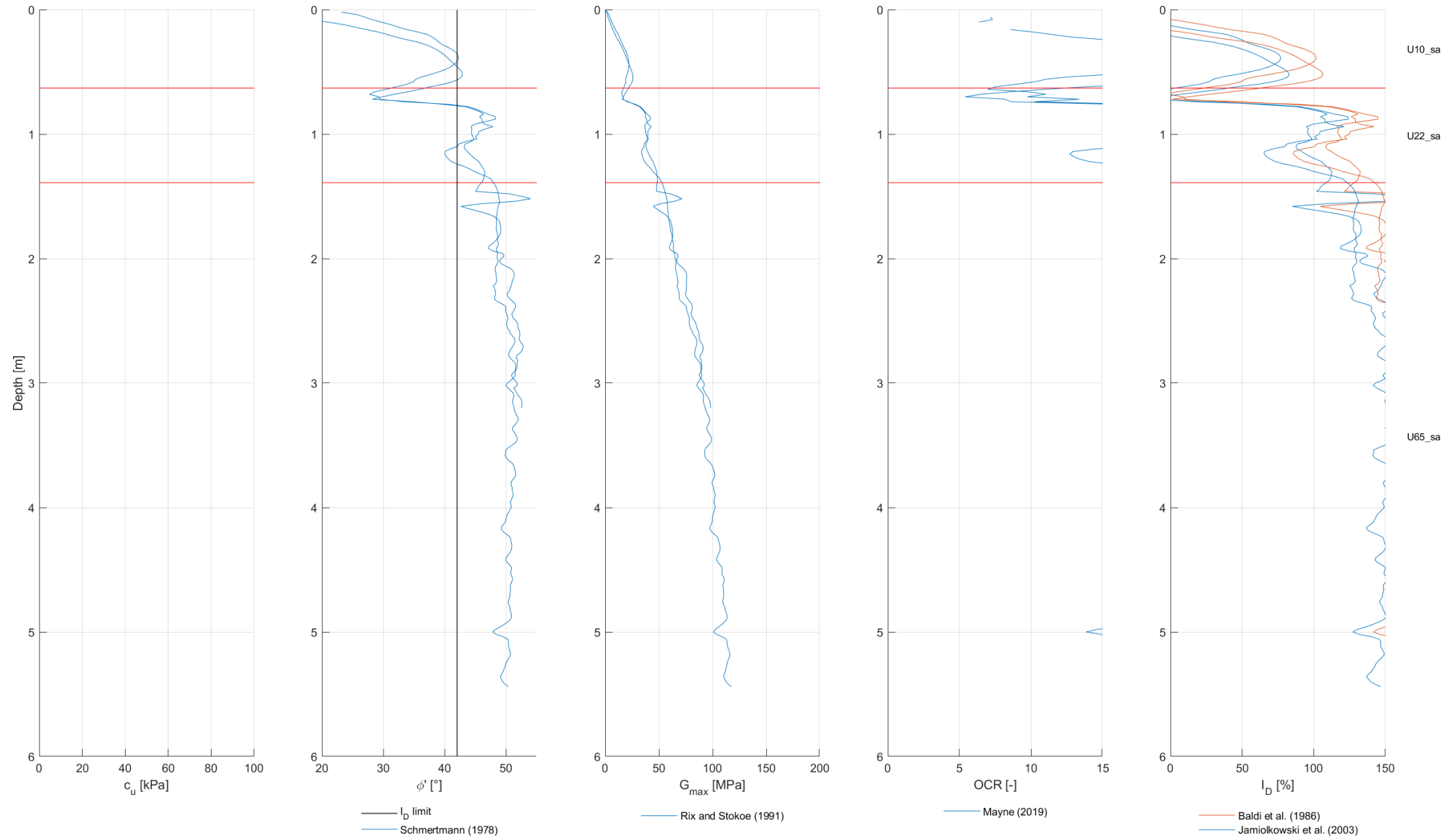


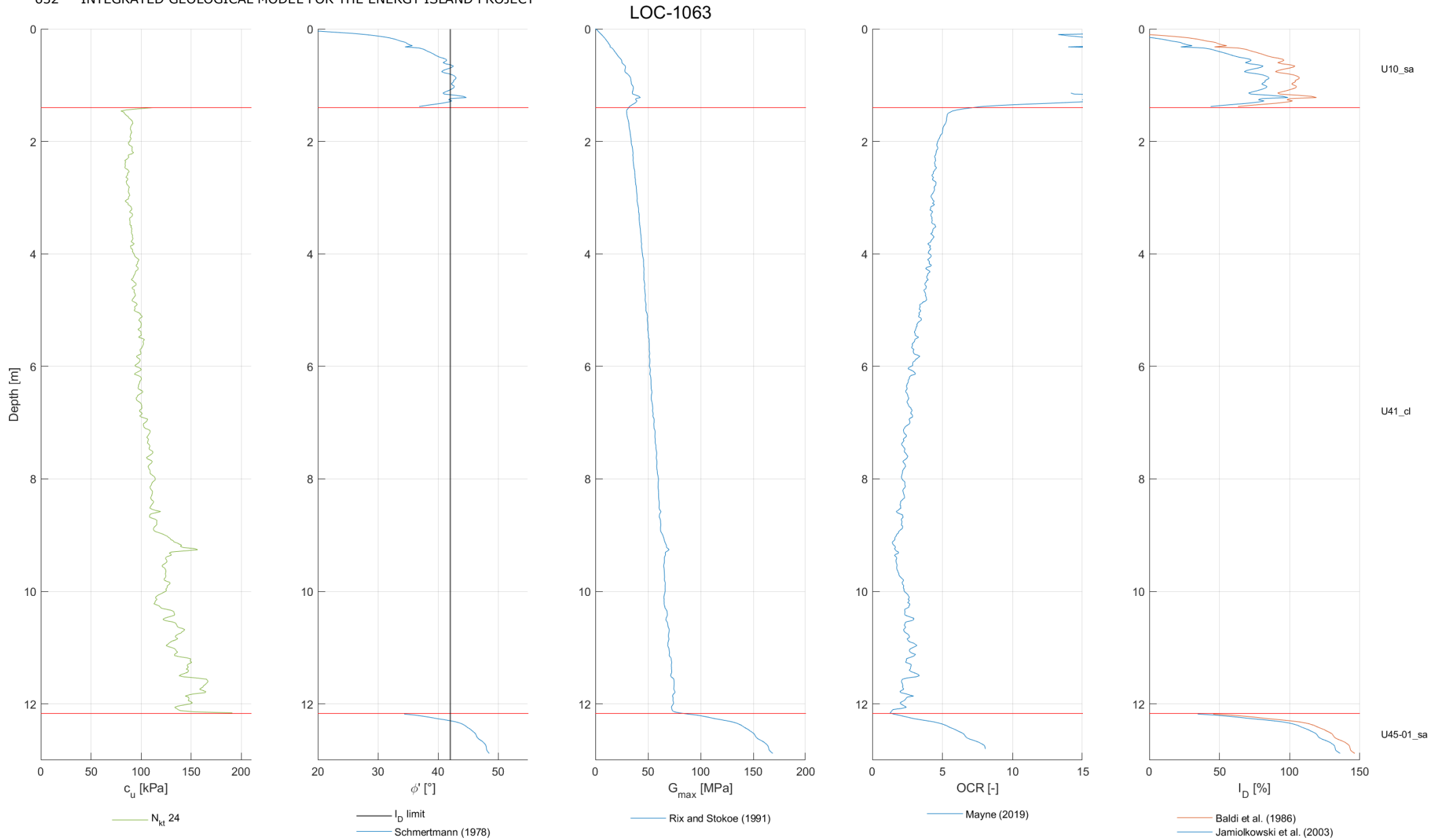
LOC-1060



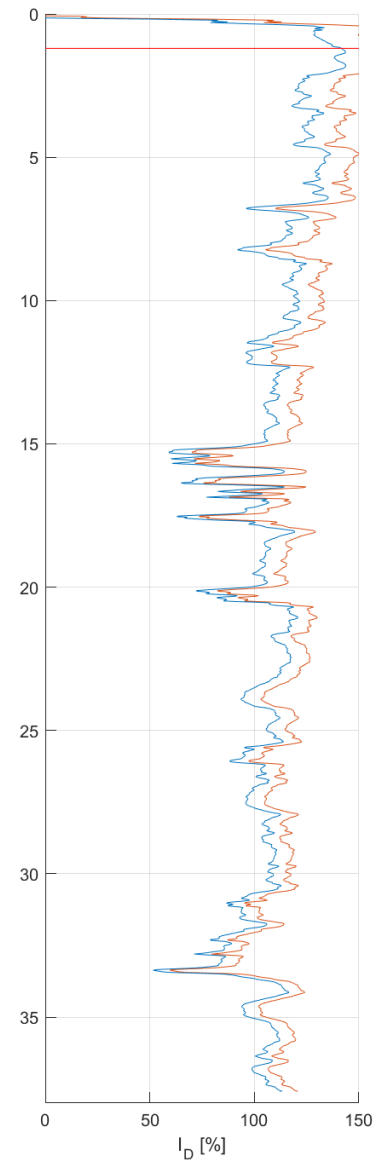
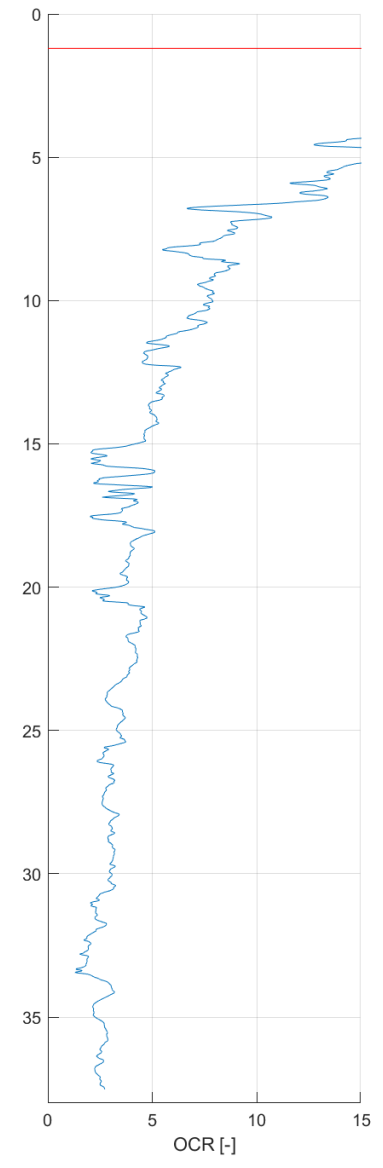
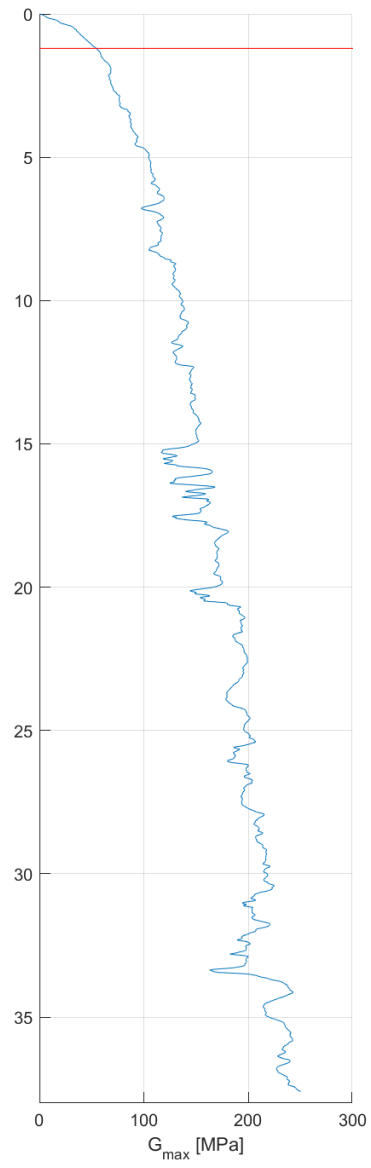
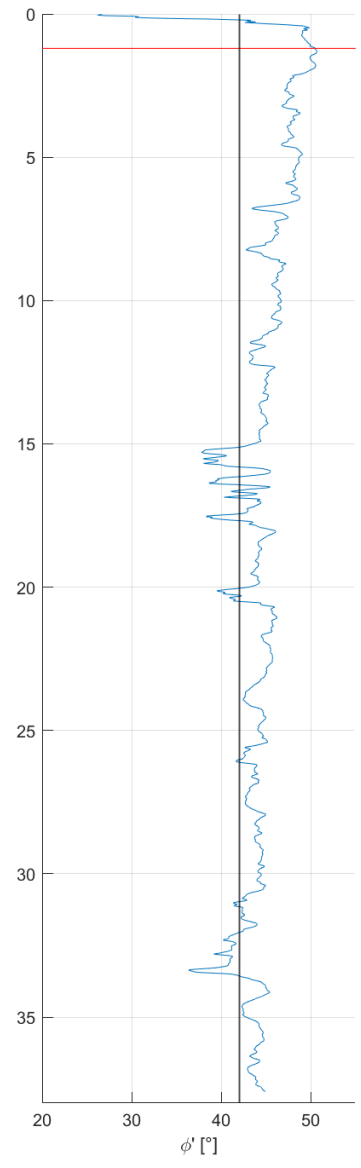
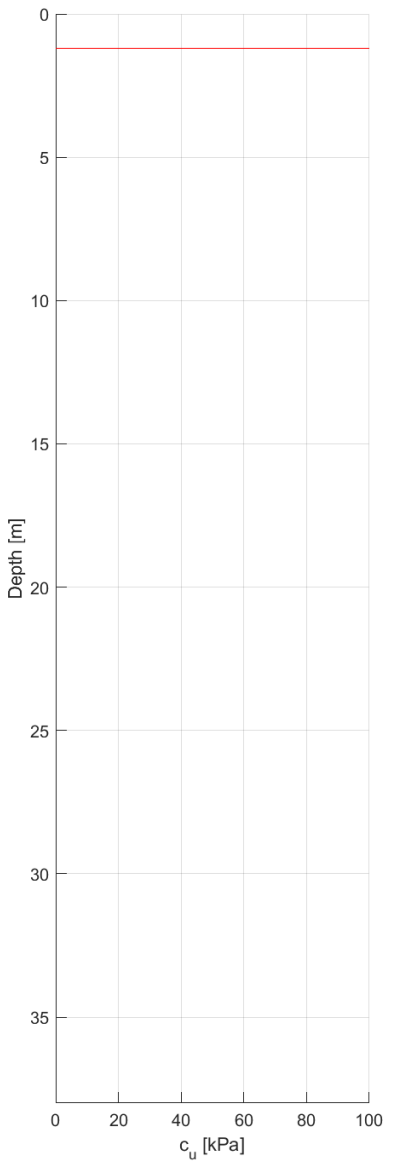


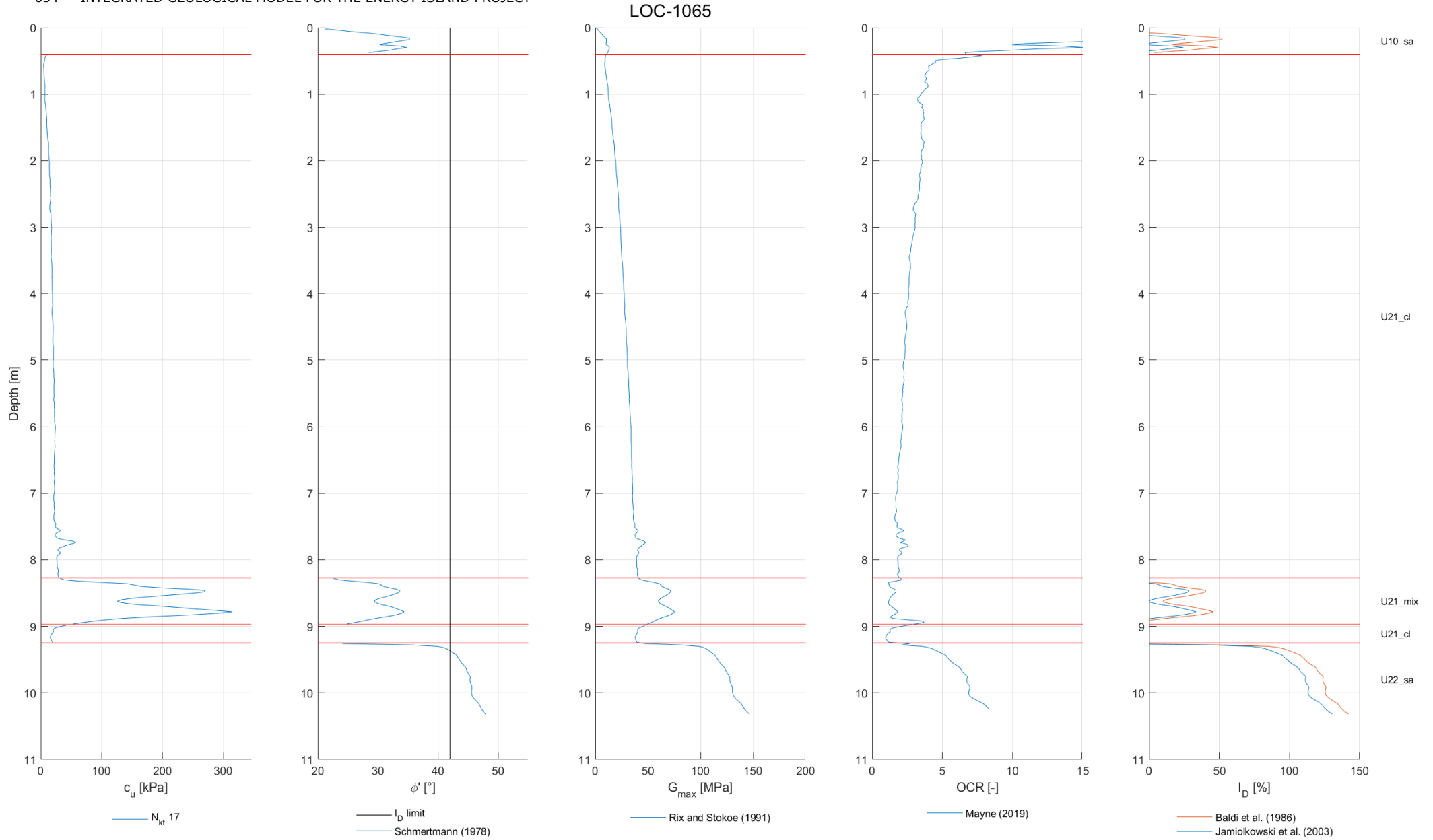
LOC-1062



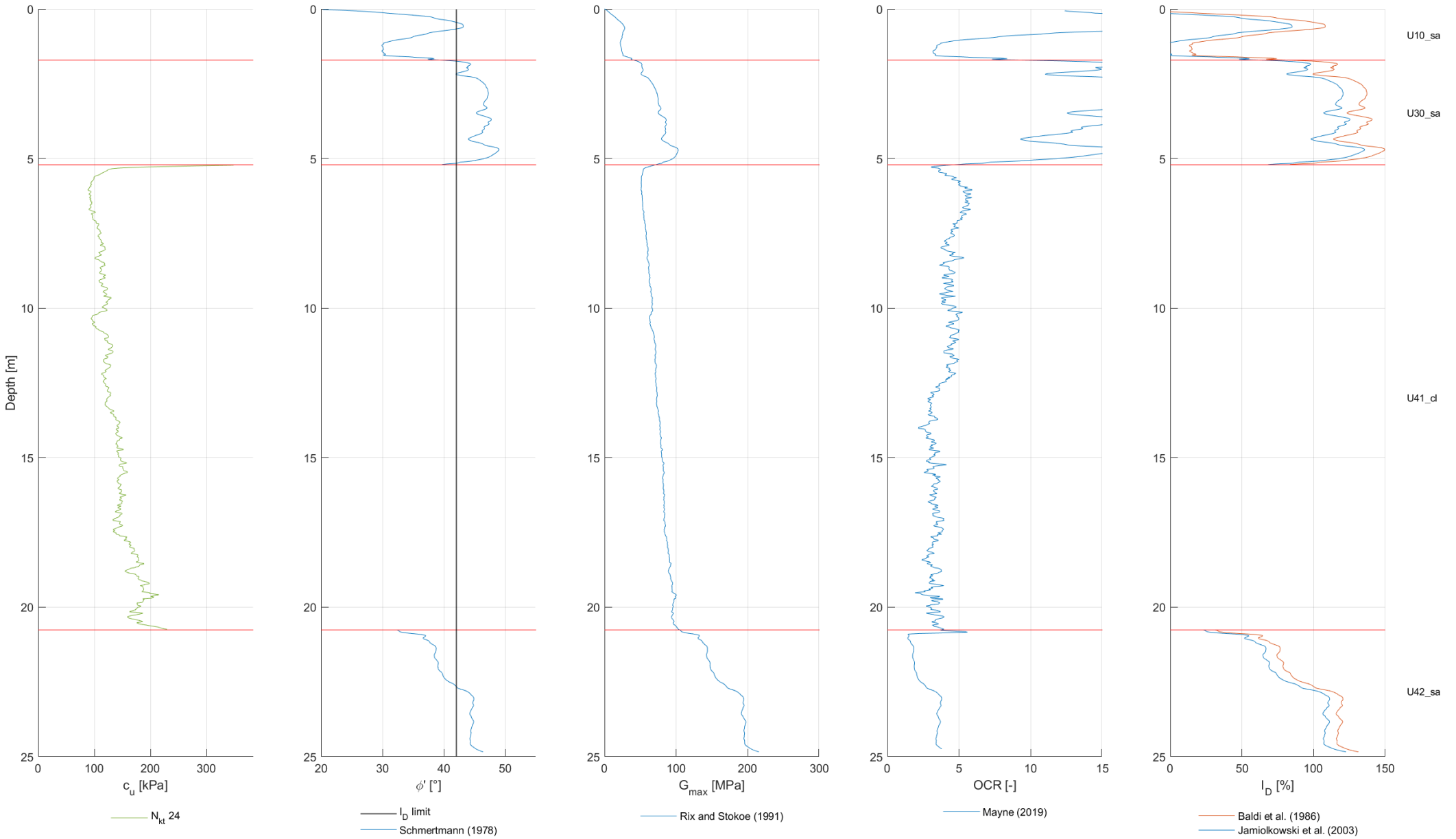


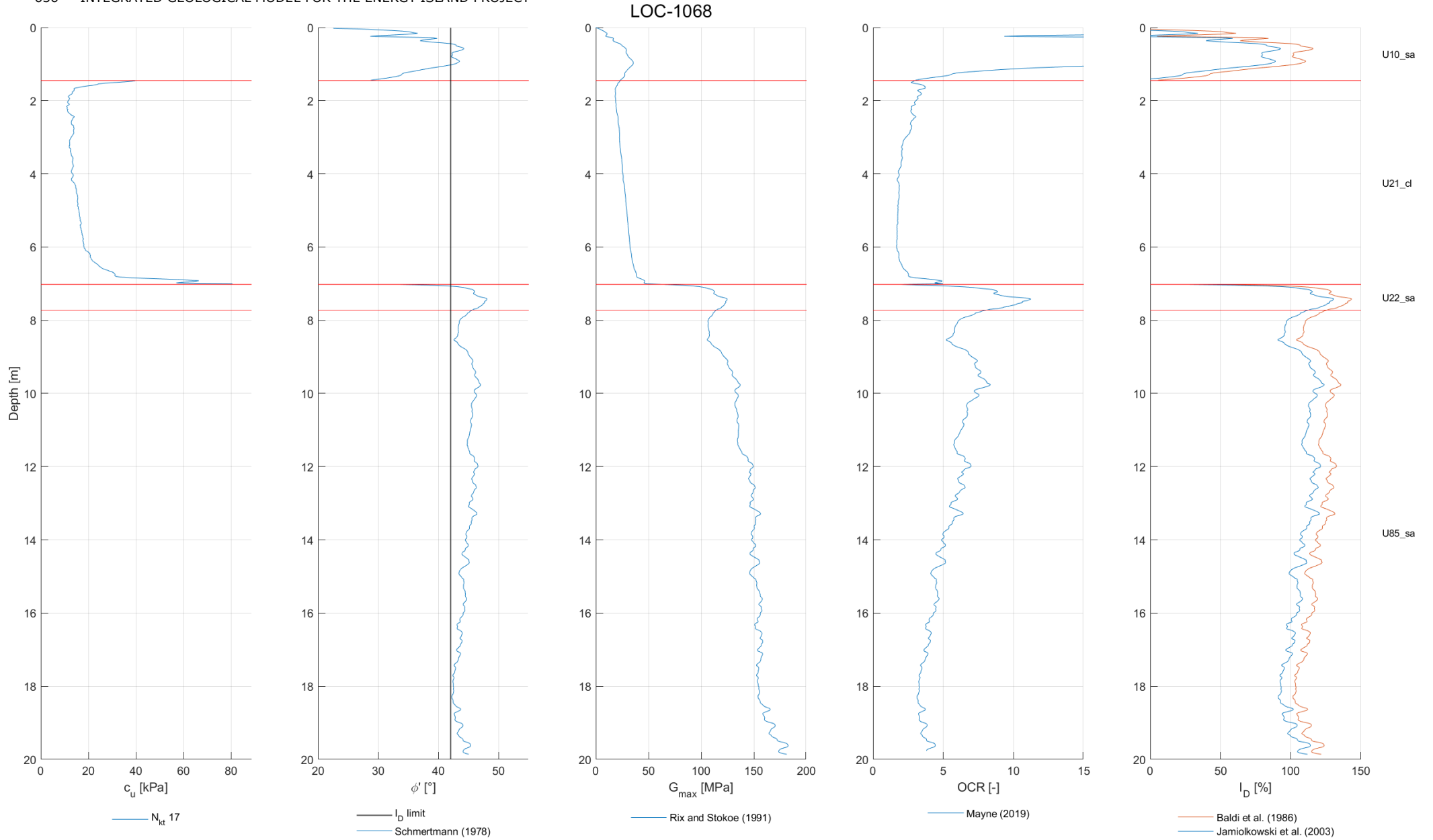
LOC-1064



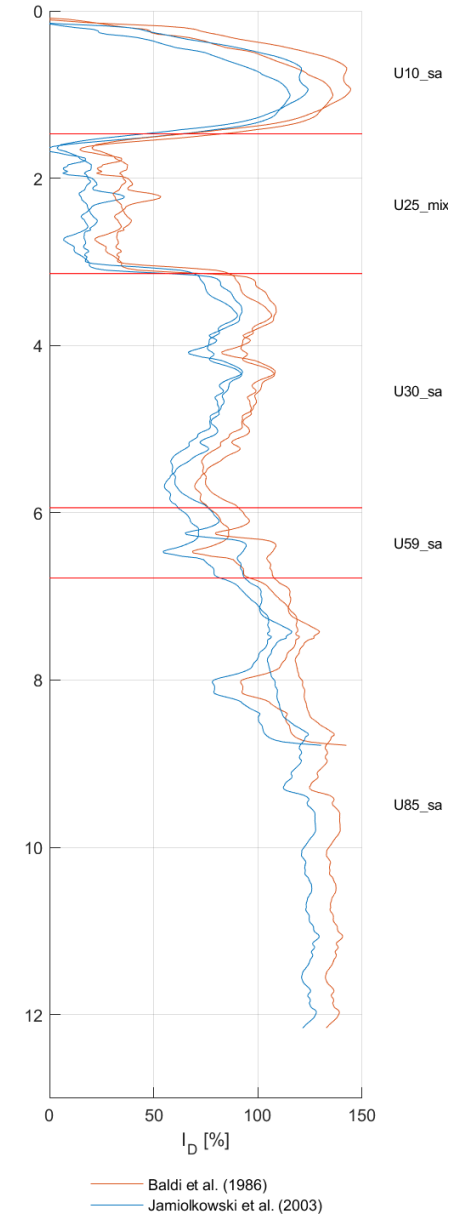
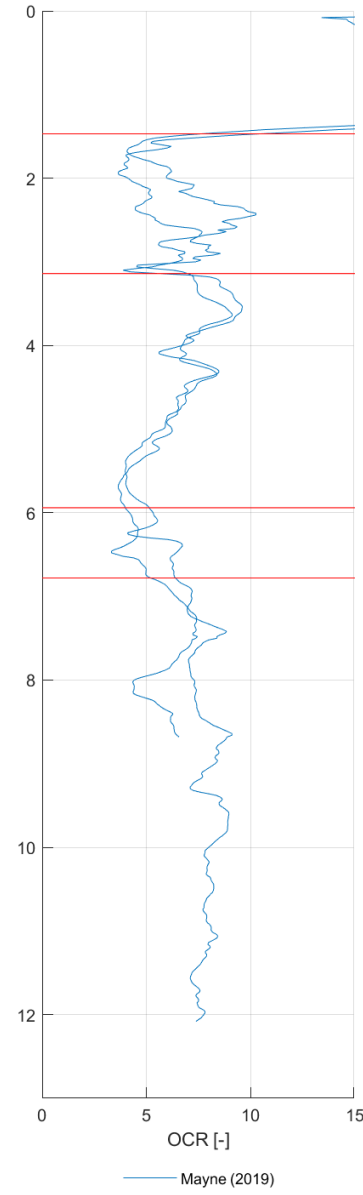
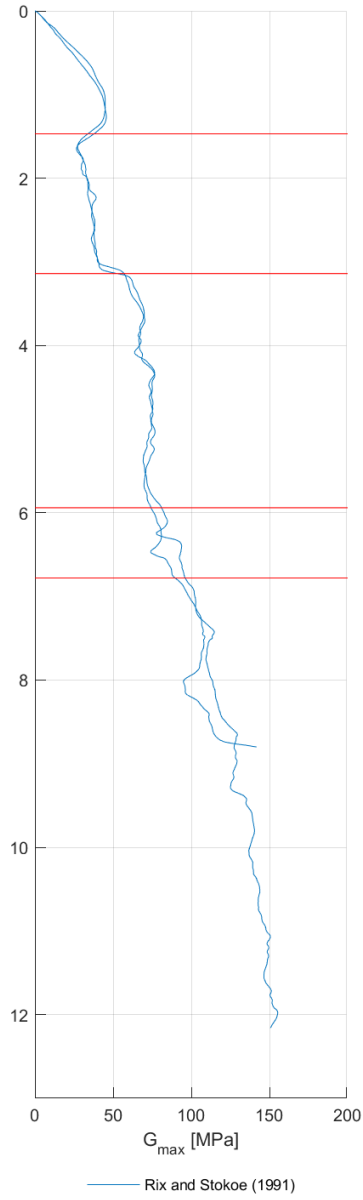
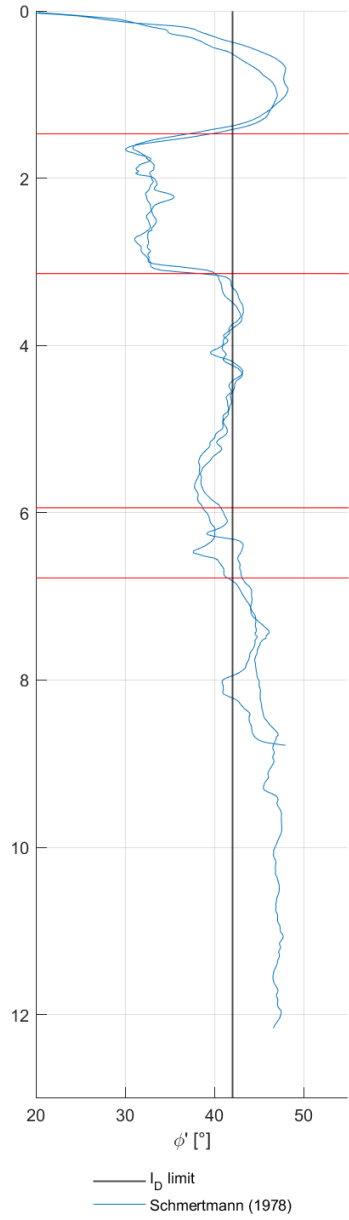
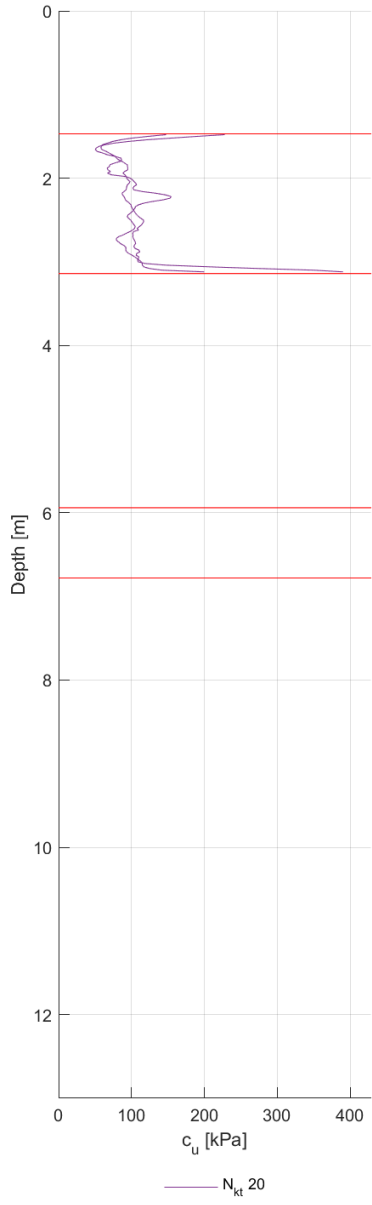


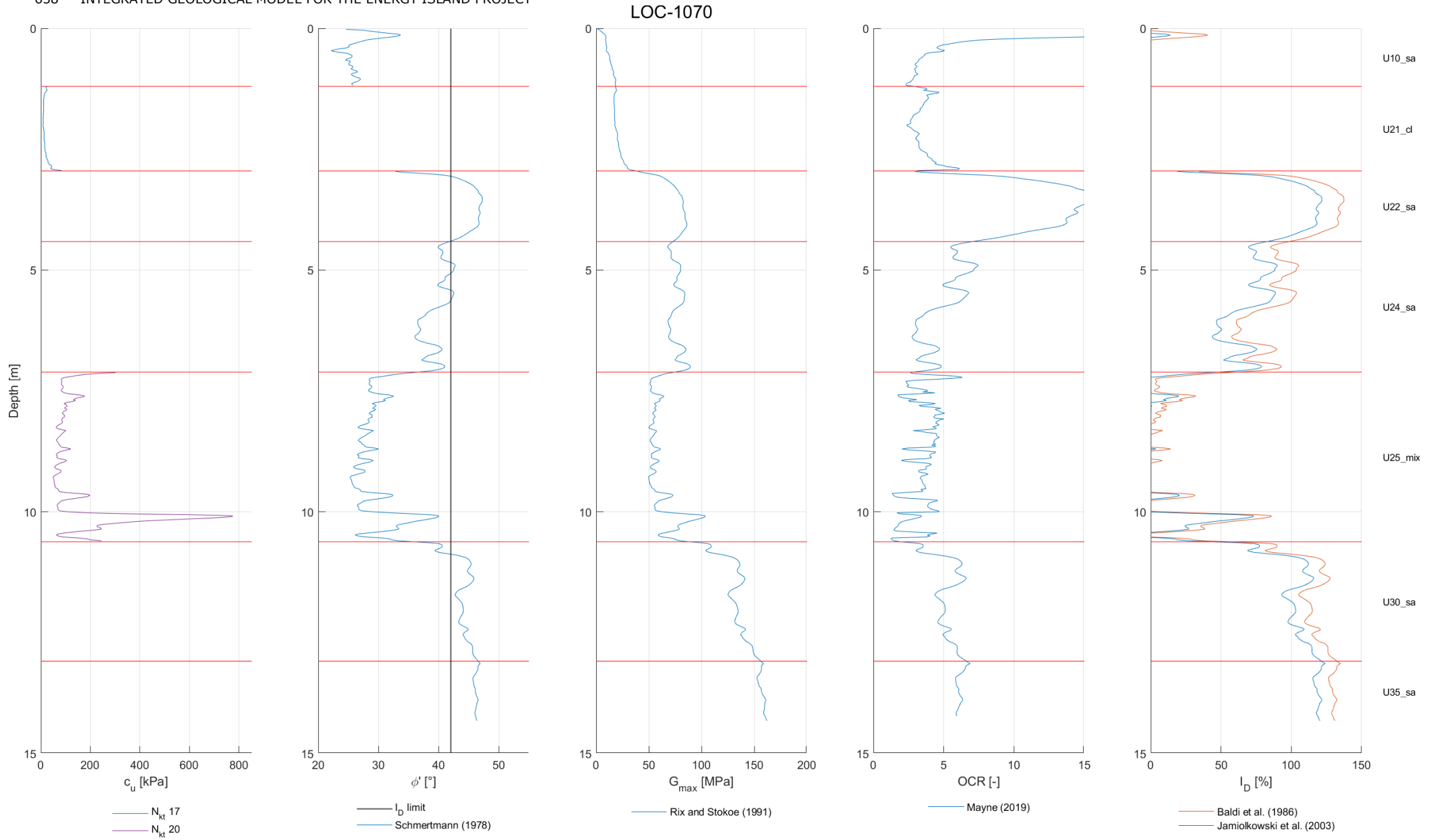
LOC-1067



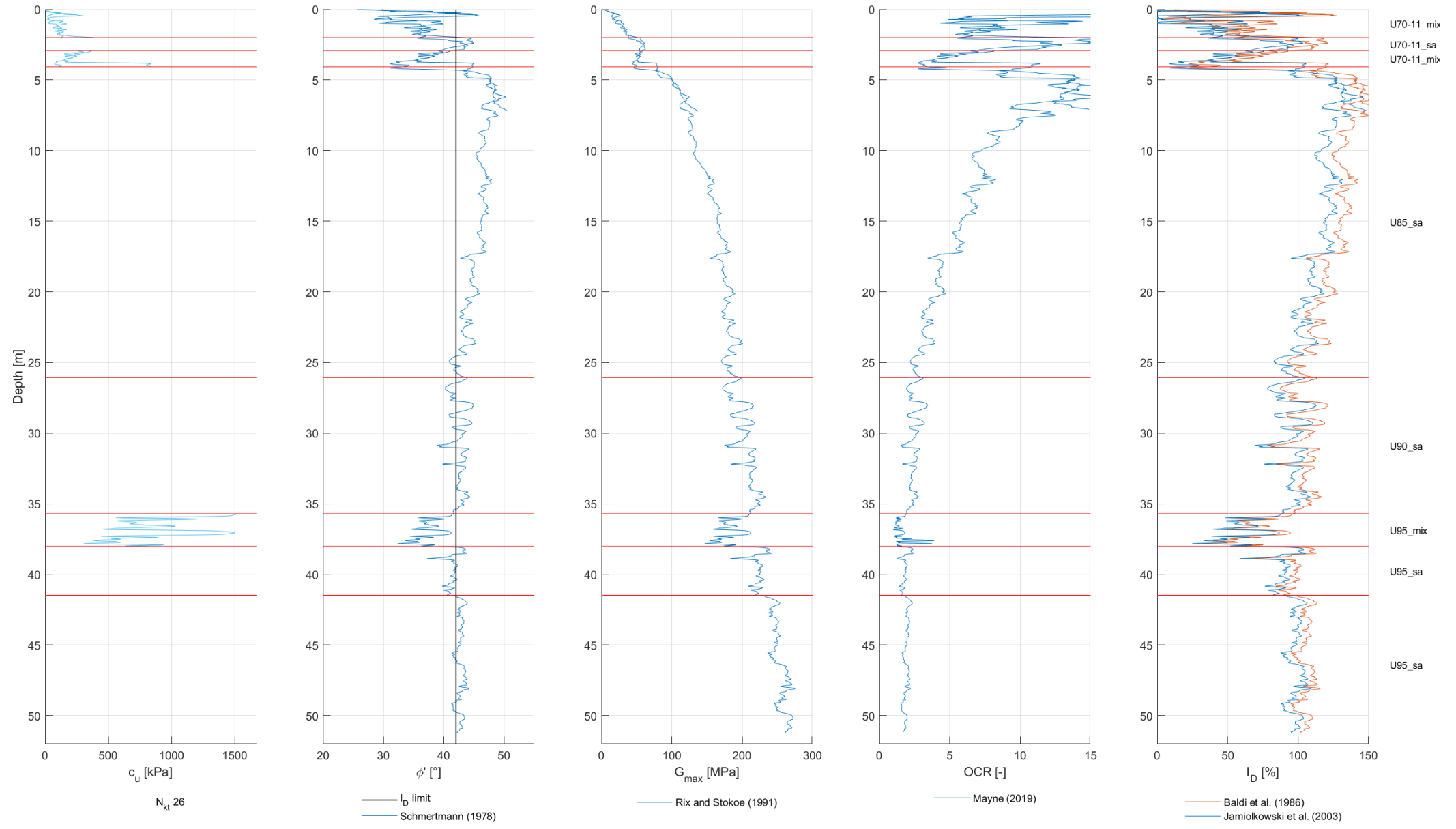


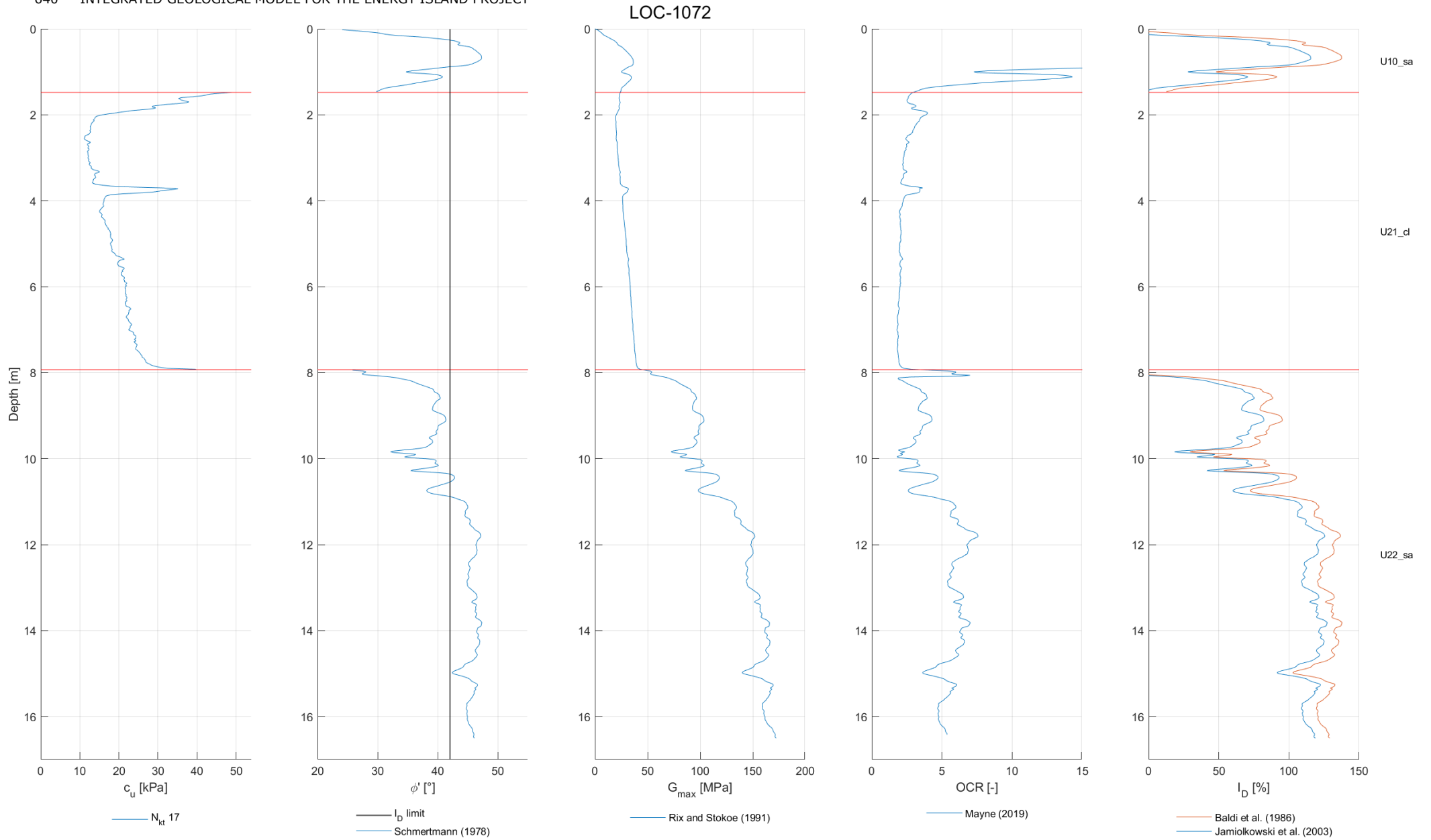
LOC-1069





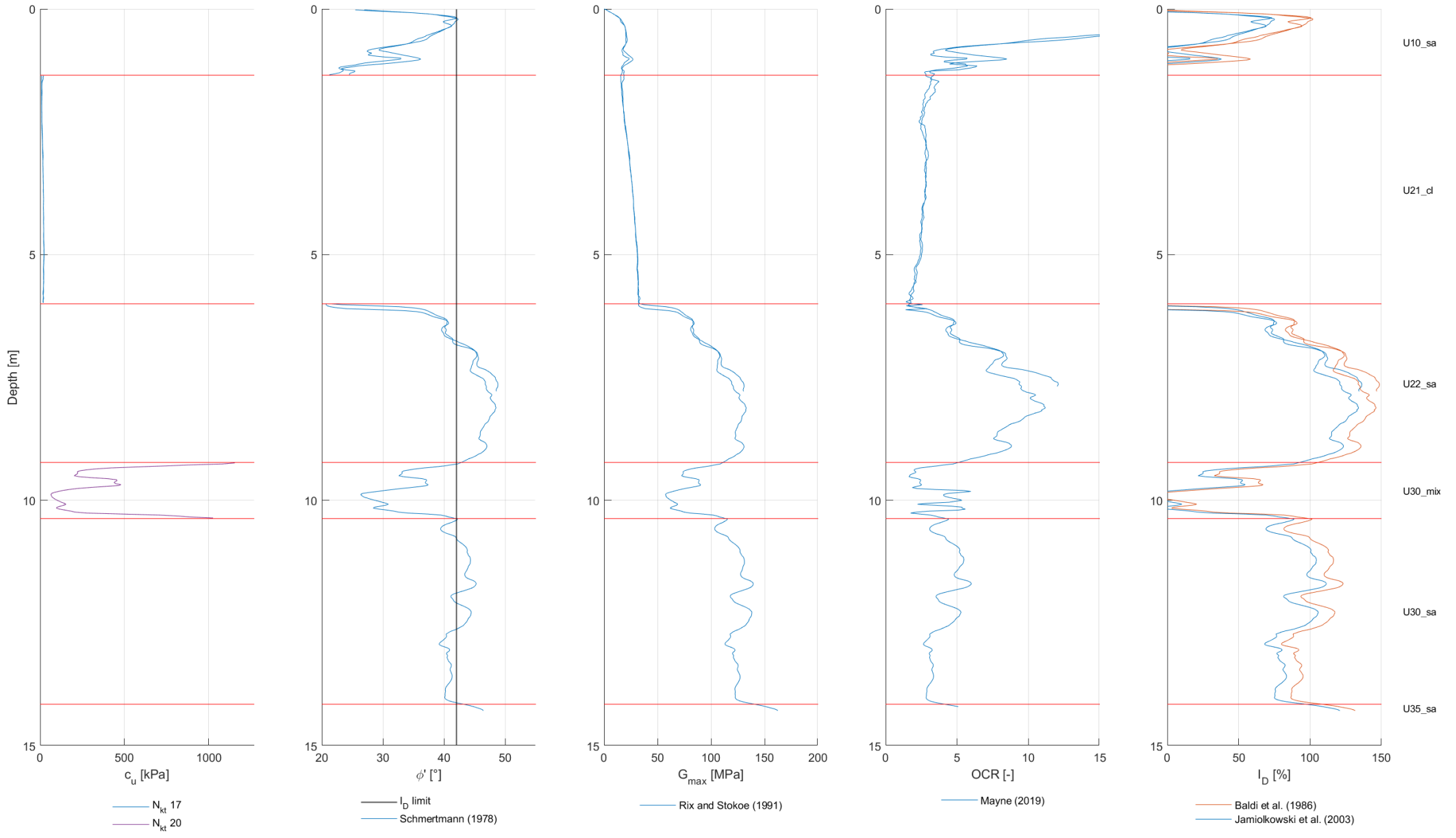
LOC-1071

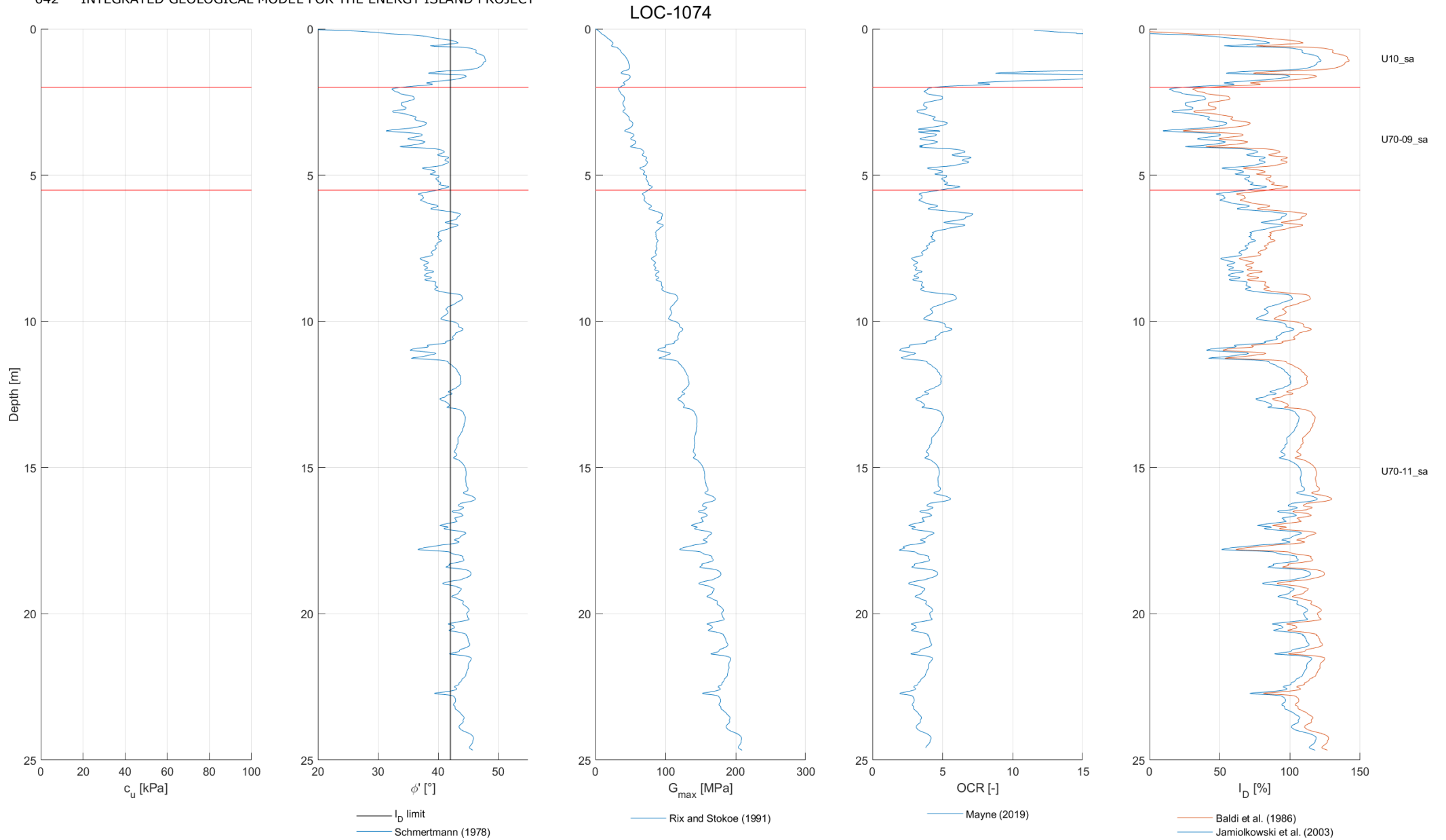




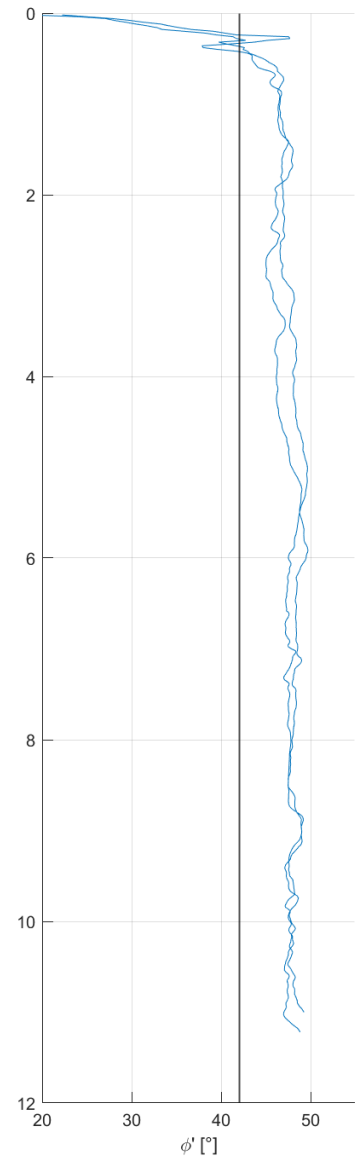
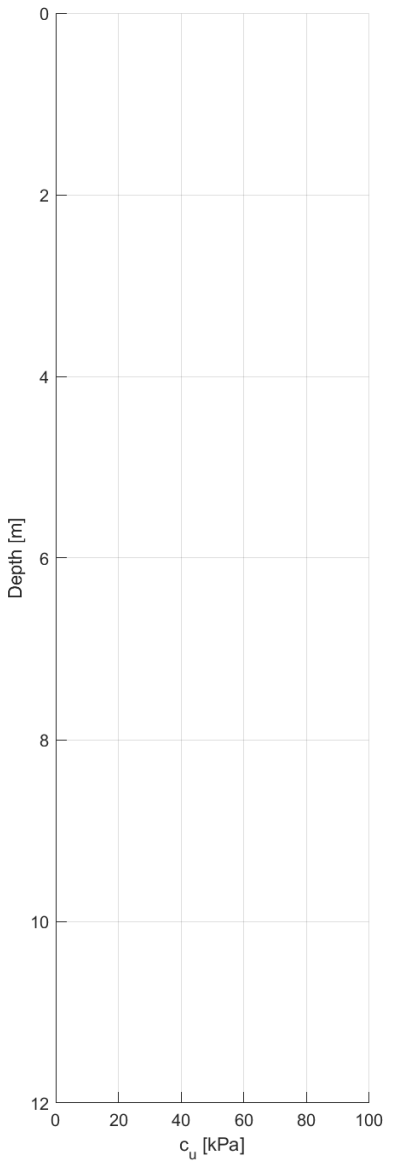
LOC-1073

