

Details of multiple regression models results for the relationships between NRE, PRE, NRE:PRE and environmental factors (Latitude (LAT, °), mean annual precipitation (MAT, °C) and mean annual precipitation (MAP, mm)), respectively.

Equations and R^2 and P values describe the explanatory power of each model.

Group	Equation	R^2	P
NRE			
All data	$y=1.56091+0.0036\text{Lat}$	0.063	<0.0001
	$y=1.74165-0.0047\text{MAT}$	0.039	<0.0001
	$y=1.74711-0.0000609\text{MAP}$	0.054	<0.0001
	$y=1.7205+0.283461\text{Lat}-0.038019\text{MAT}-0.002754\text{MAP}$	0.106	<0.0001
Graminoids	$y=1.63377+0.00225\text{Lat}$	0.052	0.037
	$y=1.77788-0.00776\text{MAT}$	0.073	<0.0001
	$y=1.77679-0.0000865\text{MAP}$	0.038	0.002
	$y=1.525405+0.025707\text{Lat}-0.569069\text{MAT}-0.00372\text{MAP}$	0.059	0.004
Forbs	$y=1.53428+0.00401\text{Lat}$	0.088	<0.0001
	$y=1.71494-0.00297\text{MAT}$	0.017	0.014
	$y=1.72878-0.0000519\text{MAP}$	0.055	<0.0001
	$y=1.881503+0.547313\text{Lat}+0.455467\text{MAT}-0.00249\text{MAP}$	0.145	<0.0001
Monocots	$y=1.52058+0.00431\text{Lat}$	0.069	<0.0001
	$y=1.70834-0.0015\text{MAT}$	0.002	0.337
	$y=1.73544-0.0000621\text{MAP}$	0.048	<0.0001
	$y=1.923174+0.090165\text{Lat}-0.612721\text{MAT}-0.000192\text{MAP}$	0.102	<0.0001
Eudicots	$y=1.58939+0.00319\text{Lat}$	0.058	<0.0001
	$y=1.77276-0.0071\text{MAT}$	0.105	<0.0001
	$y=1.76133-0.0000623\text{MAP}$	0.060	<0.0001

	$y=1.039314+0.514526\text{Lat}+0.47502\text{MAT}-0.00428\text{MAP}$	0.133	<0.0001
PRE			
All data	$y=1.67742+0.00278\text{Lat}$	0.076	<0.0001
	$y=1.82743-0.00434\text{MAT}$	0.059	<0.0001
	$y=1.82165-0.0000405\text{MAP}$	0.055	<0.0001
	$y=1.463987+0.256038\text{Lat}-0.152148\text{MAT}-0.000796\text{MAP}$	0.189	<0.0001
Graminoids	$y=1.71335+0.00248\text{Lat}$	0.062	0.001
	$y=1.86398-0.00611\text{MAT}$	0.119	<0.0001
	$y=1.85218-0.0000485\text{MAP}$	0.041	0.007
	$y=1.716721+0.150796\text{Lat}-0.743164\text{MAT}+0.001219\text{MAP}$	0.134	<0.0001
Forbs	$y=1.67729+0.00234\text{Lat}$	0.049	<0.0001
	$y=1.79375-0.00275\text{MAT}$	0.020	0.023
	$y=1.79524-0.0000323\text{MAP}$	0.040	0.002
	$y=1.998607+0.384289\text{Lat}+0.592512\text{MAT}-0.003873\text{MAP}$	0.088	0.0003
Monocots	$y=1.55926+0.00504\text{Lat}$	0.162	<0.0001
	$y=1.82846-0.00765\text{MAT}$	0.116	<0.0001
	$y=1.82004-0.0000743\text{MAP}$	0.162	<0.0001
	$y=1.072710+0.211078\text{Lat}-0.582170\text{MAT}+0.005599\text{MAP}$	0.083	0.001
Eudicots	$y=1.74055+0.00176\text{Lat}$	0.042	0.003
	$y=1.83857-0.00304\text{MAT}$	0.039	0.004
	$y=1.82611-0.0000174\text{MAP}$	0.008	0.119
	$y=1.487155+0.439232\text{Lat}+0.141750\text{MAT}-0.005656\text{MAP}$	0.251	<0.0001
NRE:PRE			
All data	$y=-0.69622+0.00367\text{Lat}$	0.041	<0.0001
	$y=-0.89795-0.00613\text{MAT}$	0.040	<0.0001
	$y=0.8697-0.0000288\text{MAP}$	0.022	0.003
	$y=0.7126+0.00346\text{Lat}-0.00631\text{MAT}+0.005972\text{MAP}$	0.124	<0.0001

Graminoids	$y=0.675212+0.00327\text{Lat}$	0.016	0.065
	$y=0.871558-0.00767\text{MAT}$	0.035	0.011
	$y=0.859-0.0000649\text{MAP}$	0.003	0.226
	$y=0.7986+0.001455\text{Lat}-0.006107\text{MAT}-0.0000048\text{MAP}$	0.026	0.263
Forbs	$y=0.680155+0.00484\text{Lat}$	0.090	<0.0001
	$y=0.931163-0.00677\text{MAT}$	0.066	0.0001
	$y=0.894-0.00003\text{MAP}$	0.019	0.027
	$y=0.579+0.006801\text{Lat}-0.005365\text{MAT}+0.00008941\text{MAP}$	0.095	0.0002
Monocots	$y=0.640453+0.00426\text{Lat}$	0.017	<0.05
	$y=0.890308-0.0089\text{MAT}$	0.001	0.407
	$y=0.89722-0.0000745\text{MAP}$	0.014	0.268
	$y=0.8294+0.00122\text{Lat}-0.008635\text{MAT}+0.00001656\text{MAP}$	0.083	0.001
Eudicots	$y=0.791646+0.00222\text{Lat}$	0.052	0.001
	$y=0.883745-0.00548\text{MAT}$	0.072	0.0001
	$y=0.8536-0.0000414\text{MAP}$	0.034	0.007
	$y=0.5665+0.006125\text{Lat}-0.000483\text{MAT}-0.0000866\text{MAP}$	0.251	<0.0001

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