

**Table S2.** Latitudinal patterns of variation of average annual temperature and precipitation (second-order polynomial regressions), and relationships between earwig diversity (residuals from the species–area relationships; Tables 1-3) and precipitation (linear regressions).  $r^2$  = coefficient of determination, F = Fisher’s F, p = probability.

<b>Model</b>	<b>Equation</b>	<b><math>r^2</math></b>	<b>F</b>	<b>p</b>
Global relationship between temperature and latitude	$y = 25.390 - 0.008x^2 + 0.022x$	0.839	359.380	$1.93 \times 10^{-55}$
Global relationship between rainfall and latitude	$y = 1437.900 - 0.181x^2 - 5.275x$	0.144	11.557	$2.29 \times 10^{-5}$
Global relationship between temperature and diversity (mainlands and islands)	$y = -0.301 + 0.017x$	0.097	14.872	0.0002
Global relationship between rainfall and diversity (mainlands and islands)	$y = -0.317 + 0.0003x$	0.241	44.057	$6.60 \times 10^{-10}$
Relationship between rainfall and diversity in the North Hemisphere (mainlands and islands)	$y = -0.282 + 0.0003x$	0.200	27.792	$6.74 \times 10^{-7}$
Relationship between rainfall and diversity in the South Hemisphere (mainlands and islands)	$y = -0.330 + 0.0002x$	0.268	9.516	0.005
Global relationship between rainfall and diversity (mainlands)	$y = -0.324 + 0.0003x$	0.270	40.727	$4.27 \times 10^{-9}$
Relationship between rainfall and diversity in the North Hemisphere (mainlands)	$y = -0.274 + 0.0003x$	0.233	27.00	$1.28 \times 10^{-6}$
Relationship between rainfall and diversity in the South Hemisphere (mainlands)	$y = -0.499 + 0.0004x$	0.348	10.128	0.005
Global relationship between rainfall and diversity (islands)	$y = -0.372 + 0.0002x$	0.154	4.924	0.035
Relationship between rainfall and diversity in the North Hemisphere (islands)	$y = -0.468 + 0.0003x$	0.181	4.417	0.049
Relationship between rainfall and diversity in the South Hemisphere (islands)	$y = 0.002 - 6 \times 10^{-7}x$	$2.10 \times 10^{-5}$	0.0001	0.992