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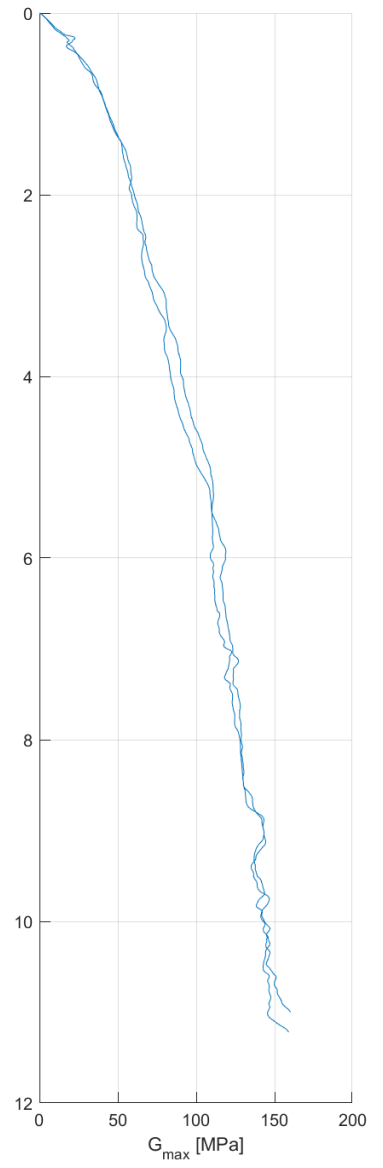




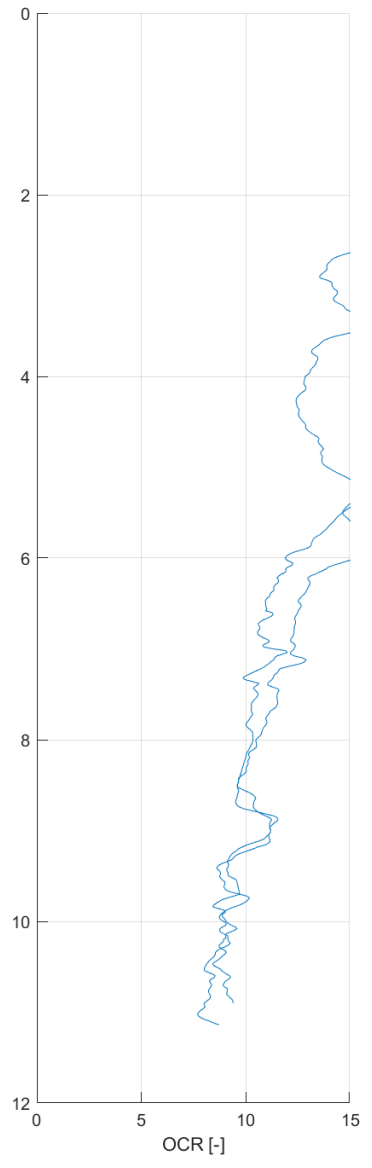
LOC-1075



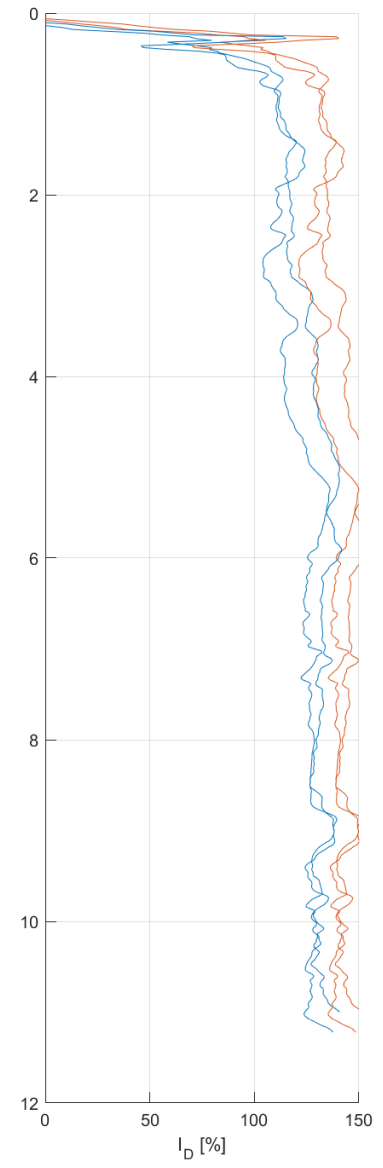
— I_D limit
— Schmertmann (1978)



— Rix and Stokoe (1991)

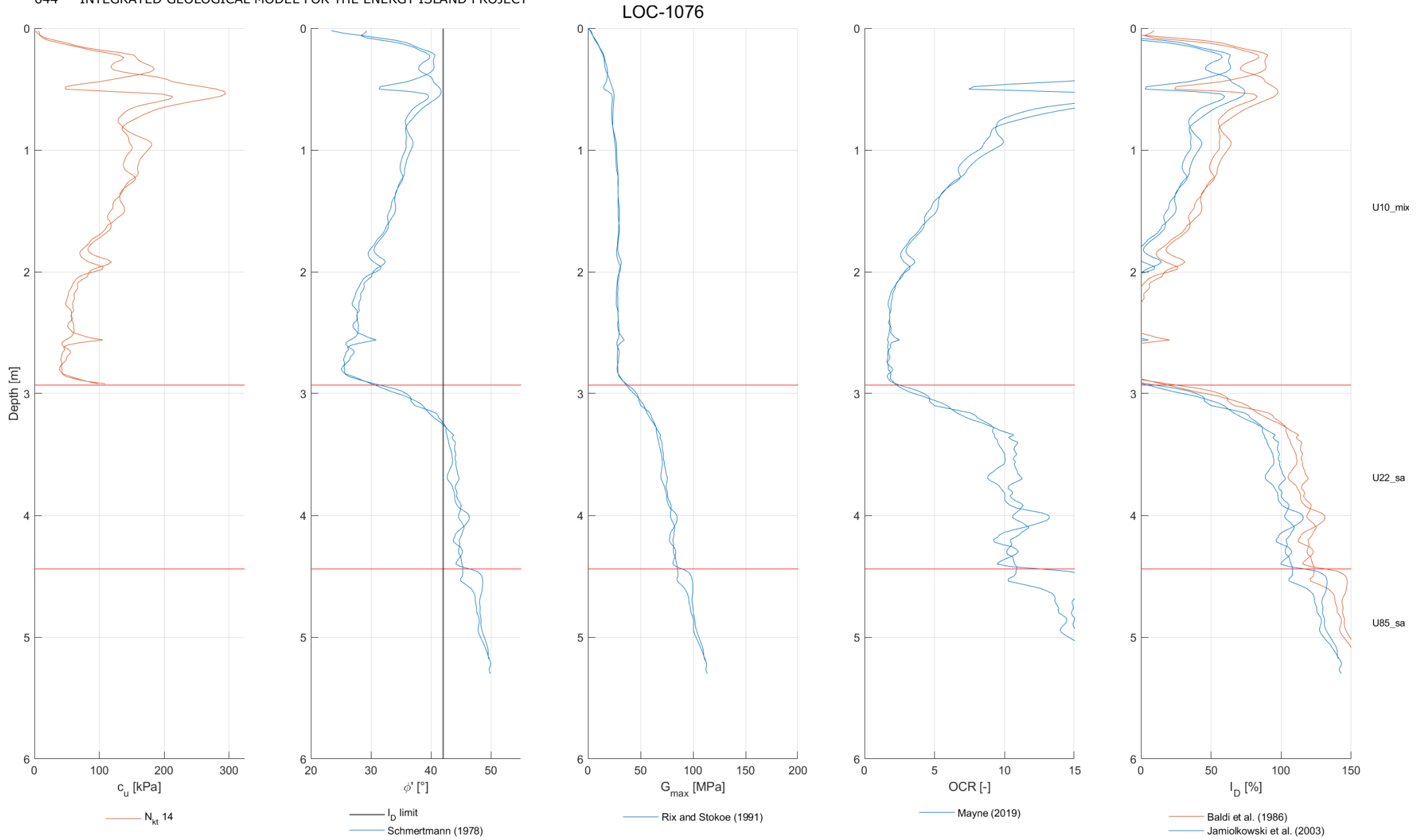


— Mayne (2019)



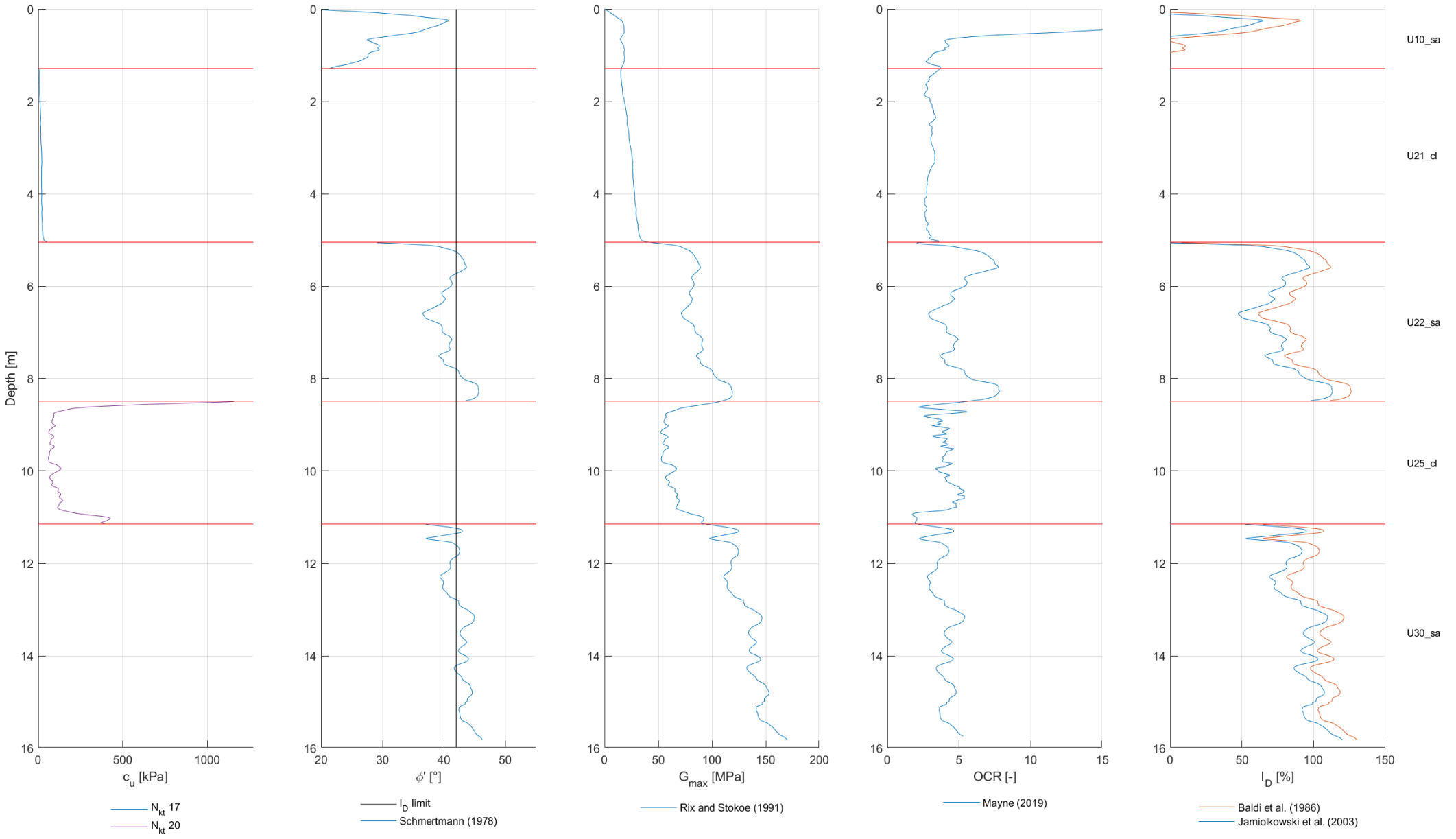
— Baldi et al. (1986)
— Jamiolkowski et al. (2003)

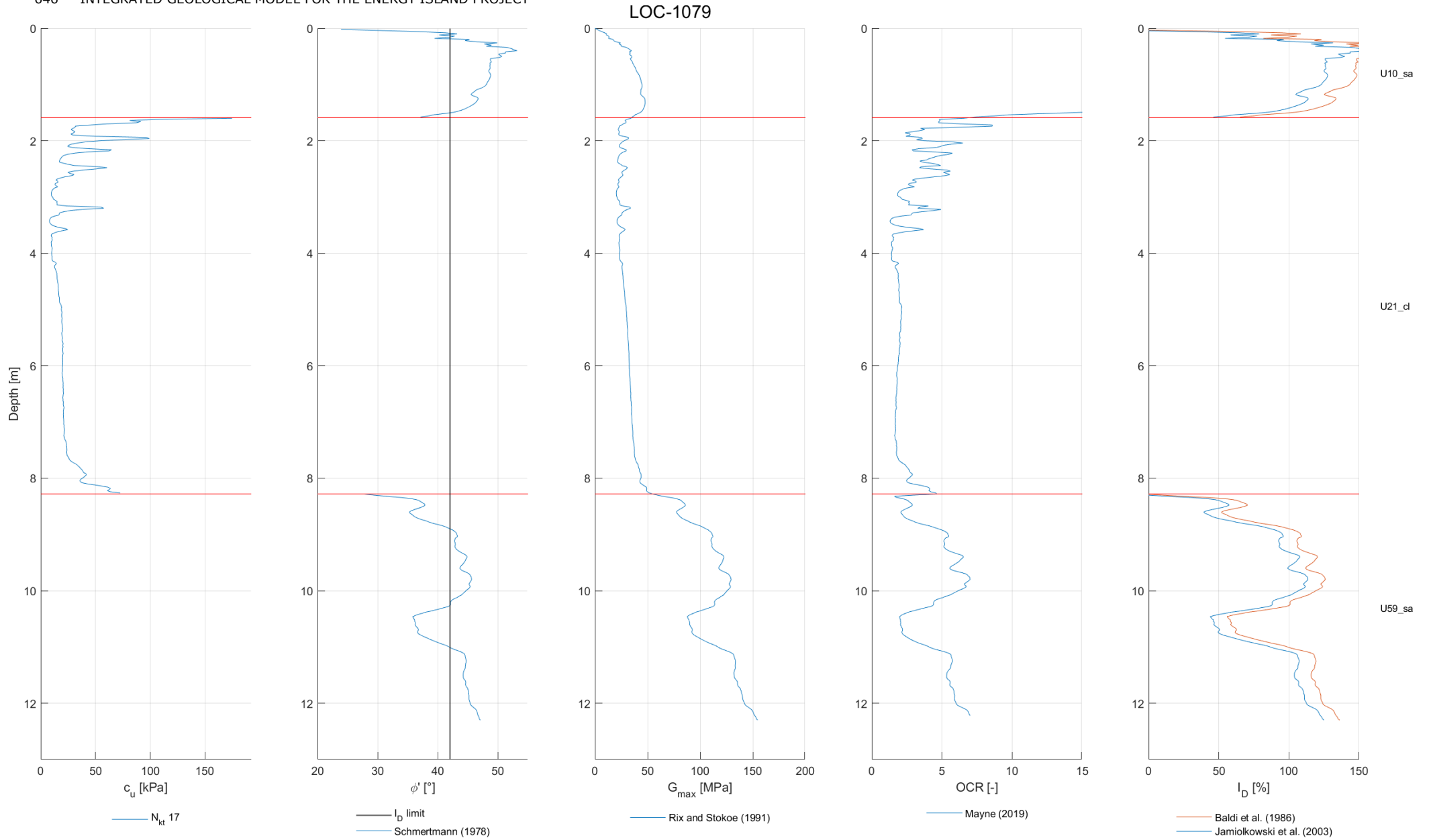
U85_sa



LOC-1077

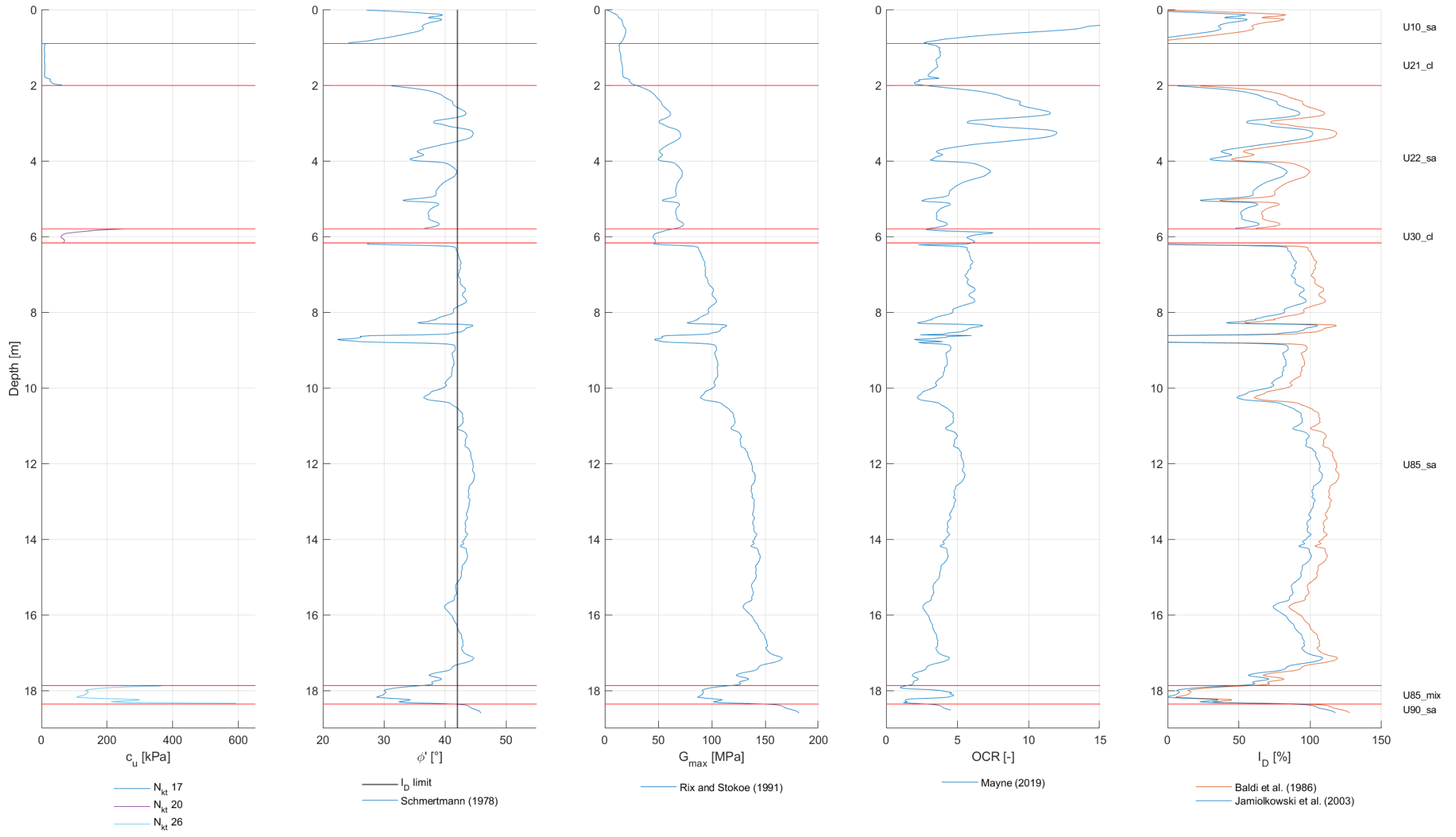
INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT

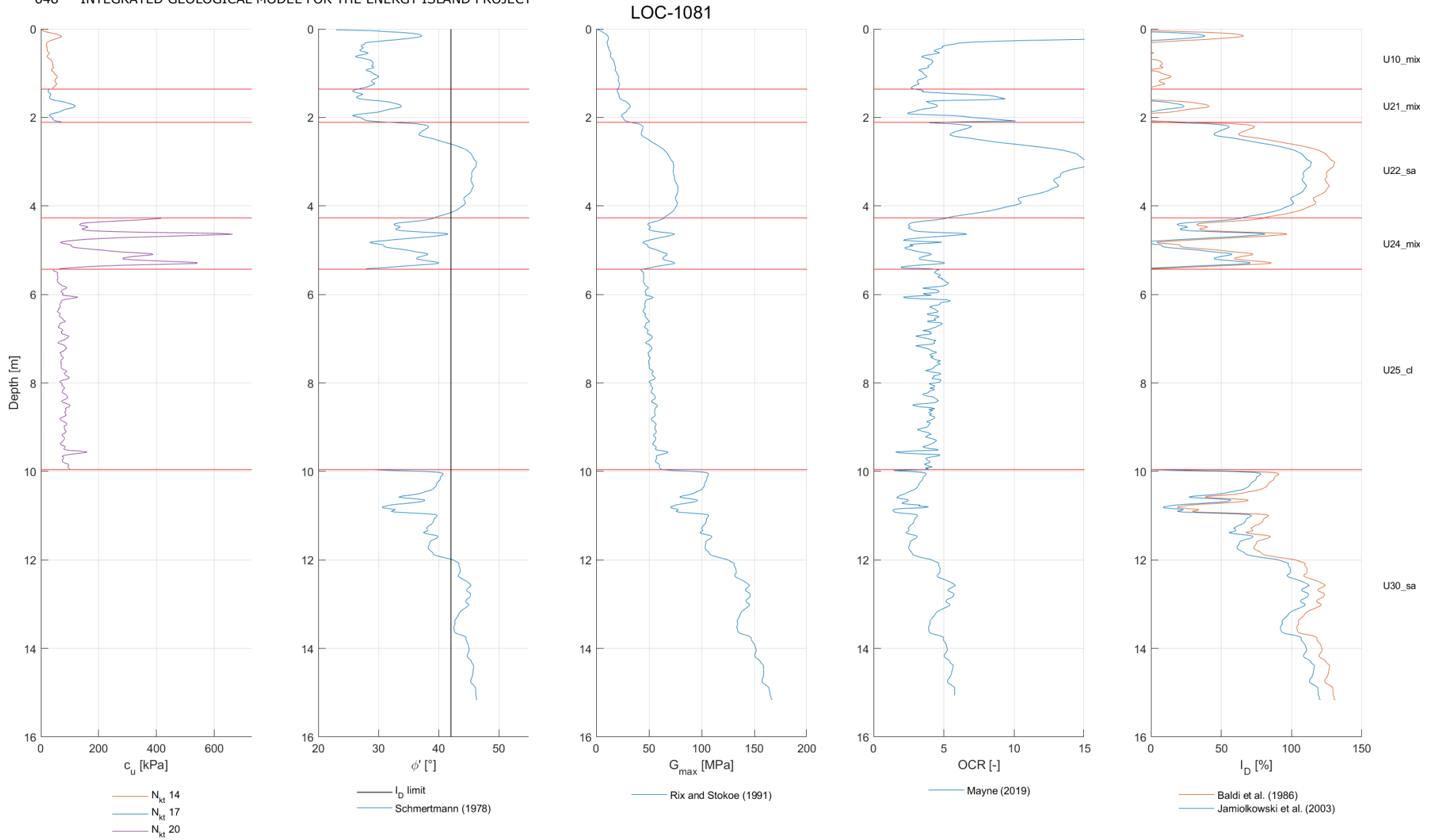




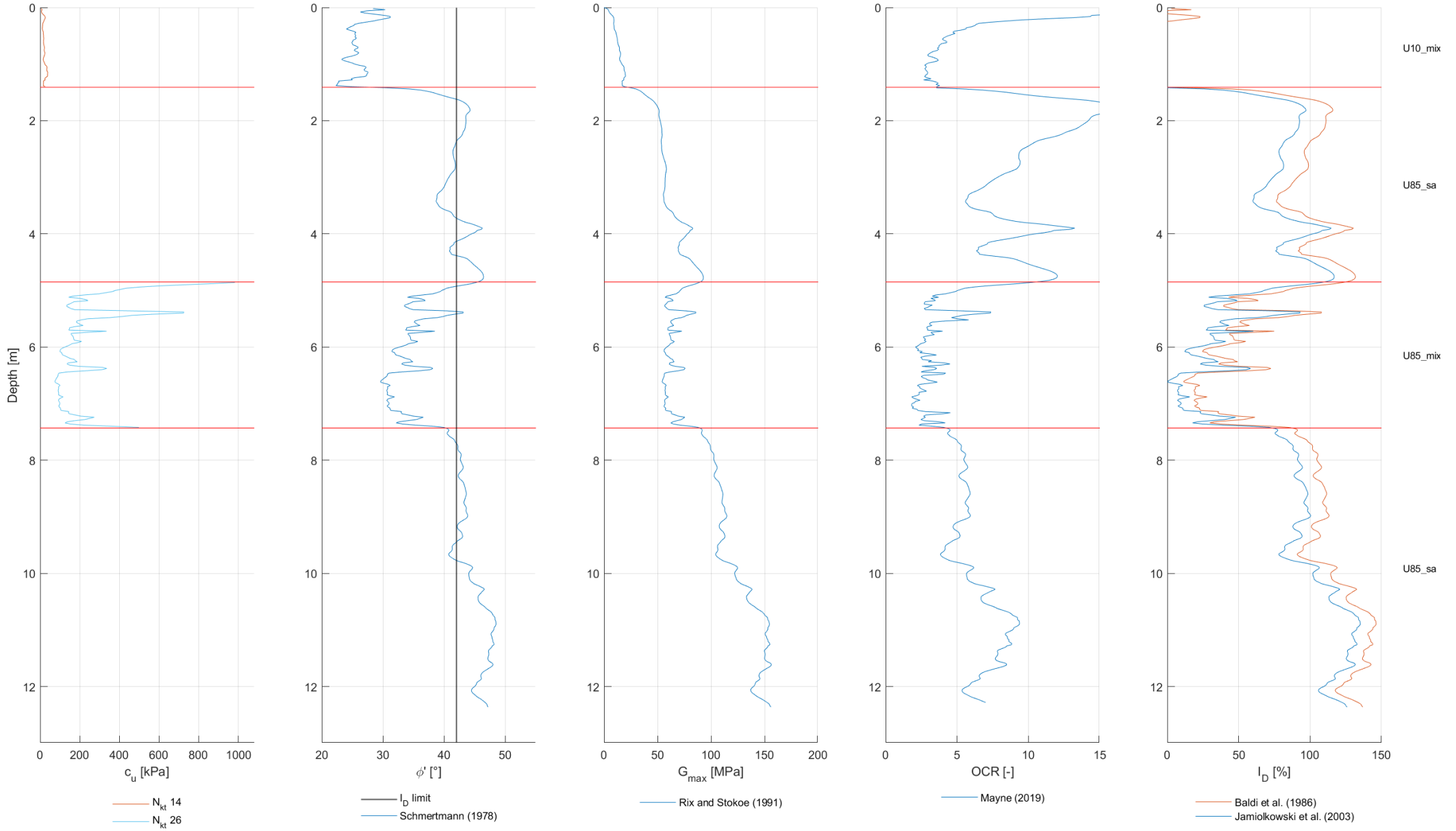
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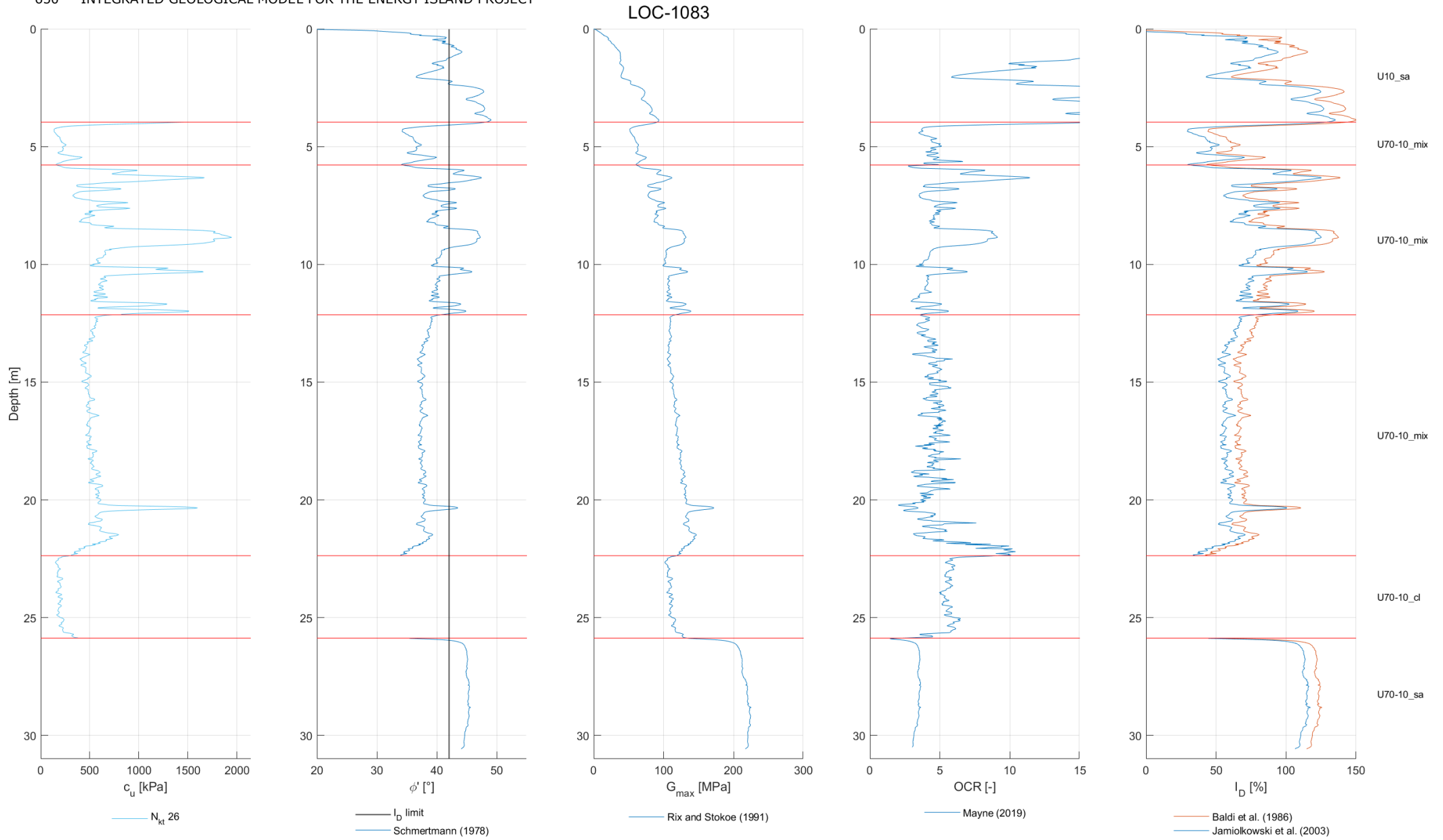
INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT



