

Table S1. Two-way ANOVA for testing the effects of geomorphologic setting and soil layer on contents of SOC

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	513.832 ^a	47	10.933	3.017	<0.001
Intercept	1297.570	1	1297.570	358.031	<0.001
Geomorphologic settings	243.711	2	121.856	33.623	<0.001
depth	53.026	15	3.535	0.975	0.487
Geom*depth	217.095	30	7.236	1.997	0.006
Error	347.922	96	3.624		
Total	2159.324	144			

^a R Square = 0.618 (Adjusted R Squared = 0.431), 3 replicates and 95% confidence level

Table S2. Two-way ANOVA for testing the effects of geomorphologic setting and soil layer on storages of SOC

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3734.817 ^a	47	79.656	4.651	.000
Intercept	18246.411	1	18246.411	1065	<0.001
Geomorphologic settings	1655.575	2	827.788	48.329	<0.001
depth	687.166	15	45.811	2.675	<0.01
Geom*depth	1401.076	30	46.703	2.727	<0.001
Error	1644.313	96	17.128		
Total	23634.541	144			

^a R Square = 0.695 (Adjusted R Squared = 0.545), 3 replicates and 95% confidence level.