

Table S2. Statistical values of correlations and regressions between environmental parameters Monthly average temperature (Tme), Monthly average maximum temperature (Tma), Monthly average minimum temperature (Tmi), Monthly average solar radiation (Ras) and the dependent variables Specific richness (Rsm), Abundance (Asm) and Diversity index (Shannon_H'Ex). Monthly values are analysed jointly for the three years (N=36) and for each year separately (N=12). The best-fit polynomial regression function with the lowest Akaike Information Criterion (AIC) value is shown.

Parameters	Rsm 2017-2019	Rsm 2017	Rsm 2018	Rsm 2019	Asm 2017-2019	Asm 2017	Asm 2018	Asm 2019	Shannon H'Ex 2017-2019	Shannon_H'Ex 2017	Shannon_H'Ex 2018	Shannon_H'Ex 2019
Tme												
Pearson	0.79	0.77	0.90	0.83	0.74	0.74	0.78	0.81	0.79	0.72	0.92	0.80
p	0.0000000086	0.0034953	0.000083336	0.00078338	0.00000024421	0.0058299	0.0025817	0.0013487	0.0000000110	0.0079361	0.0000232	0.0016136
Regression	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1								
AIC	5.79	4.73	4.23	4.54	7.11	5.17	4.63	4.84	5.42	4.63	4.15	4.50
R ²	0.63	0.59	0.80	0.69	0.55	0.55	0.61	0.66	0.62	0.52	0.85	0.65
F	57.28	14.43	40.34	22.54	41.26	12.18	15.88	19.30	56.03	10.93	54.74	18.311
p	0.0000000086	0.0034953	0.000083336	0.00078338	0.0000002442	0.0058299	0.0025817	0.0013487	0.0000000110	0.0079361	0.0000232	0.0016136
Tma												
Pearson	0.76	0.75	0.88	0.83	0.70	0.71	0.76	0.80	0.77	0.71	0.92	0.81
p	0.0000000673	0.0047723	0.00013029	0.00094395	0.0000017155	0.0096432	0.004512	0.0017073	0.00035252	0.0091767	0.00001985	0.0013407
Regression	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1								
AIC	6.01	4.77	4.25	4.56	7.48	5.29	4.70	4.88	5.52	4.64	4.15	4.48
R ²	0.58	0.57	0.78	0.68	0.49	0.50	0.57	0.64	0.60	0.51	0.85	0.66
F	47.06	13.03	36.13	21.39	33.29	10.18	13.27	18.01	50.15	10.37	56.76	19.34
p	0.0000000673	0.0047723	0.00013029	0.00094395	0.0000017155	0.0096432	0.004512	0.0017073	0.00035252	0.0091767	0.00001985	0.0013407
Tmi												
Pearson	0.80	0.78	0.90	0.80	0.76	0.76	0.81	0.78	0.78	0.72	0.91	0.76
p	0.0000000066	0.0030039	0.000057886	0.0018382	0.0000000953	0.0037909	0.0013818	0.0026055	0.000000024621	0.0079966	0.000049619	0.0042263
Regression	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1								
AIC	5.76	4.71	4.21	4.64	6.95	5.08	4.56	4.95	5.48	4.63	4.18	251.21
R ²	0.63	0.60	0.82	0.64	0.57	0.58	0.66	0.61	0.60	0.52	0.82	0.58
F	58.70	15.14	44.08	17.61	45.45	14.05	19.17	15.83	51.91	10.90	45.74	13.55
p	0.0000000066	0.0030039	0.000057886	0.0018382	0.0000000953	0.0037909	0.0013818	0.0026055	0.000000024621	0.0079966	0.000049619	0.0042263
Ras												
Pearson	0.75	0.72	0.81	0.78	0.72	0.70	0.76	0.77	0.74	0.68	0.81	0.76
p	0.0000001117	0.0078665	0.0012994	0.0029444	0.0000006276	0.011838	0.0039363	0.0034095	0.00000026318	0.014826	0.0017037	0.0045032
Regression	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1	Polynomial Order 1								
AIC	6.10	4.85	4.39	4.70	7.29	5.34	4.69	5.00	5.70	4.70	4.35	4.60
R ²	0.57	0.52	0.66	0.60	0.52	0.49	0.58	0.59	0.55	0.46	0.64	0.57
F	44.73	10.96	19.51	15.24	37.28	9.43	13.88	14.54	40.94	8.63	18.02	13.28
p	0.0000001117	0.0078665	0.0012994	0.0029444	0.0000006276	0.011838	0.0039363	0.0034095	0.00000026318	0.014826	0.0017037	0.0045032