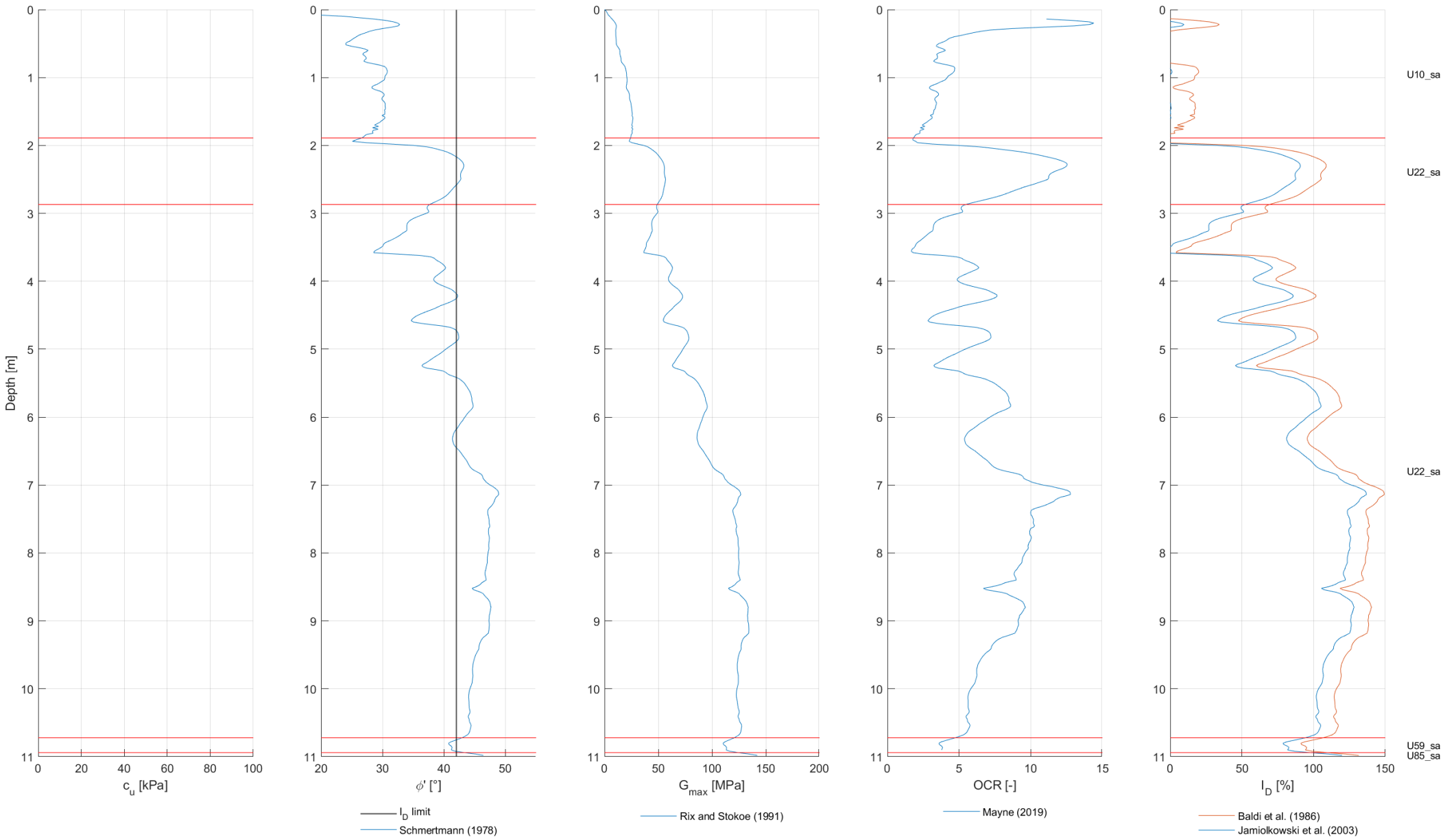


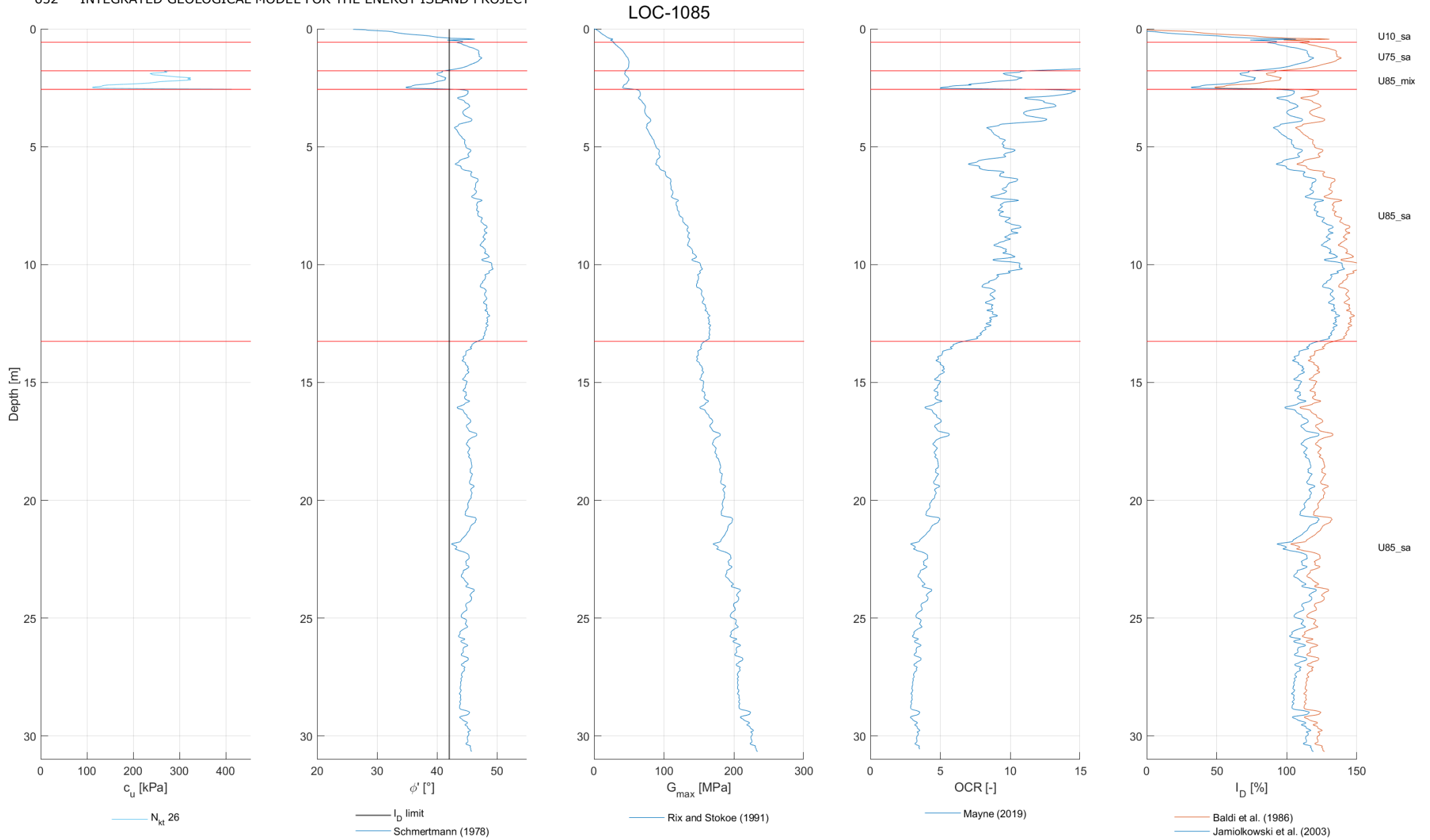
LOC-1082



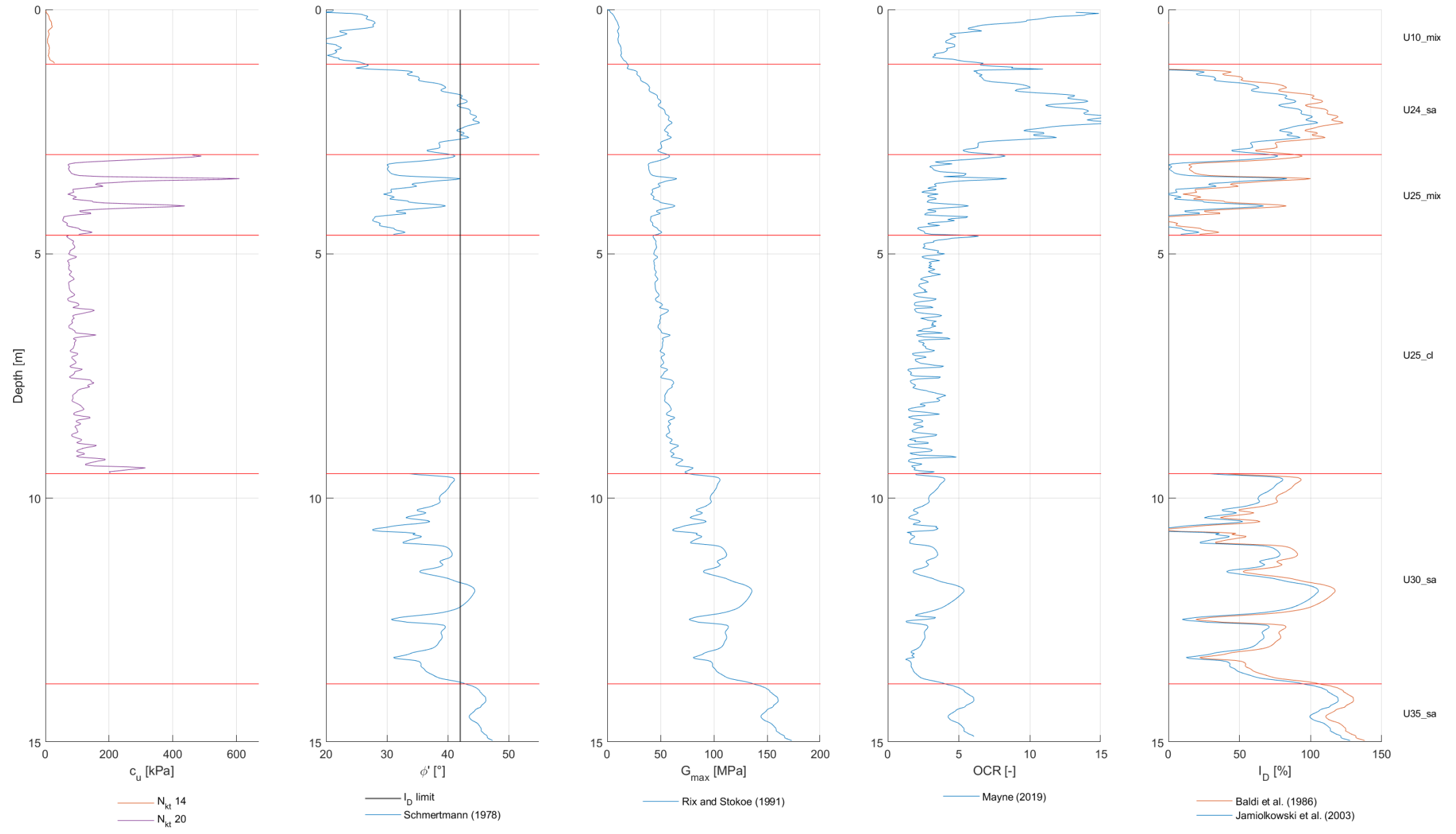


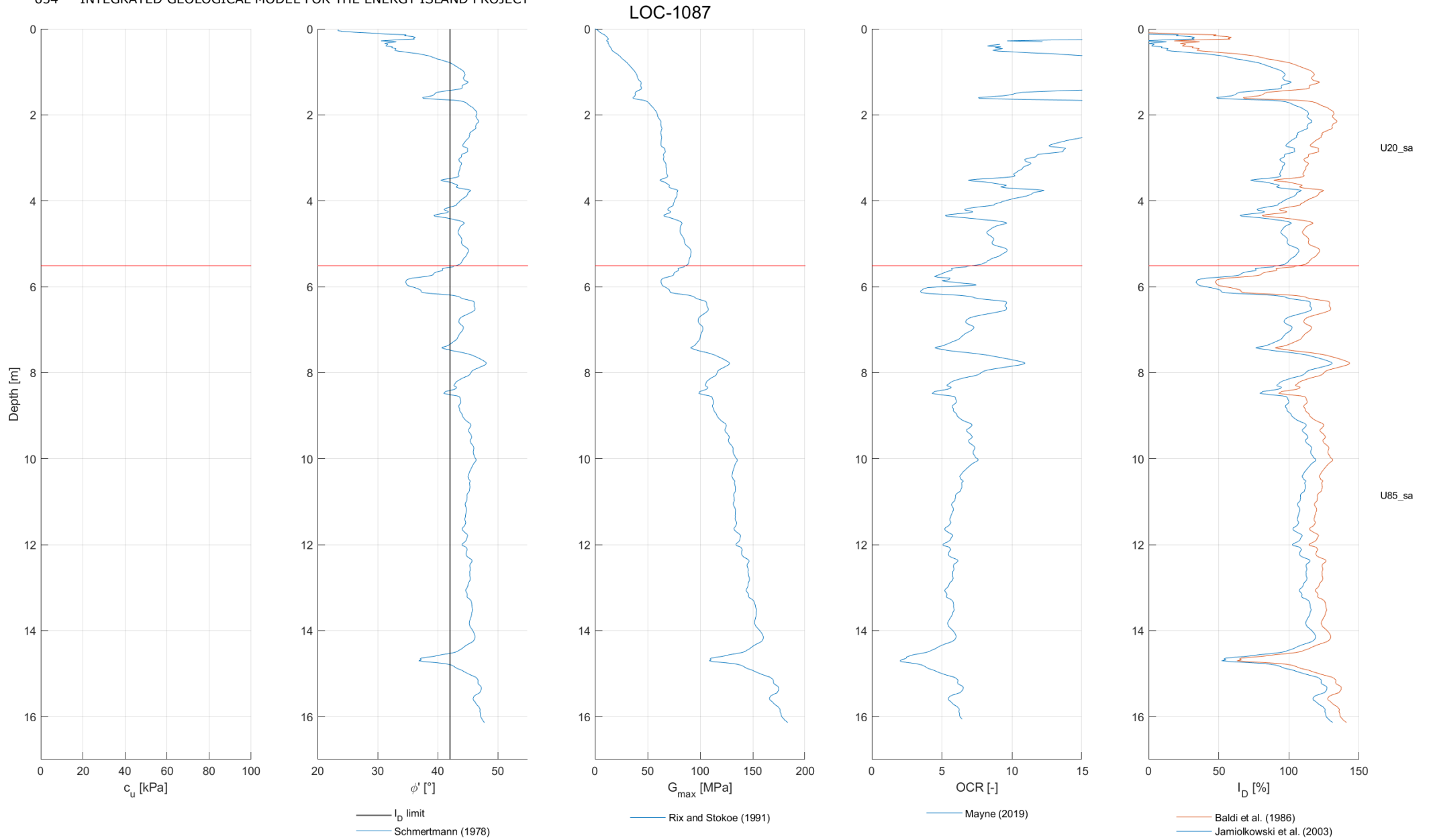
LOC-1084





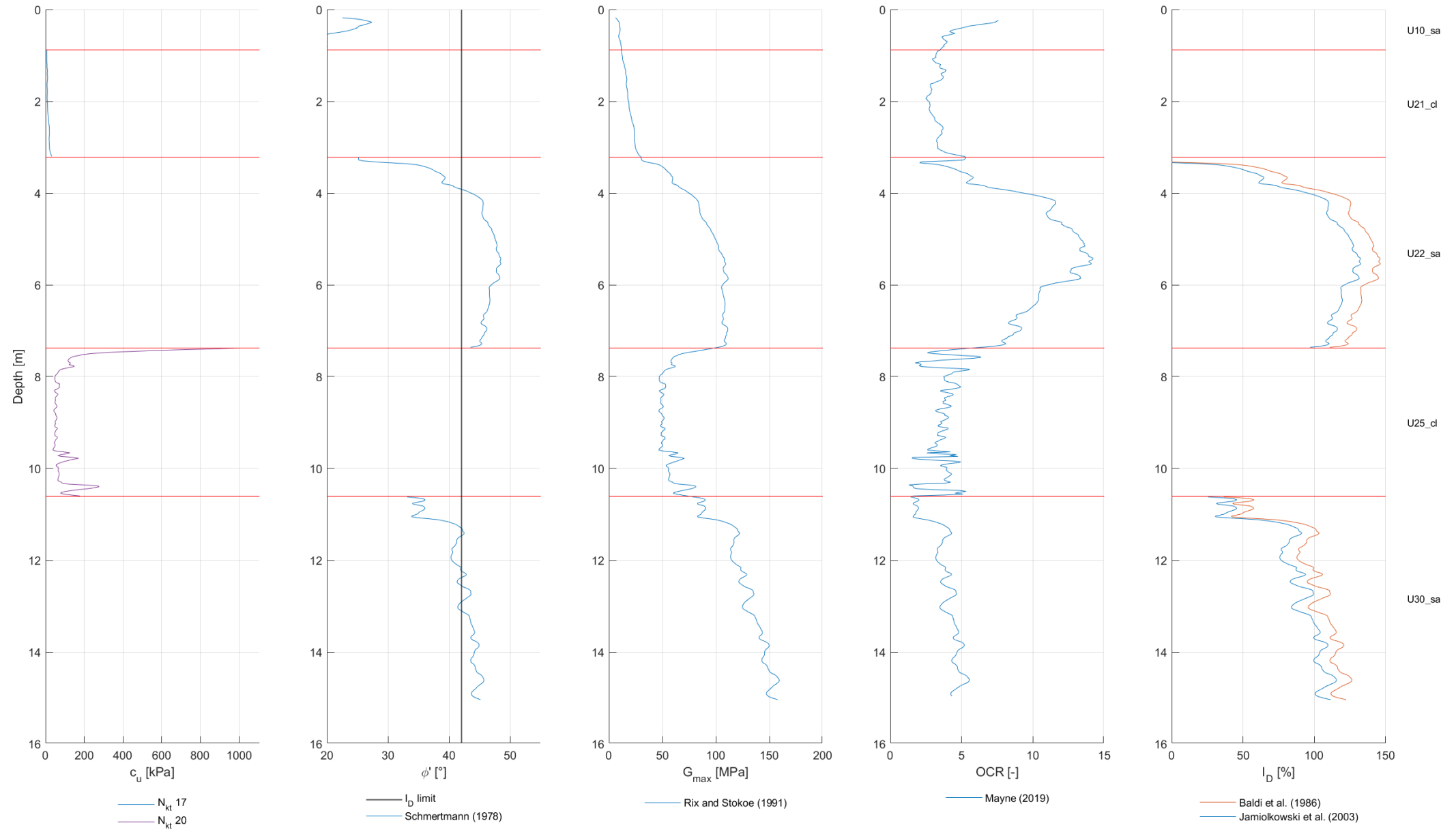
LOC-1086

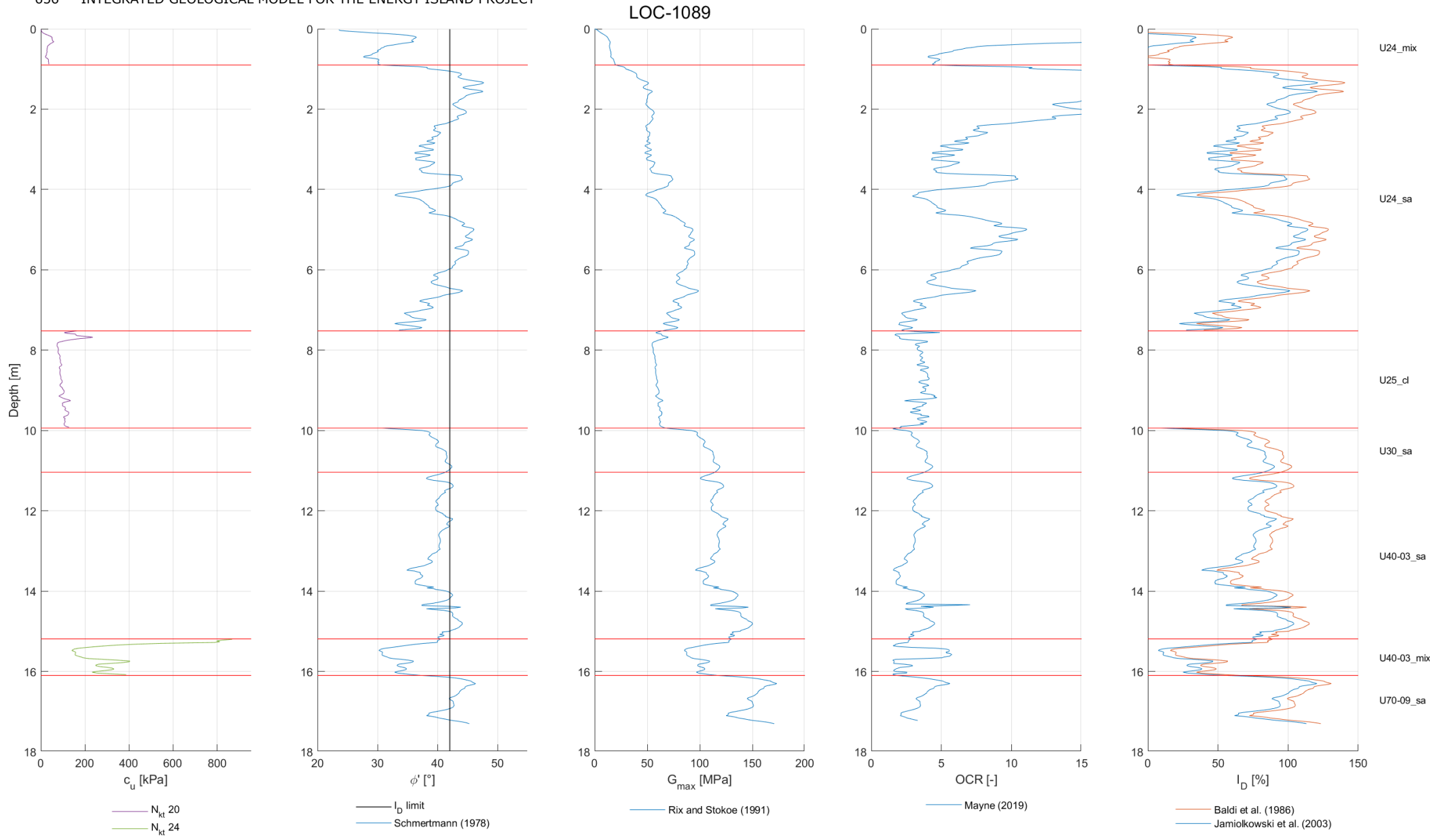




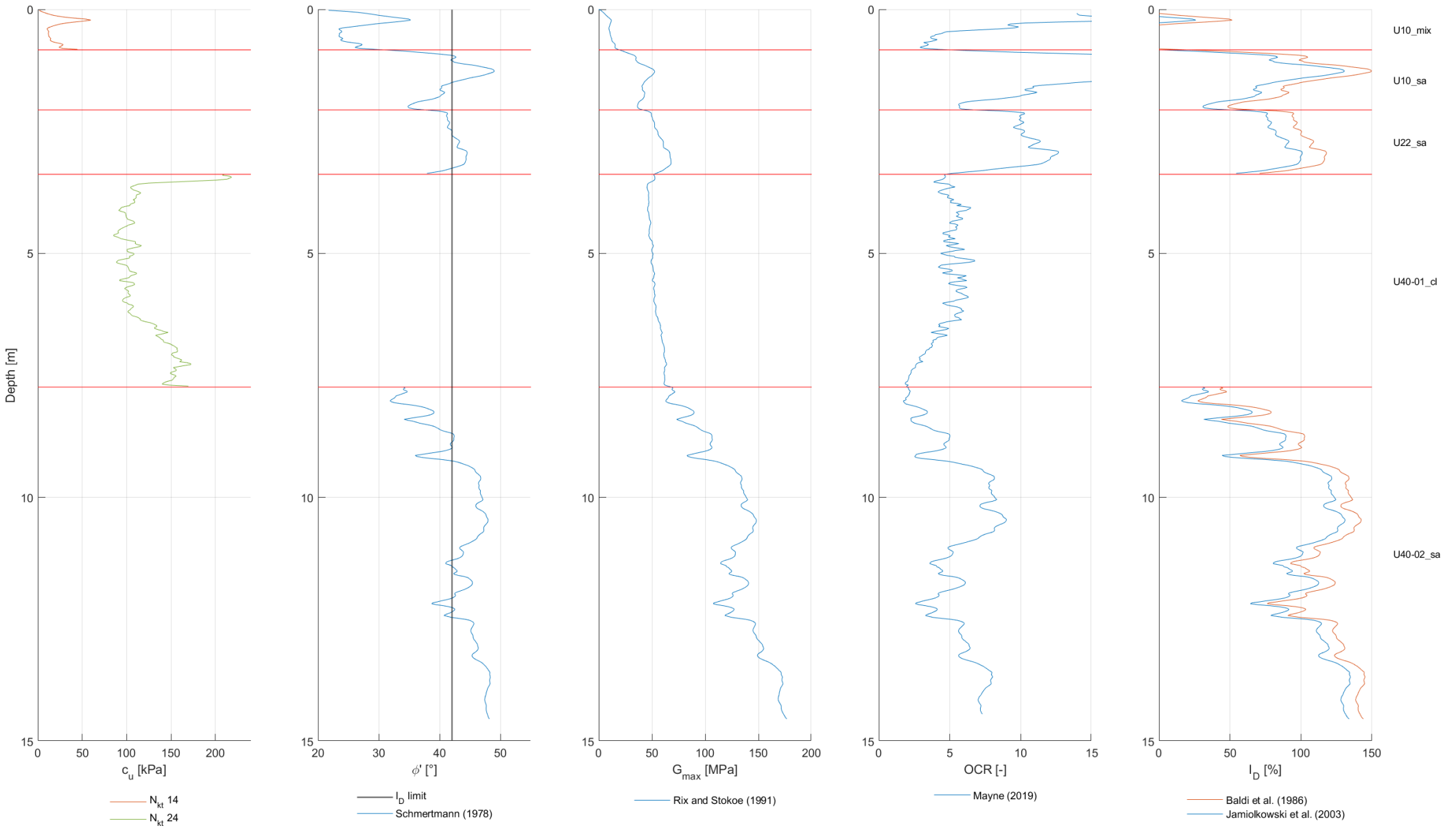
LOC-1088

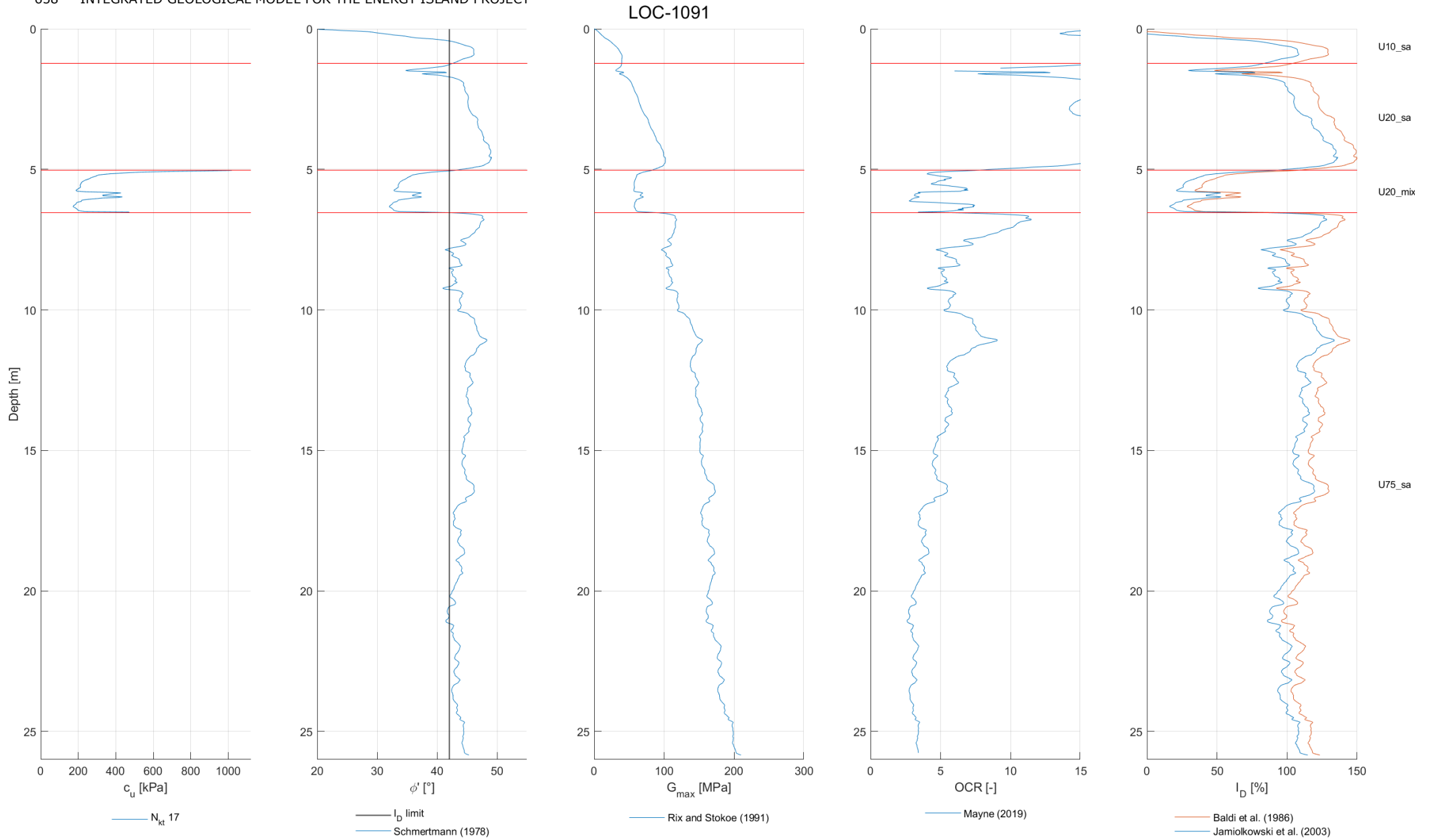
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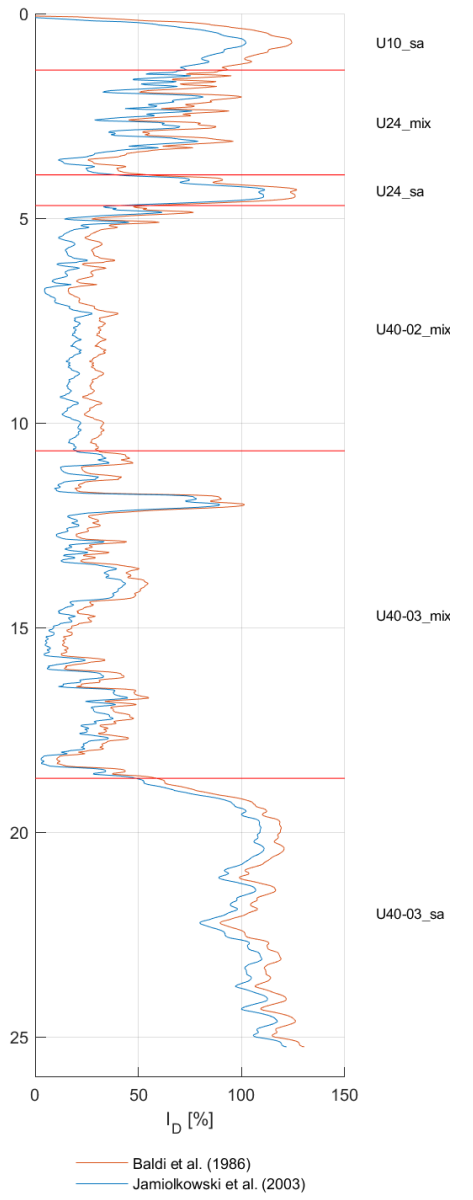
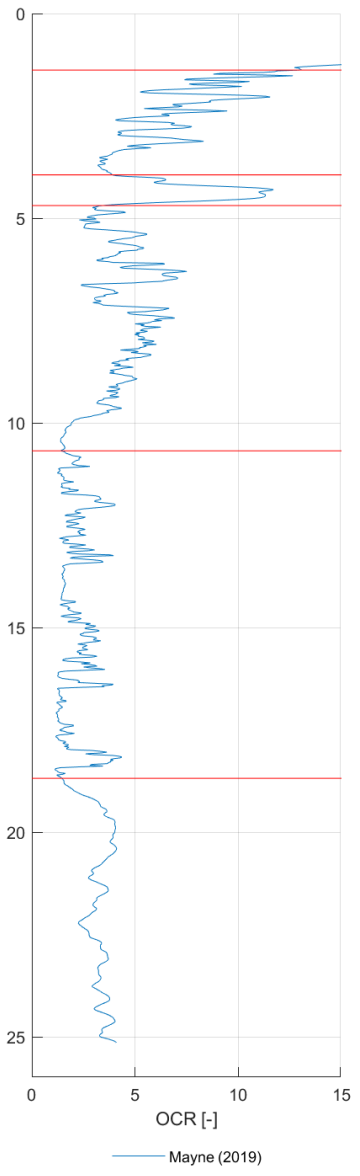
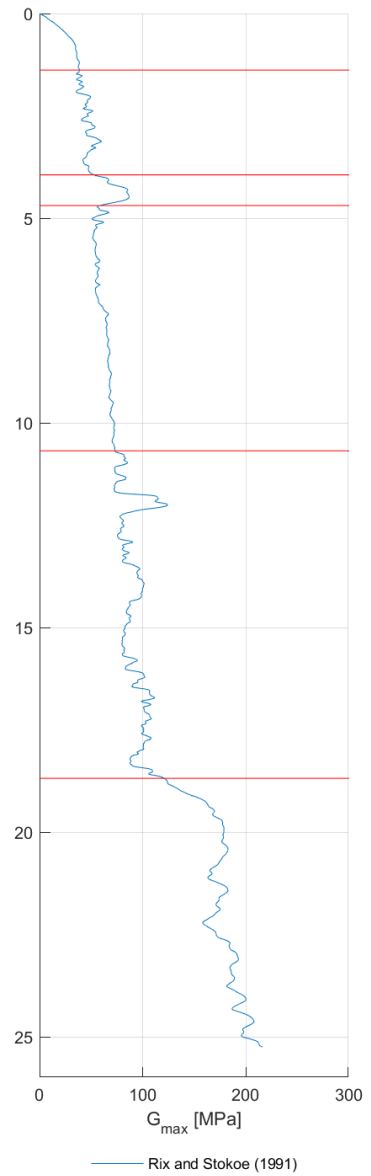
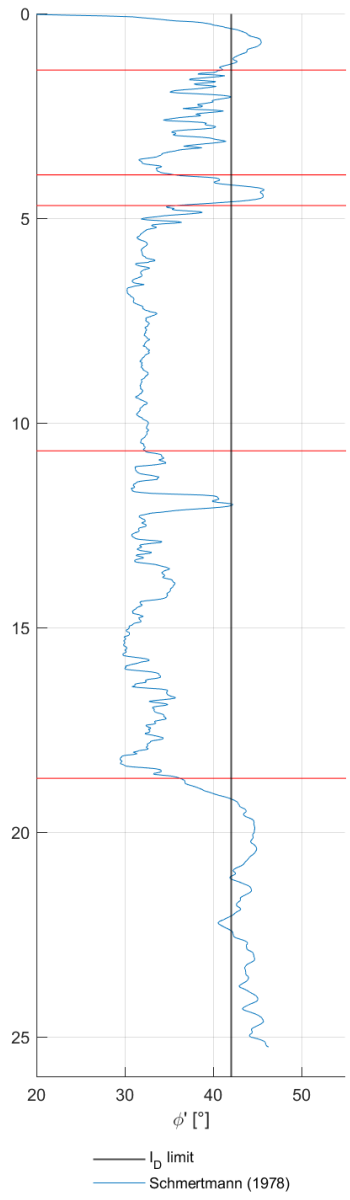
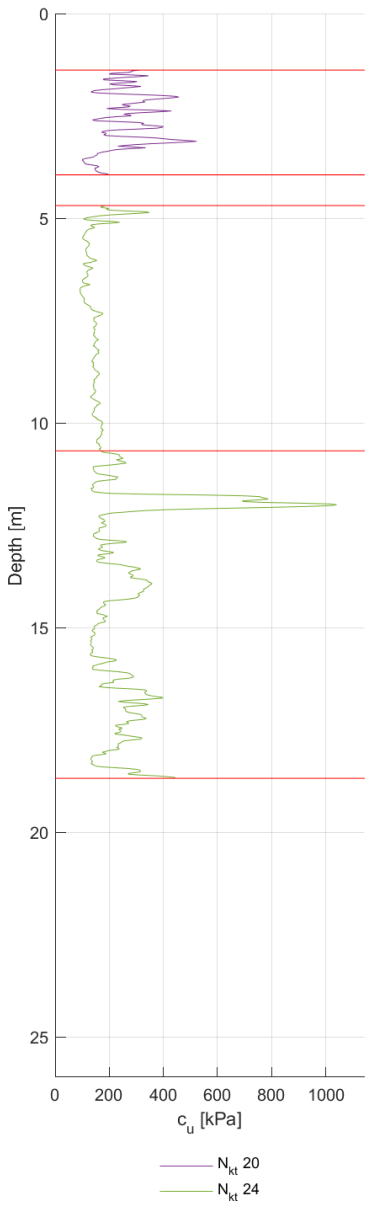
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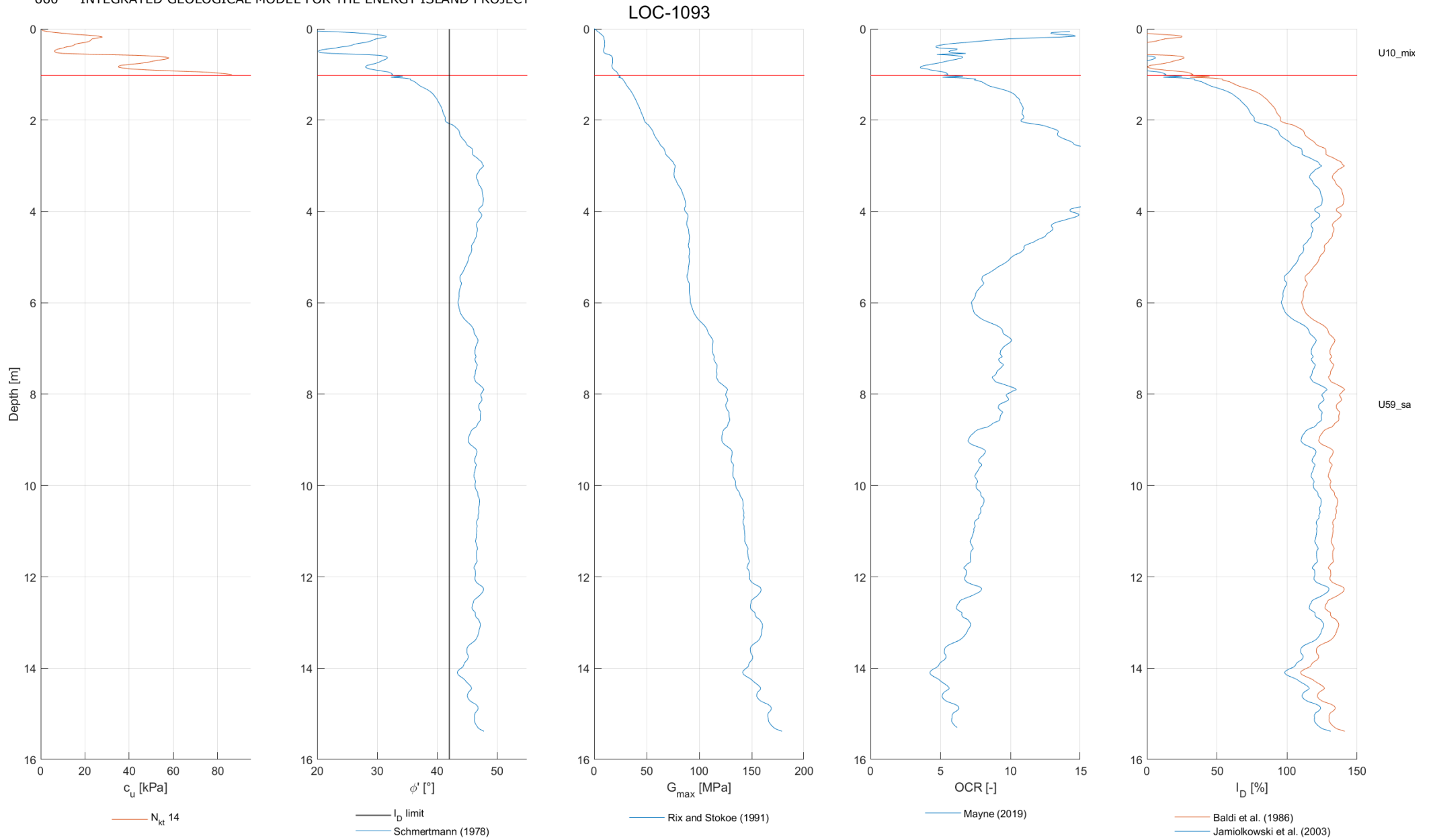




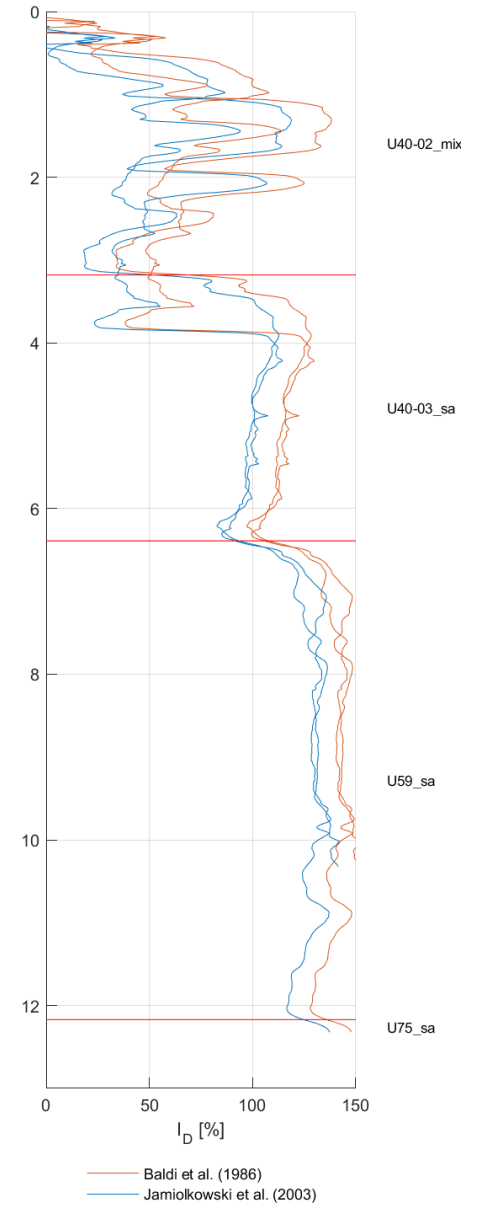
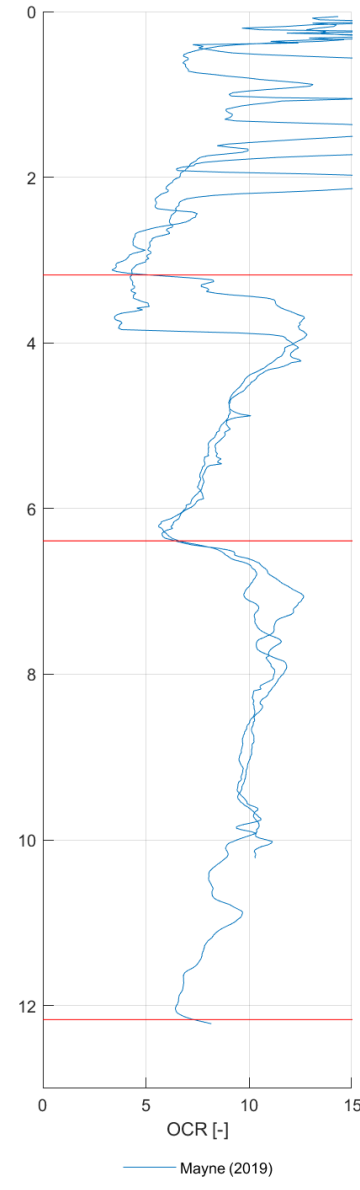
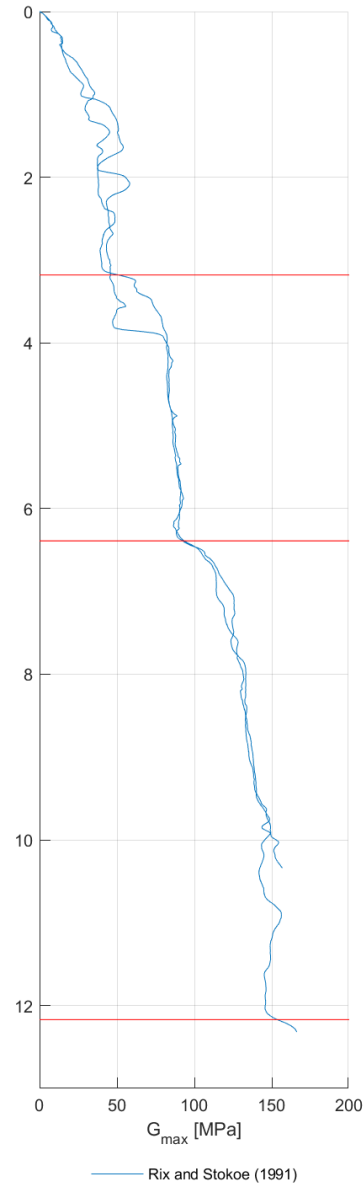
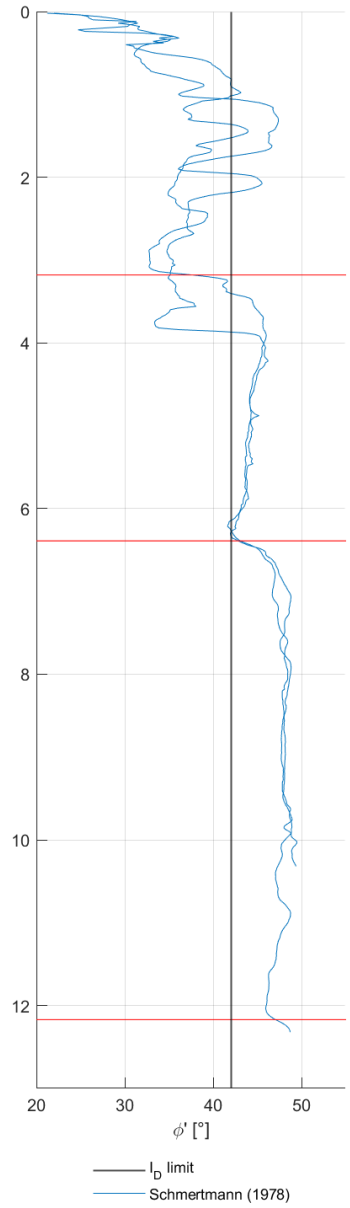
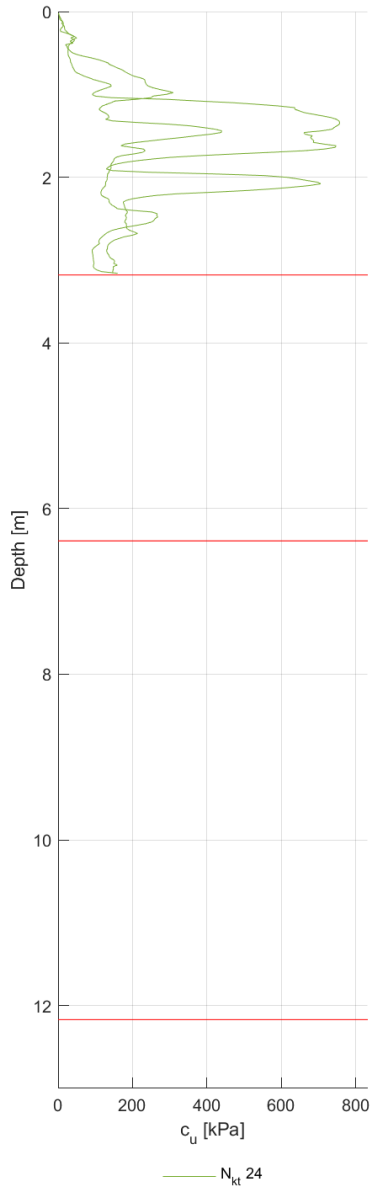
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LOC-1092





LOC-1094

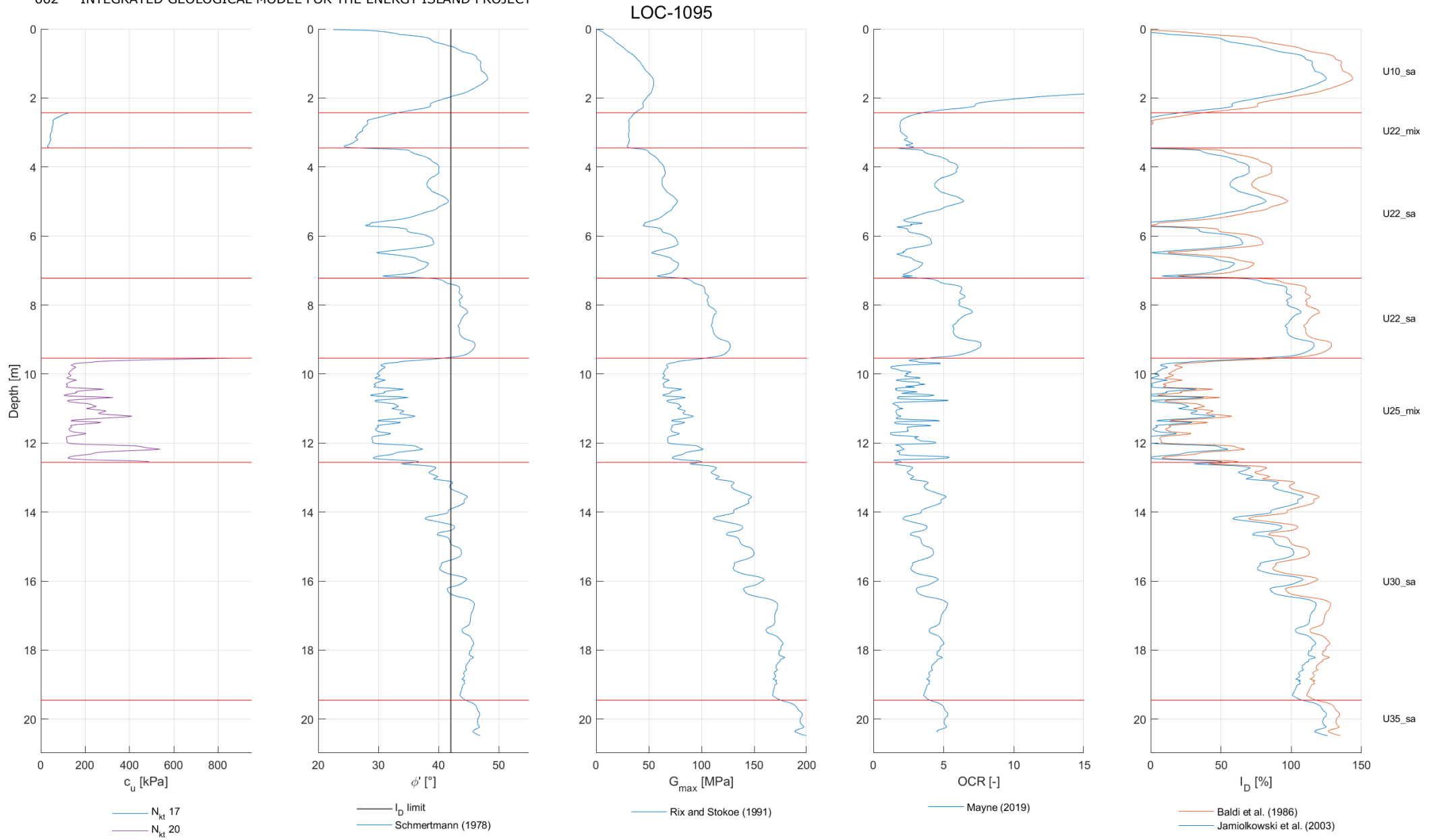


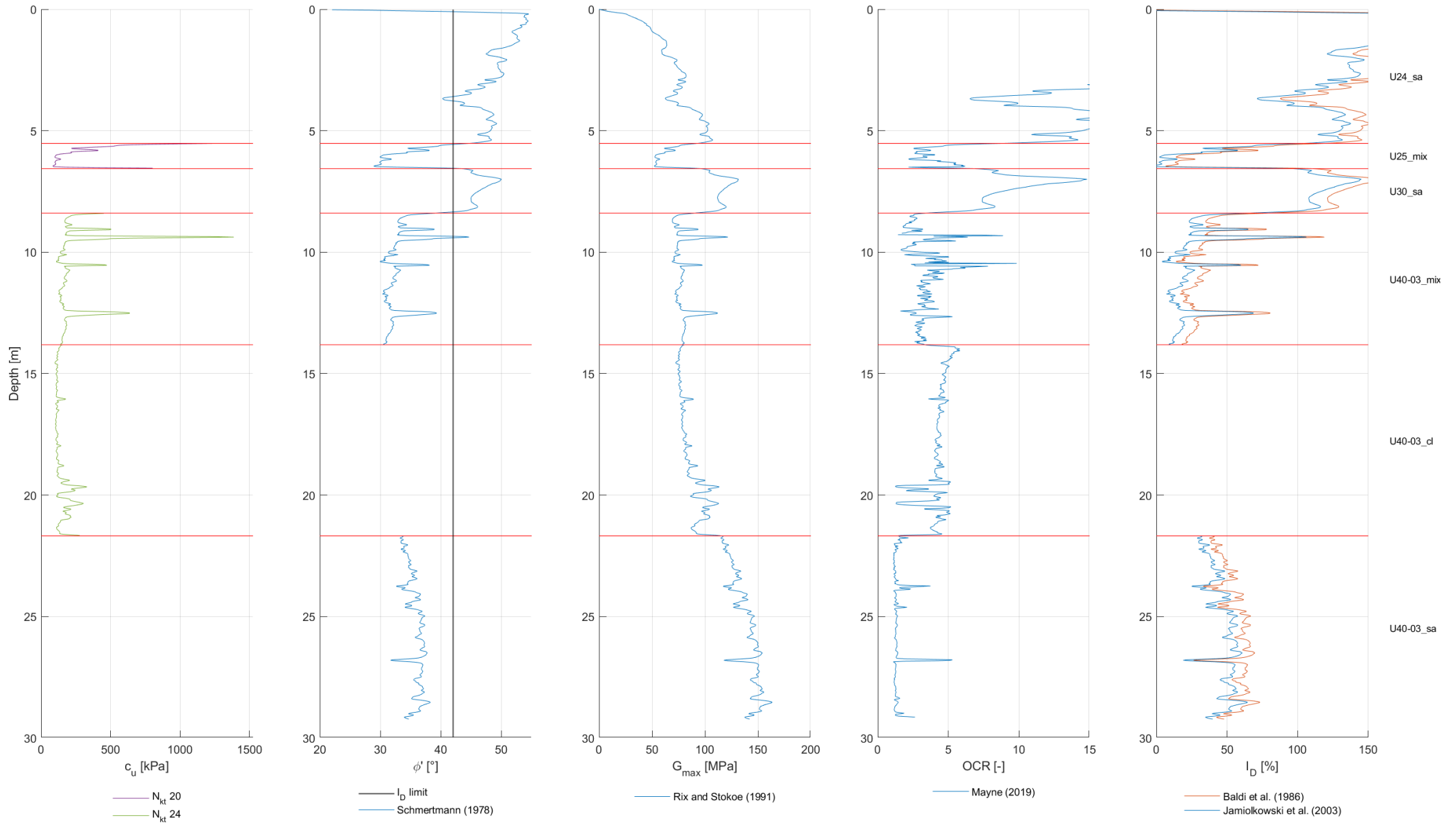
U40-02_mix

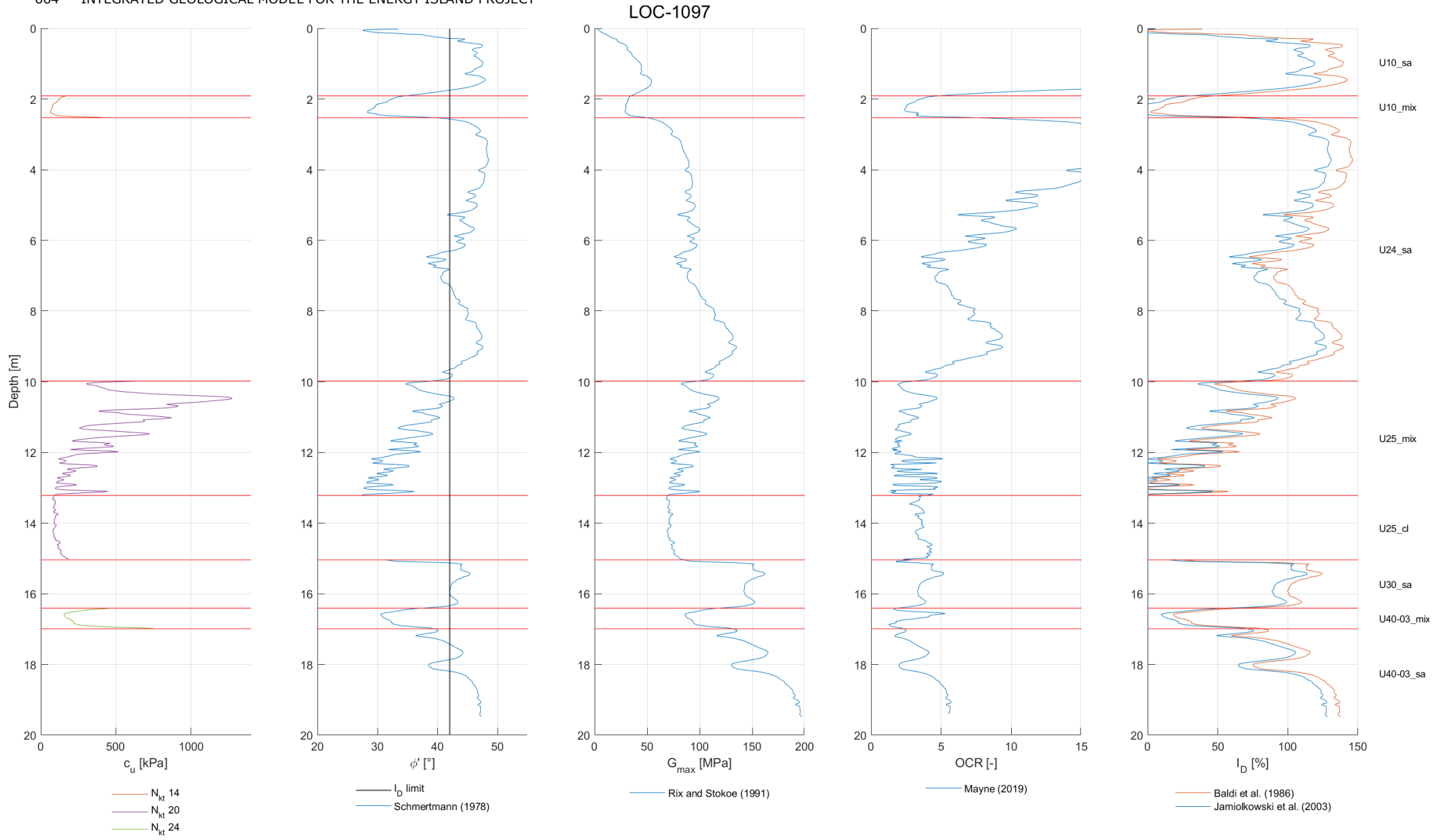
U40-03_sa

U59_sa

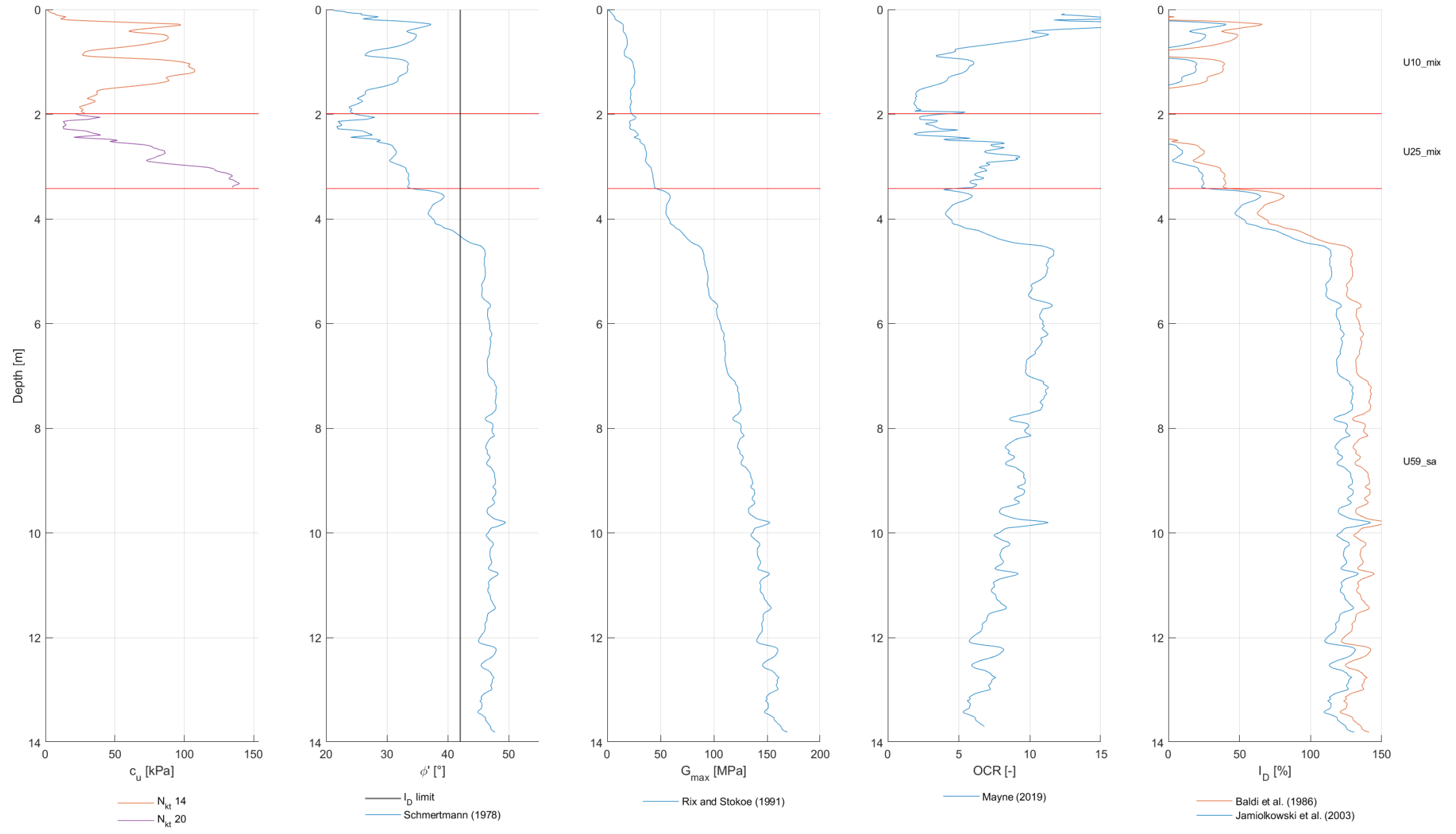
U75_sa



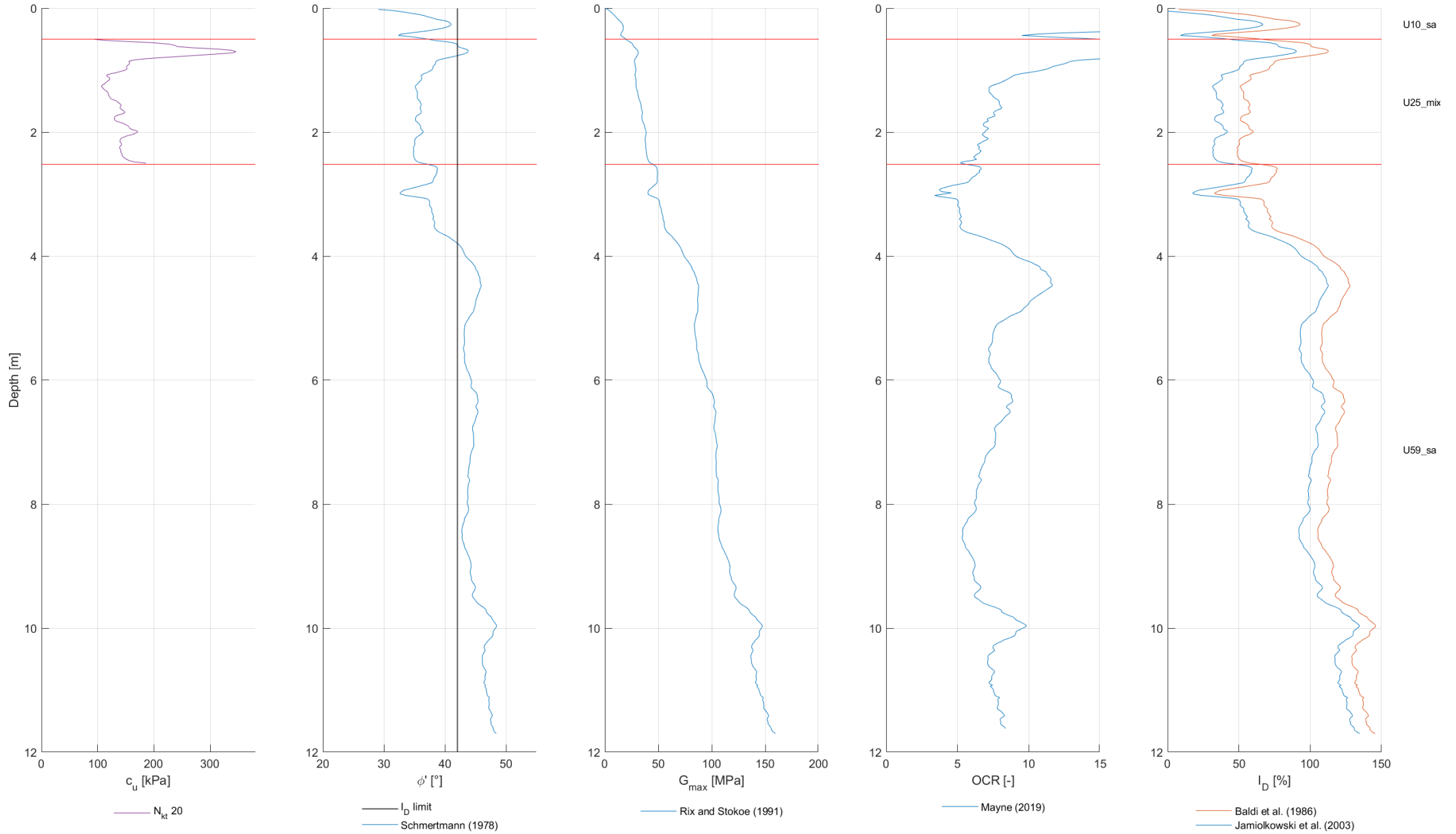




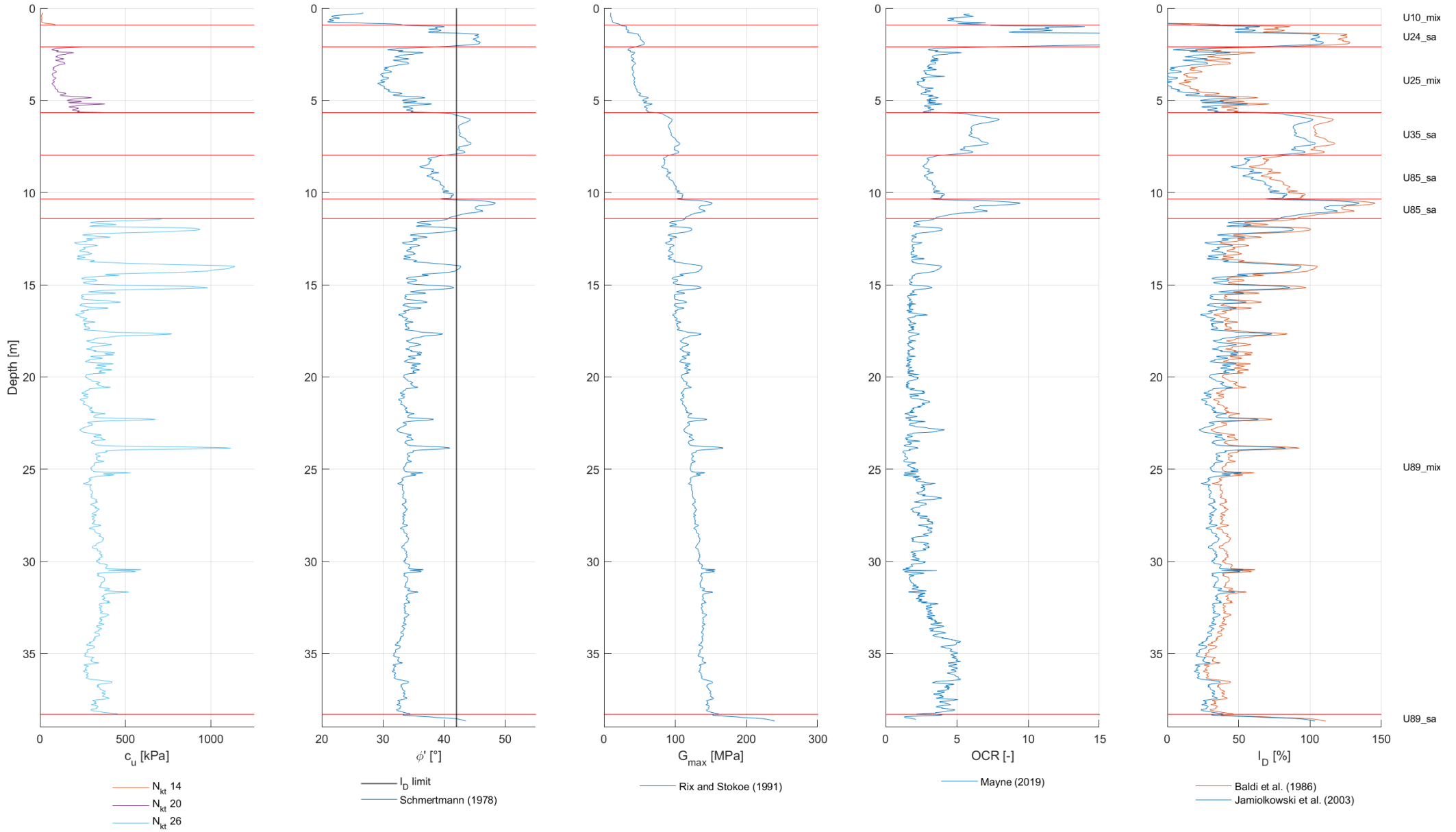
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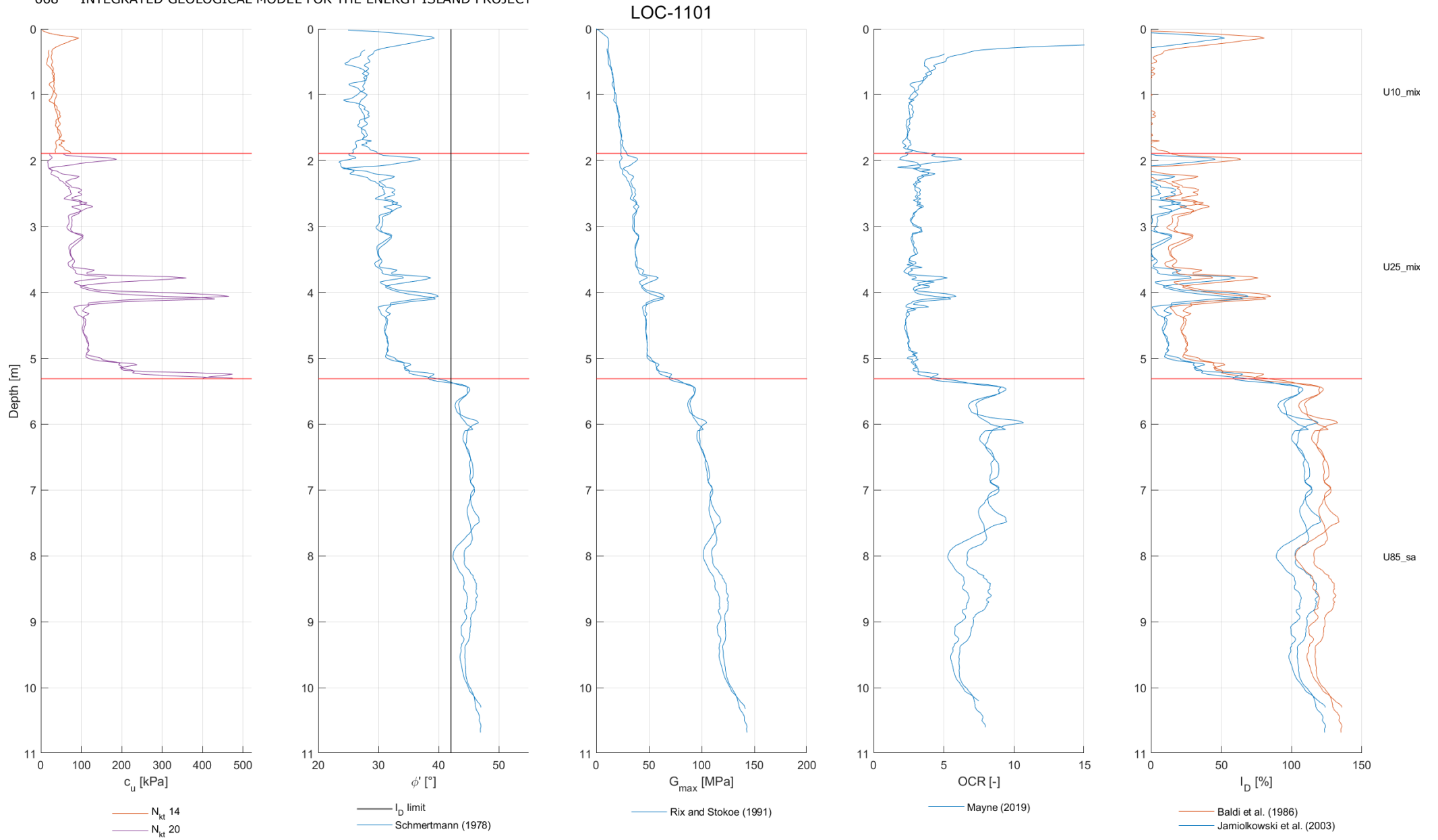


