

## Supporting Information

**Wall W.A., Busby R. Bosche L.**, 2024. Vegetation predicts soil shear strength in Arctic Soils: Ground-based and remote sensing techniques. Ann. For. Res. 67(1): 155-166.

**Supplementary Table 1** Correlation matrix for ground-based and remotely sensed variables for 24 vegetation plots in interior Alaska.

	TotalTrees	AveDBH	TotalConifers	AveConiferDBH	TotalHardw oods	AveHardwoodDB	GraminoidCo ver_cat2	MossCover_ cat1	B1_MEAN	B2_MEAN	B3_MEAN	B4_MEAN	B5_MEAN	B6_MEAN	B7_MEAN	B8A_MEAN	B8_MEAN	B11_MEAN	B12_MEAN	Brightness	Greenness	NDVI_MEAN
TotalTrees		-0.17																				
AveDBH		0.6	-0.15																			
TotalConifers			0.59	0.39																		
AveConiferDBH		-0.05		-0.45	-0.49																	
TotalHardwoods		0.44	-0.03		-0.45																	
AveHardwoodDBH		-0.26	0.07	-0.65		-0.27	0.45															
GraminoidCover_cat2		-0.67	-0.35	-0.59		-0.41	-0.08	0.28														
MossCover_cat1		0.23	0.09	0.53		0.28	-0.34	-0.54	-0.57													
B1_MEAN		-0.85	0.04	-0.54		0.07	-0.33	0.18	0.57	-0.21												
B2_MEAN		-0.73	-0.1	-0.57		-0.26	-0.18	0.36	0.6	-0.29	0.8											
B3_MEAN		-0.46	-0.27	-0.6	-0.55		0.15	0.46	0.64	-0.43	0.48	0.79										
B4_MEAN		-0.37	-0.17	-0.57	-0.48	0.23	0.42	0.42	0.42	-0.29	0.47	0.77	0.87									
B5_MEAN		-0.25	-0.3	-0.54	-0.58	0.33	0.48	0.53	0.42	-0.42	0.27	0.59	0.94	0.81								
B6_MEAN		0.01	-0.21	-0.51	-0.52	0.58	0.57	0.35	0.48	0	0.24	0.69	0.53	0.85								
B7_MEAN		0.02	-0.18	-0.51	-0.5	0.6	0.58	0.34	-0.5	0	0.24	0.66	0.52	0.83	1							
B8A_MEAN		0.02	-0.21	-0.51	-0.52	0.59	0.57	0.34	-0.48	0.01	0.24	0.67	0.52	0.84	1	1						
B8_MEAN		0.08	-0.2	-0.48	-0.53	0.63	0.56	0.3	-0.48	-0.07	0.19	0.66	0.52	0.83	0.99	0.99	0.99					
B11_MEAN		-0.08	-0.3	-0.52	-0.56	0.5	0.49	0.42	-0.44	0.13	0.39	0.79	0.7	0.93	0.96	0.95	0.96	0.94				
B12_MEAN		-0.12	-0.29	-0.52	-0.54	0.45	0.47	0.42	-0.41	0.2	0.47	0.82	0.79	0.93	0.9	0.89	0.9	0.89	0.98			
Brightness		0	-0.21	-0.52	-0.53	0.59	0.57	0.36	-0.49	0.02	0.27	0.71	0.56	0.87	1	1	1	0.99	0.97	0.92		
Greenness		0.11	-0.18	-0.46	-0.49	0.64	0.56	0.27	-0.47	-0.1	0.13	0.58	0.44	0.78	0.99	0.99	0.99	0.99	0.92	0.85	0.99	
NDVI_MEAN		0.07	-0.23	-0.44	-0.48	0.58	0.58	0.33	-0.49	-0.12	0.12	0.59	0.39	0.77	0.97	0.97	0.97	0.97	0.89	0.81	0.97	0.98
Wetness_ME		-0.09	0.25	0.45	0.54	-0.61	-0.49	-0.28	0.42	0.05	-0.21	-0.66	-0.59	-0.85	-0.97	-0.97	-0.98	-0.98	-0.94	-0.98	-0.96	-0.93