

Interactive comment on “Quantifying soil and critical zone variability in a forested catchment through digital soil mapping” by M. Holleran et al.

M. Holleran et al.

casmuss@cals.arizona.edu

Received and published: 17 July 2014

Updated Table 5

Interactive comment on SOIL Discuss., 1, 1, 2014.

C35

Table 5. Correlation matrix of environmental covariates, principal components, and soil variables.

	Mod_Depth	Wet_Ind	Sol_Rad	Slope	NDVI	B3.B2	PC1	PC2	PC3	PC4	PC5	PC6	KCl-pH	Clay (%)	T _{so}	Soil Depth (cm)	Carbon (kg m ⁻²)	Clay (kg flux m ⁻²)	Na mass flux (kg m ⁻²)
Mod_Depth	1.00																		
Wet_Ind	0.73***	1.00																	
Sol_Rad	-0.13	0.09	1.00																
Slope	0.28	-0.03	-0.59**	1.00															
NDVI	-0.01	-0.10	-0.19	0.24	1.00														
B3.B2	0.07	0.17	-0.04	-0.07	0.17	1.00													
PC1	0.76***	0.54**	-0.58**	0.67***	0.35	0.31	1.00												
PC2	0.66***	0.77***	0.41*	-0.32	-0.37	-0.28	0.10	1.00											
PC3	-0.09	-0.20	-0.11	0.23	0.93***	-0.19	0.17	-0.30	1.00										
PC4	0.02	0.23	0.22	-0.39	0.35	0.89***	0.12	-0.11	0.05	1.00									
PC5	0.66***	0.24	0.16	0.44*	0.11	0.28	0.54**	0.19	0.00	0.14	1.00								
PC6	-0.31	0.30	0.01	0.12	0.00	-0.03	-0.02	-0.04	0.01	-0.02	-0.43*	1.00							
KCl-pH	0.38	0.16	-0.18	0.52**	0.19	-0.07	0.46*	0.05	0.19	-0.18	0.43*	-0.03	1.00						
Clay (%)	0.11	0.45*	-0.24	0.03	0.01	0.01	0.24	0.19	-0.03	0.03	-0.32	0.49*	0.22	1.00					
T _{so}	0.02	-0.25	0.19	-0.30	-0.03	-0.16	-0.26	0.09	0.04	-0.04	0.07	-0.56**	-0.14	-0.27	1.00				
Soil Depth (cm)	0.24	0.34	-0.23	0.05	-0.30	-0.10	0.19	0.28	-0.30	-0.18	-0.13	0.16	-0.17	0.16	-0.14	1.00			
Carbon (kg m ⁻²)	0.01	0.14	-0.36	0.05	-0.24	0.06	0.13	-0.01	-0.28	-0.06	-0.26	0.19	0.06	0.32***	-0.26	0.66***	1.00		
Clay (kg m ⁻²)	0.23	0.45*	-0.26	0.13	-0.19	0.09	0.31	0.21	-0.26	-0.01	-0.11	0.36	0.03	0.37	-0.25	0.89***	0.73***	1.00	
Na mass flux (kg m ⁻²)	0.03	-0.16	0.32	-0.44*	-0.01	-0.02	-0.28	0.15	0.02	0.15	0.09	-0.52**	-0.07	-0.27	0.62**	-0.38	-0.43*	-0.49*	1.00

Pairwise correlation coefficients
 Bold values are significant at P<0.05*, P<0.01**, P<0.001***, P<0.0001****

Fig. 1.

C36