LOC-1099

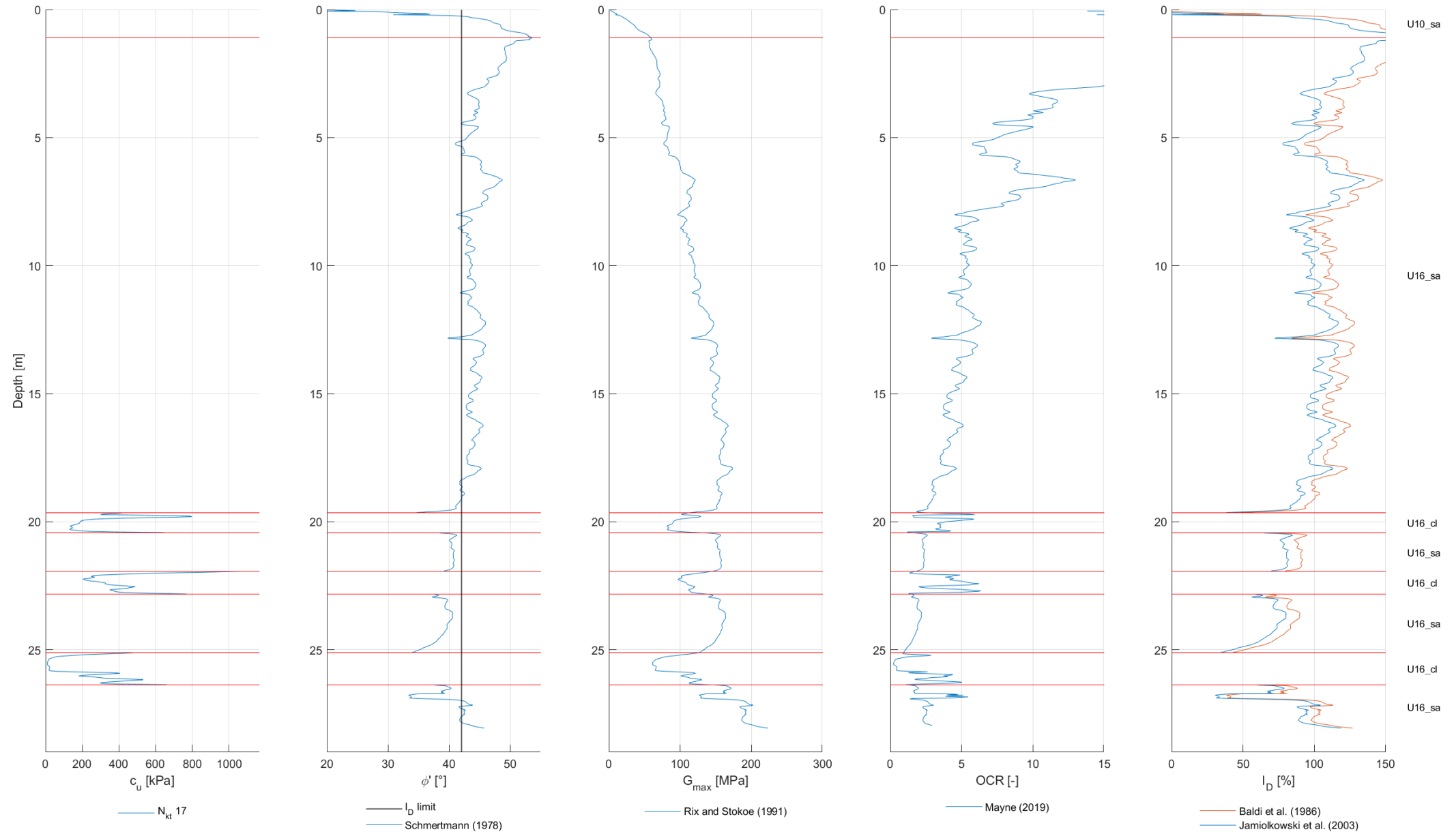


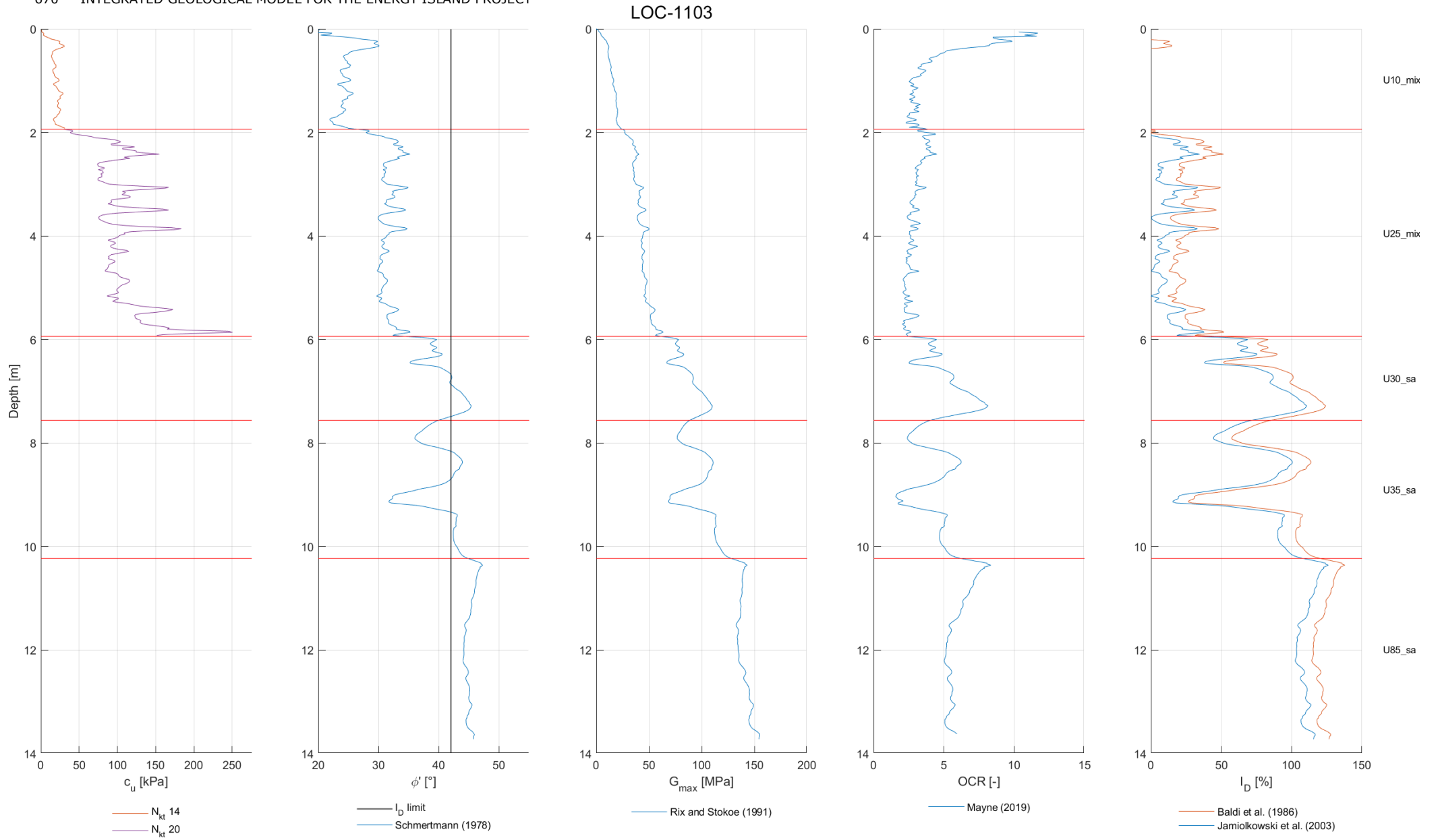
LOC-1100



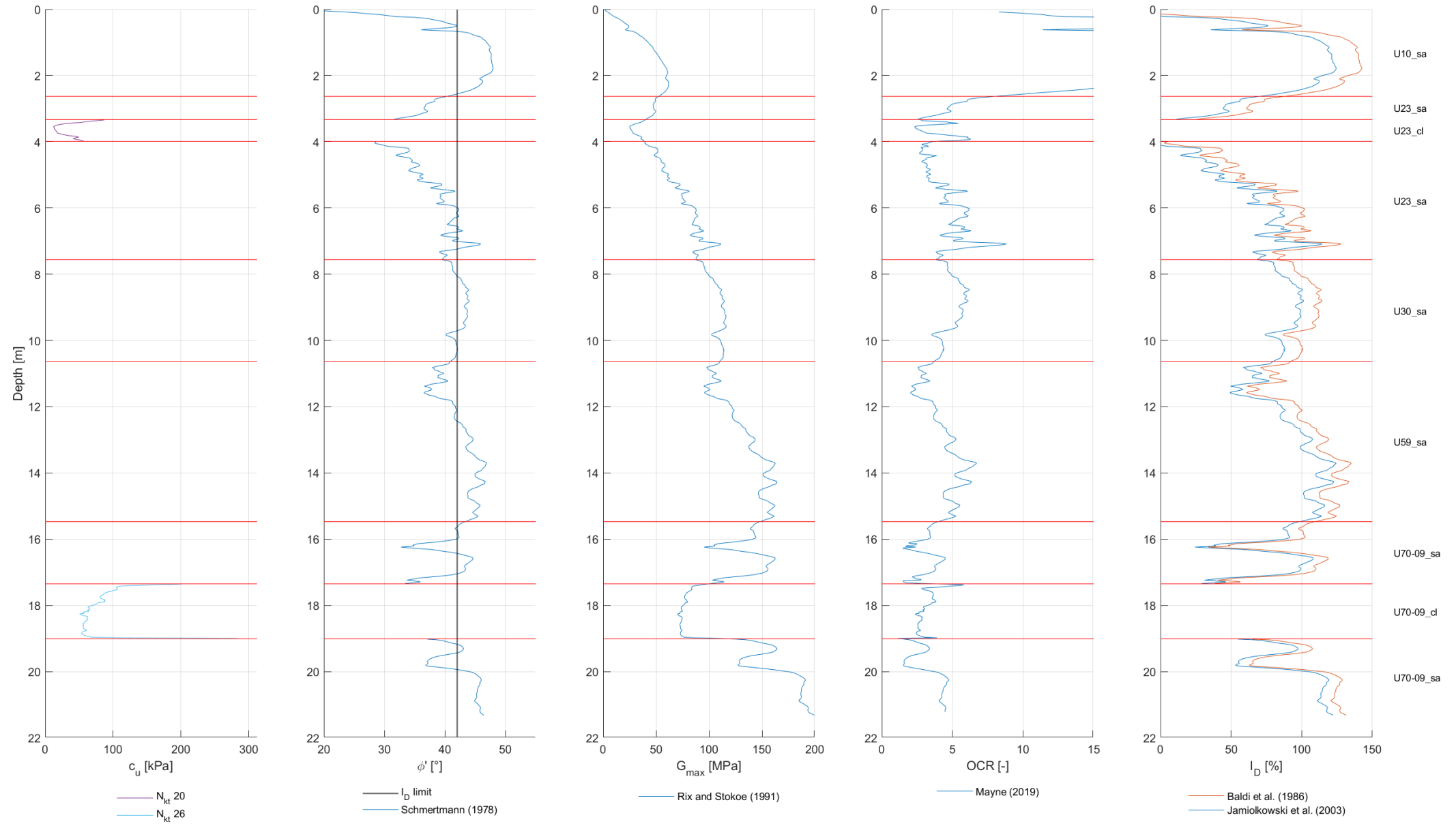


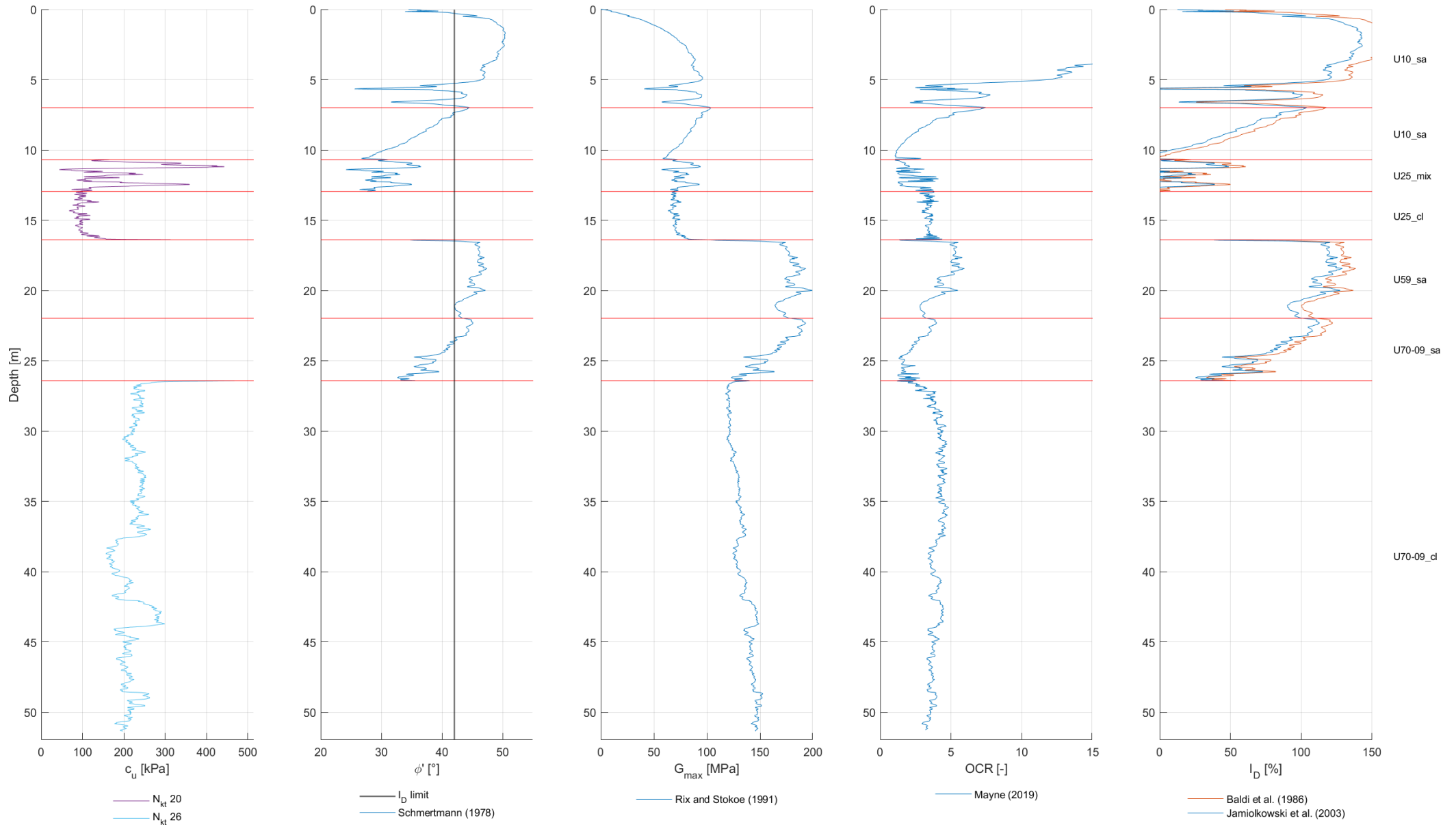
LOC-1102





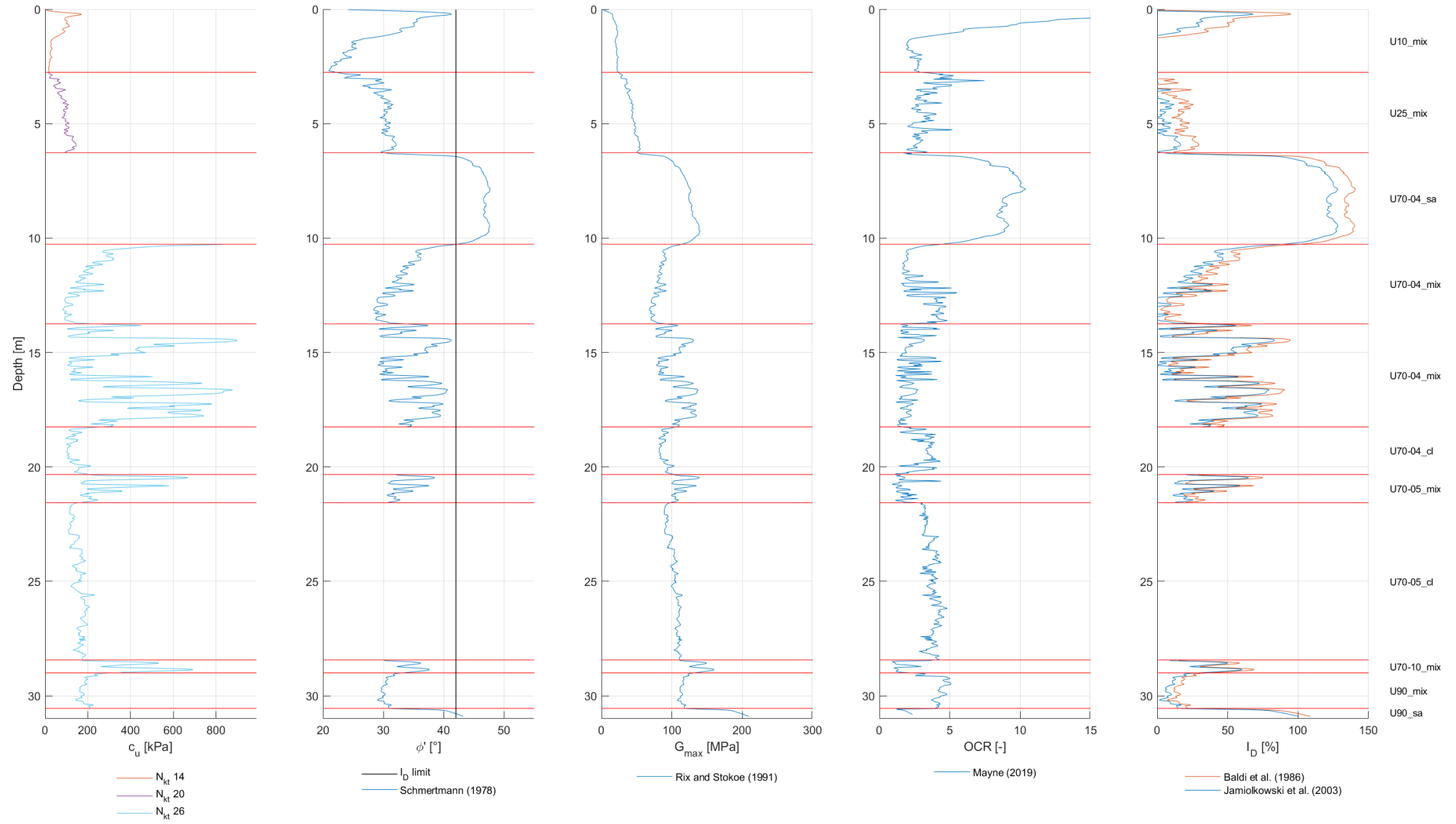
LOC-1104

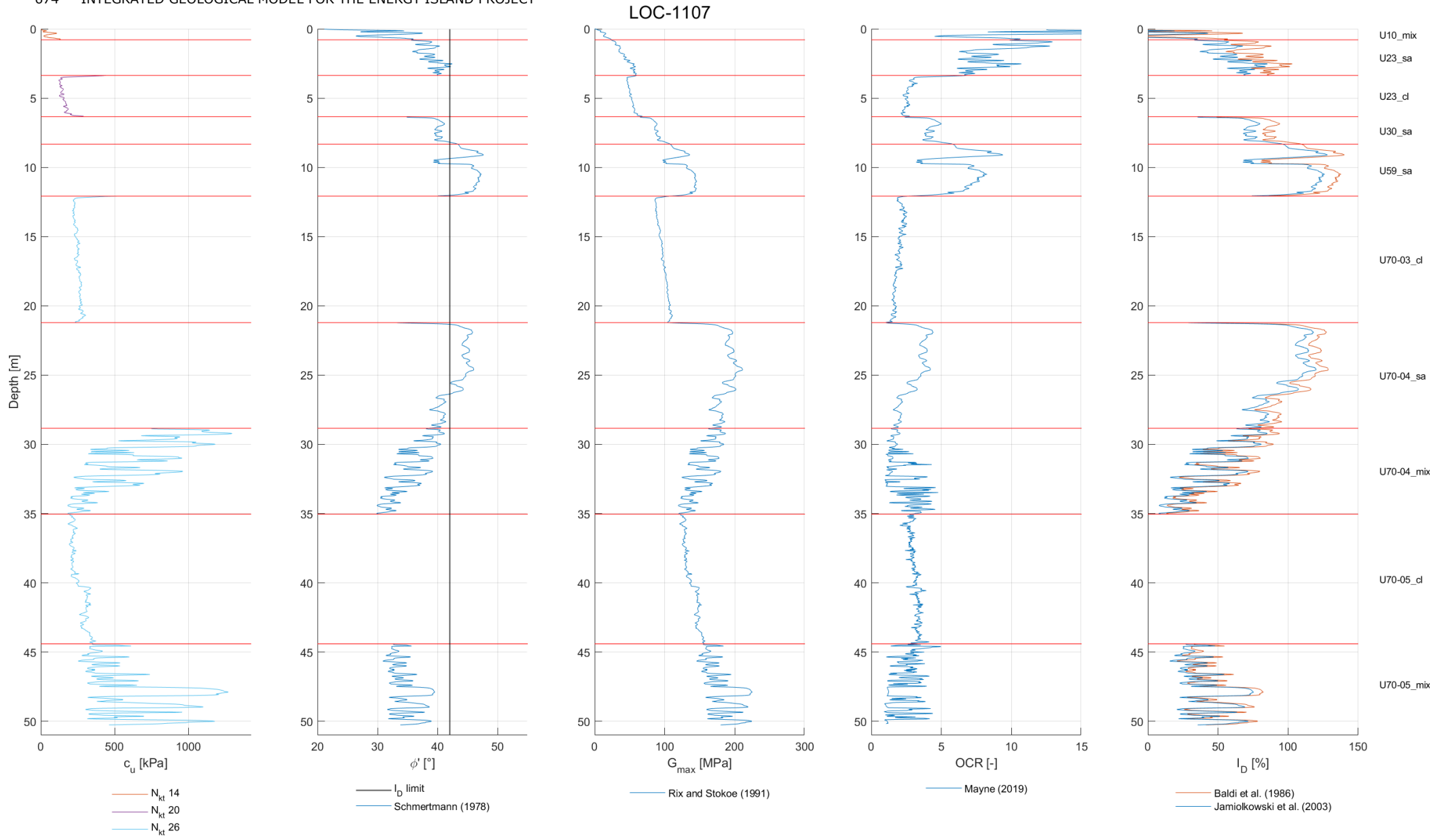




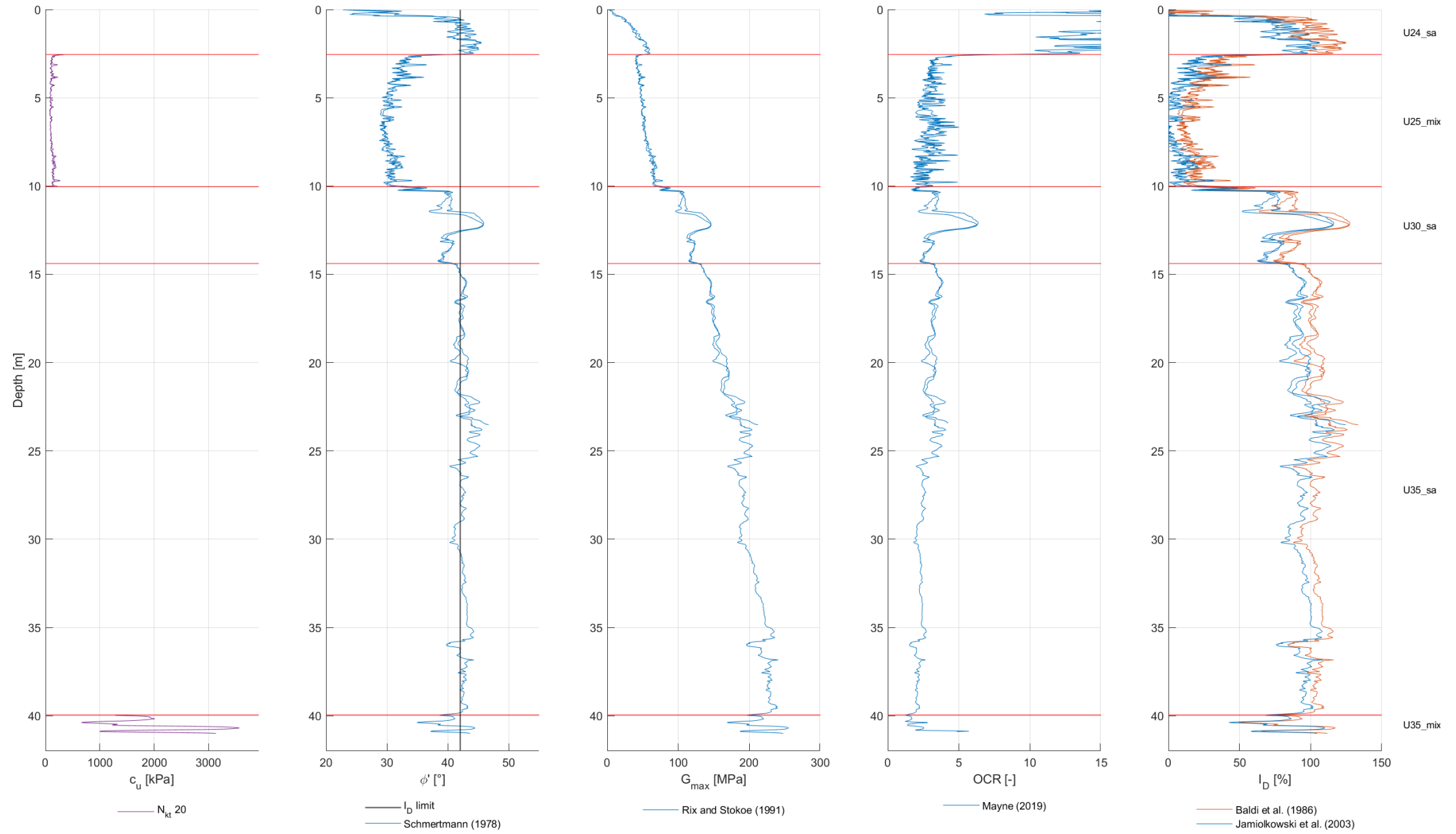
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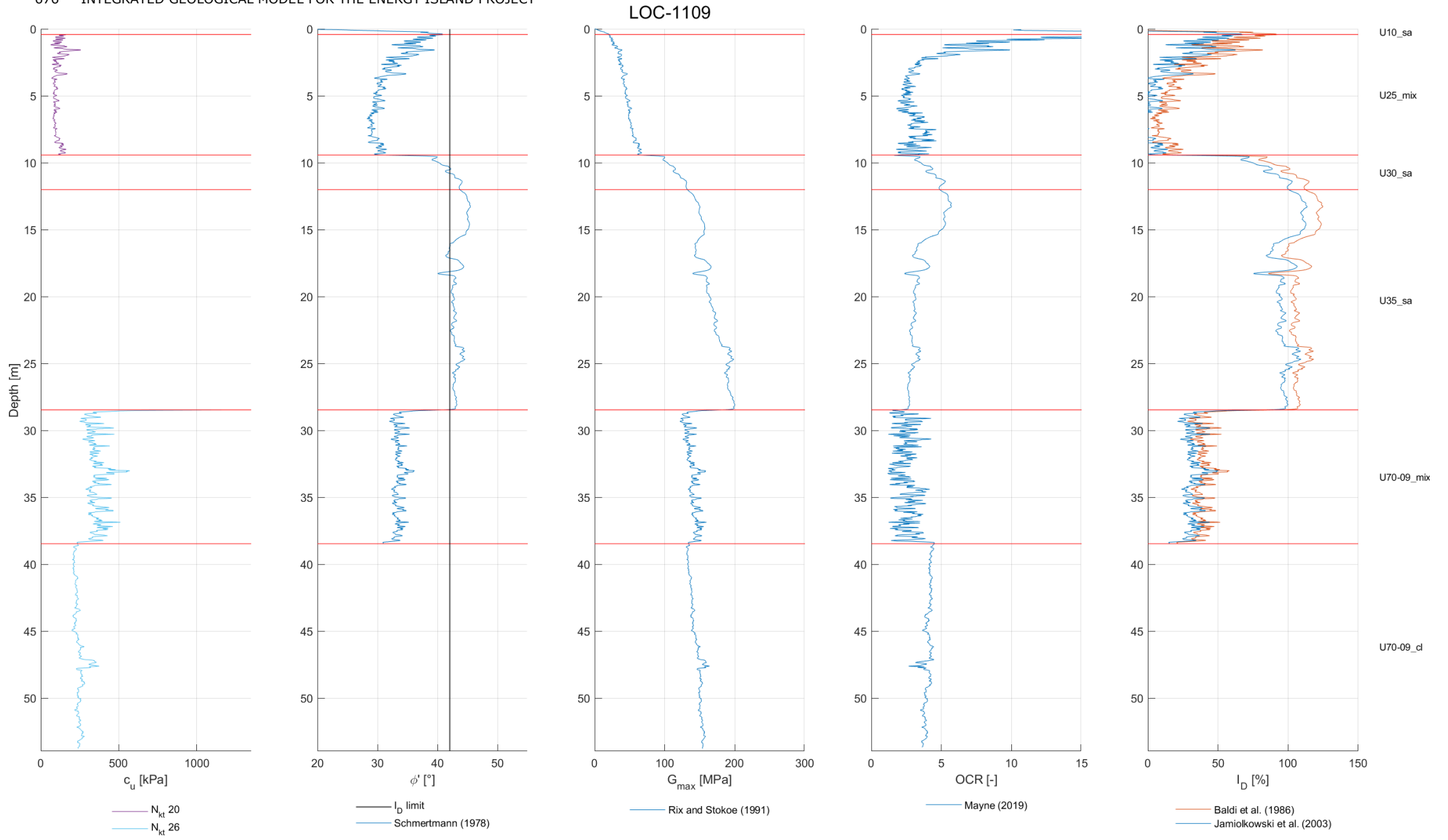
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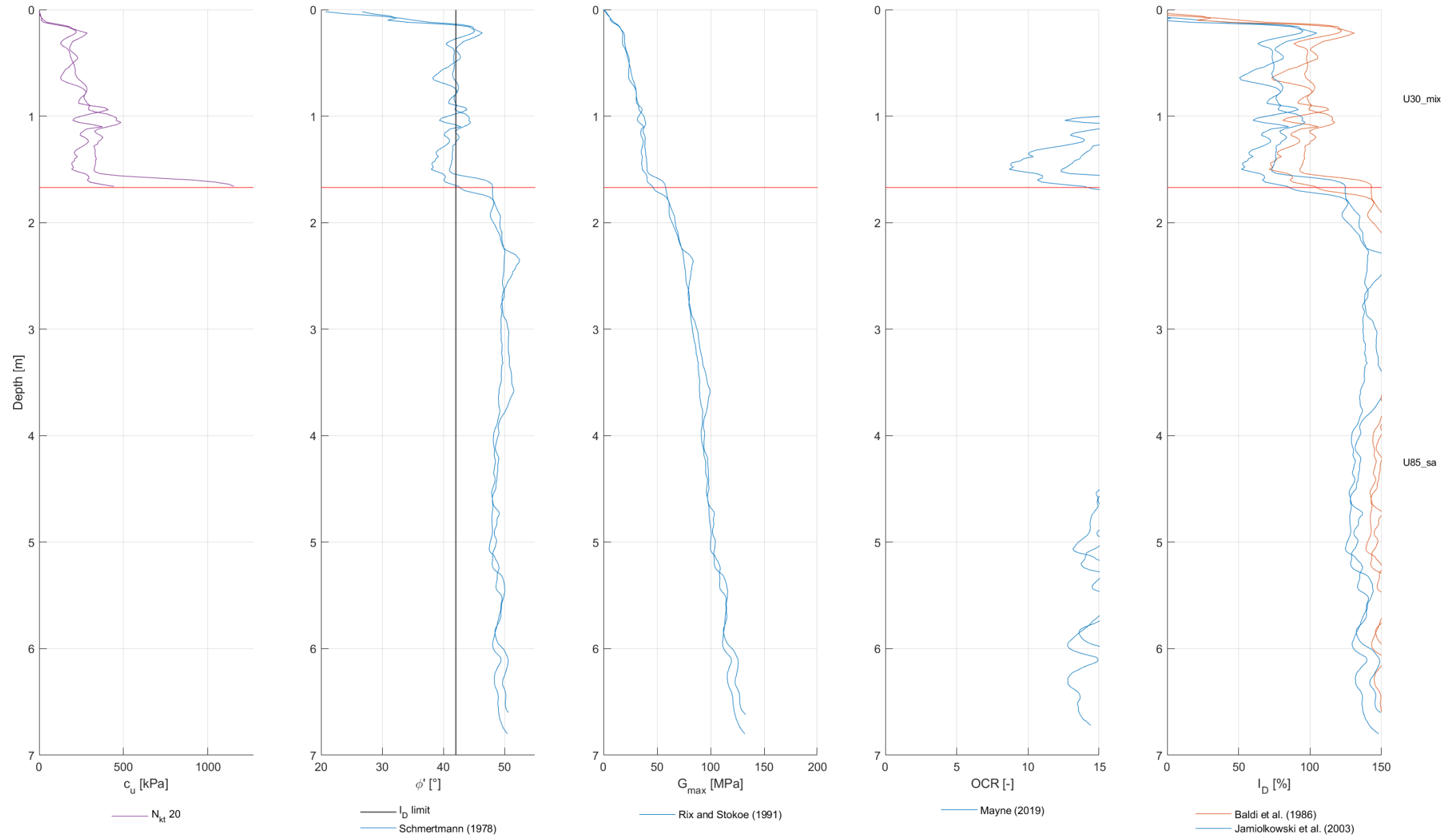


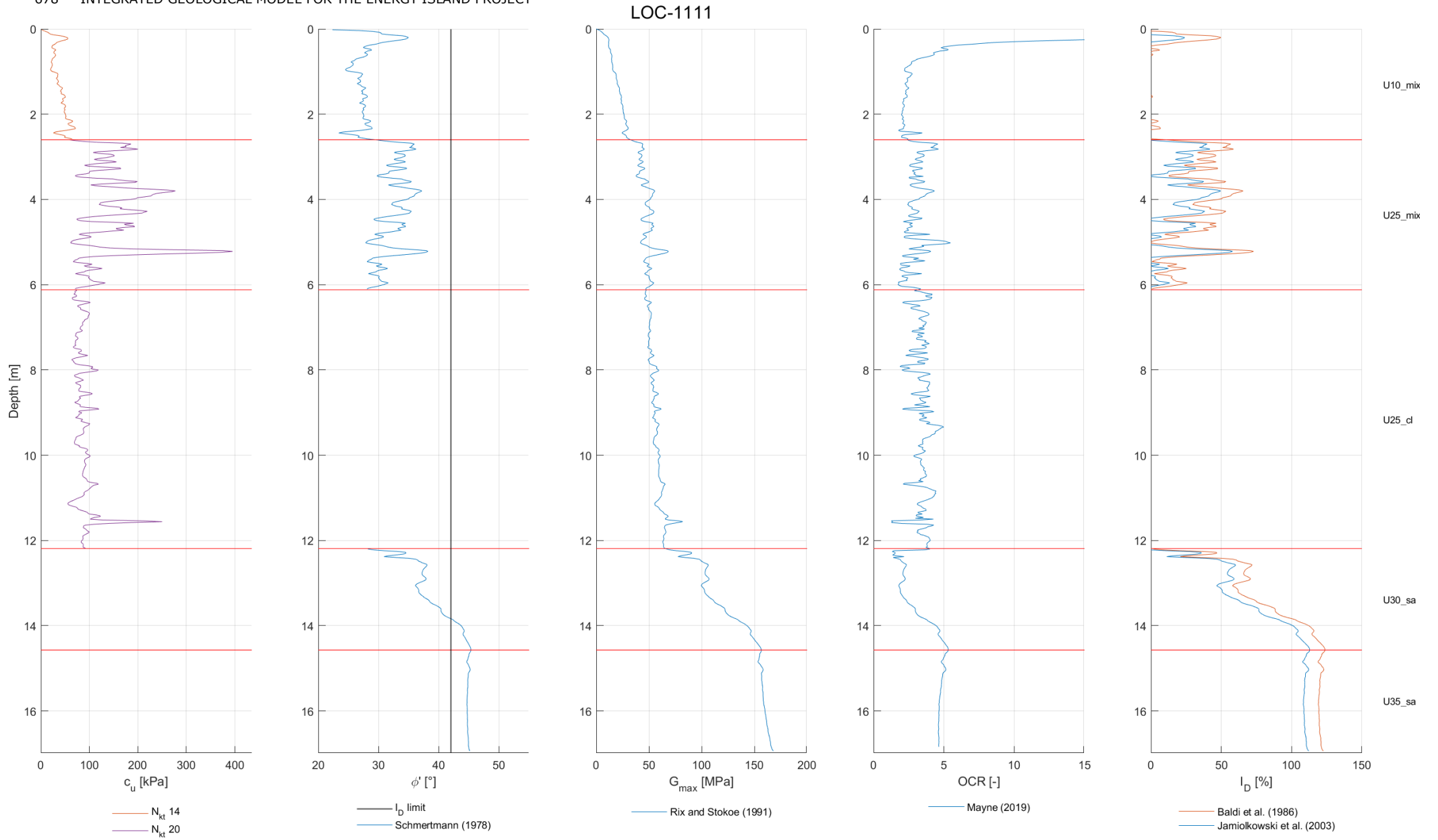
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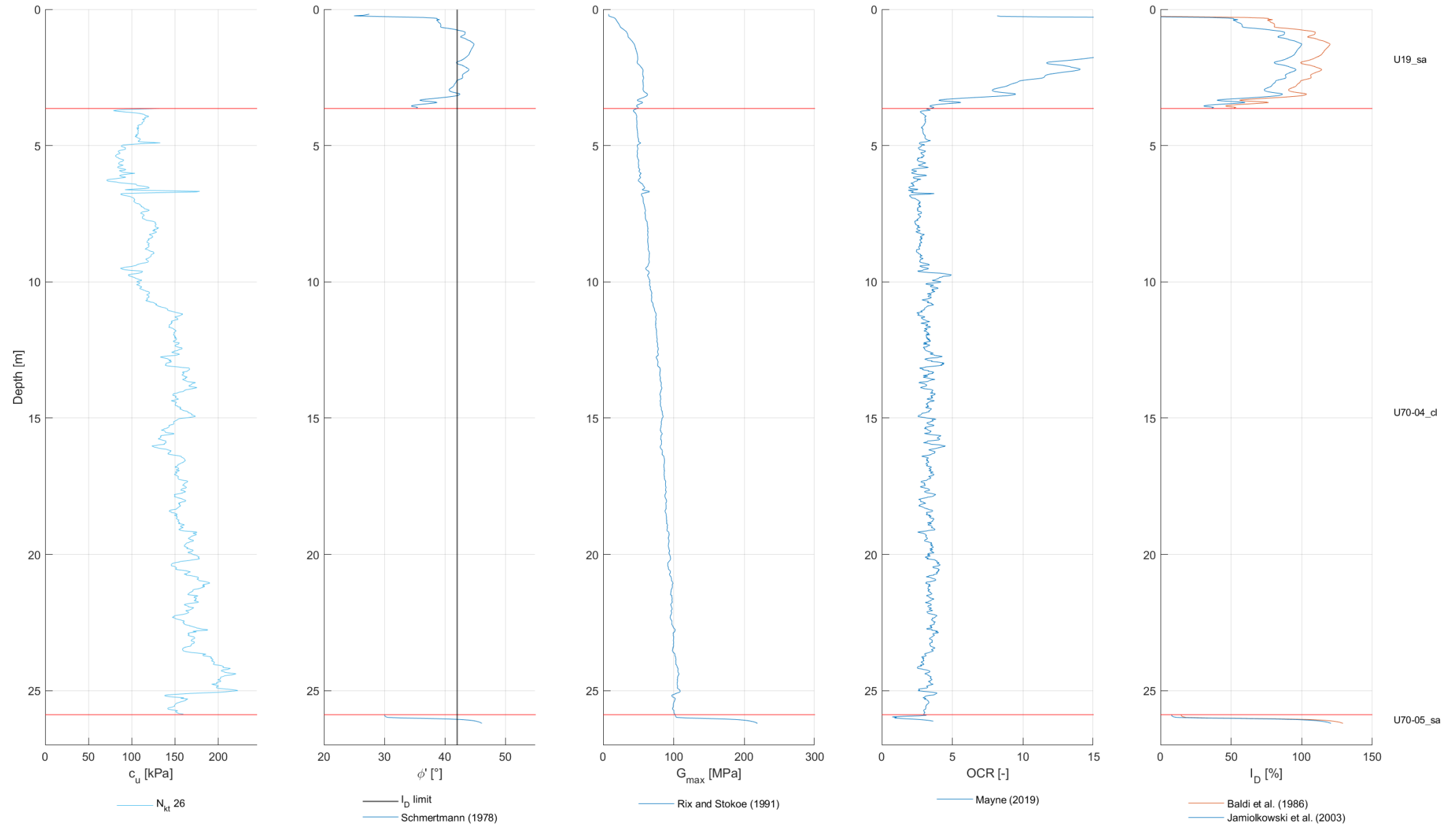


