

**Table S1.** Multi-collinearity test by using cross-correlations (Pearson correlation coefficients, r) among environmental variables.

	aspect	dem	slope	bio1	bio2	bio3	bio4	bio5	bio6	bio7	bio08	bio09	bio10	bio11	bio12	bio13	bio14	bio15	bio16	bio17	bio18	bio19
aspect	1																					
dem	-0.214	1																				
slope	-0.032	0.251	1																			
bio1	-0.025	-0.734	-0.321	1																		
bio2	0.081	0.216	0.478	-0.486	1																	
bio3	0.067	0.201	0.212	-0.313	0.713	1																
bio4	0.07	0.183	0.506	-0.516	0.9	0.406	1															
bio5	0.049	-0.672	0.06	0.693	0.231	0.031	0.256	1														
bio6	-0.061	-0.524	-0.479	<b>0.848</b>	<b>-0.869</b>	-0.553	<b>-0.858</b>	0.226	1													
bio7	0.084	0.183	0.503	-0.493	<b>0.972</b>	0.561	<b>0.974</b>	0.274	<b>-0.875</b>	1												
bio8	0.061	-0.634	0.089	0.651	0.259	0.068	0.252	<b>0.953</b>	0.186	0.29	1											
bio9	-0.023	-0.654	-0.487	<b>0.927</b>	-0.651	-0.364	-0.674	0.476	<b>0.915</b>	-0.667	0.418	1										
bio10	0.003	-0.762	-0.155	<b>0.913</b>	-0.176	-0.221	-0.135	<b>0.911</b>	0.597	-0.137	<b>0.848</b>	0.765	1									
bio11	-0.043	-0.594	-0.453	<b>0.925</b>	-0.746	-0.416	<b>-0.8</b>	0.371	<b>0.976</b>	-0.778	0.339	<b>0.947</b>	0.701	1								
bio12	-0.076	-0.155	-0.474	0.486	<b>-0.908</b>	-0.471	<b>-0.965</b>	-0.264	<b>0.837</b>	<b>-0.957</b>	-0.231	0.629	0.127	0.766	1							
bio13	-0.109	-0.117	-0.499	0.442	<b>-0.917</b>	-0.491	<b>-0.939</b>	-0.3	<b>0.818</b>	<b>-0.956</b>	-0.318	0.61	0.107	0.73	<b>0.969</b>	1						
bio14	-0.108	-0.251	-0.501	0.534	<b>-0.863</b>	-0.51	<b>-0.813</b>	-0.098	<b>0.831</b>	<b>-0.869</b>	-0.177	0.698	0.288	0.746	<b>0.817</b>	<b>0.895</b>	1					
bio15	0.075	0.407	0.478	-0.723	<b>0.91</b>	0.608	<b>0.872</b>	-0.07	<b>-0.953</b>	<b>0.905</b>	-0.05	<b>-0.811</b>	-0.457	<b>-0.897</b>	<b>-0.897</b>	-0.884	<b>-0.866</b>	1				
bio16	-0.079	-0.081	-0.467	0.409	<b>-0.879</b>	-0.416	<b>-0.96</b>	-0.345	0.781	<b>-0.942</b>	-0.305	0.562	0.038	0.709	<b>0.994</b>	0.966	0.787	<b>-0.85</b>	1			
bio17	-0.115	-0.252	-0.505	0.542	<b>-0.915</b>	-0.579	<b>-0.852</b>	-0.124	<b>0.863</b>	<b>-0.913</b>	-0.192	0.708	0.28	0.768	<b>0.871</b>	0.938	<b>0.978</b>	-0.908	<b>0.841</b>	1		
bio18	-0.06	-0.058	-0.428	0.375	<b>-0.845</b>	-0.391	<b>-0.941</b>	-0.364	0.74	<b>-0.912</b>	-0.291	0.516	-0.004	0.674	<b>0.98</b>	0.918	0.703	-0.813	0.988	0.765	1	
bio19	-0.113	-0.251	-0.503	0.538	<b>-0.915</b>	-0.581	<b>-0.849</b>	-0.126	<b>0.86</b>	<b>-0.912</b>	-0.195	0.704	0.276	0.764	<b>0.869</b>	0.936	<b>0.978</b>	-0.907	0.839	1	0.762	

Correlations were significant at  $p<0.05$  (calculated by statistic software, SPSS 20.0). Two variables with coefficient  $>|0.8|$  were noted in bold.