

**Supplementary File 4:** Results obtained from fitting the three models in the second logistic regression analysis.

	<b>Models</b>	<b>Residual deviance</b>	<b>Deviance change</b>	<b>df</b>	<b>df change</b>	<b>P</b>
<b>Model 1</b>	Null	249.25		268		
	+ Age	139.94	109.313	267	1	<0.0001
	+ Precipitation	137.17	2.767	266	1	0.0962
	+Topography	134.55	2.624	265	1	0.1052
	+Age*Topography	133.25	1.297	264	1	0.2548
	+ Precipitation*Topography	133.07	0.179	263	1	0.6725
	+ Age*Precipitation	113.06	20.013	262	1	<0.0001
<b>Model 2</b>	Null	249.25		268		
	+ (-1/Age)	122.00	127.251	267	1	<0.0001
	+ Precipitation	118.27	3.730	266	1	0.0534
	+Topography	115.18	3.092	265	1	0.0786
	+ (-1/Age)*Topography	112.08	3.101	264	1	0.0782
	+ Precipitation*Topography	112.07	0.007	263	1	0.9326
<b>Model 3</b>	Null	249.25		268		
	+ (-1/√Age)	123.90	125.354	267	1	<0.0001
	+ Precipitation	119.55	4.352	266	1	0.0370
	+Topography	116.43	3.112	265	1	0.0777
	+ (-1/√Age)*Topography	114.03	2.402	264	1	0.1212
	+Precipitation*Topography	114.02	0.011	263	1	0.9165
	+ (-1/√Age)*Precipitation	110.19	3.828	262	1	0.0504

*“Absence/ Presence” was considered as the response variable and “Age”, “Precipitation”, “Topography” and their interactions as predictor variables.*