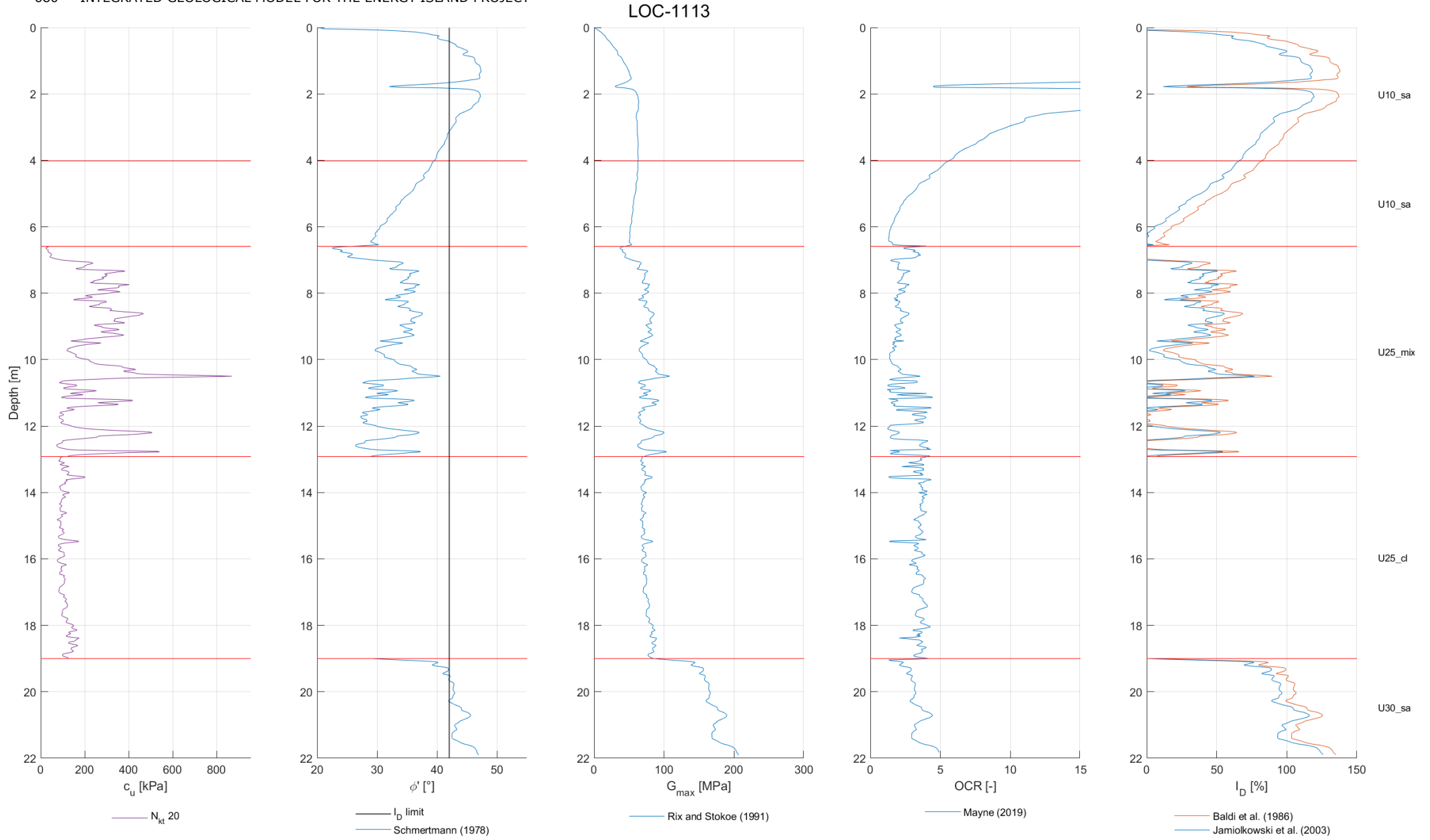
LOC-1110



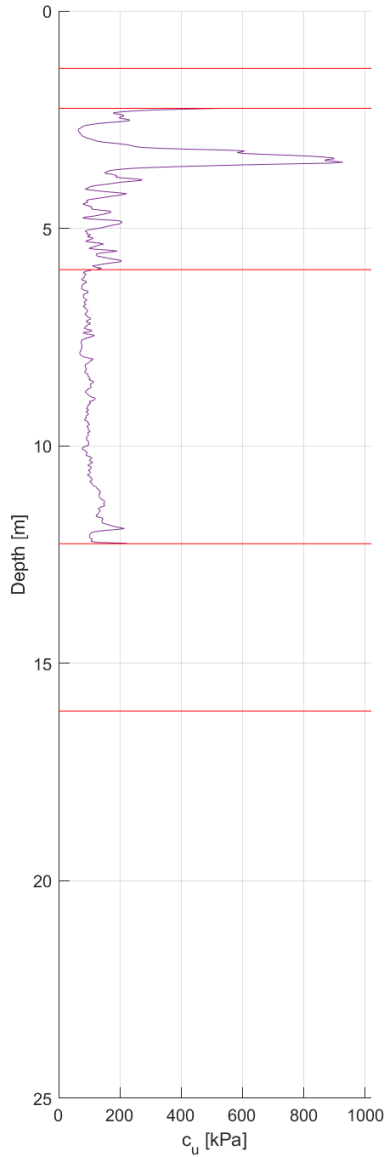


LOC-1112

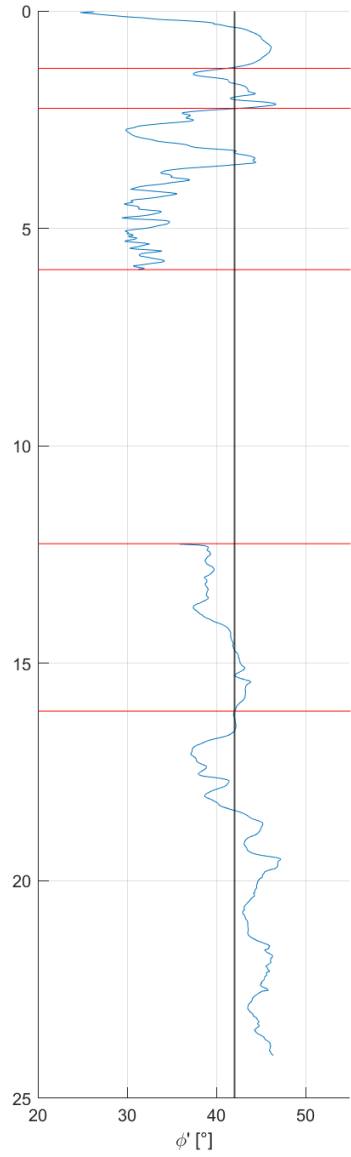




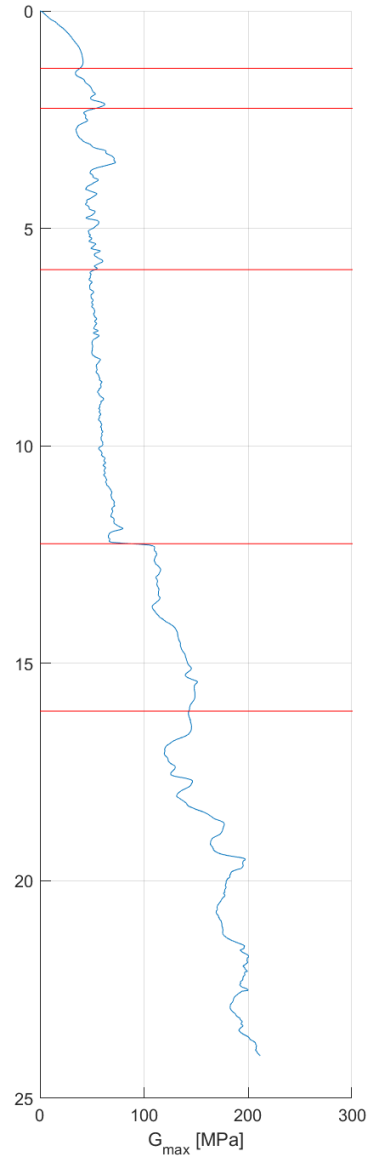
LOC-1114



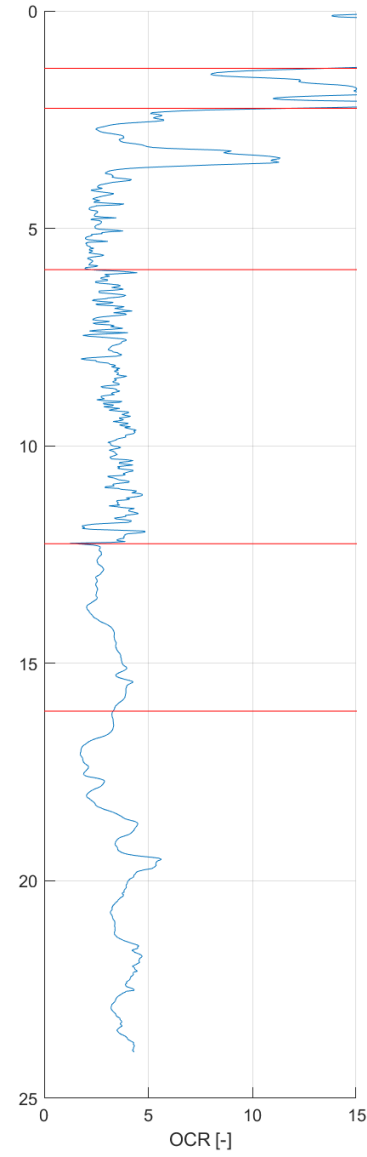
$N_{kt} 20$



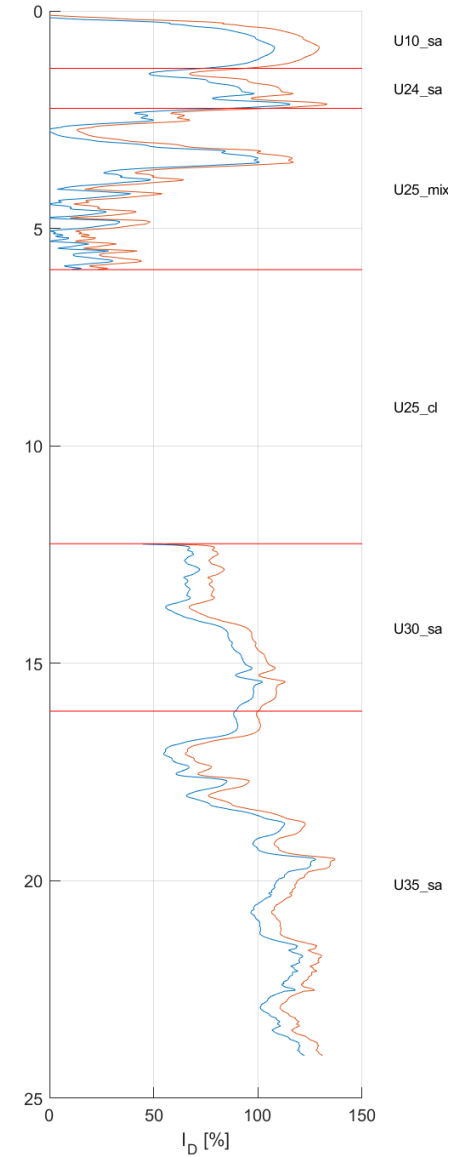
I_D limit
Schmertmann (1978)



Rix and Stokoe (1991)



Mayne (2019)



Baldi et al. (1986)
Jamiolkowski et al. (2003)

