**Table 1** Multivariate models, restricted to land-only cells (110 km grain size, standardized data; see Fig. 4 for graphics, ES4 for inclusion of all cells ≥20% land). Ordinary least squares (OLS) as well as spatial explicit simultaneous autoregressive (SAR) models were fitted.

|  |  |  |
| --- | --- | --- |
|  | OLS: R2adj = 0.778; AIC = 8237.1 | SAR: R2pseudo = 0.923; AIC = 1863.1 |
| N = 6312 cells | Coefficient±SE | t | p | Coefficient±SE | z | p |
| Intercept | 0.014±0.010 | 1.38 | 0.167 | -2.470±2.411 | -1.03 | 0.306 |
| AET | 0.665±0.008 | 87.05 | <0.001 | 0.399±0.007 | 55.87 | <0.001 |
| Temperature | 0.174±0.008 | 20.83 | <0.001 | 0.096±0.015 | 6.49 | <0.001 |
| TopoRange | 0.198±0.006 | 31.25 | <0.001 | 0.125±0.005 | 25.49 | <0.001 |
| *Palaearctic* | 0\* |  |  | 0\* |  |  |
| *Afrotropics* | 0.262±0.021 | 12.20 | <0.001 | 0.660±0.027 | 24.23 | <0.001 |
| *Indomalaya* | 0.353±0.028 | 12.55 | <0.001 | -0.009±0.030 | -0.30 | 0.763 |
| *Australasia* | -0.803±0.025 | -32.70 | <0.001 | 16.720±8.105 | 2.06 | 0.039 |

\*) by default