U10_sa

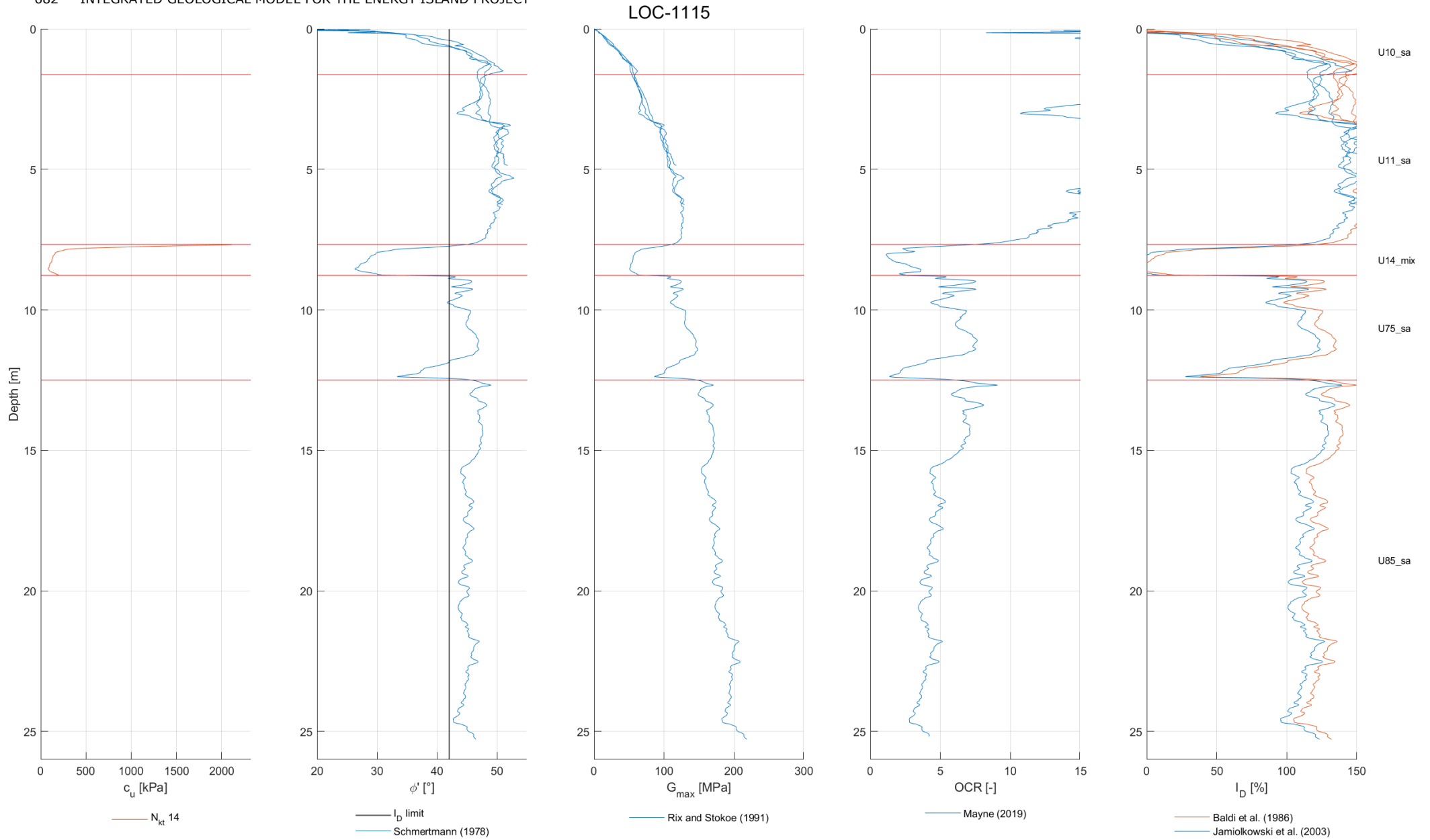
U24_sa

U25_mix

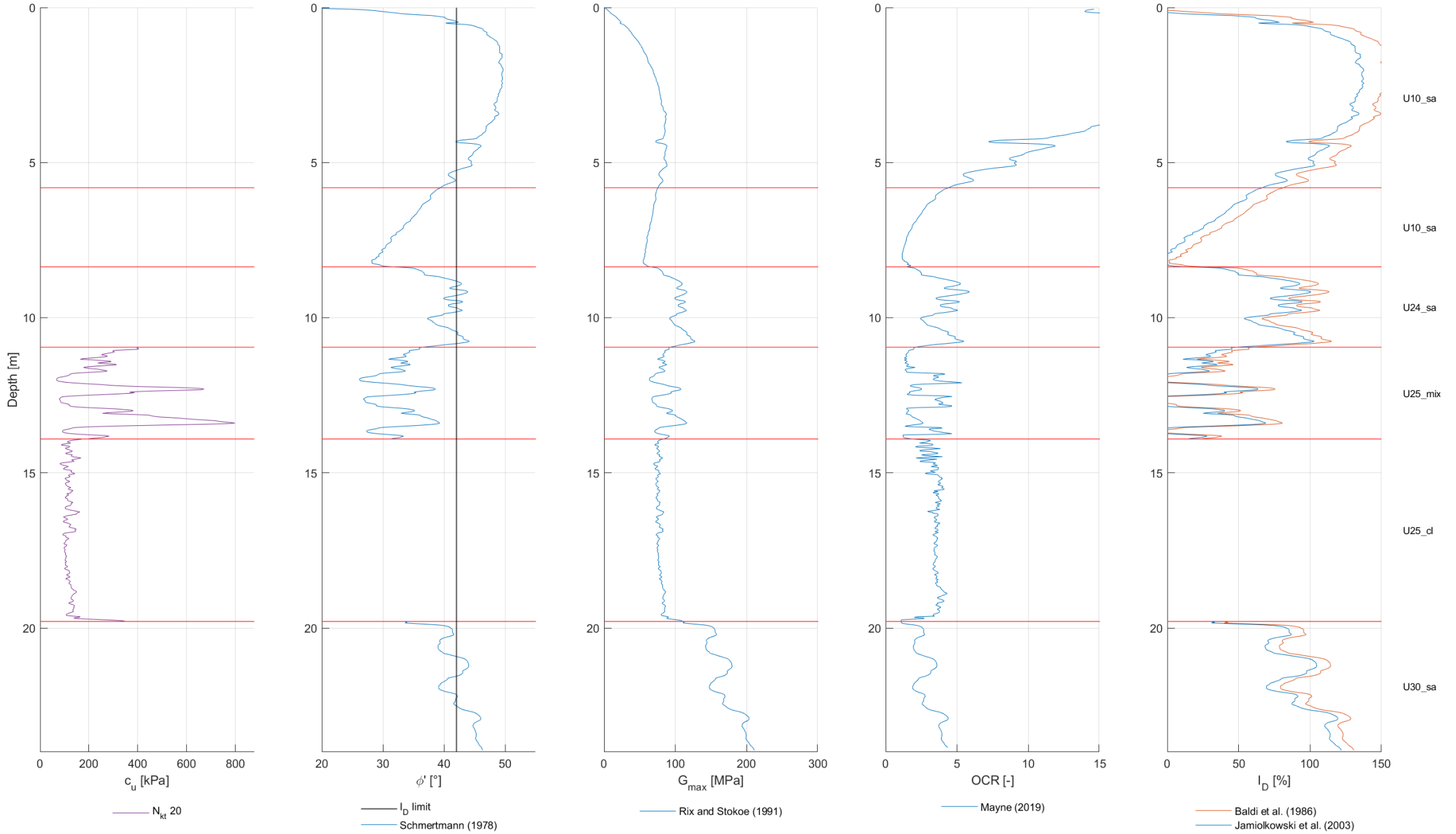
U25_cl

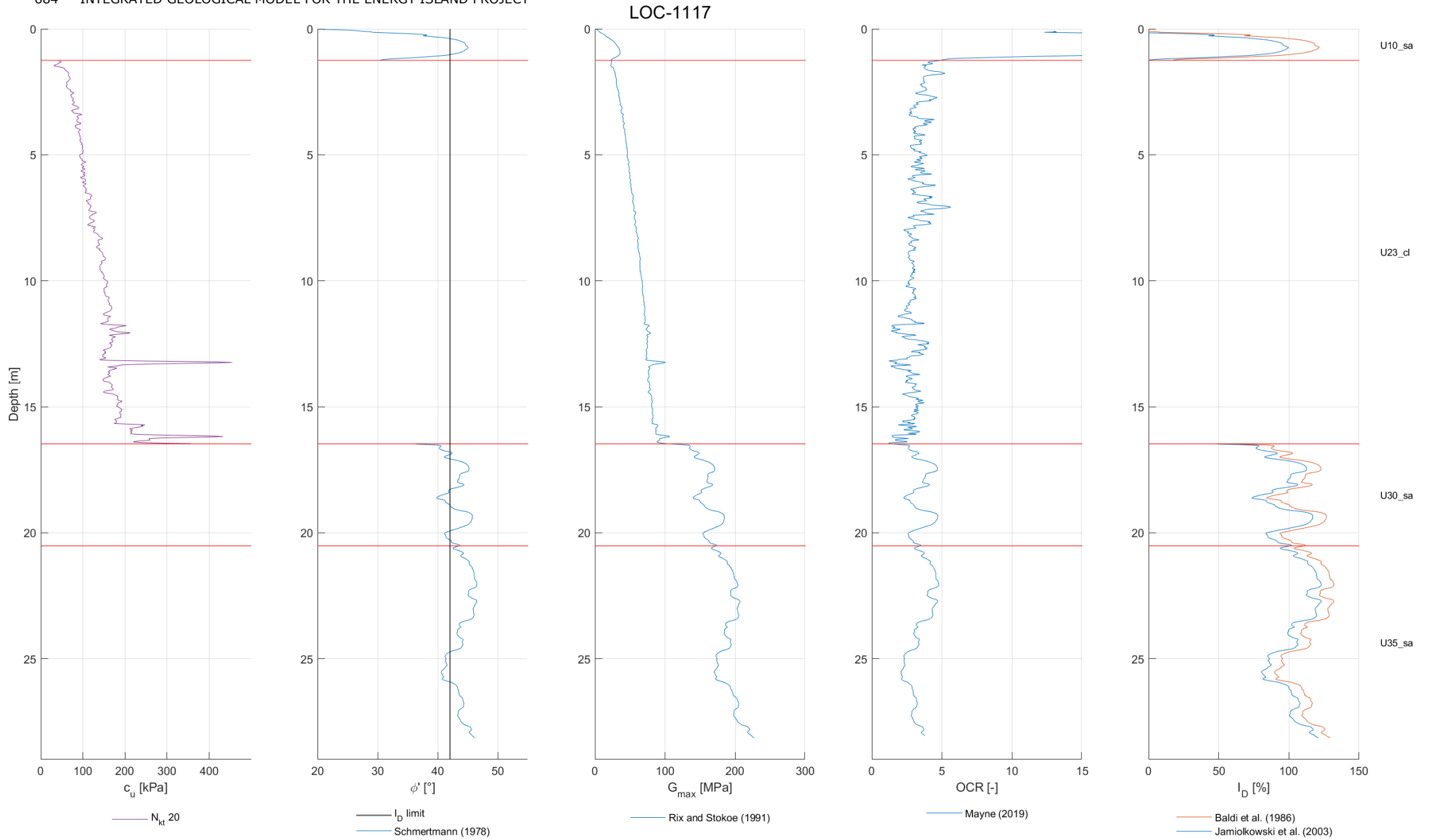
U30_sa

U35_sa

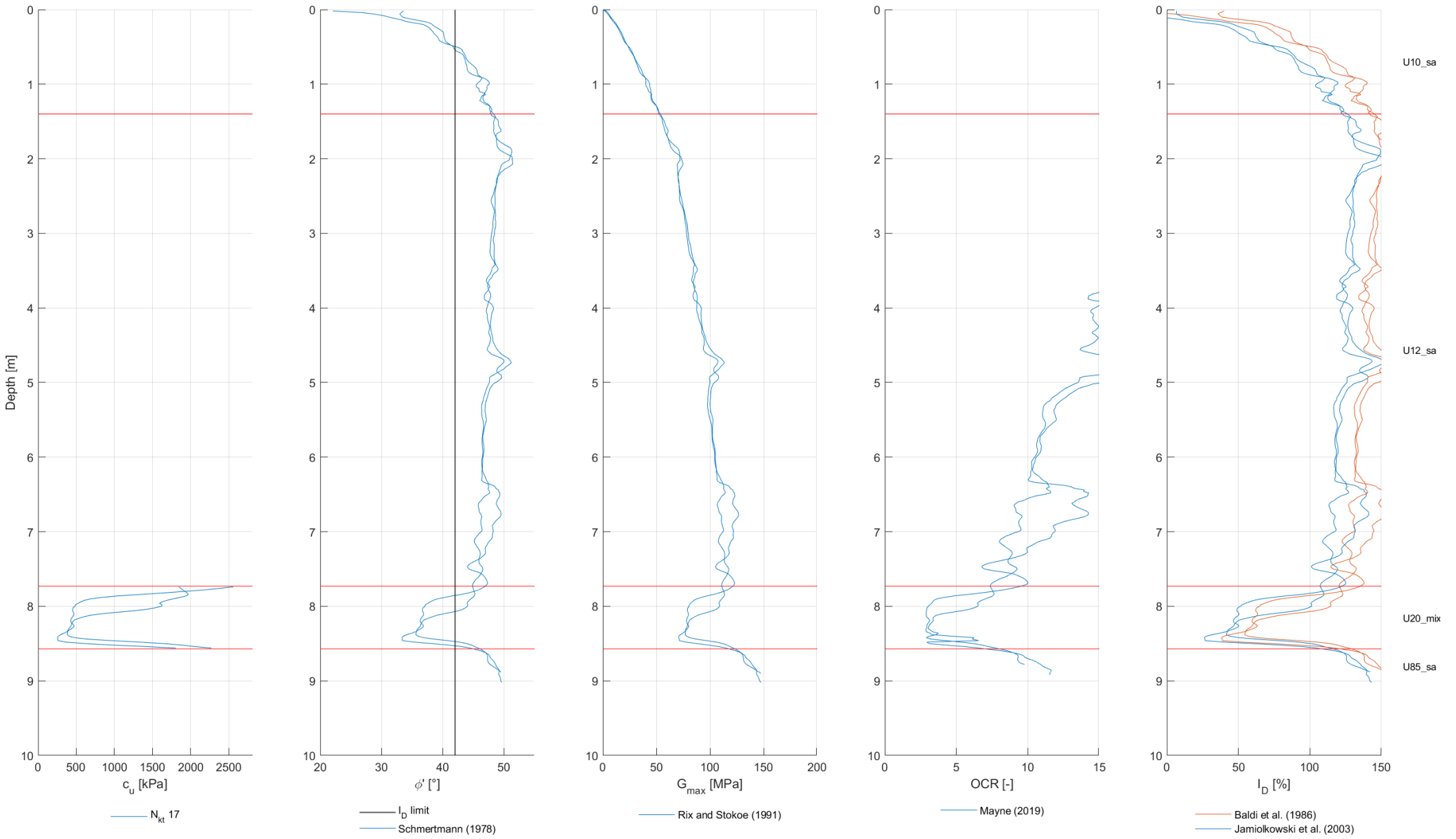


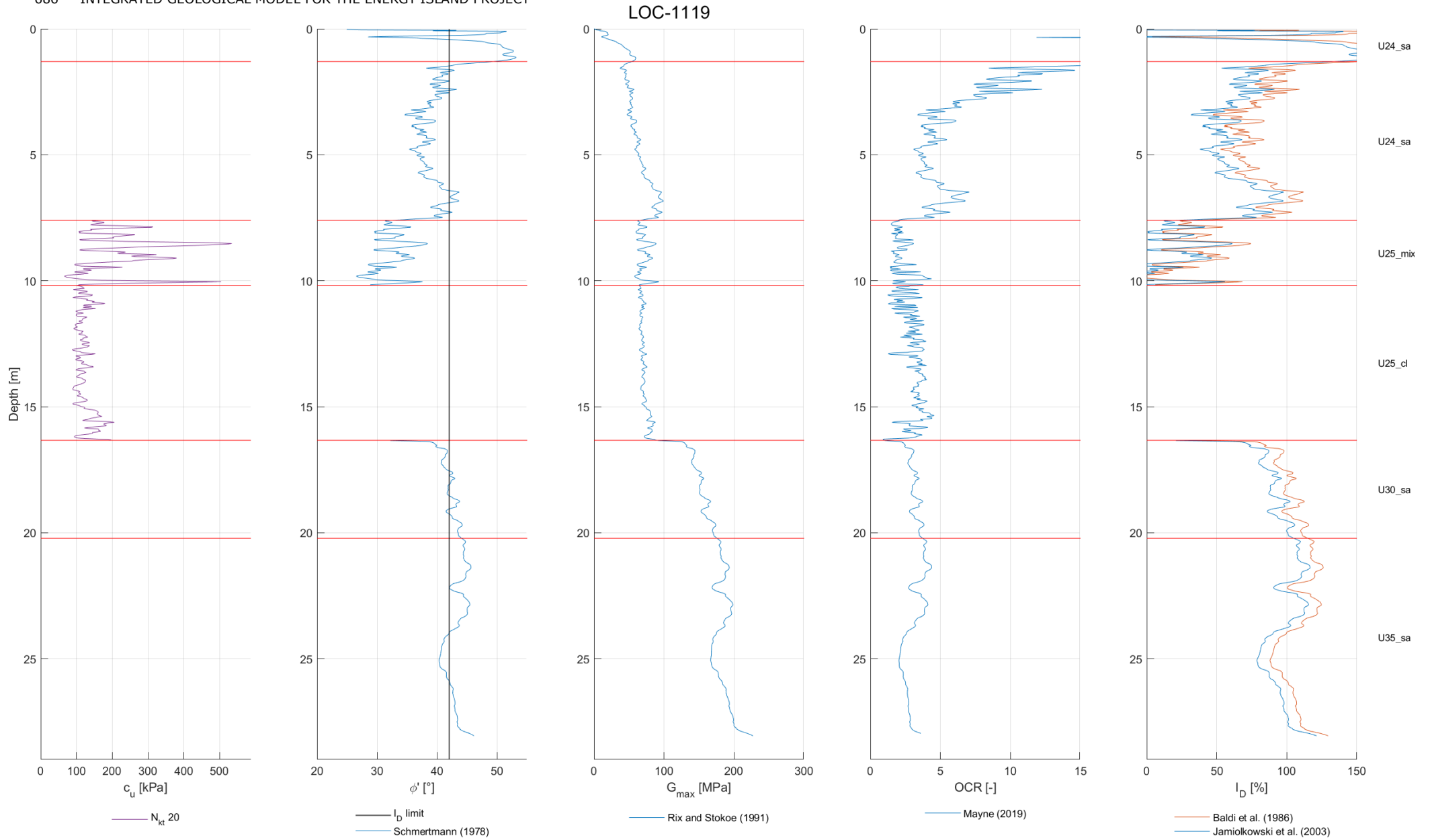
LOC-1116



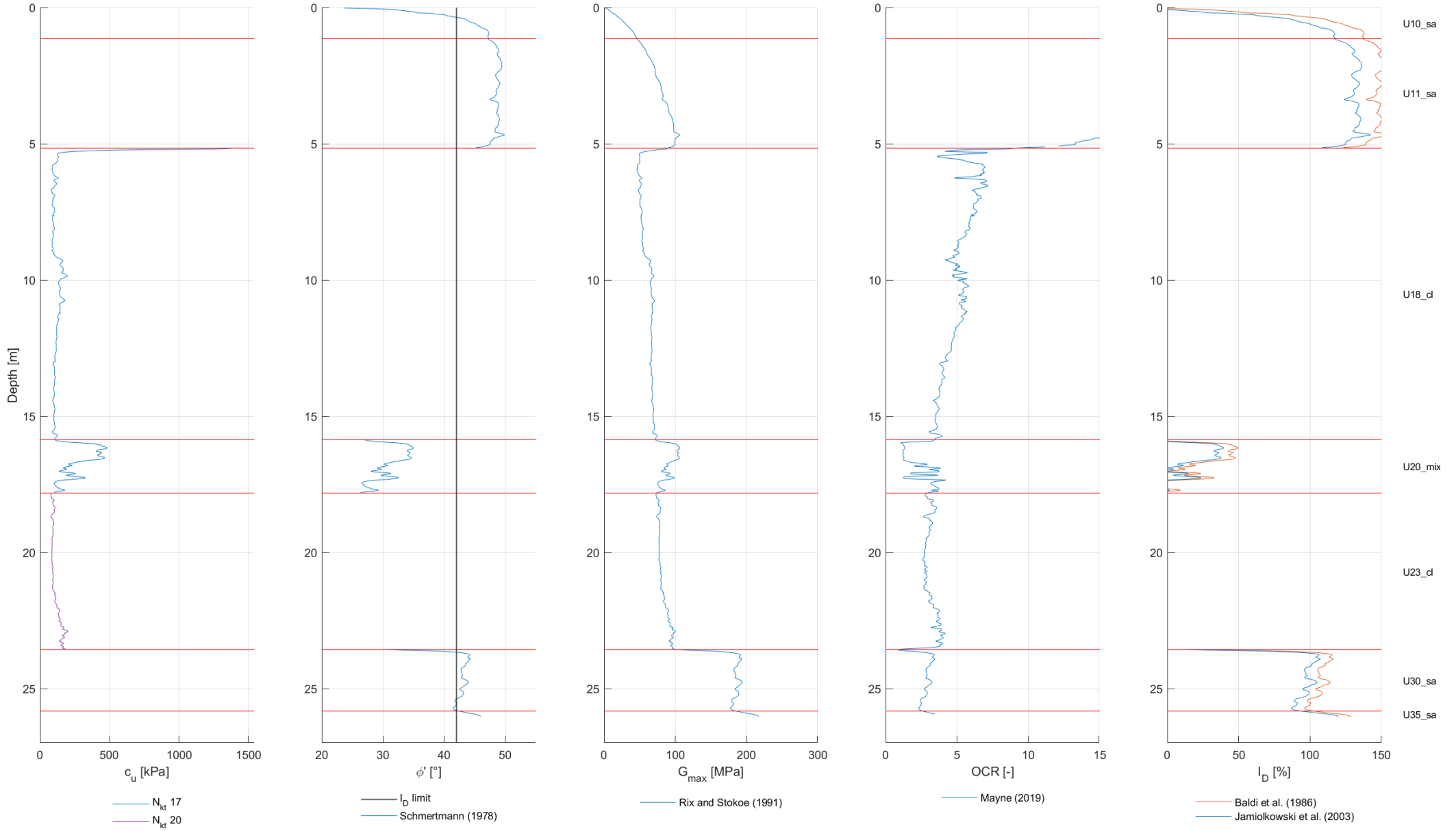


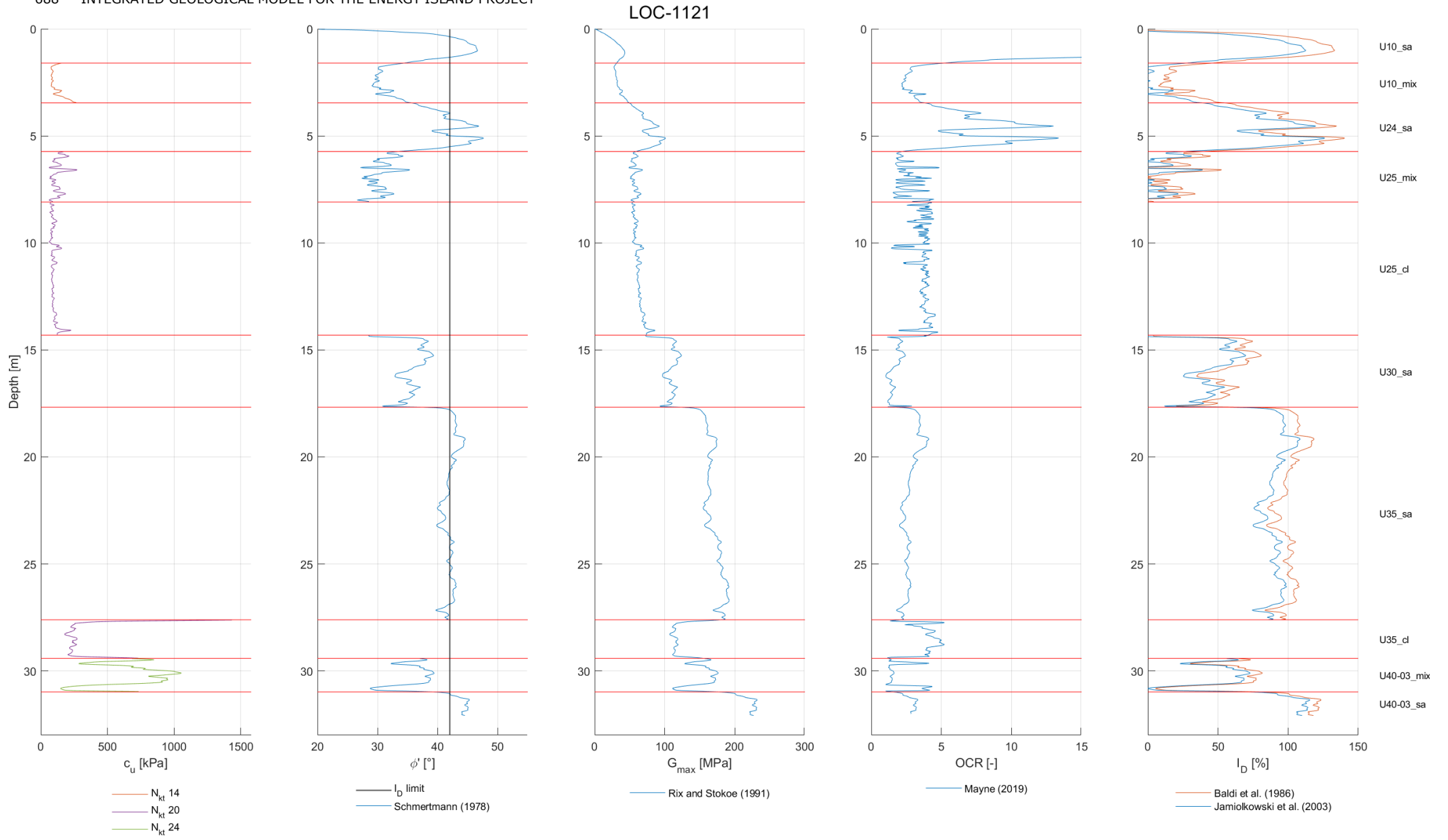
LOC-1118

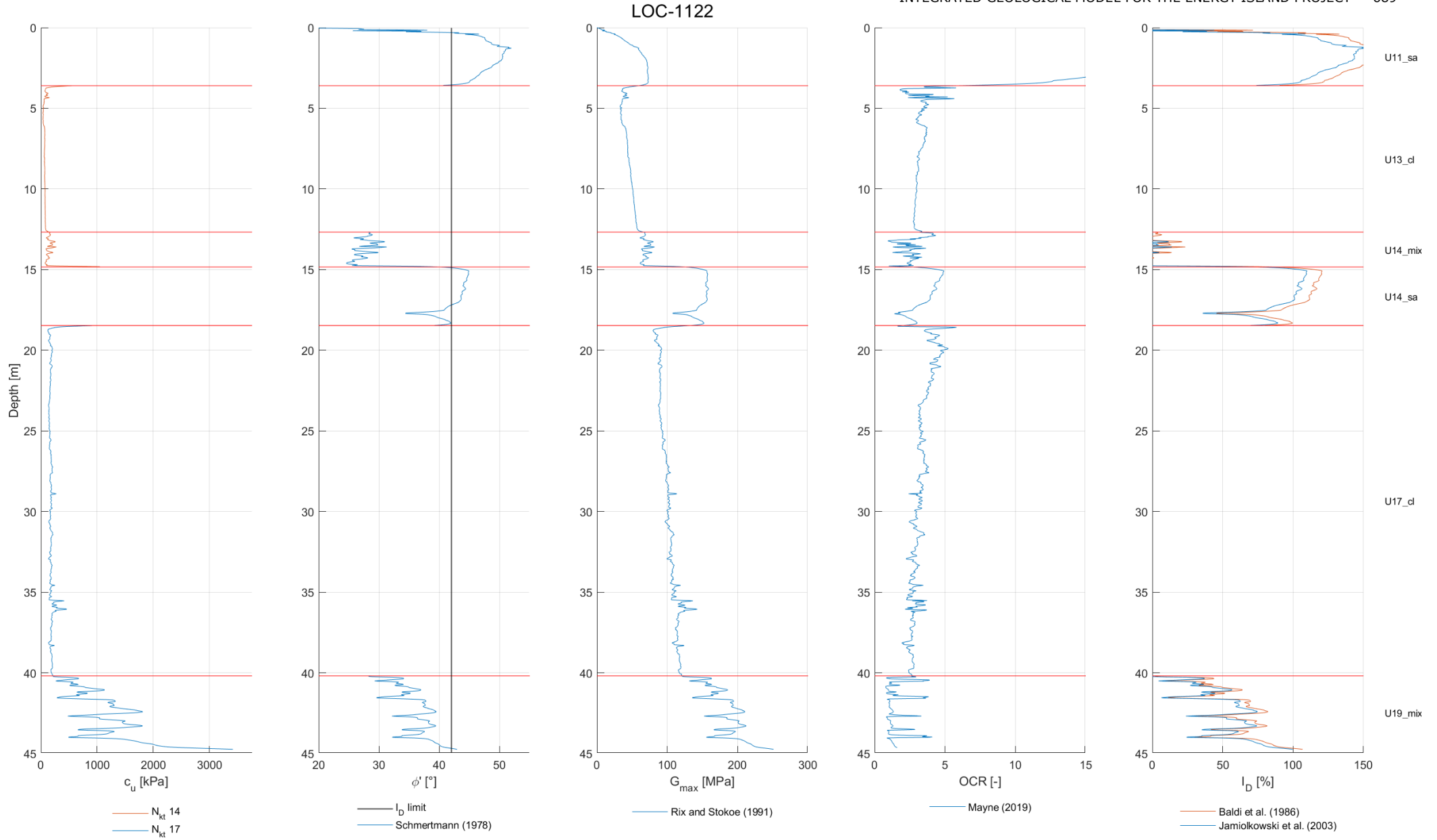


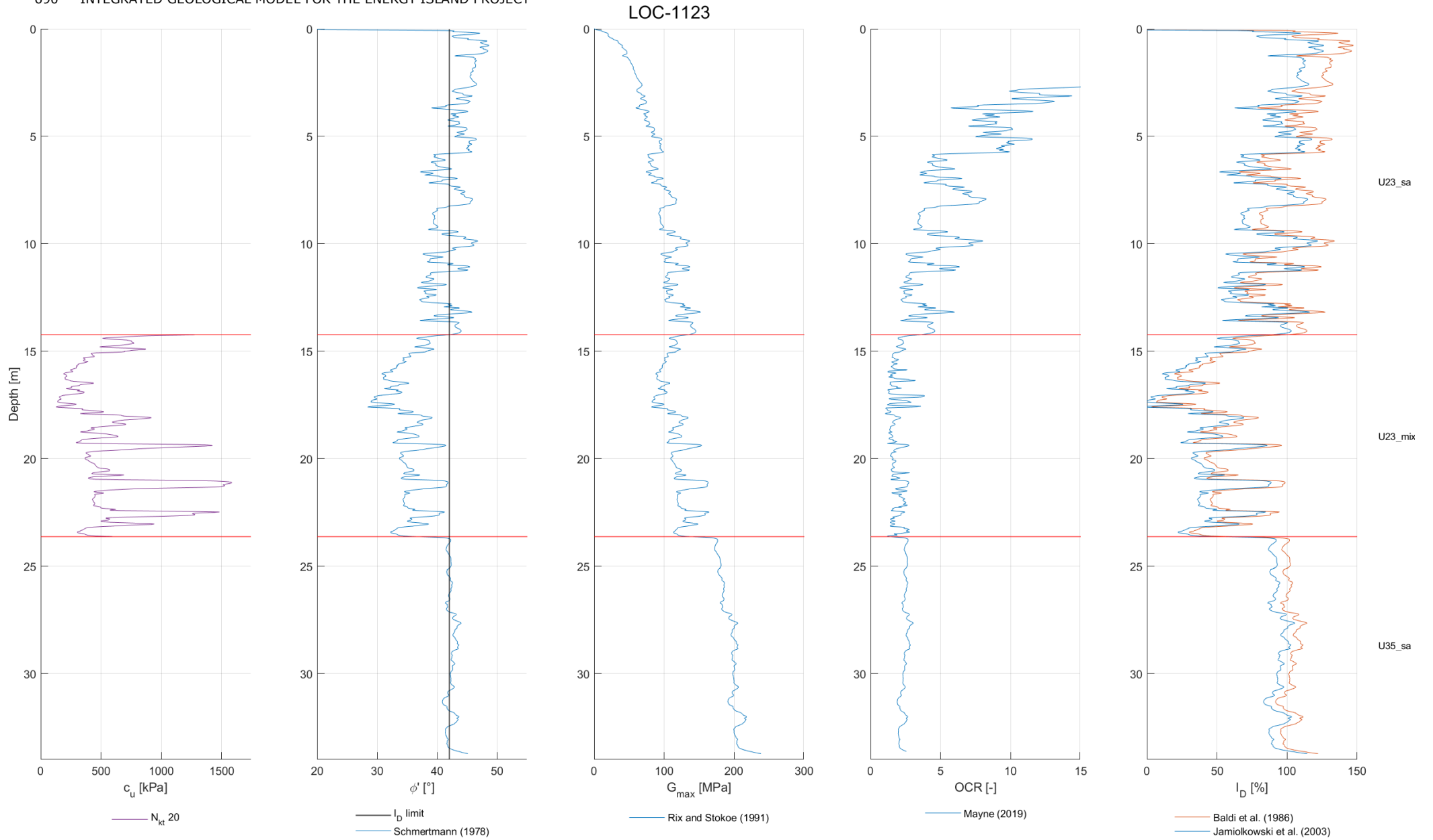


LOC-1120

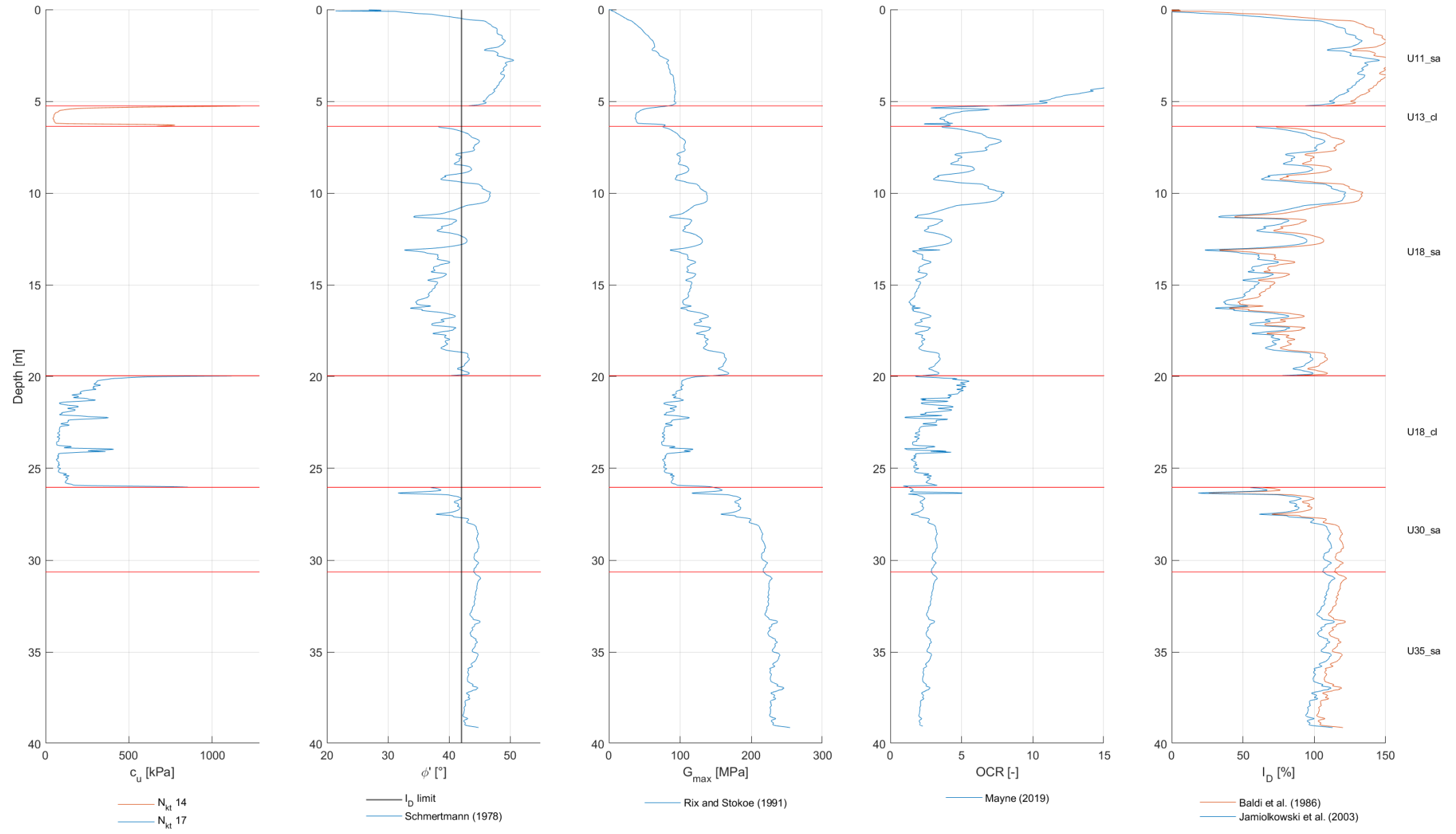


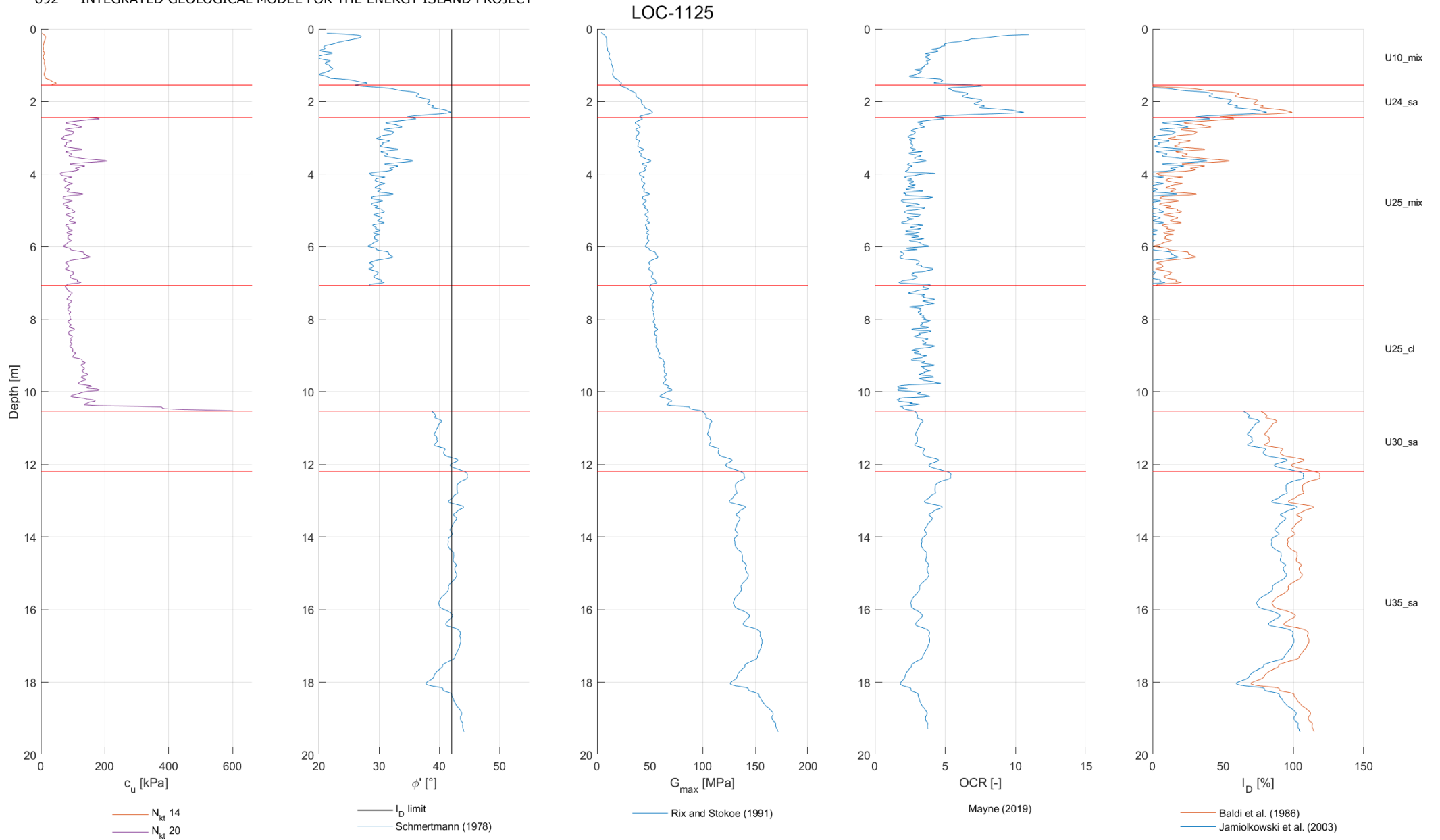




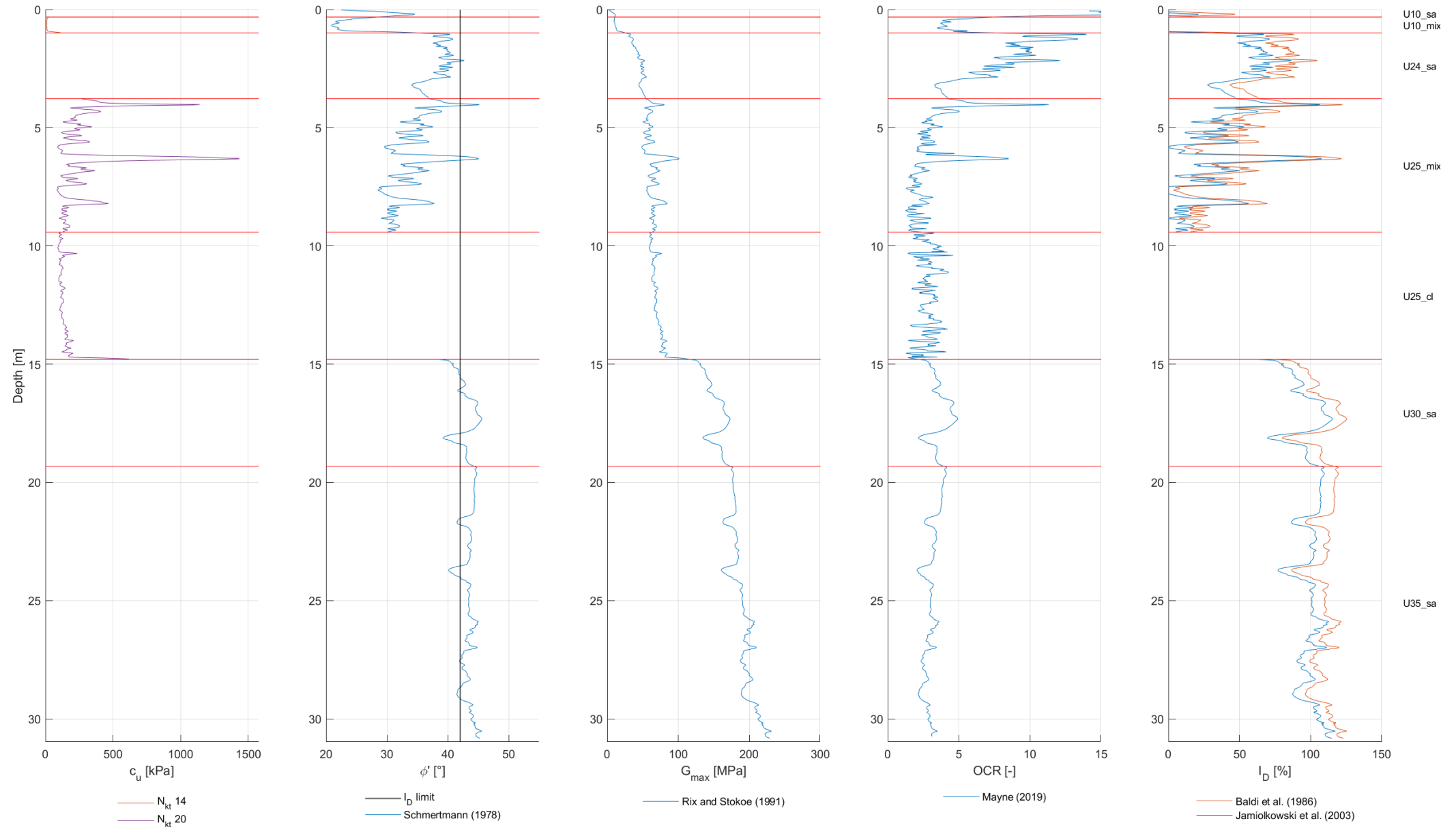


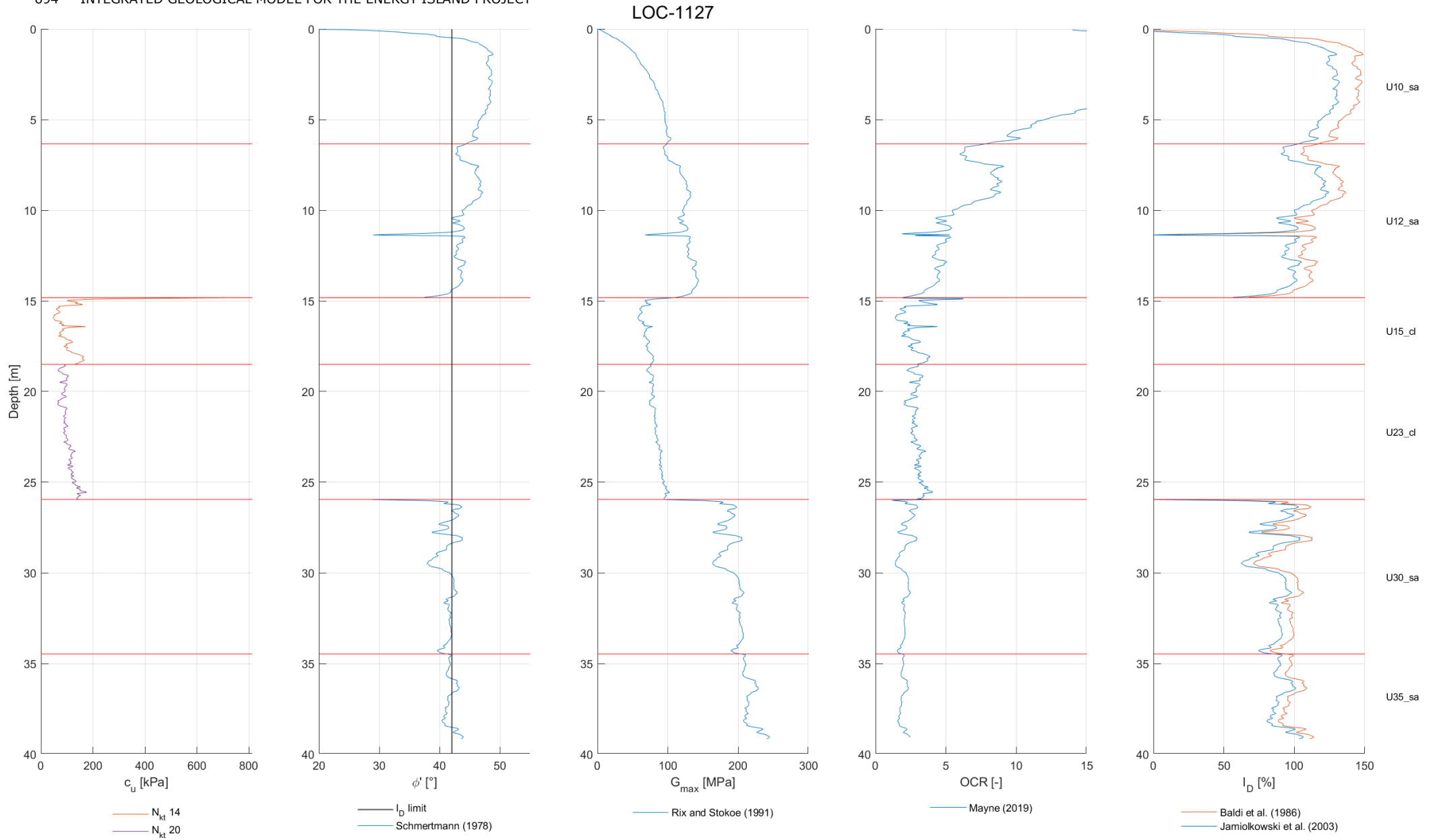
LOC-1124





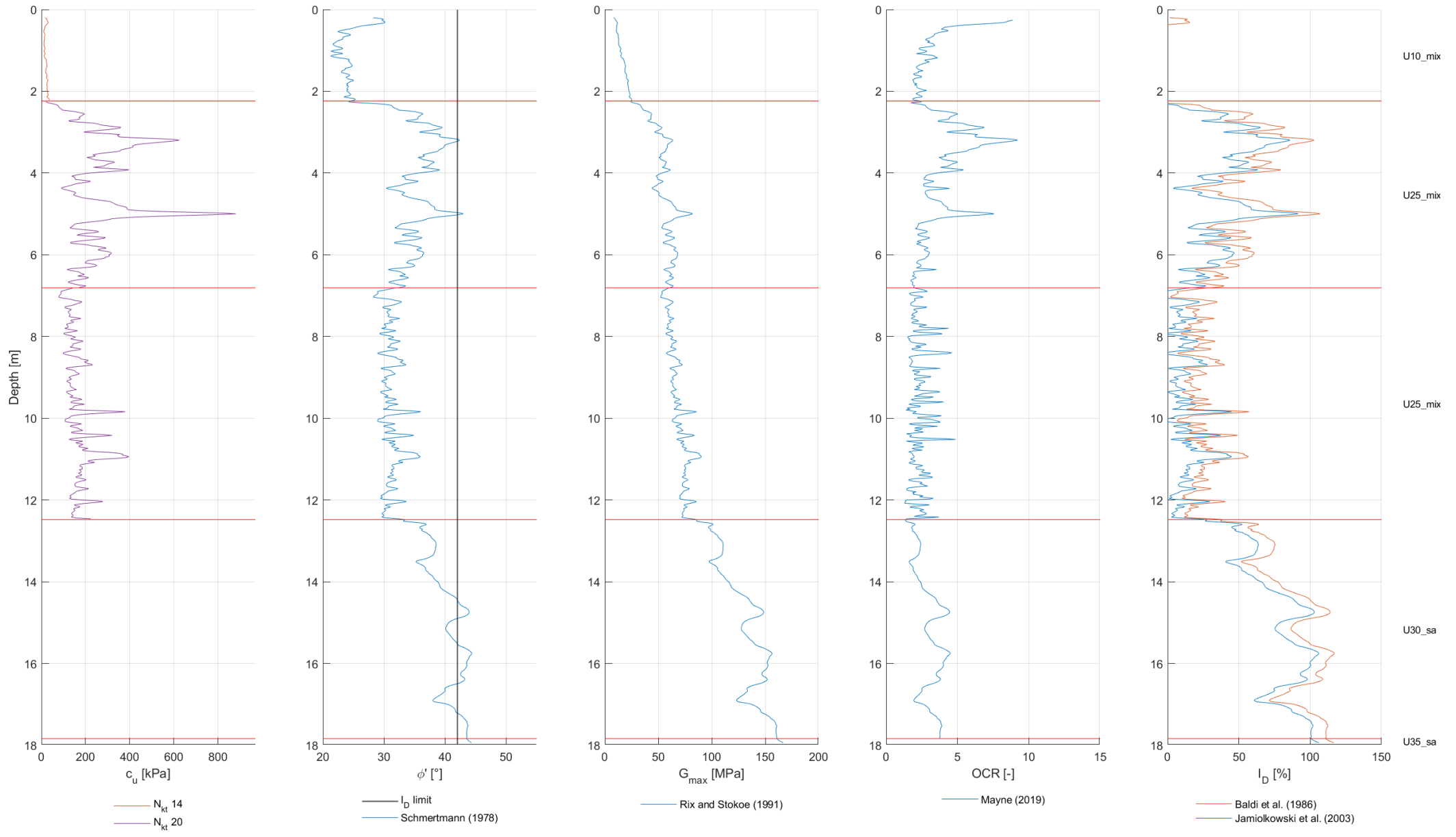
LOC-1126

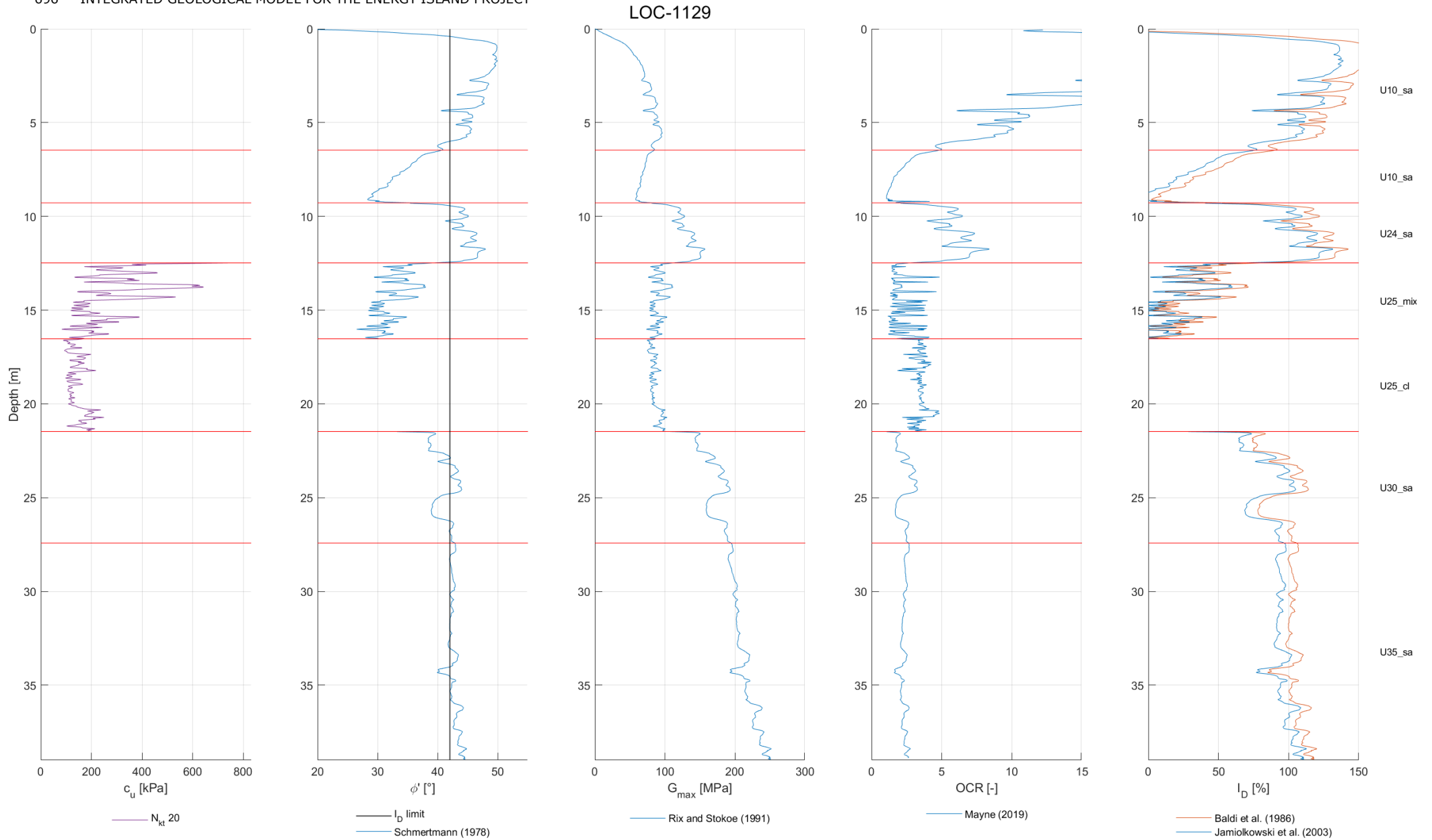




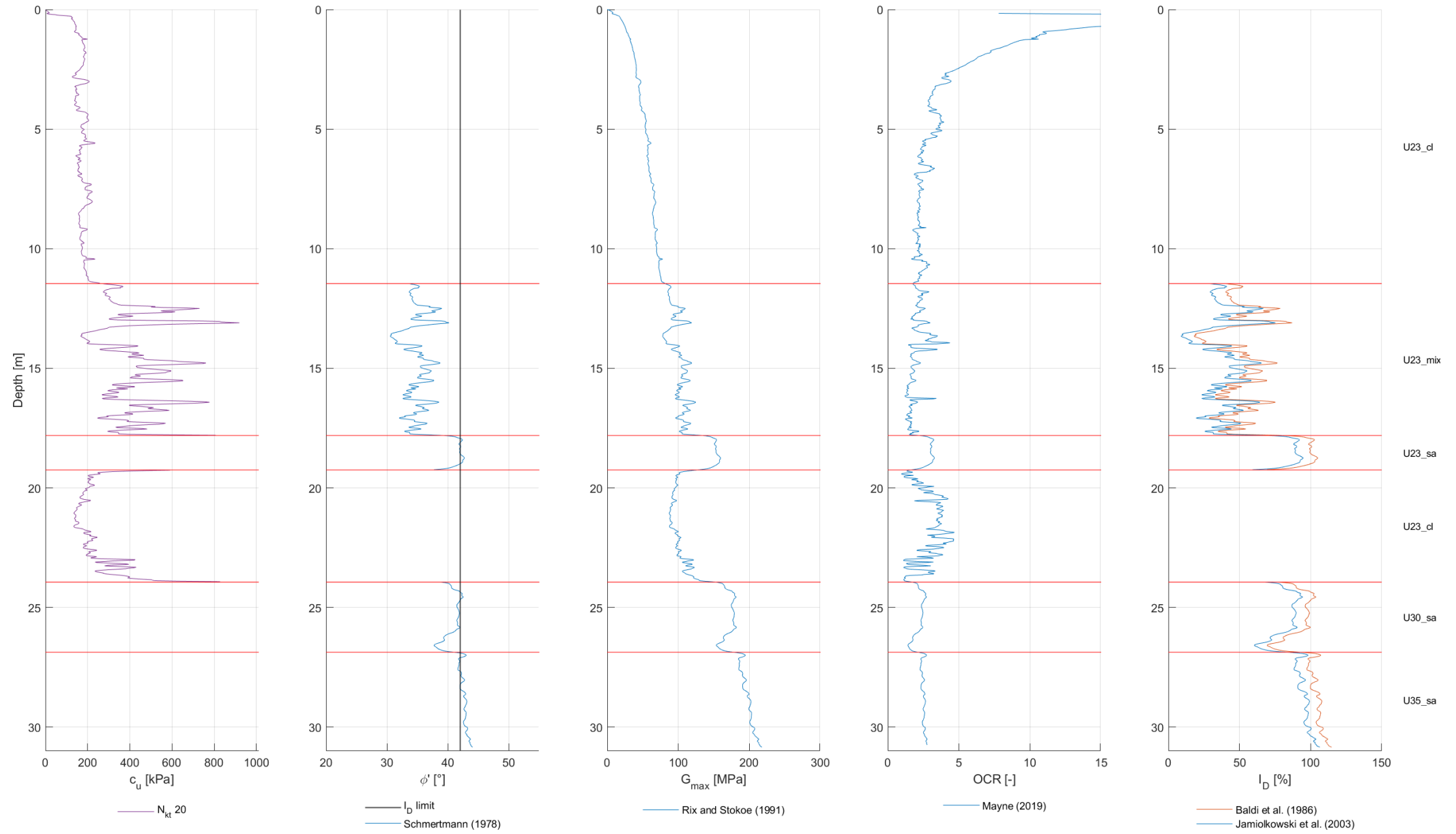
LOC-1128

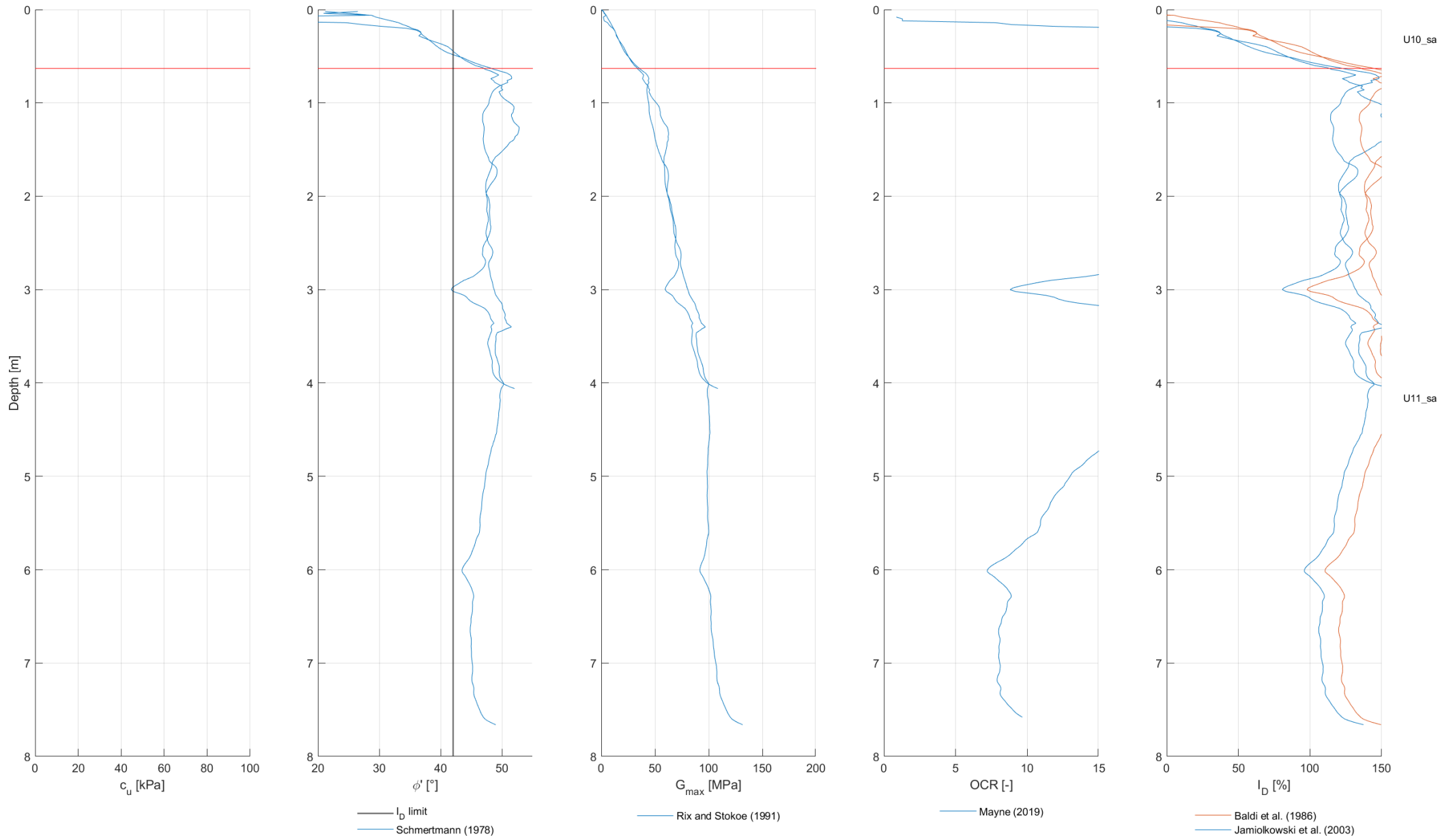
INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT



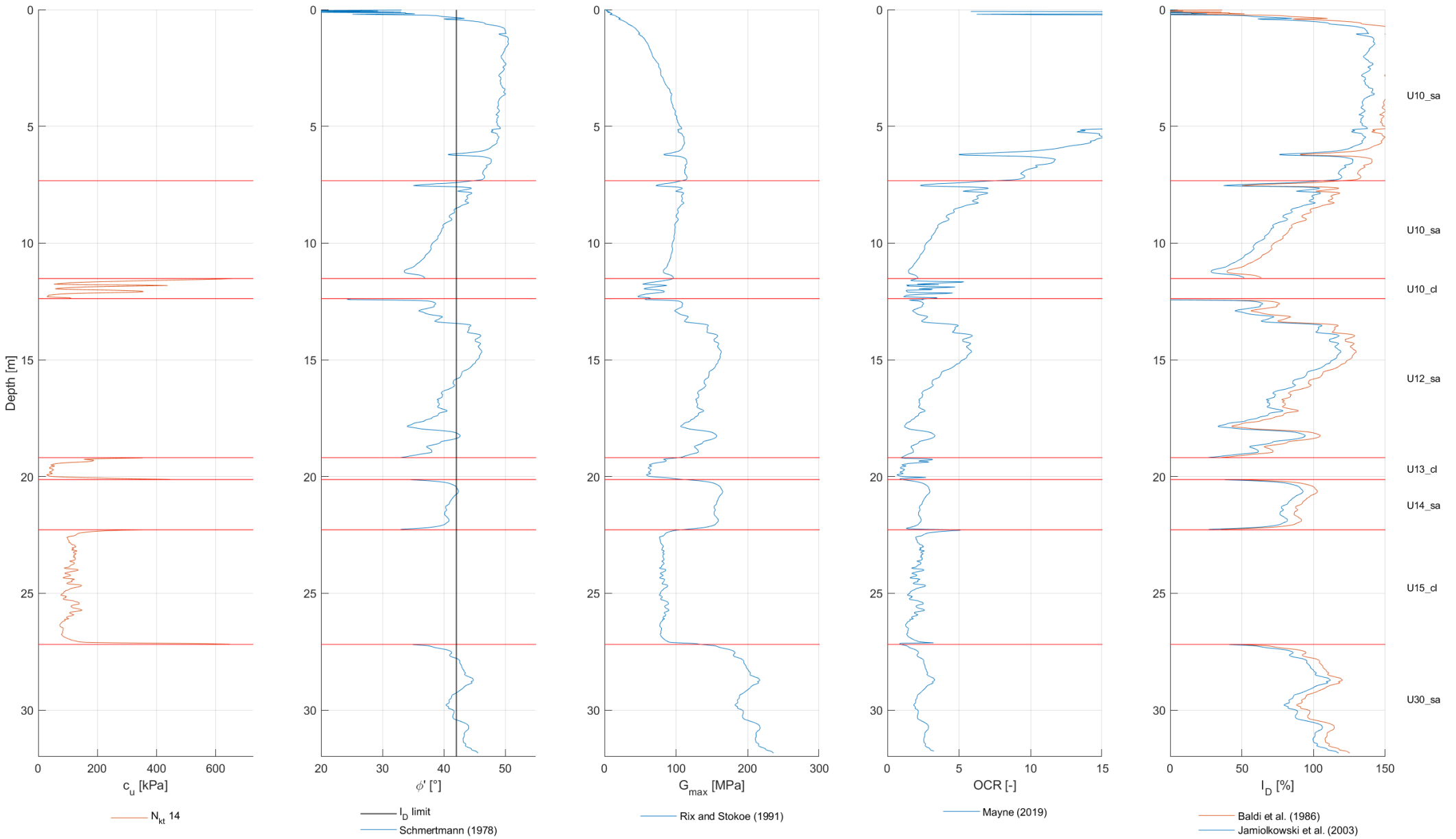


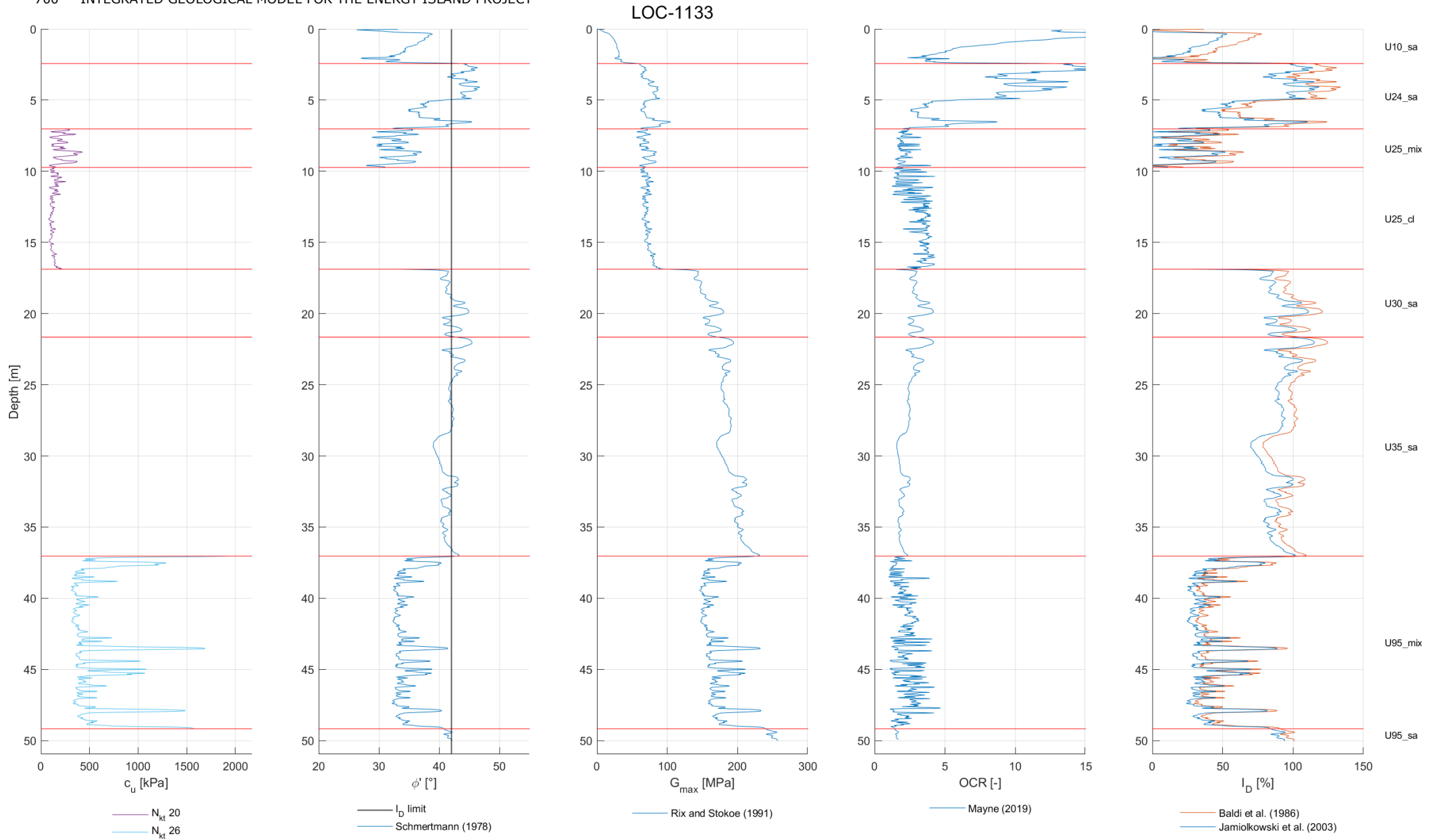
LOC-1130





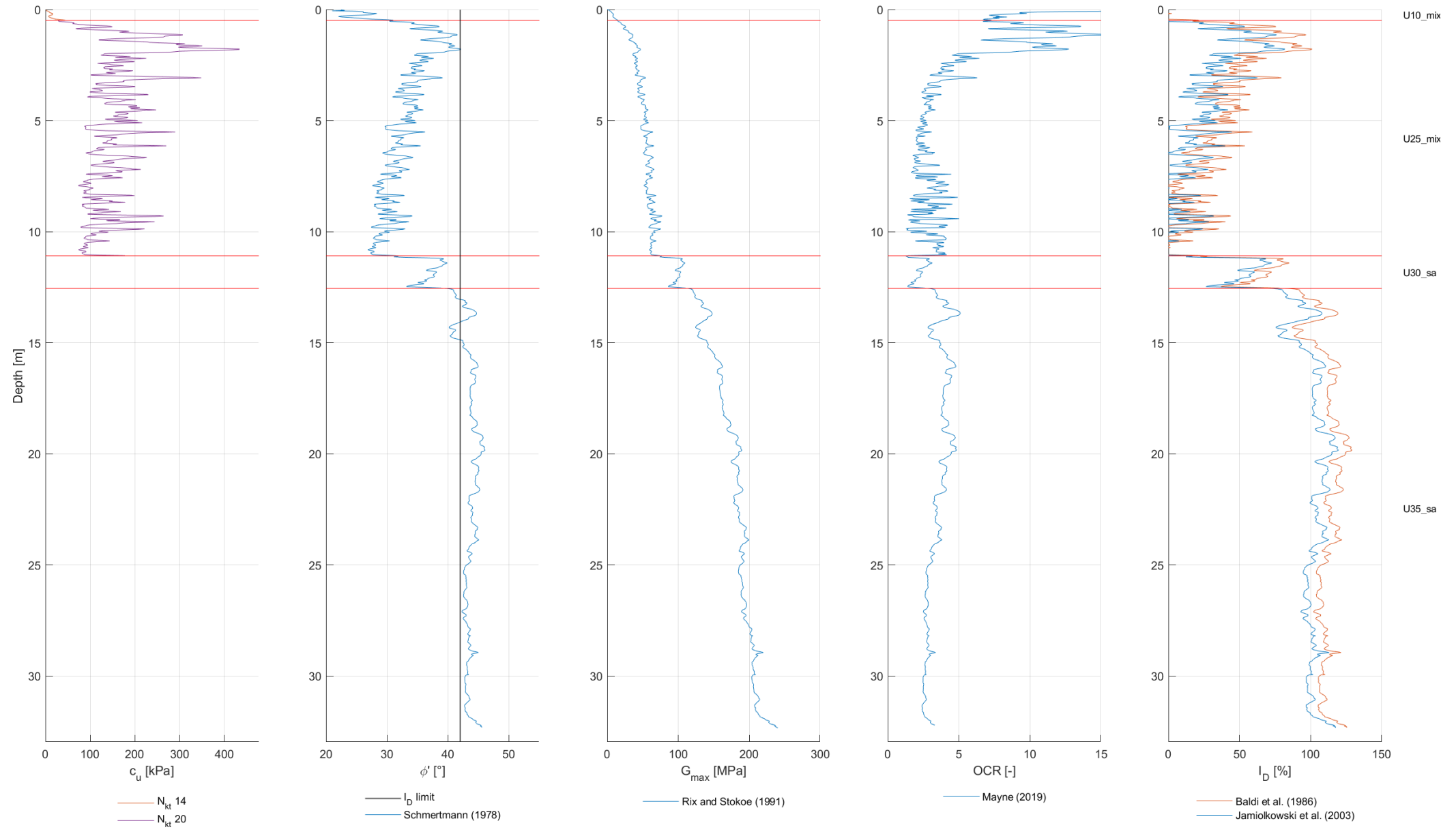
LOC-1132

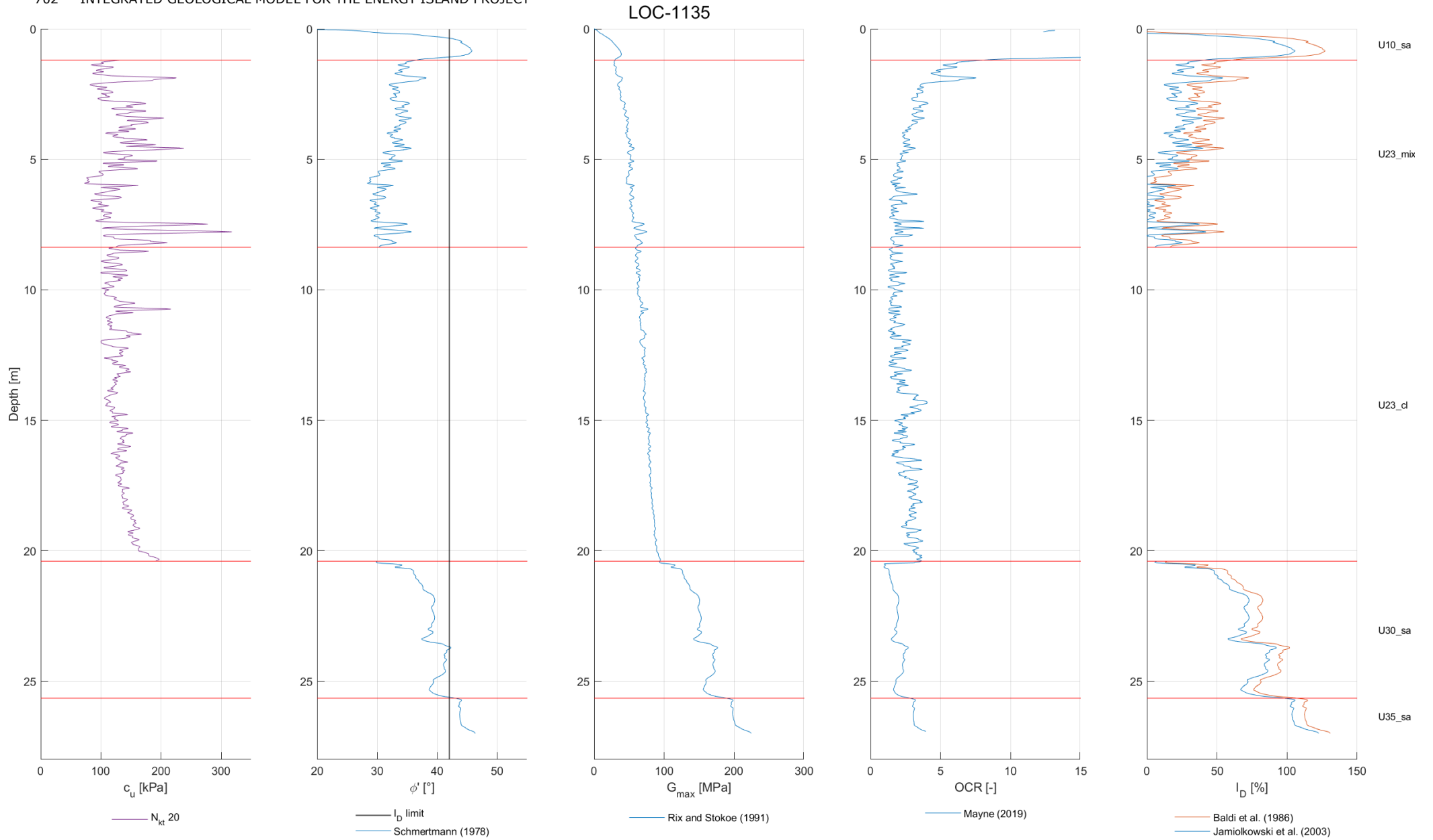




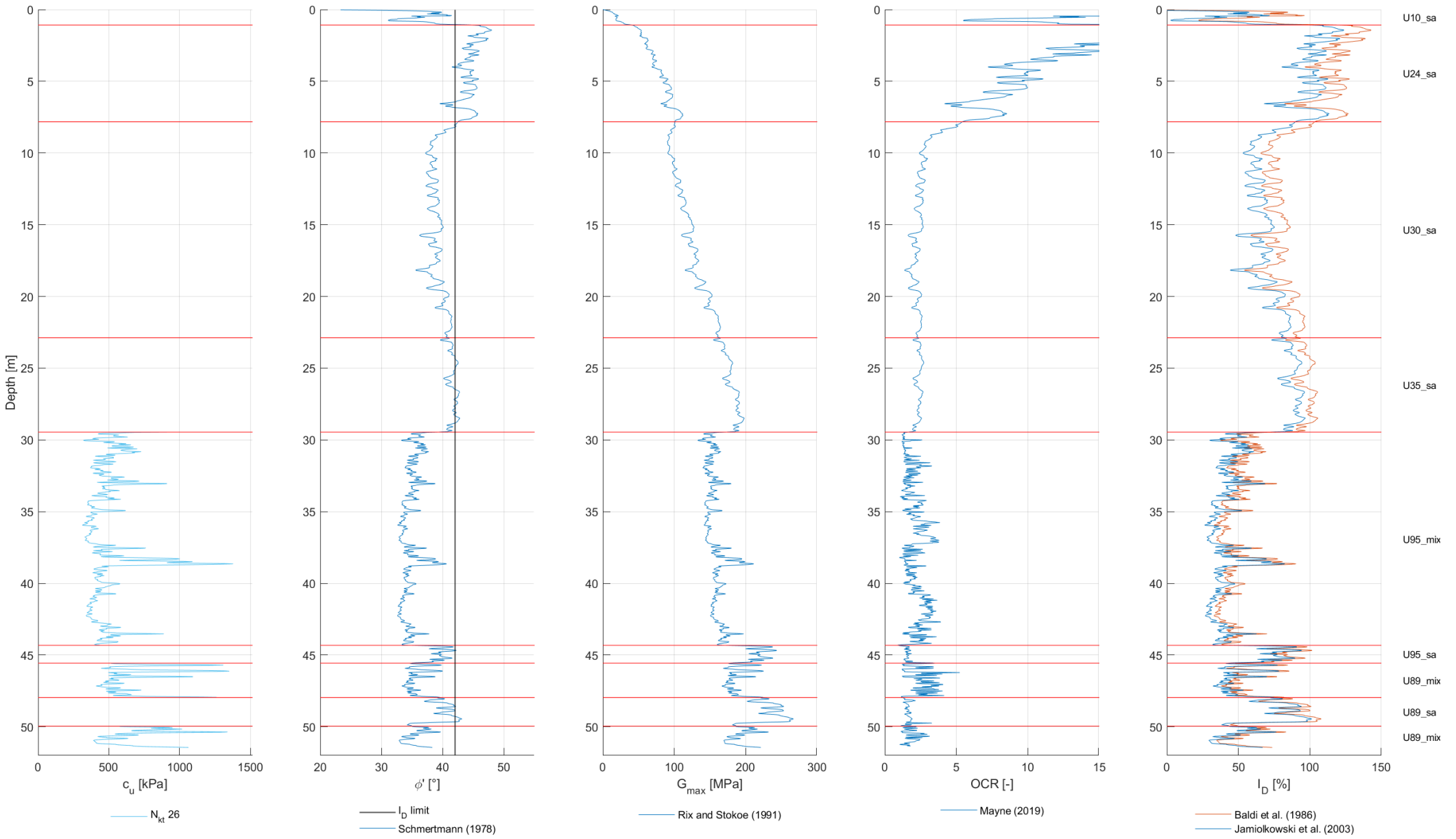
INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT

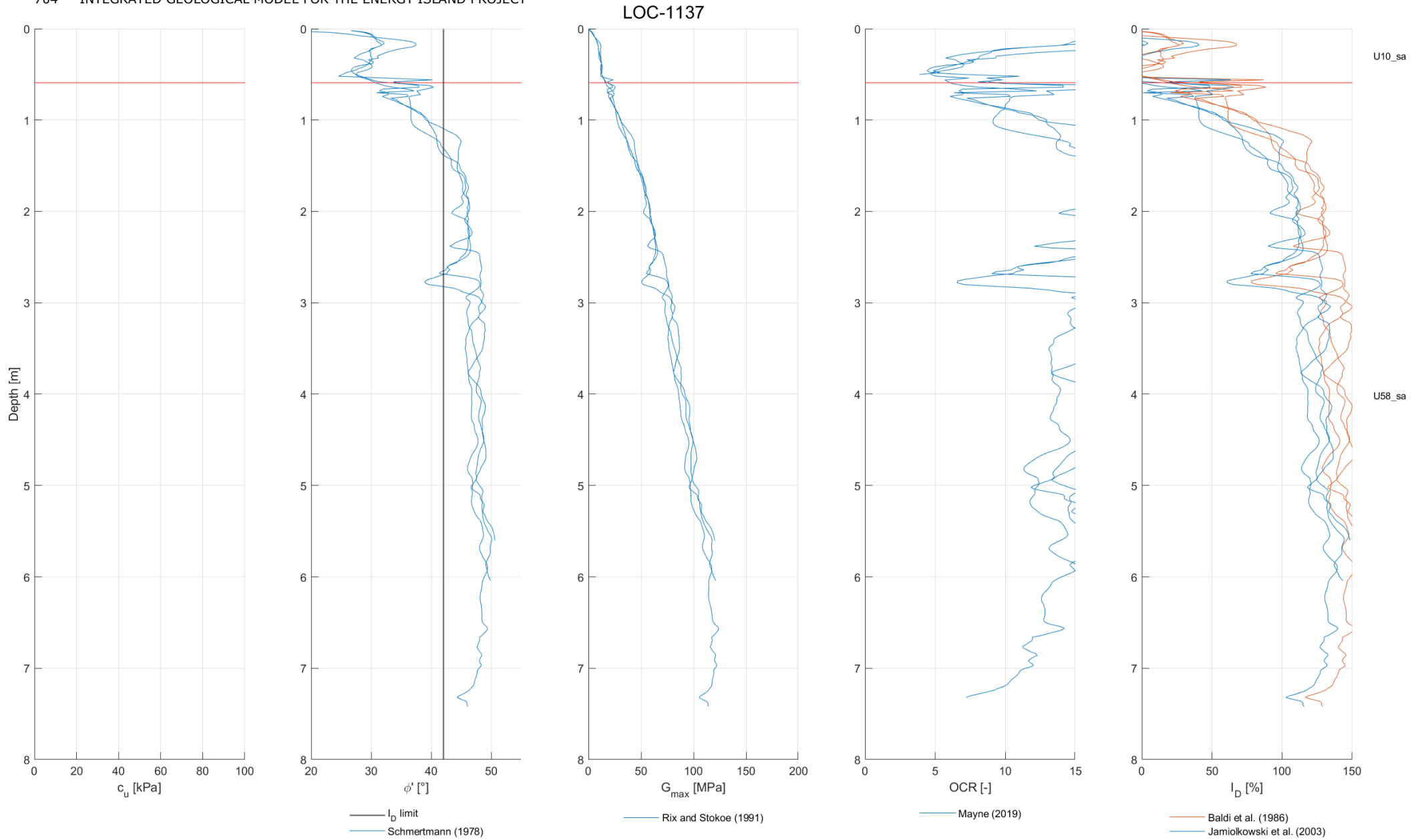
LOC-1134





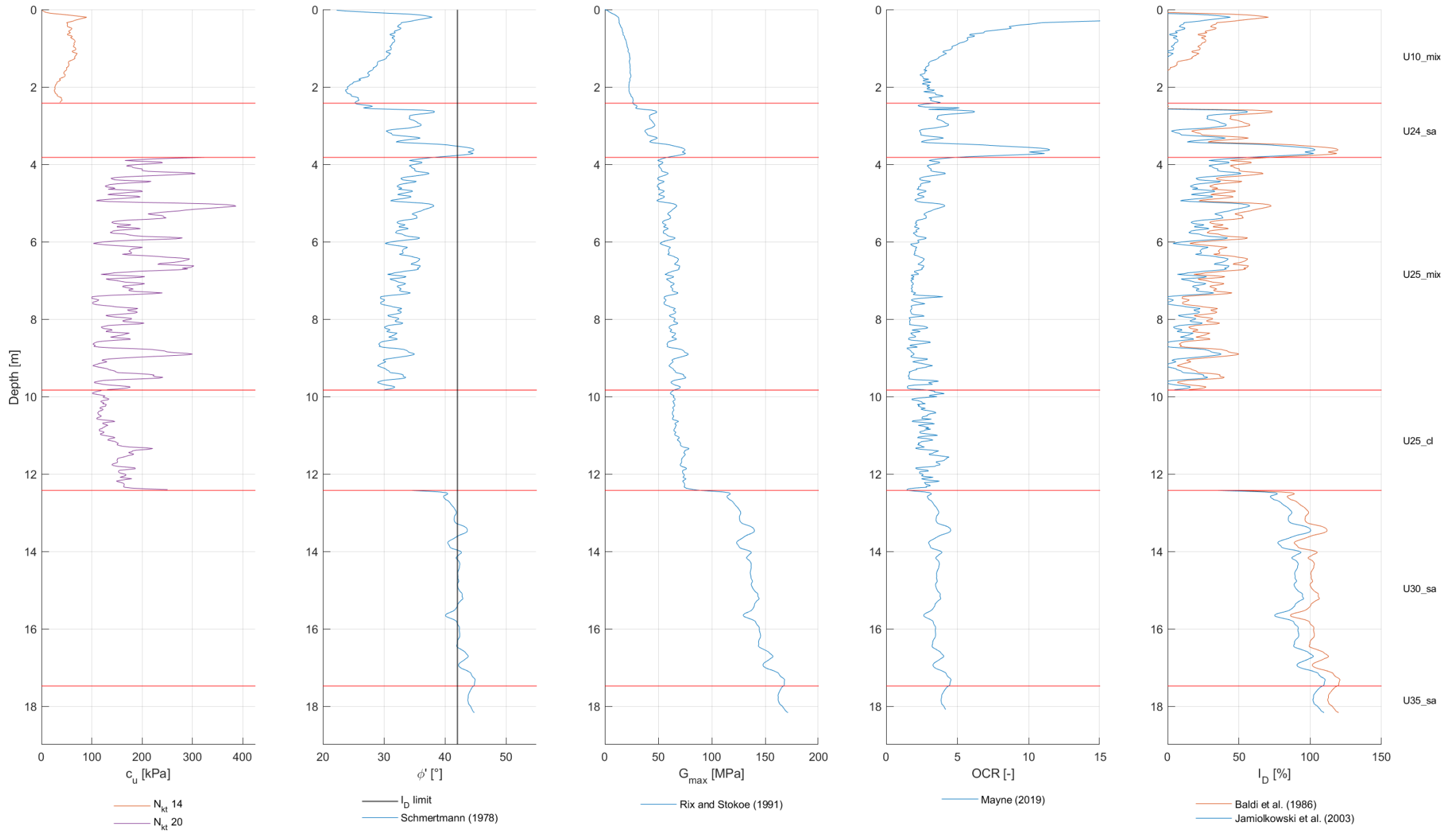
LOC-1136

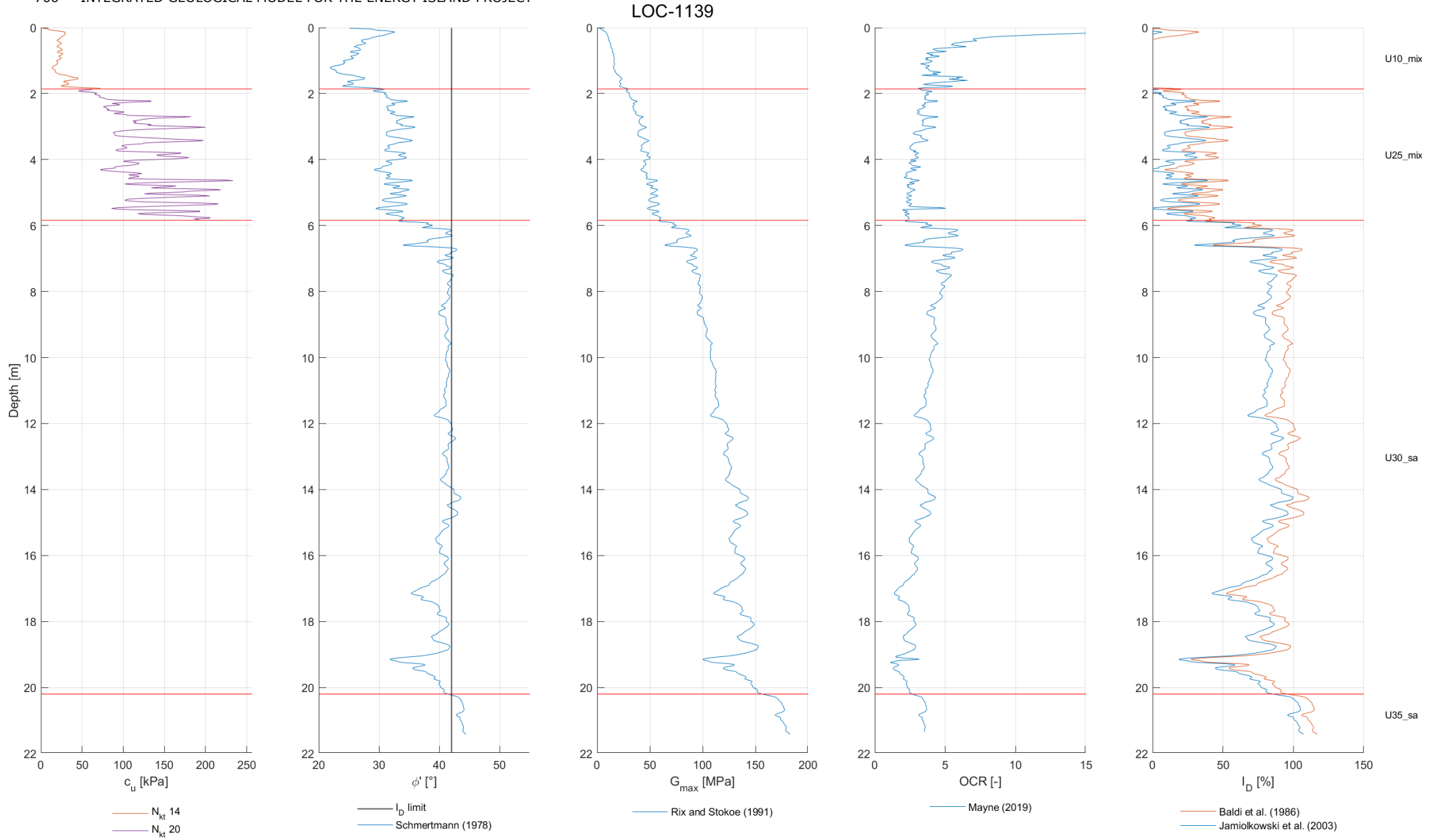




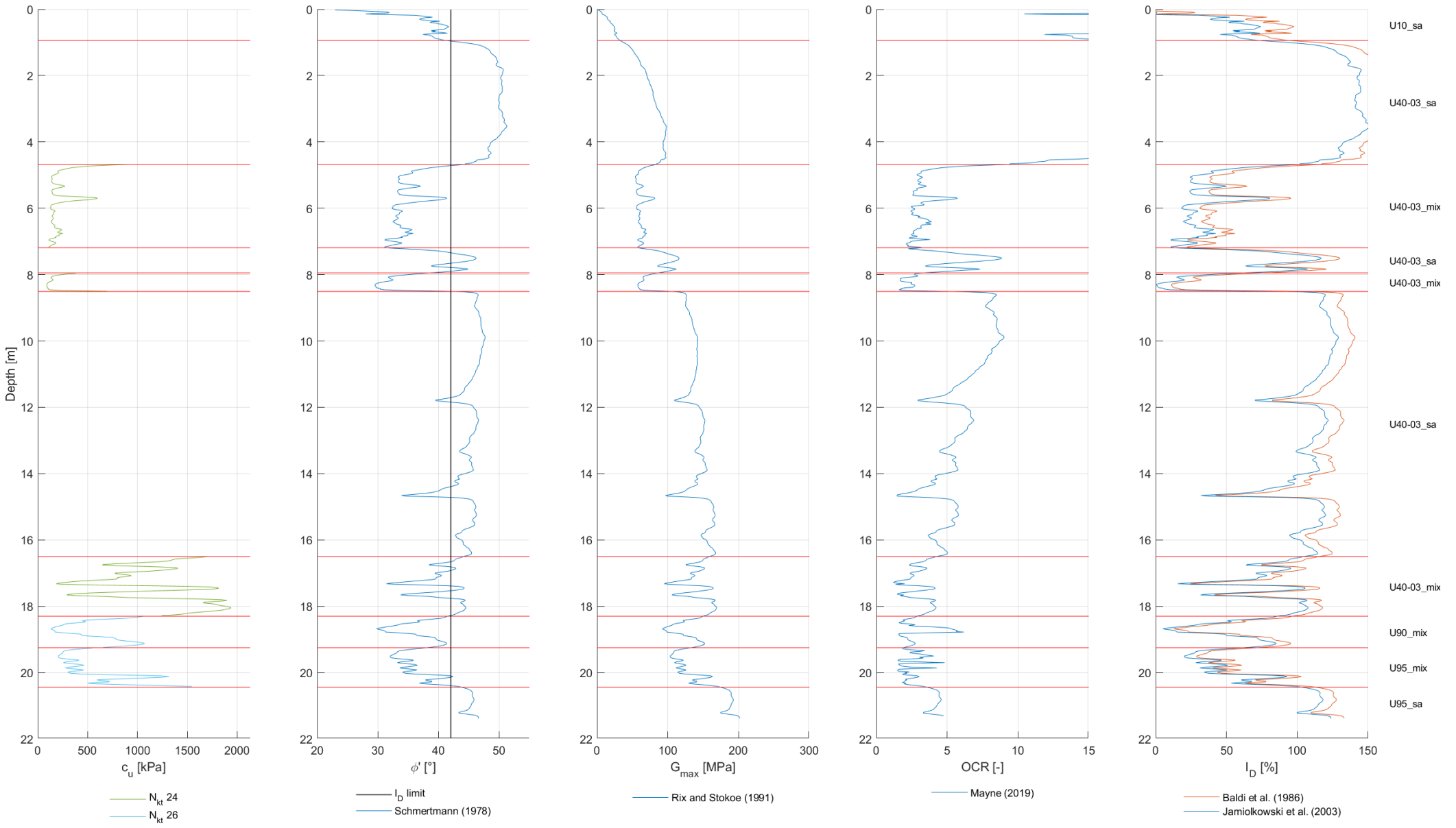
LOC-1138

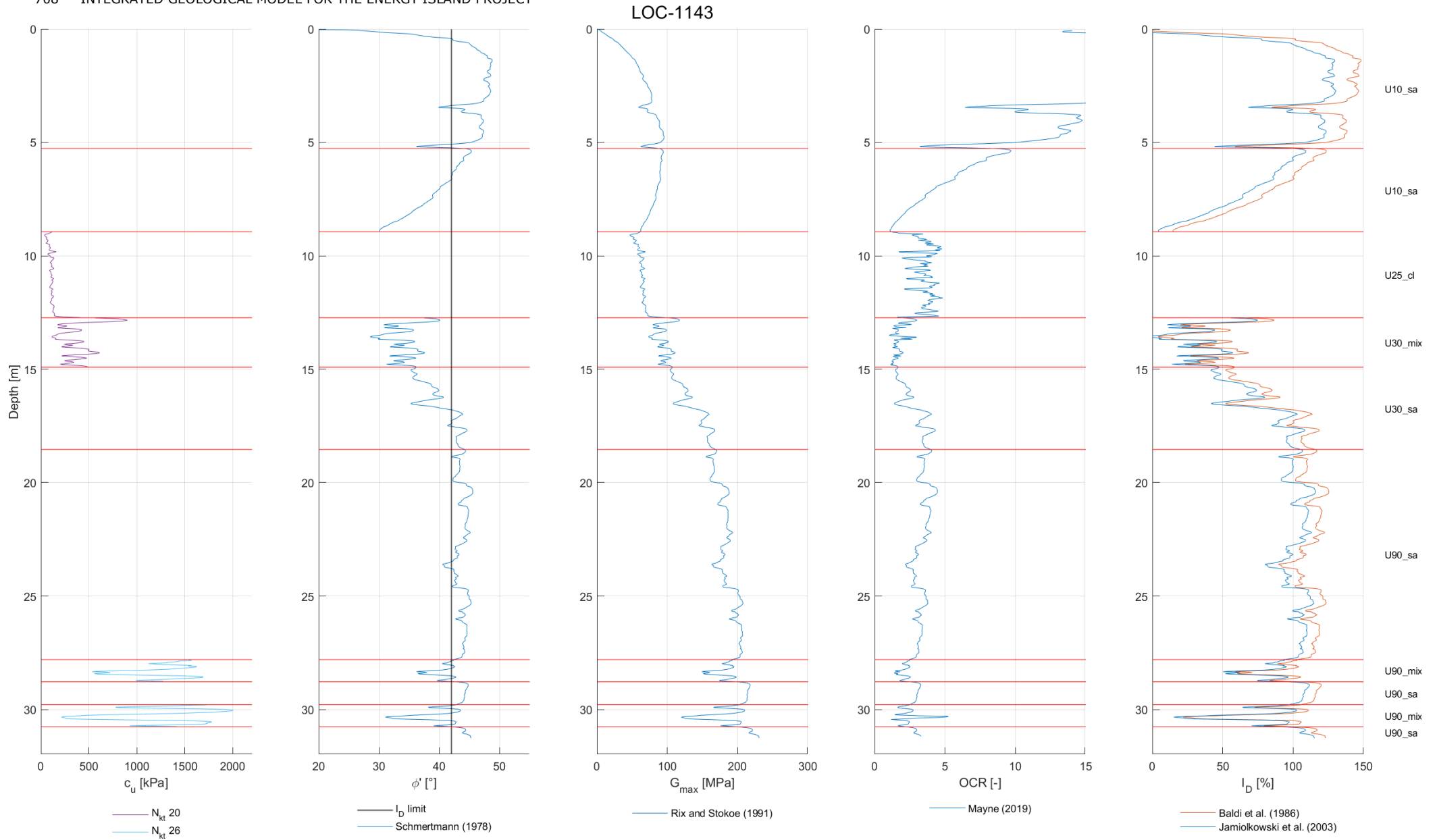
INTEGRATED GEOLOGICAL MODEL FOR THE ENERGY ISLAND PROJECT



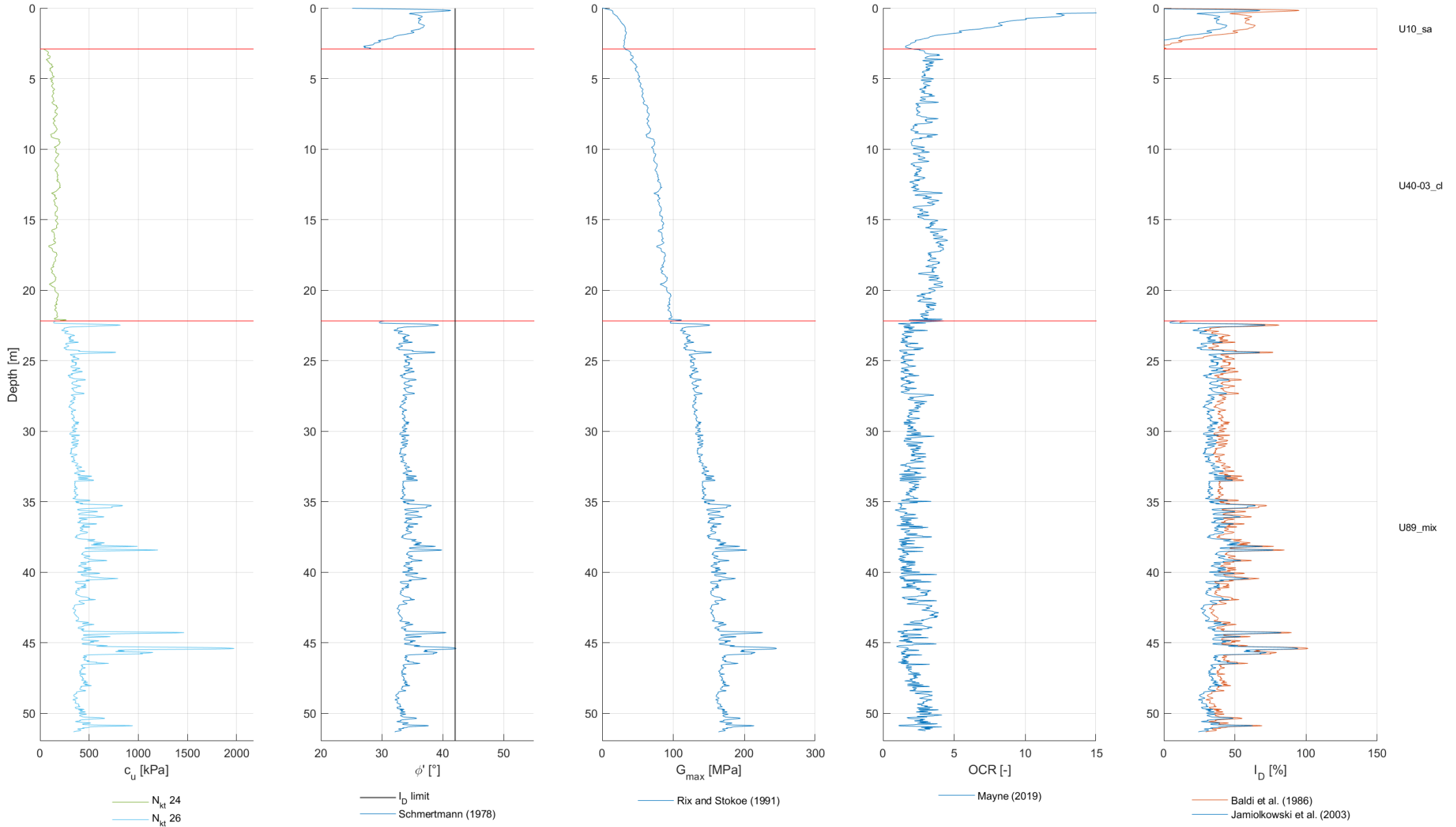


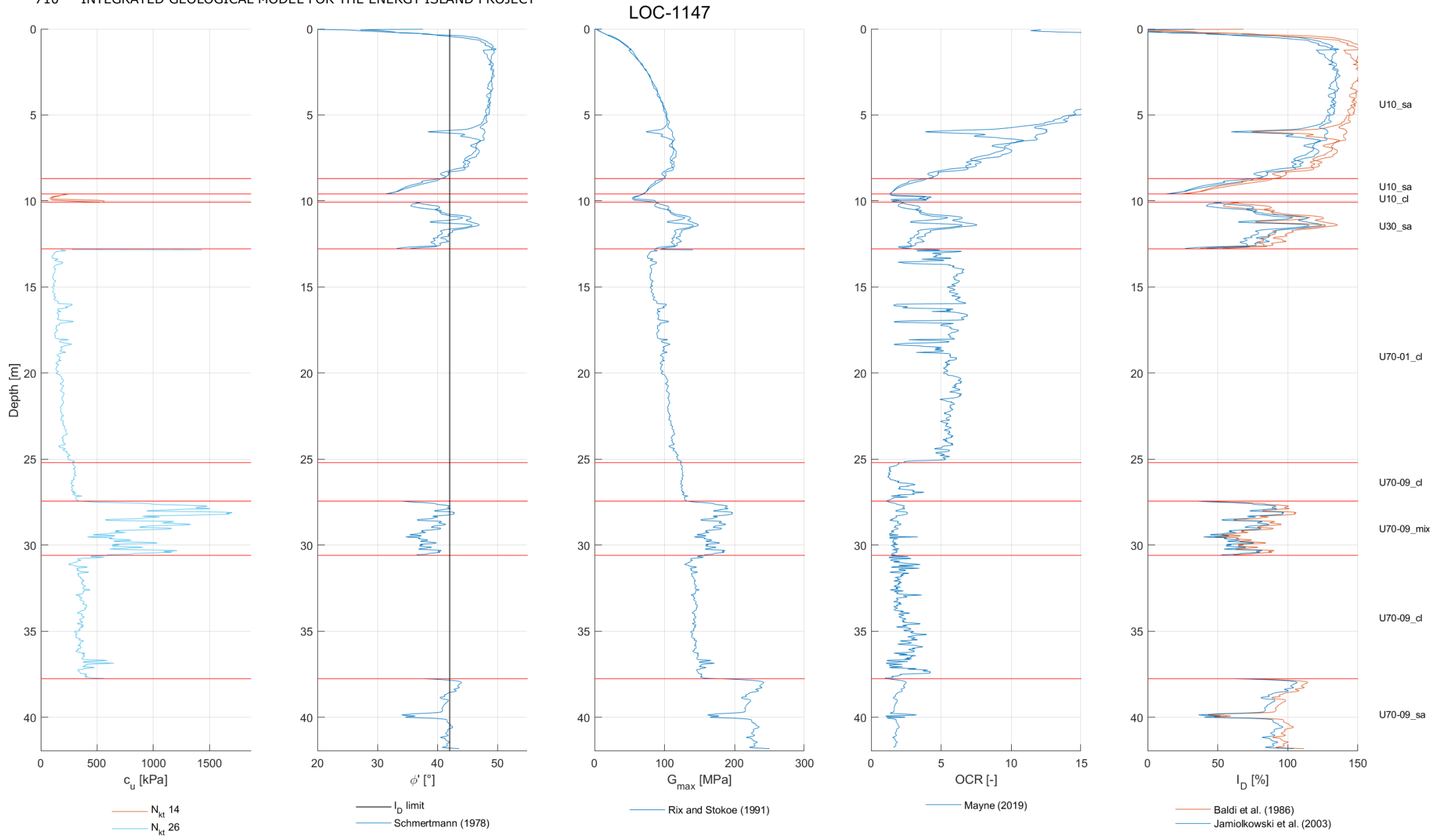
LOC-1142



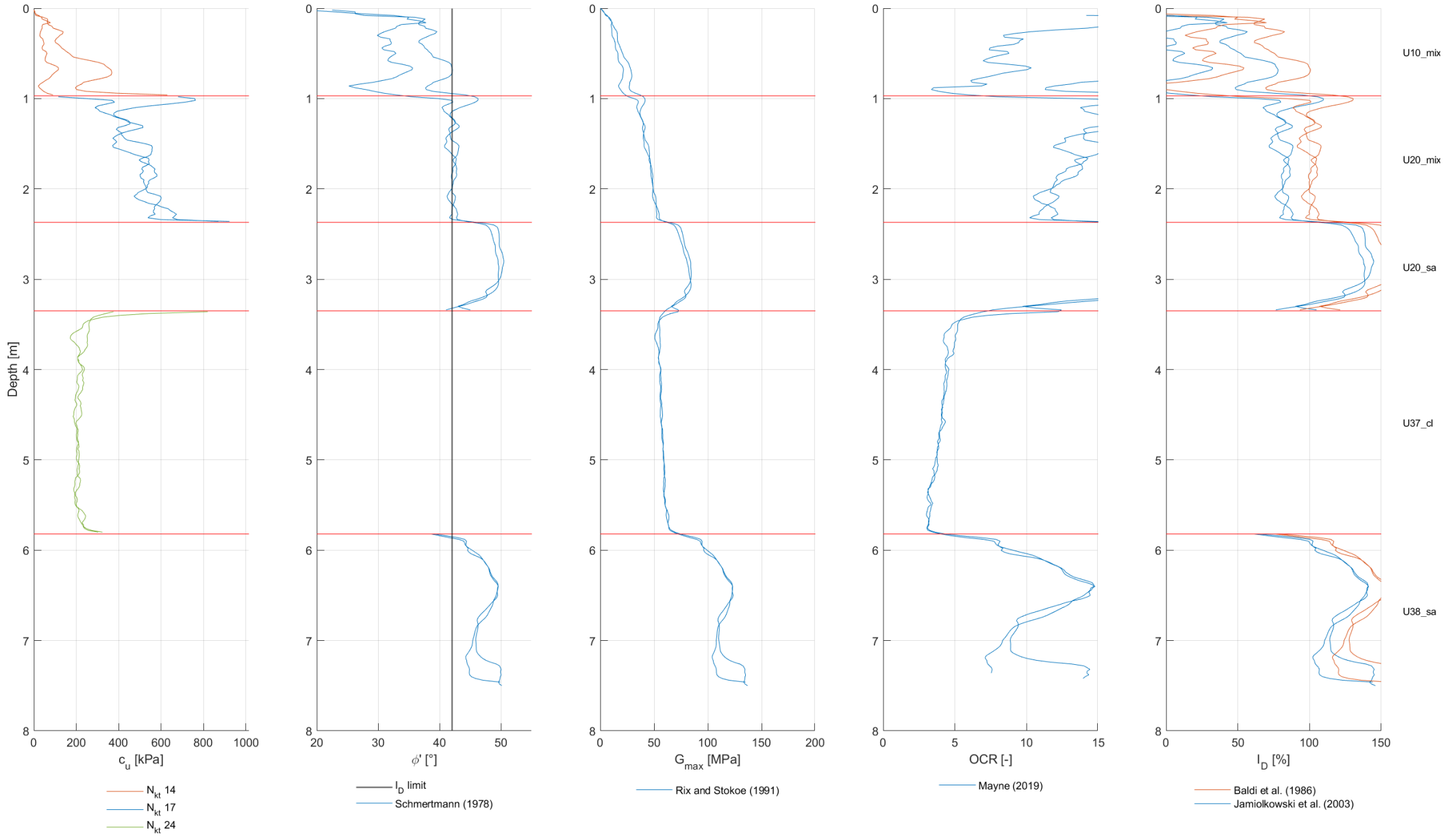


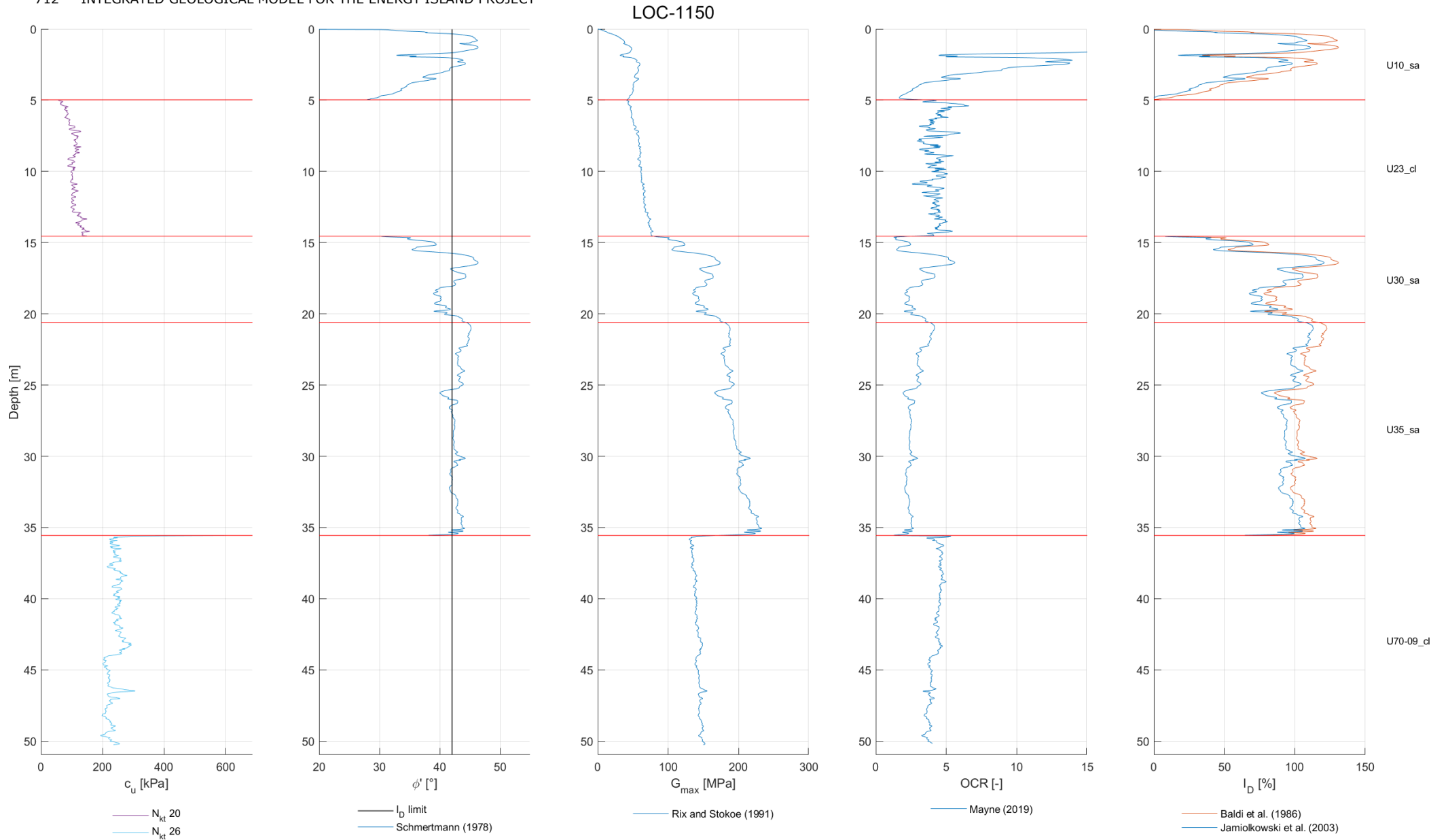
LOC-1146



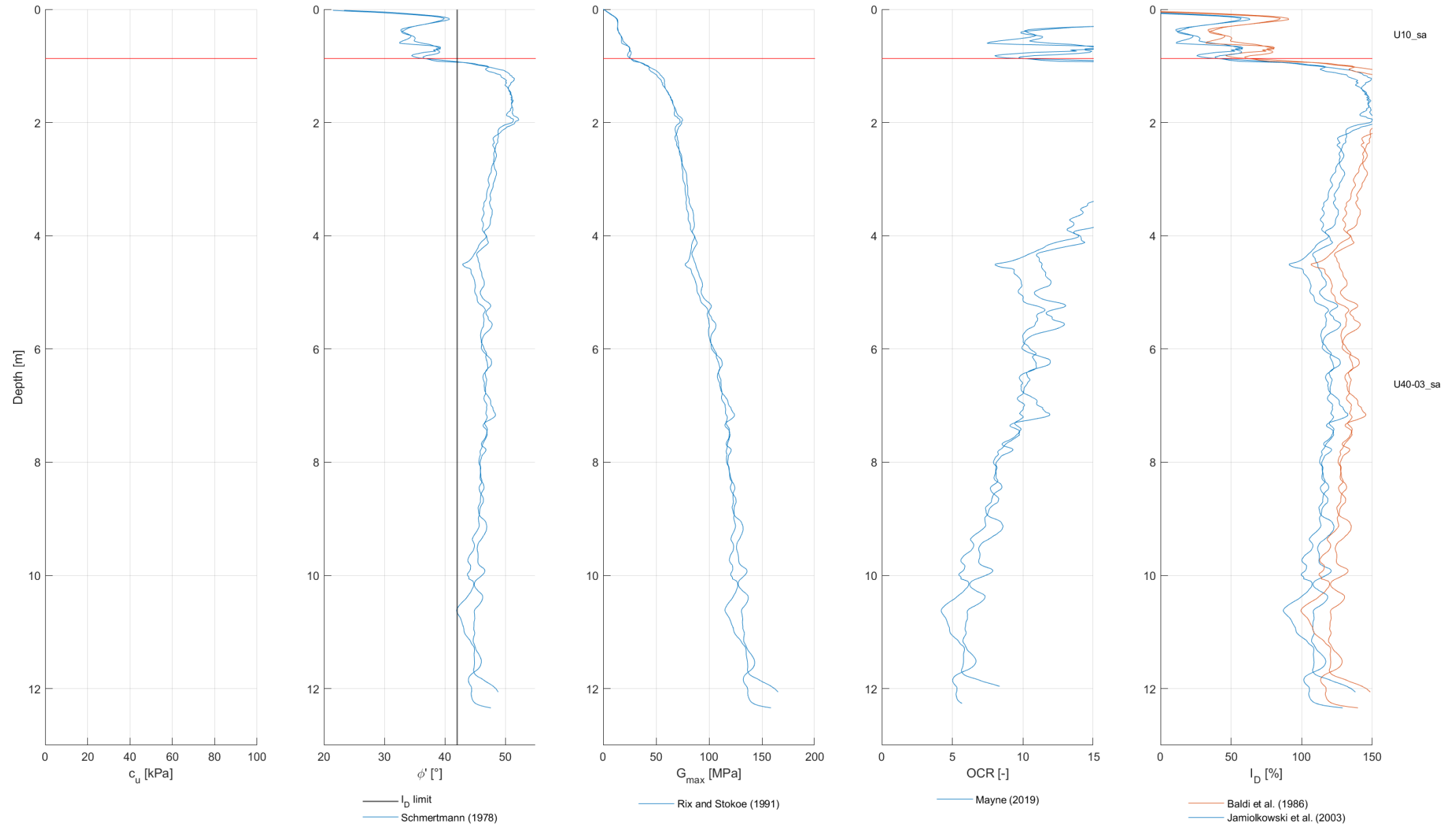


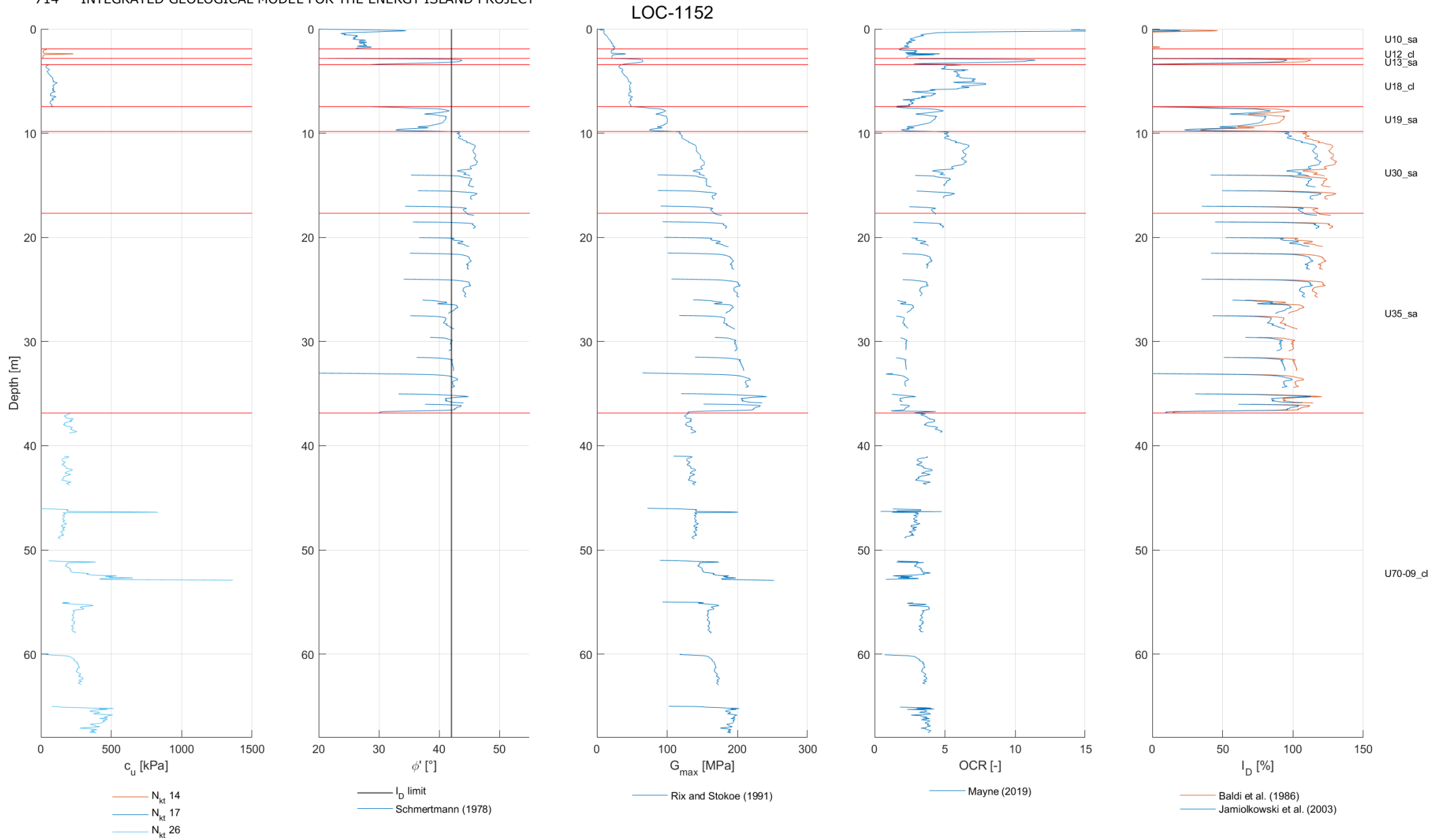
LOC-1149



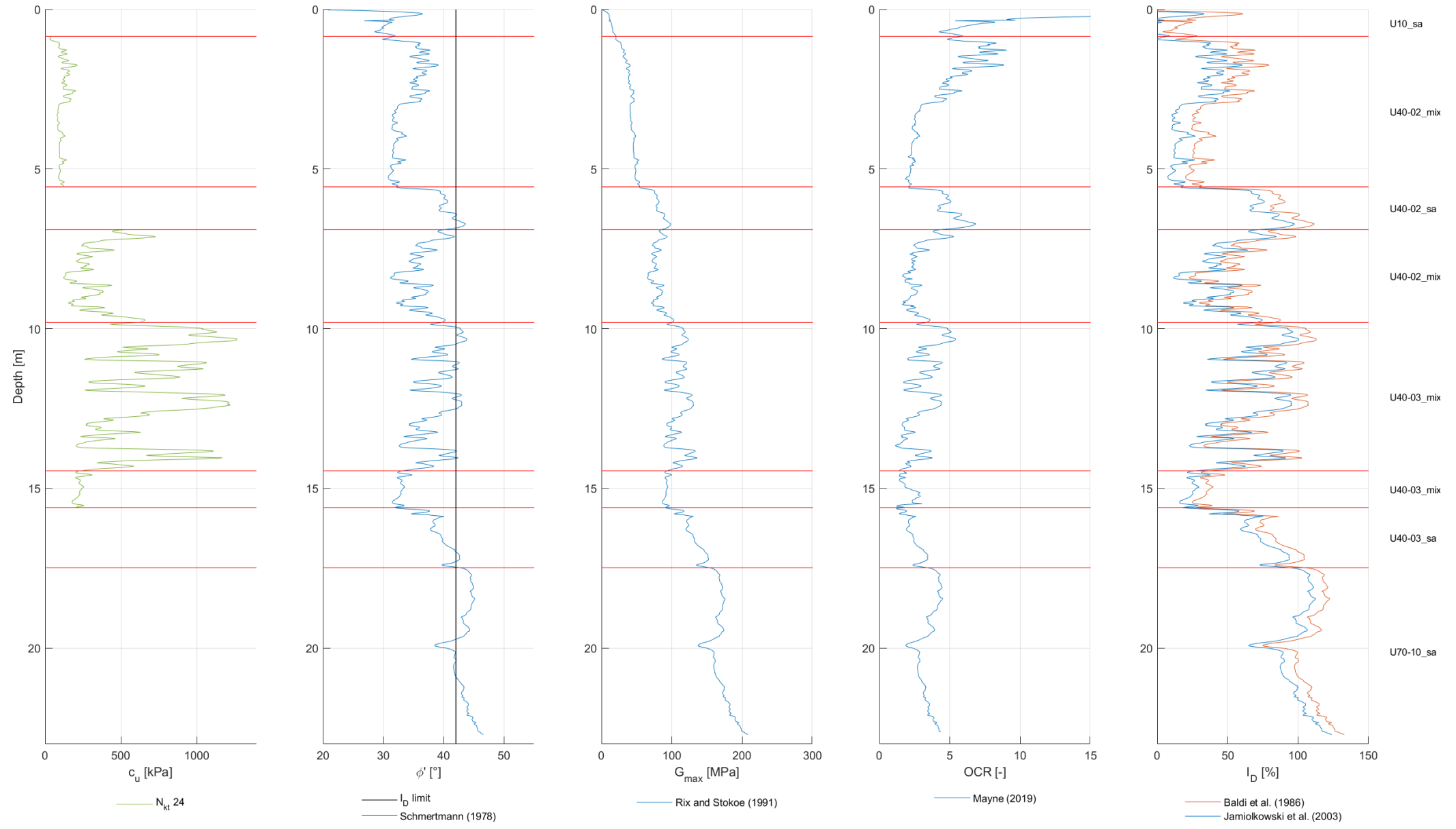


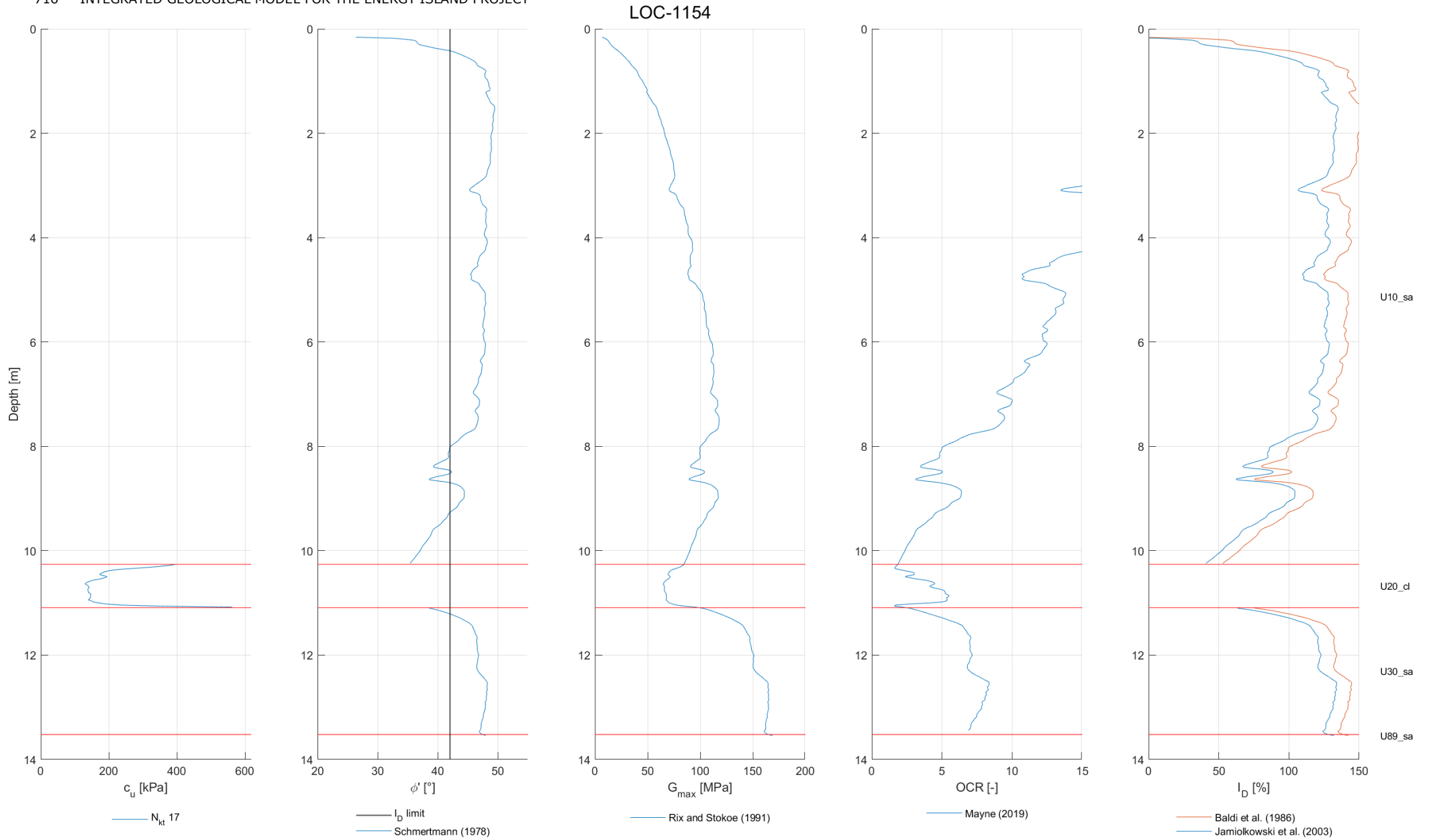
LOC-1151



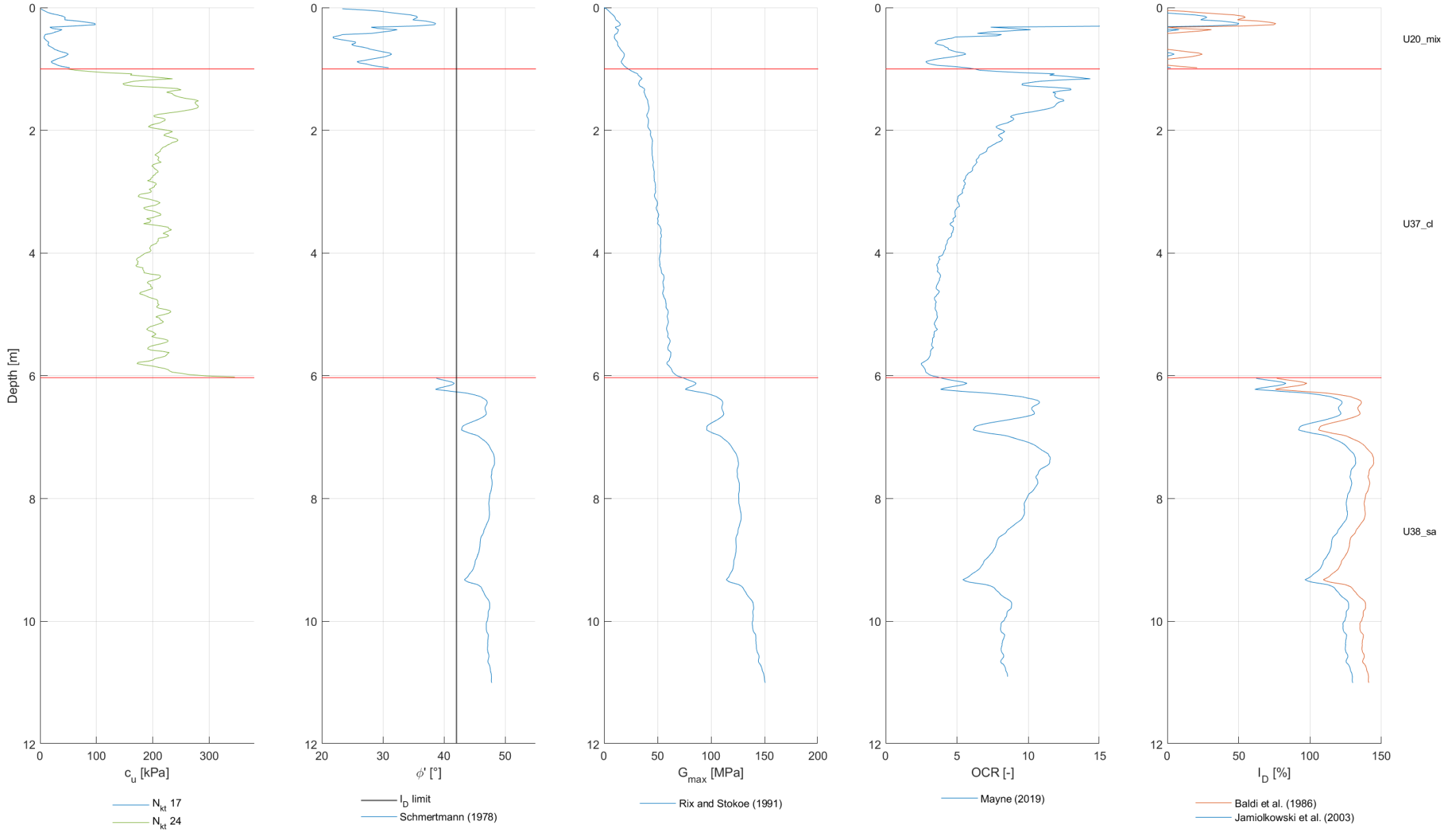


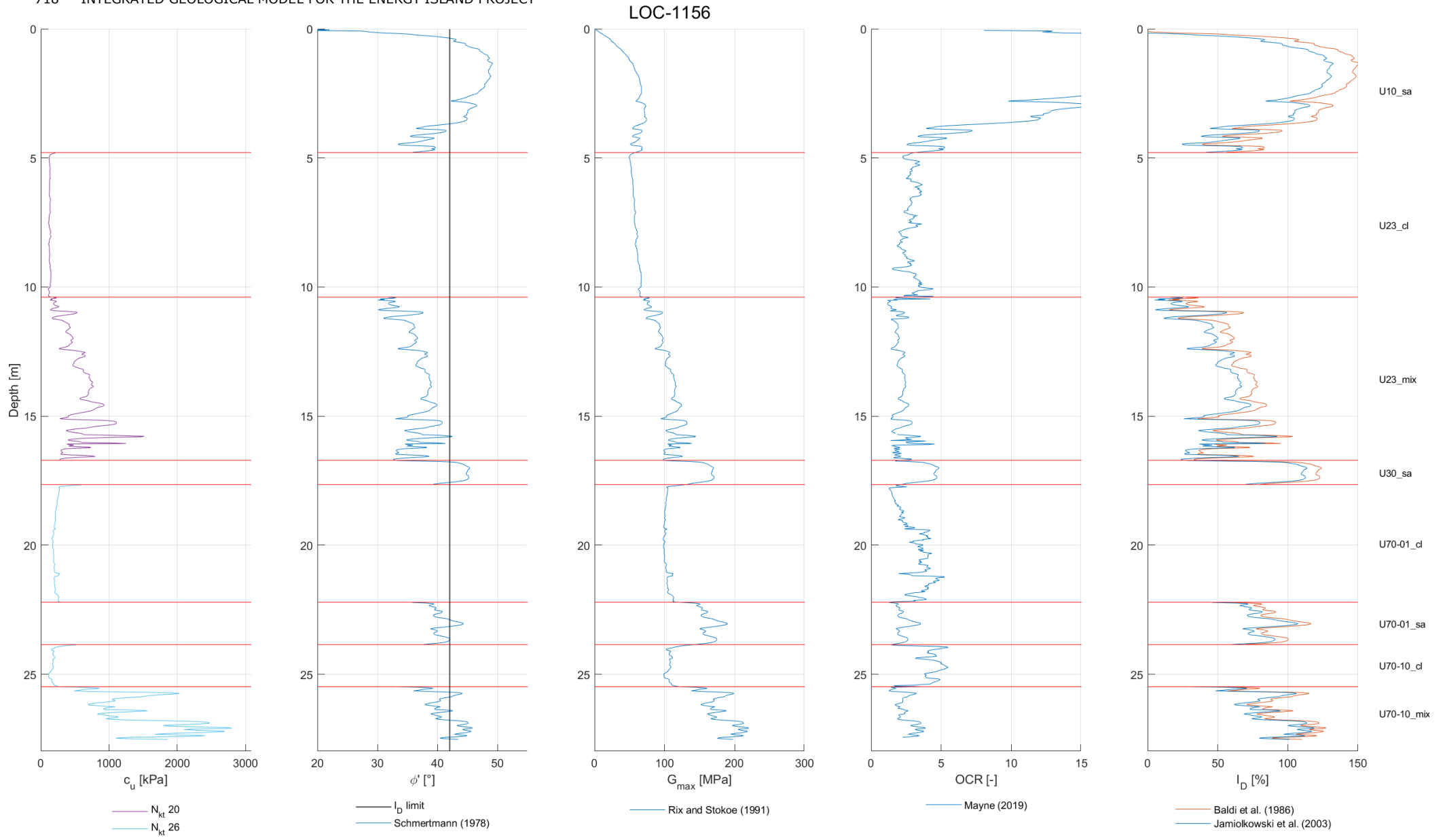
LOC-1153



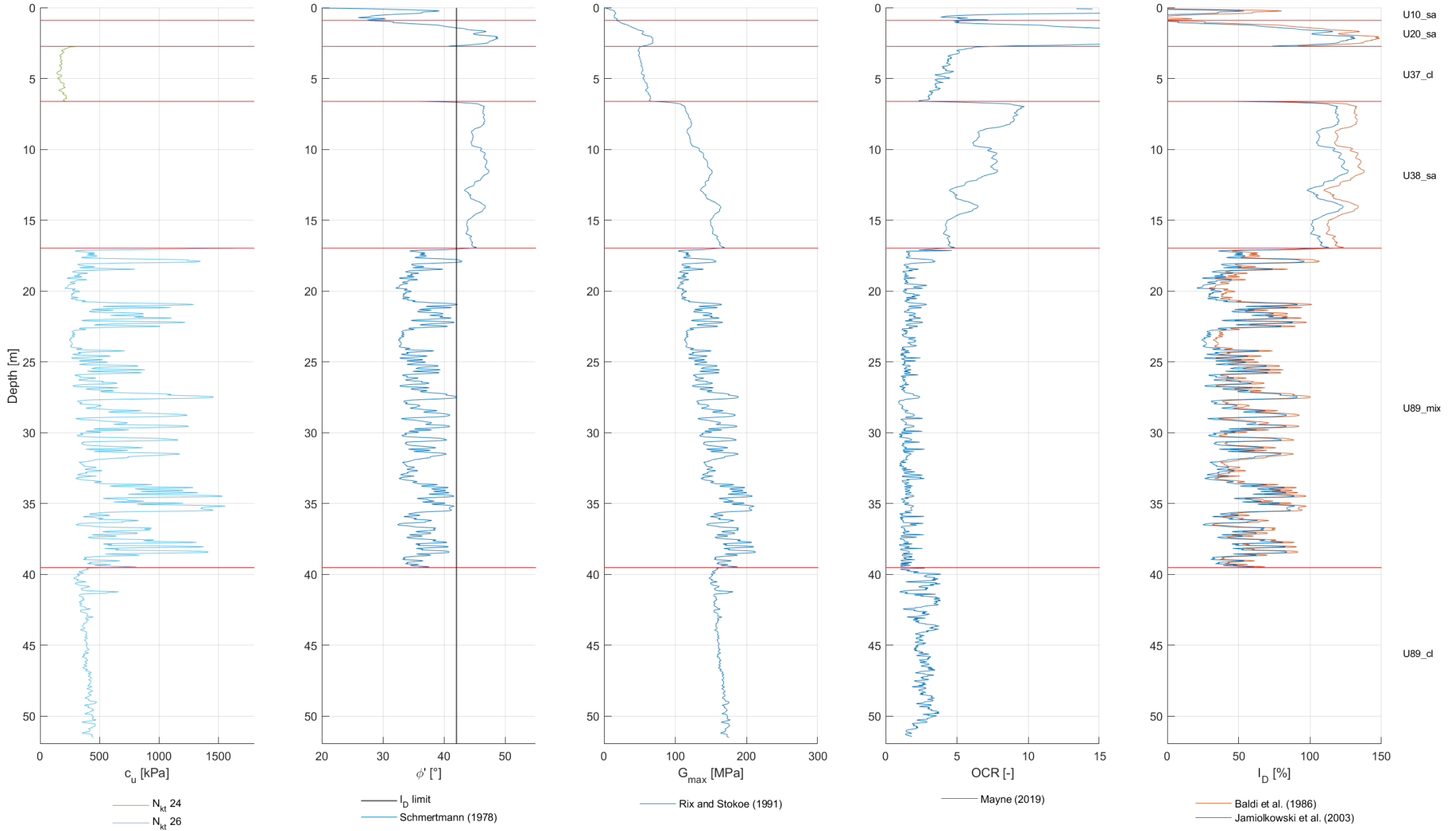


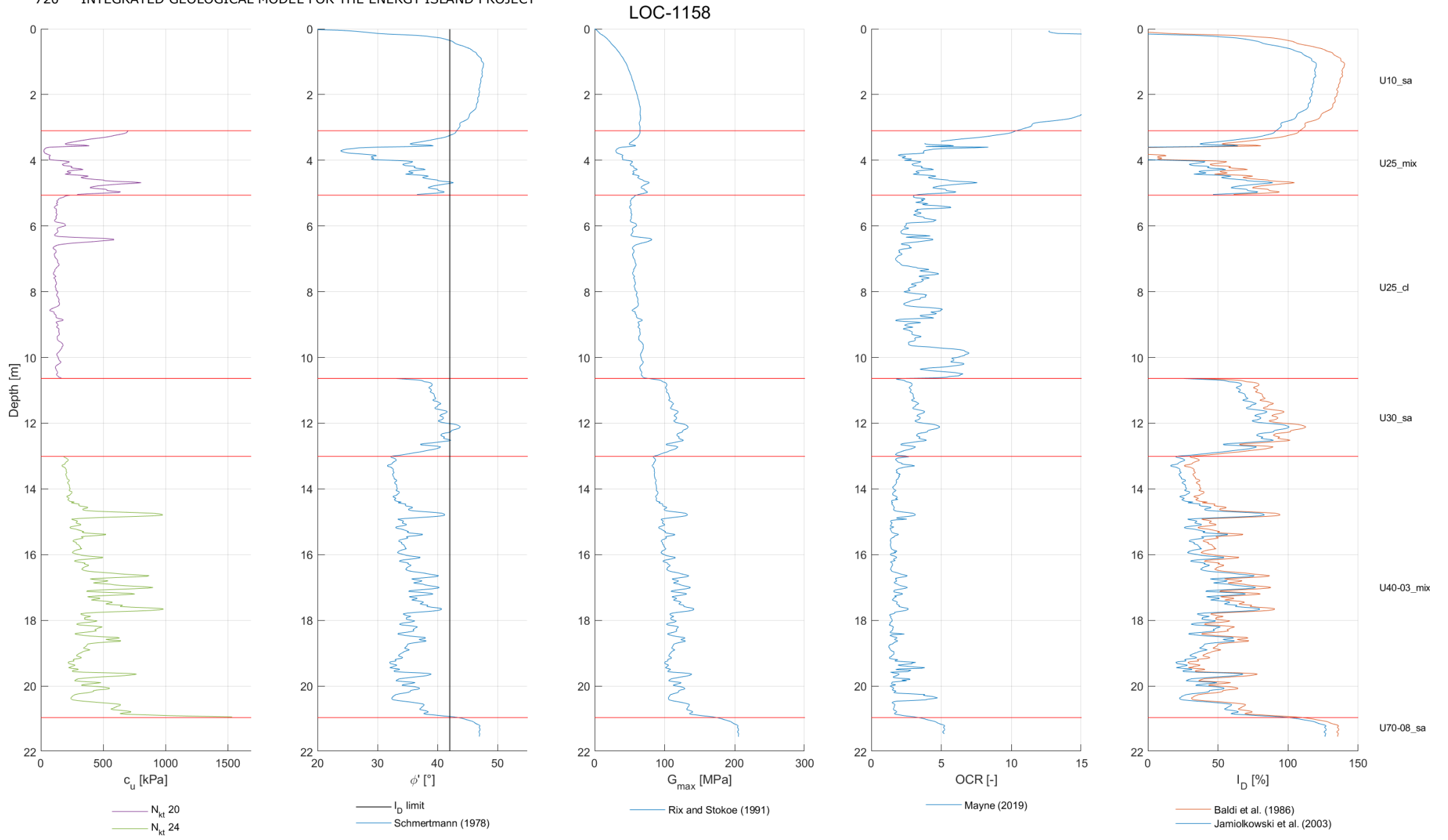
LOC-1155



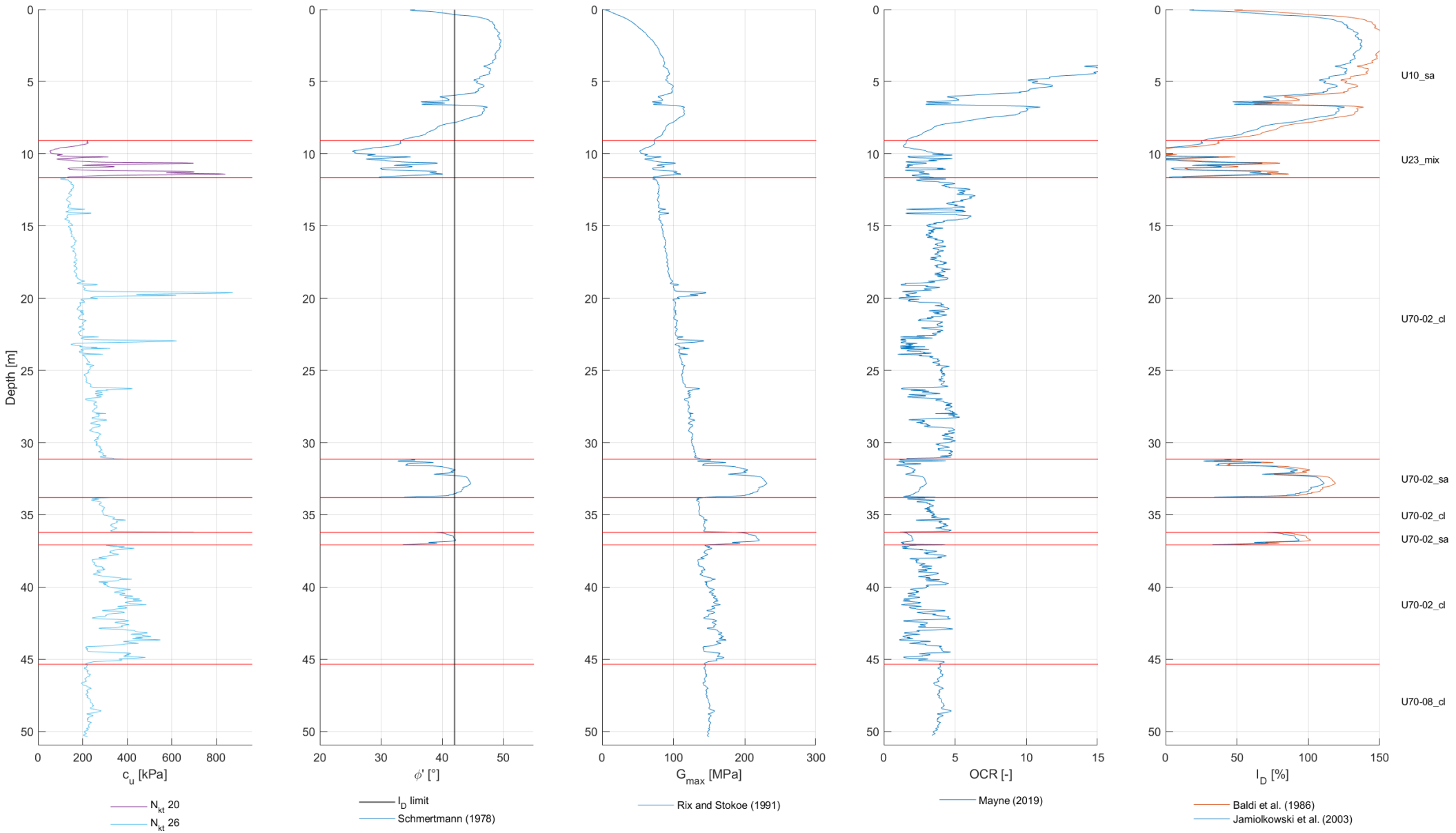


LOC-1157

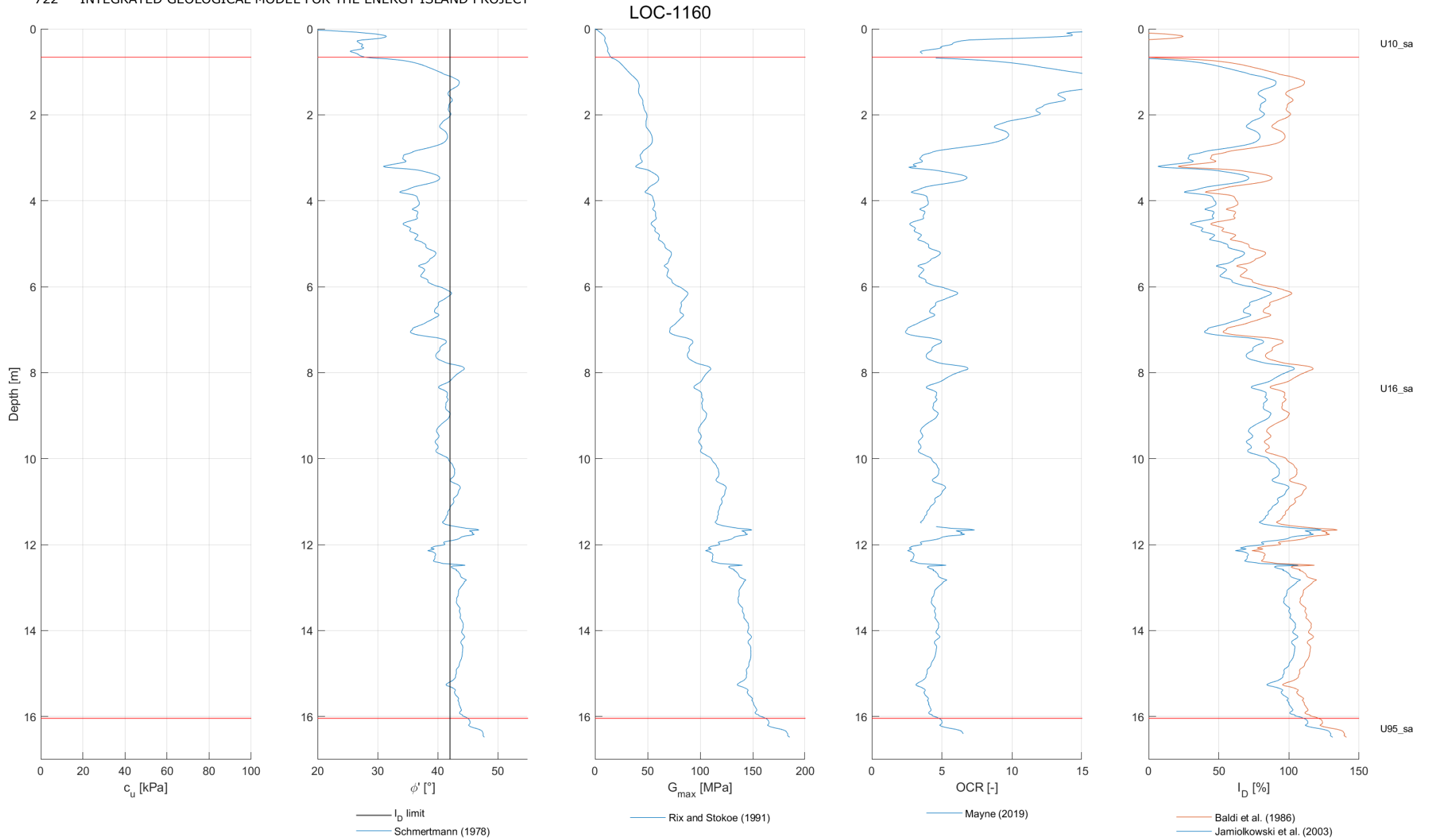




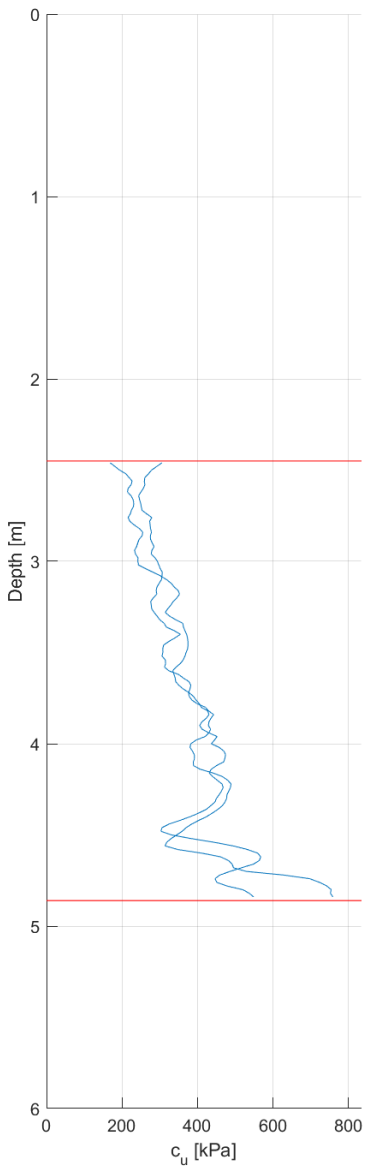
LOC-1159



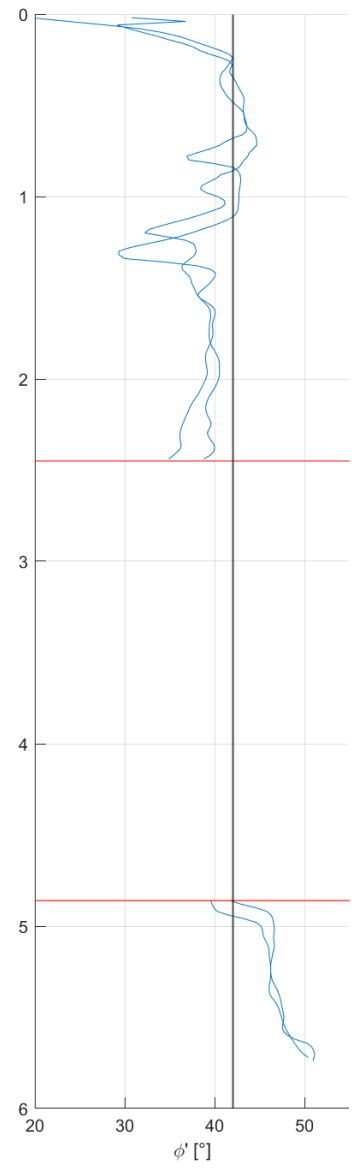
U10_sa
 U23_mix
 U70-02_cl
 U70-02_sa
 U70-02_cl
 U70-02_sa
 U70-02_cl
 U70-08_cl



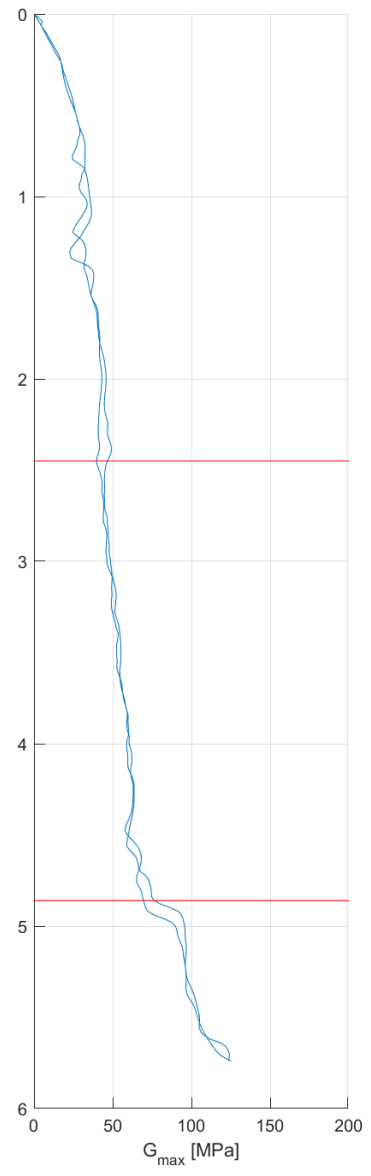
LOC-1161



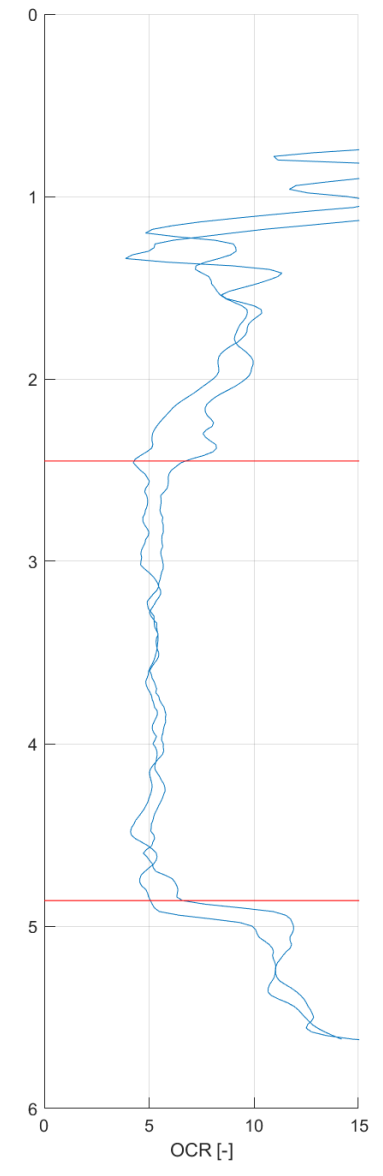
— N_{kt} 17



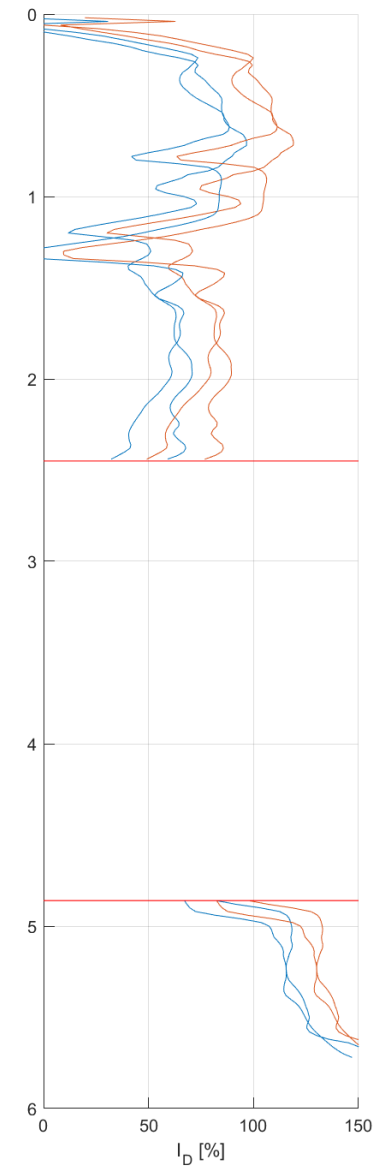
— I_D limit
— Schmertmann (1978)



— Rix and Stokoe (1991)



— Mayne (2019)

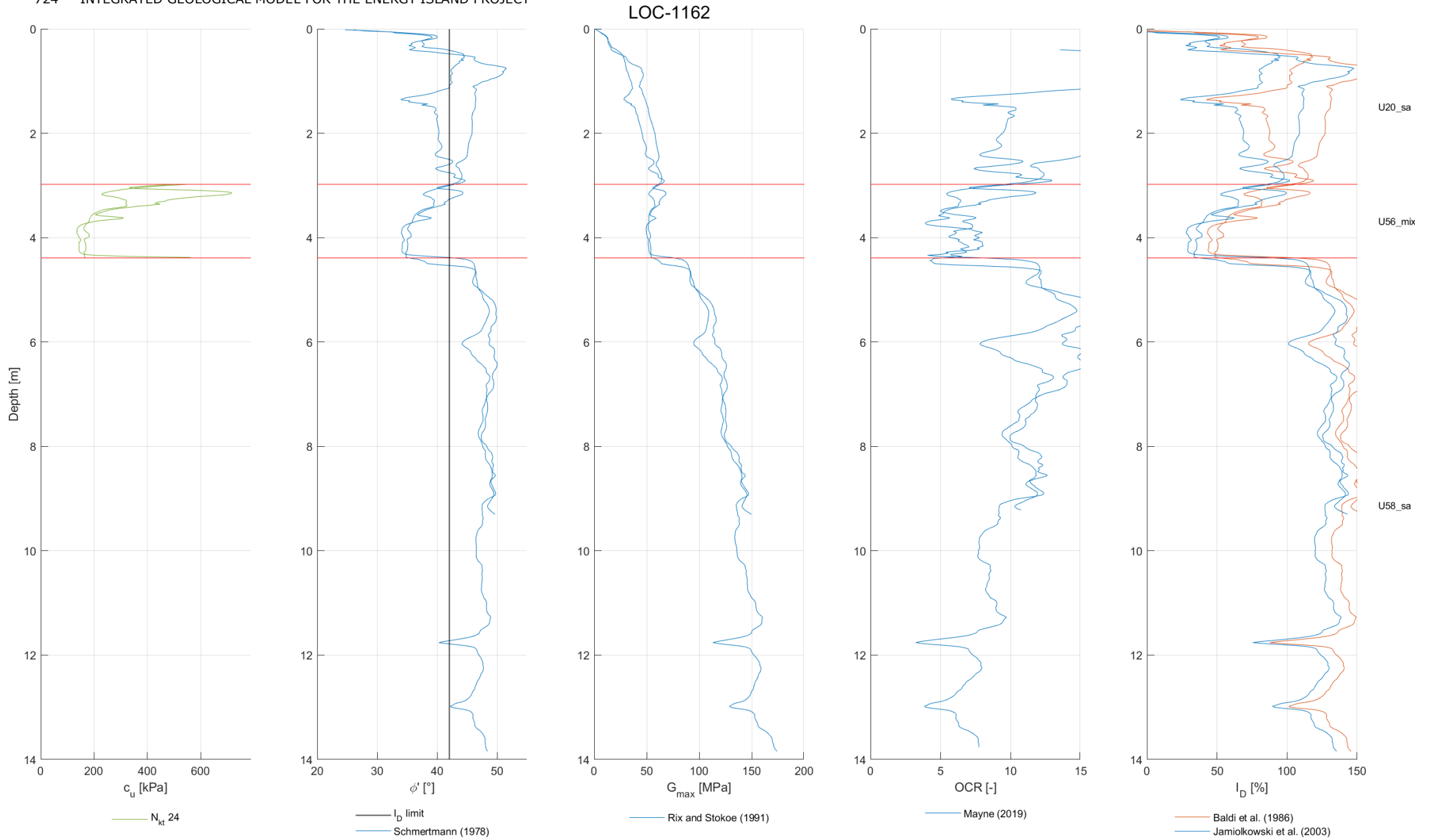


— Baldi et al. (1986)
— Jamiolkowski et al. (2003)

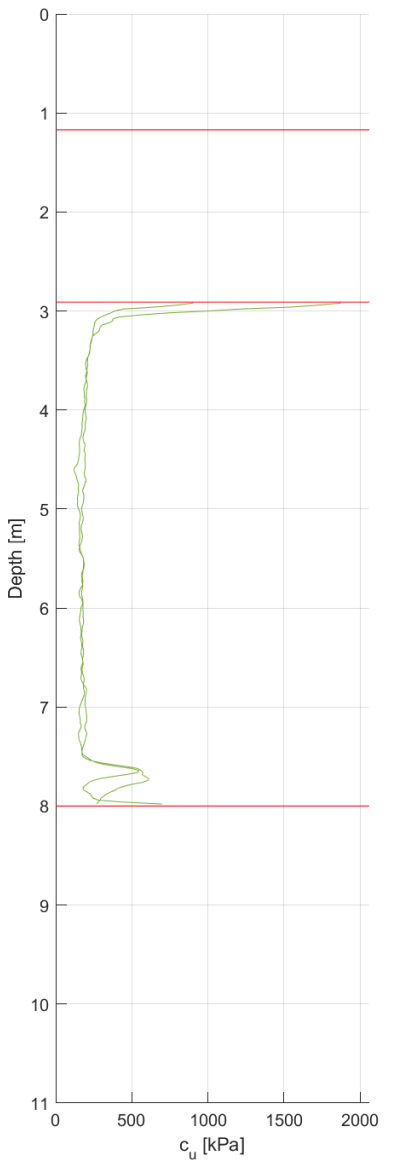
U10_sa

U20_cd

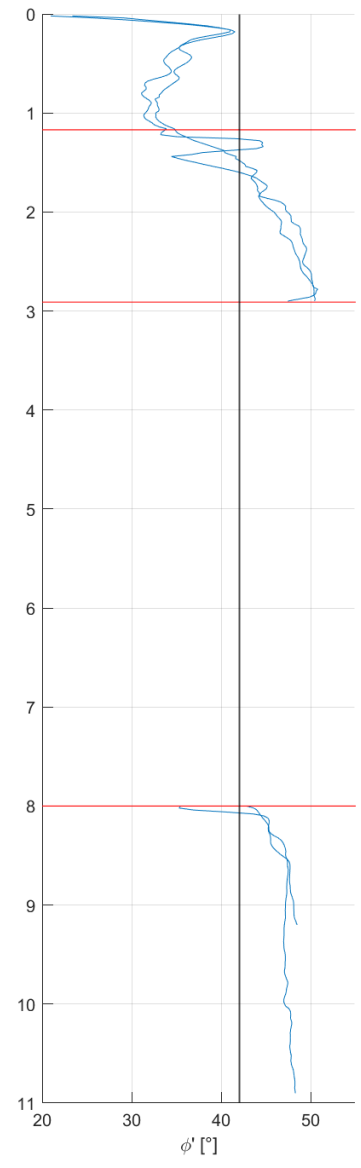
U30_sa



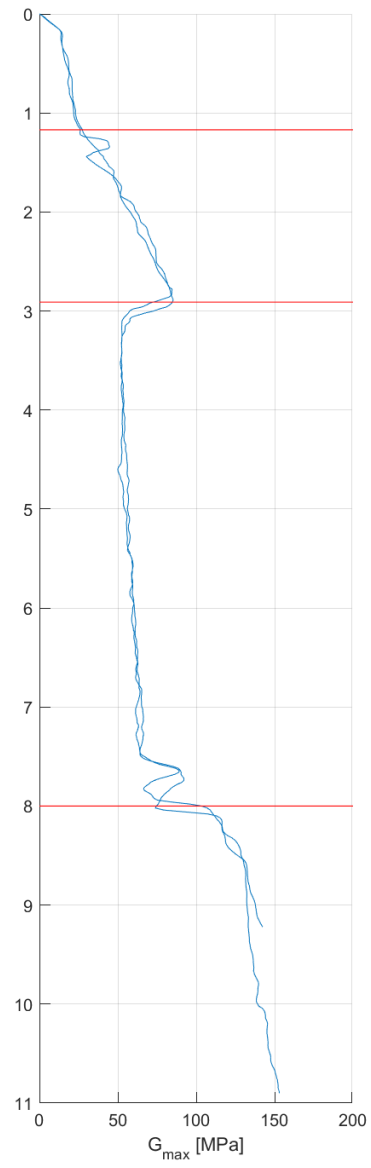
LOC-1163



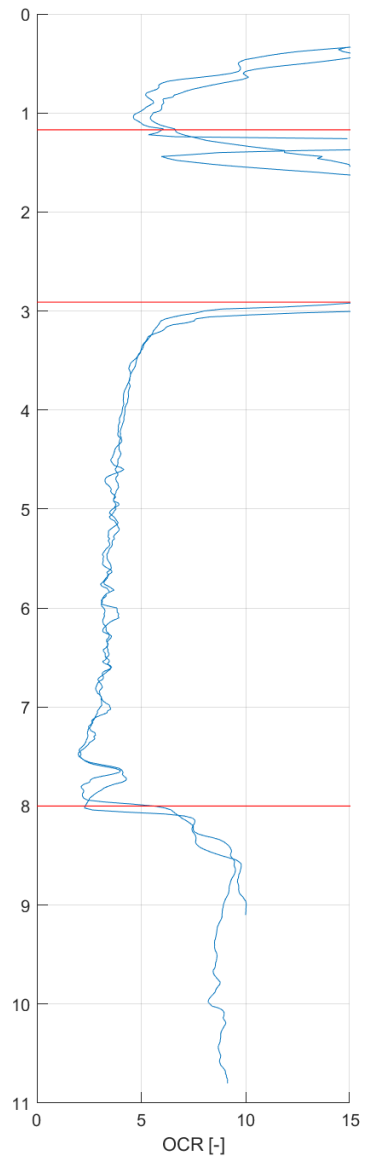
N_{kt} 24



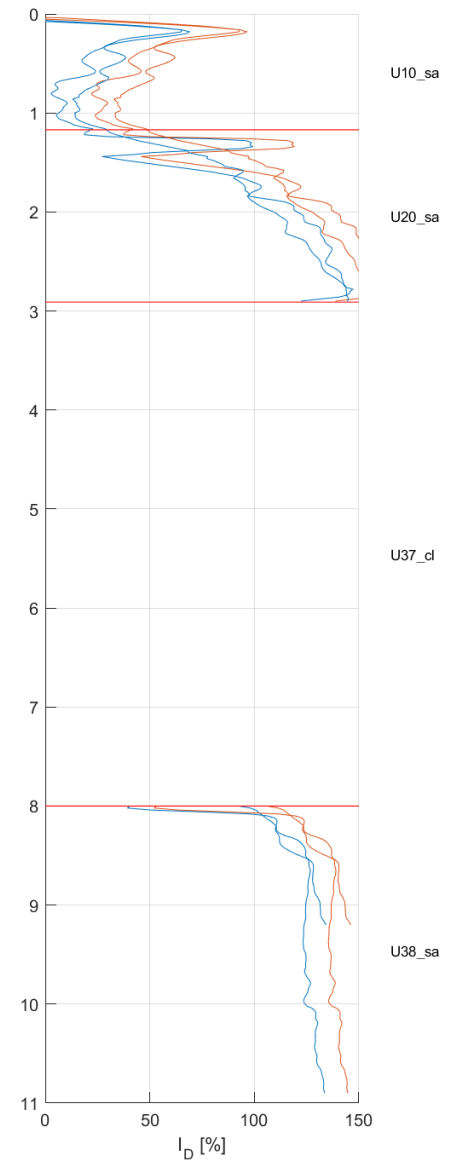
I_D limit
Schmertmann (1978)



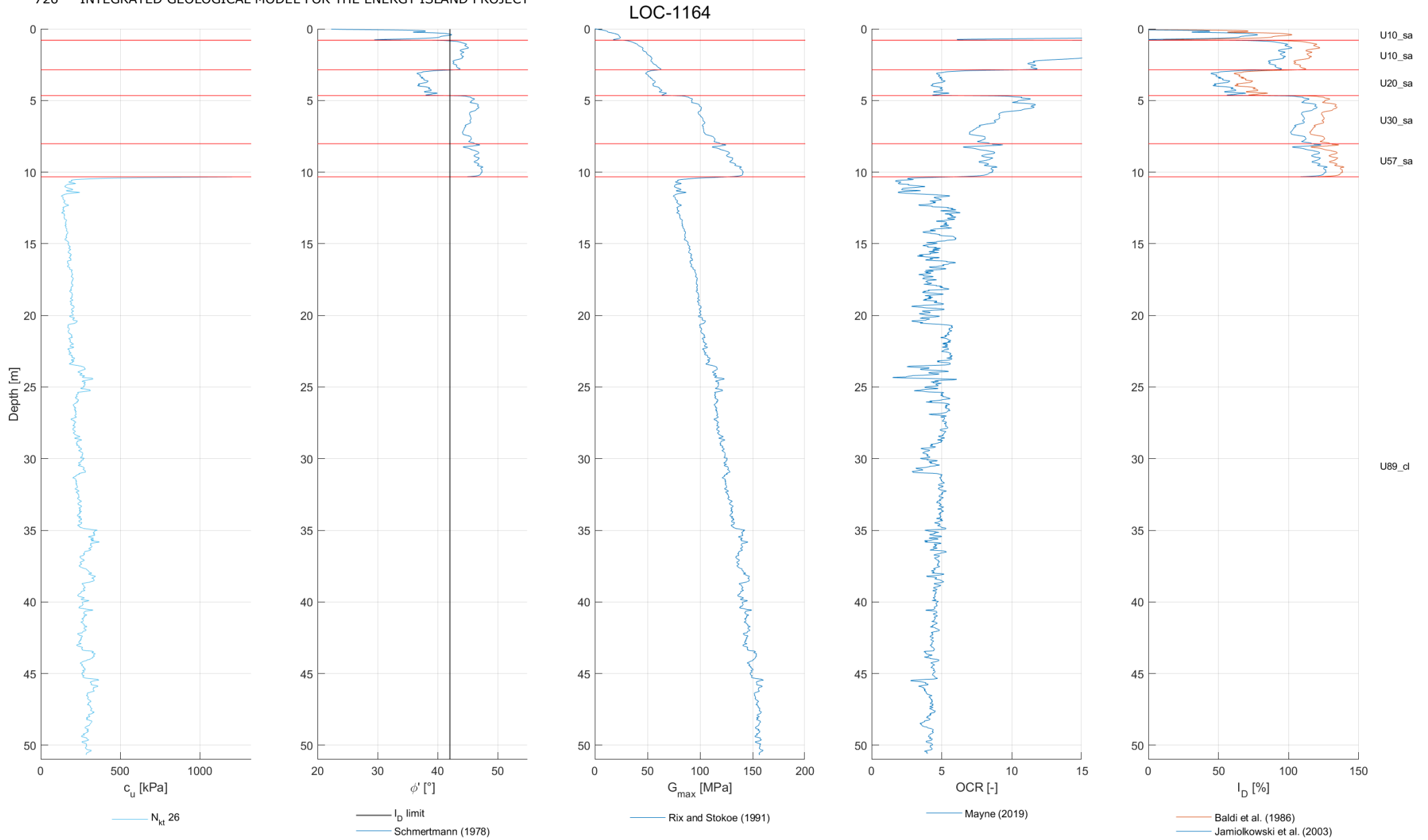
Rix and Stokoe (1991)

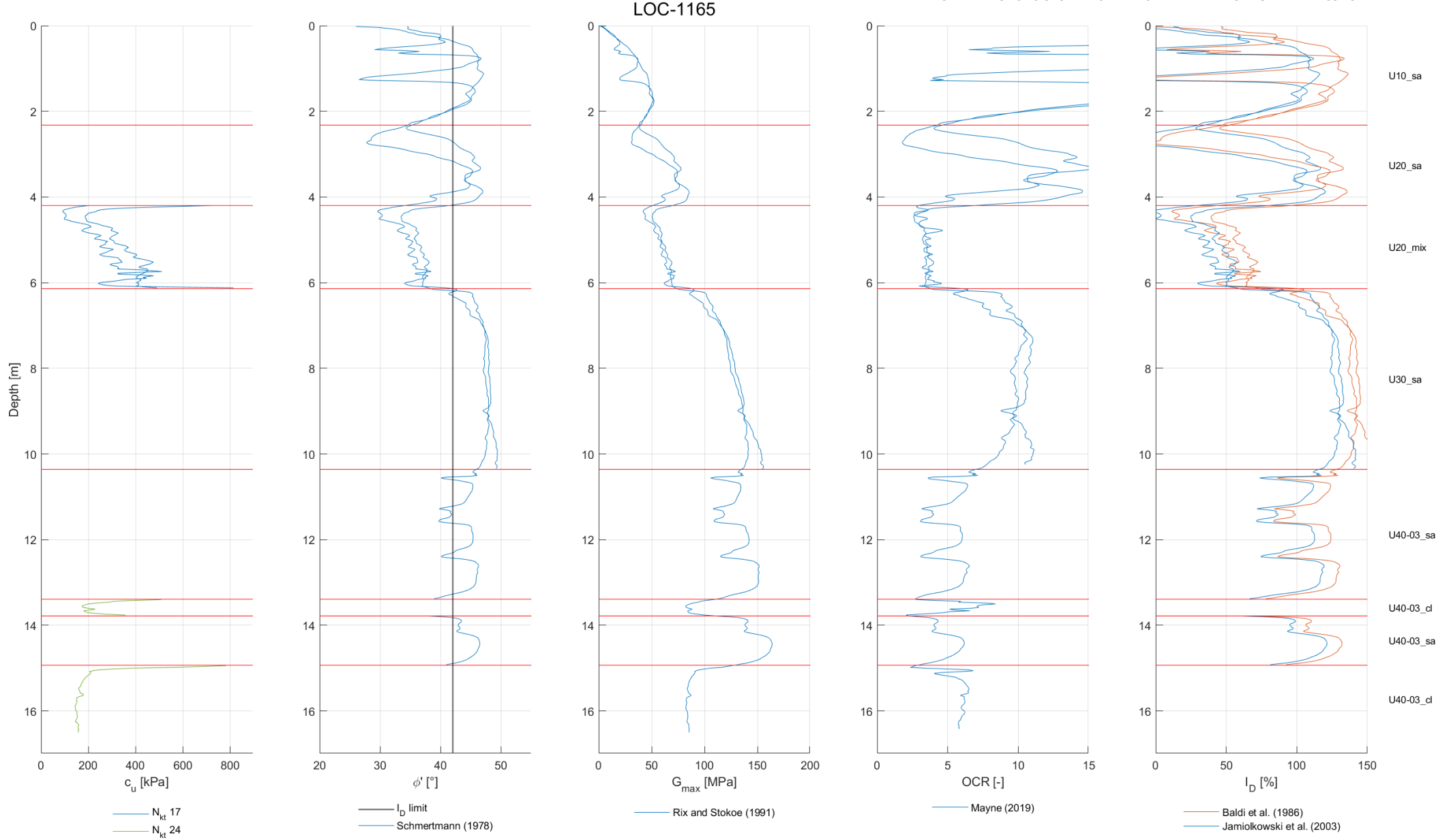


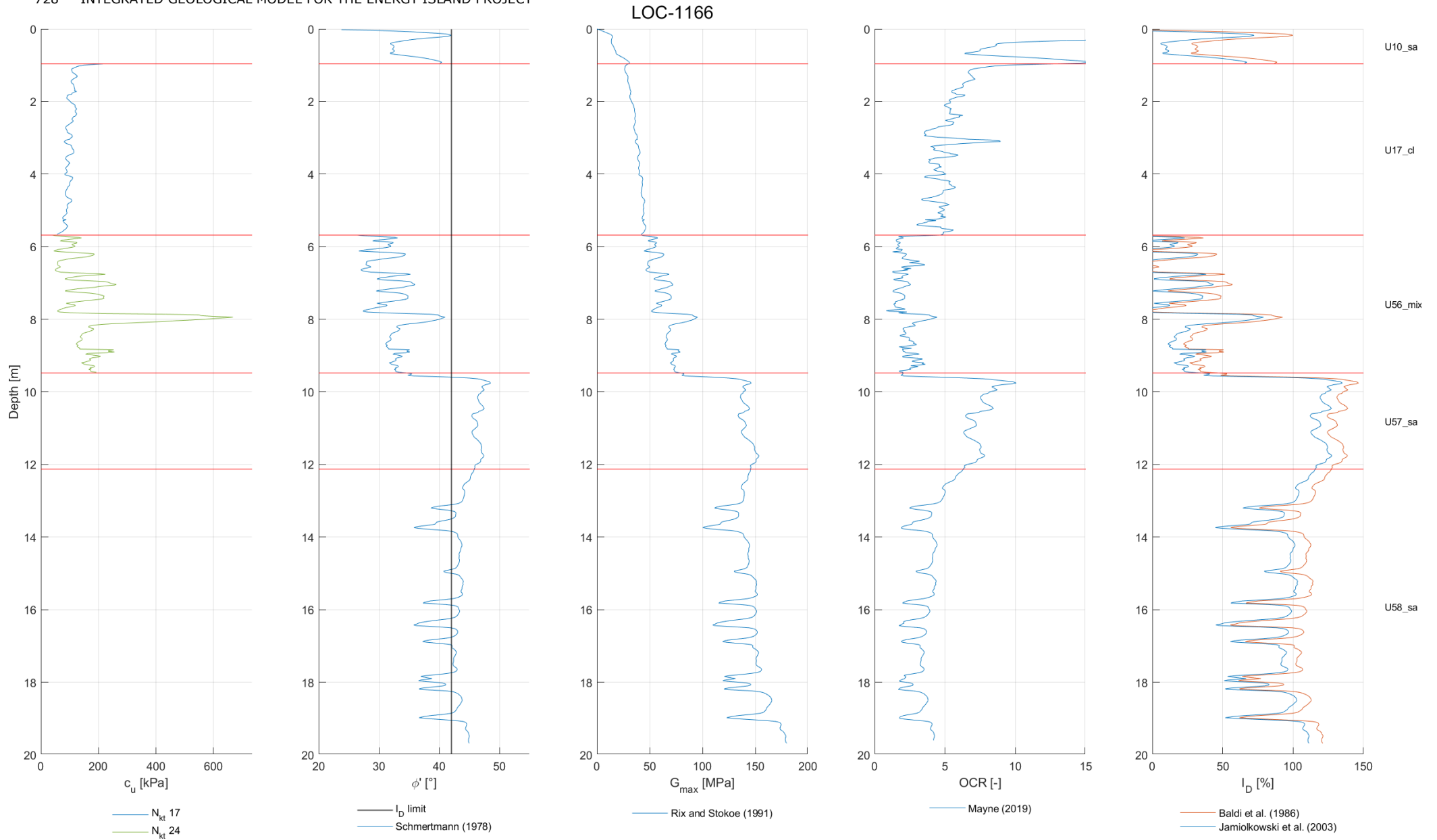
Mayne (2019)

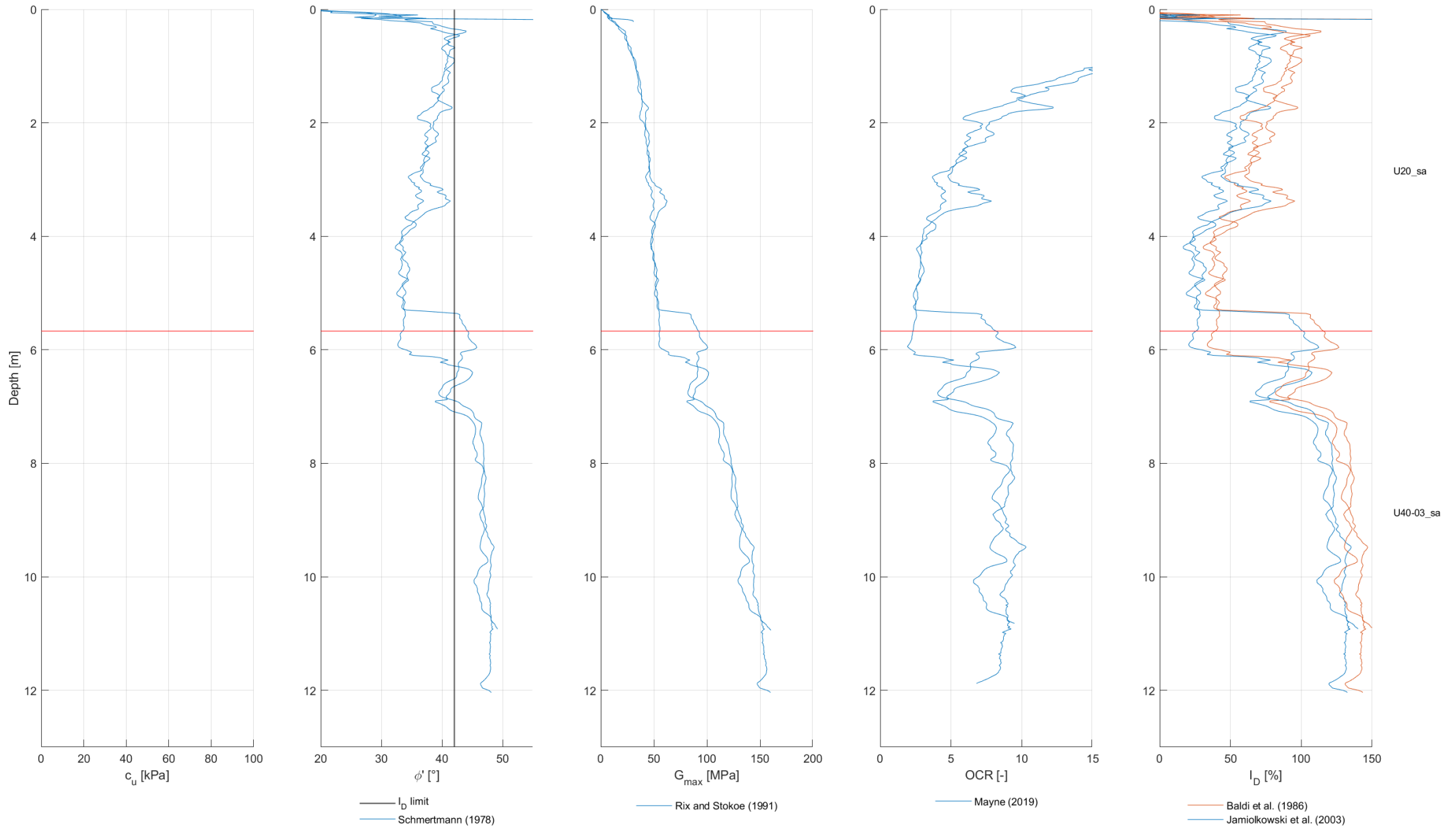


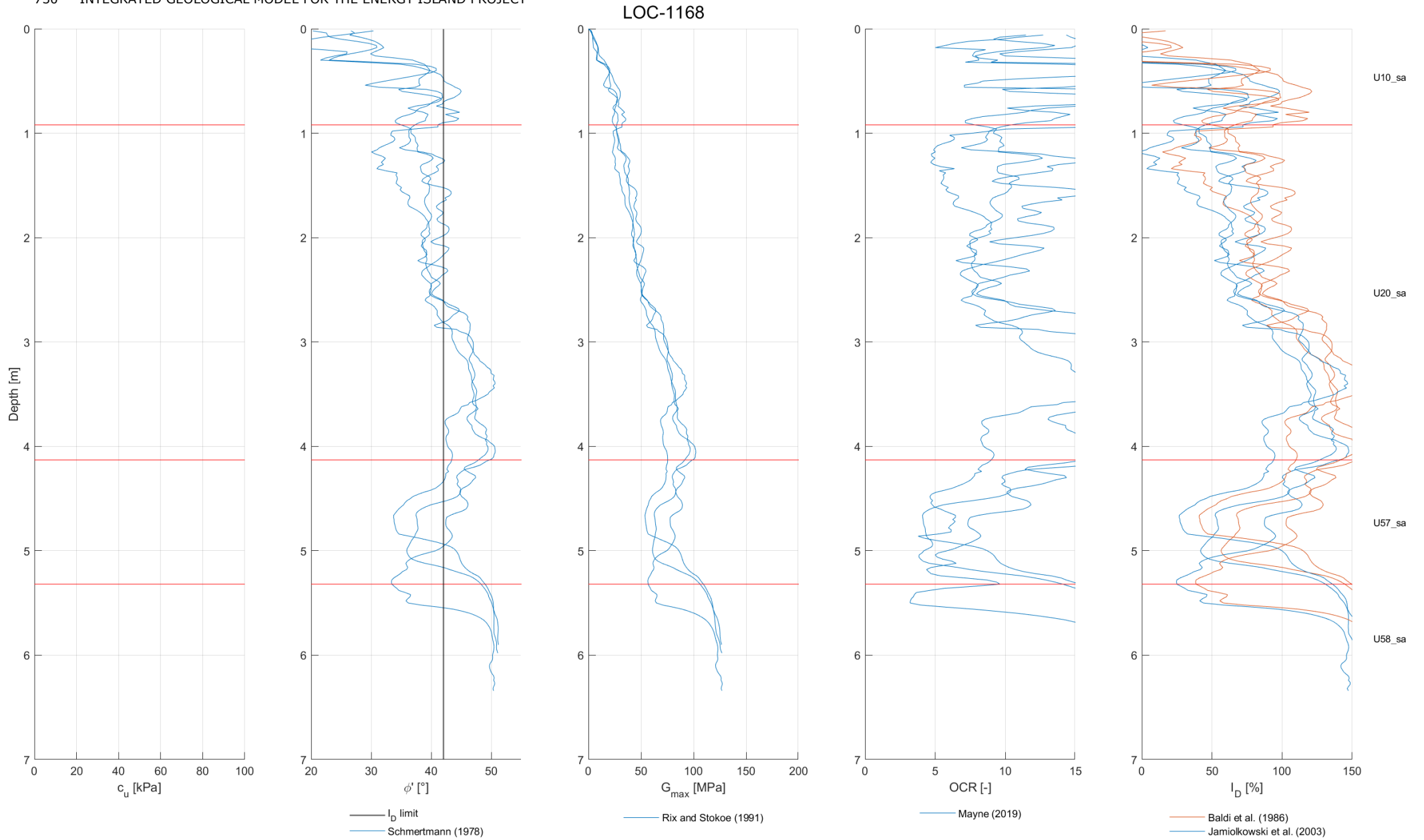
Baldi et al. (1986)
Jamiolkowski et al. (2003)



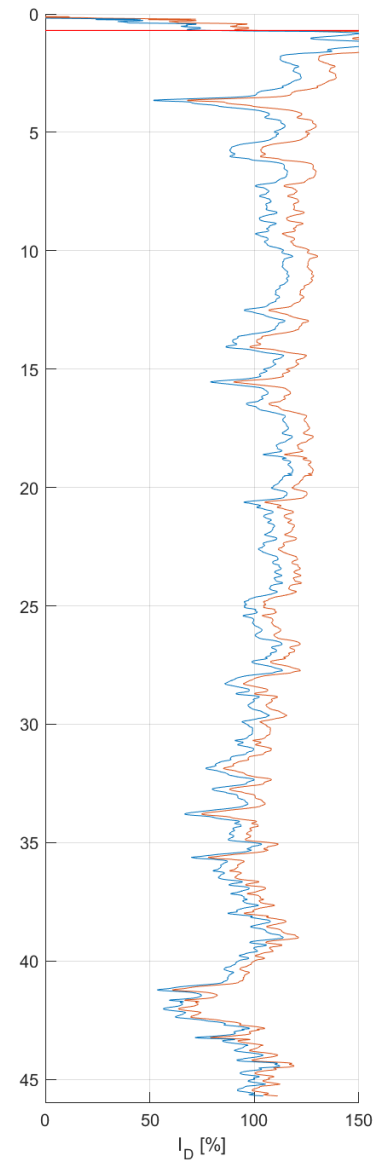
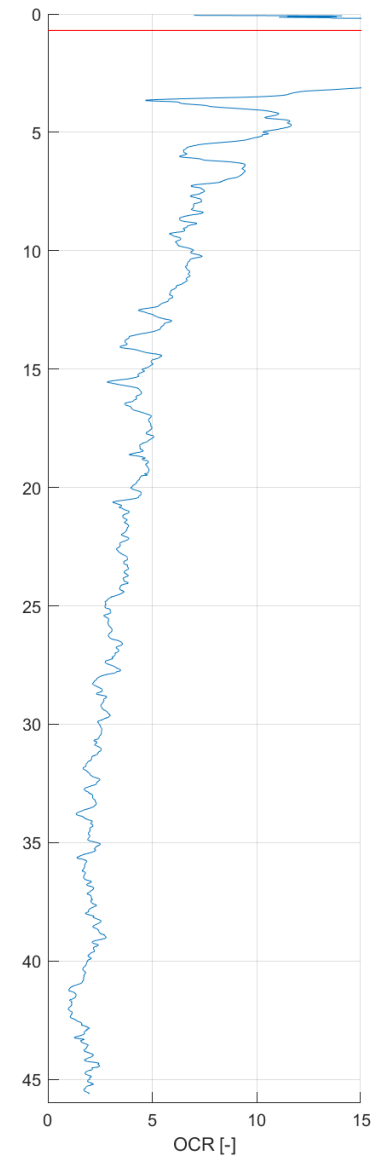
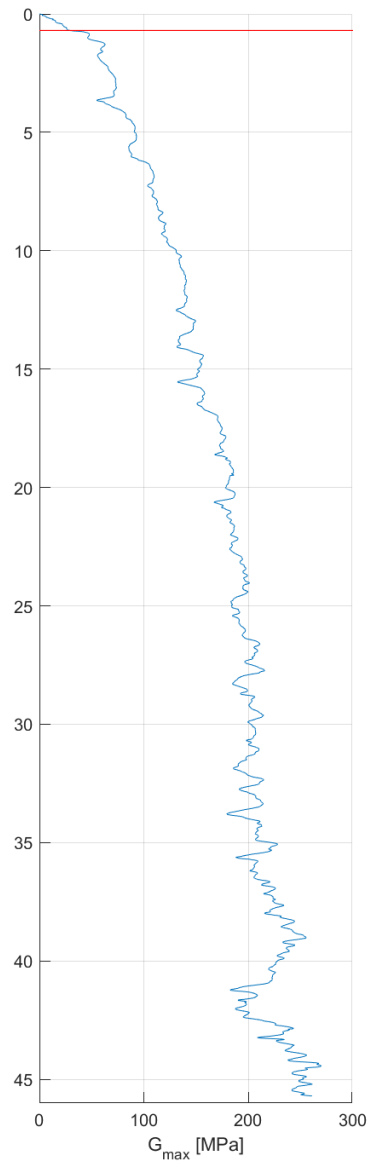
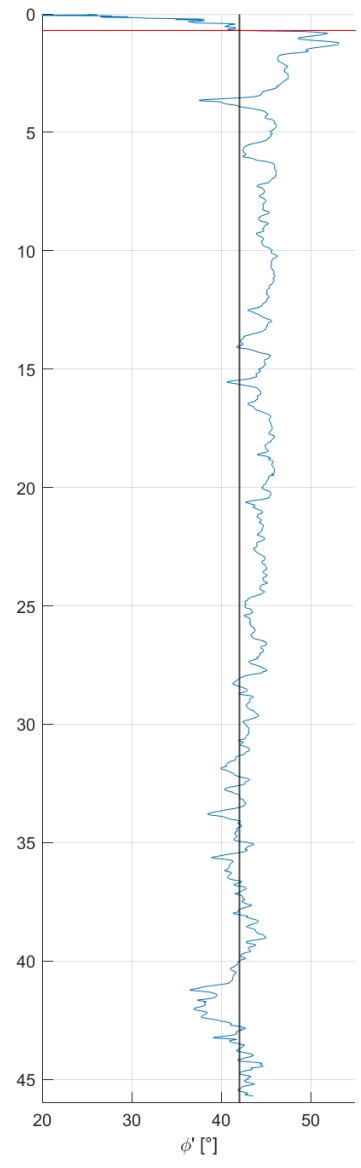
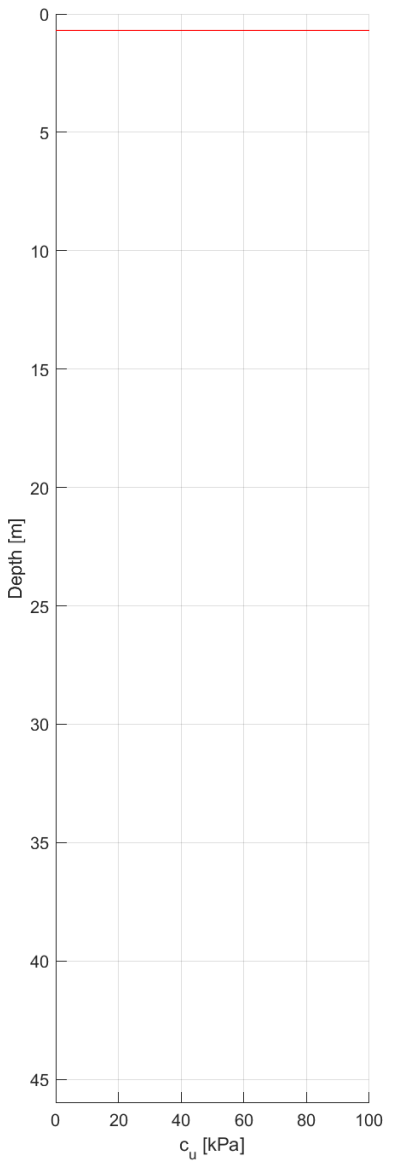








LOC-1169



— I_D limit
— Schmertmann (1978)

— Rix and Stokoe (1991)

— Mayne (2019)

— Baldi et al. (1986)
— Jamiolkowski et al. (2003)

U10_sa

U16_sa

