# Supplementary Information

**Table S1.** Pearson's correlation coefficients (r) to analyze the relationships between main diet categories (EltonTraits 1.0 database, <https://doi.org/10.6084/m9.figshare.c.3306933.v1>) and main dietary strategies of 4854 extant terrestrial mammals (i.e., score values of first four PCoA axes). PCoA axes with correlation coefficients greater than 0.5 are in bold, and jointly explain 90% of the total variance in dietary strategies (% explained by each PCoA axis in the table).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Diet categories | Correlations | | | |
| Axis 1 | Axis 2 | Axis 3 | Axis 4 |
| 49.94% | 22.70% | 10.90% | 6.56% |
| Invertebrates | **-0.91** | -0.29 | 0.00 | -0.20 |
| Mammals/Birds | -0.05 | 0.08 | 0.14 | **0.84** |
| Reptiles/Amphibians | -0.20 | -0.01 | 0.10 | 0.38 |
| Fish | -0.04 | 0.02 | 0.04 | 0.15 |
| Vertebrates | -0.04 | 0.08 | 0.01 | 0.06 |
| Carrion | -0.29 | -0.08 | 0.05 | 0.19 |
| Fruits | 0.21 | **0.89** | 0.25 | -0.21 |
| Nectar | -0.03 | 0.20 | 0.14 | 0.09 |
| Seeds | 0.29 | 0.20 | **-0.92** | 0.05 |
| Plants | **0.83** | -0.49 | 0.15 | -0.10 |

**Table S2.** List of bioclimatic variables extracted from WorldClim version 2.1 climate data (<https://www.worldclim.org/data/worldclim21.html>) to analyze the relationship between climate and dietary strategies of terrestrial mammals (four first PCoA axes). These 19 bioclimatic variables (bio 10m) are averages of monthly values of temperature and precipitation between the years 1970-2000, and represent annual trends (annual mean temperature, annual precipitation), seasonality (annual range of temperature and precipitation), and extreme or limiting conditions (temperature of the coldest and warmest month, and precipitation of the wettest and the driest month). The four variables selected by the regression tree models and included in the GLMz analyses are shown in bold.

|  |  |
| --- | --- |
| Variable name | Variable explanation |
| BIO1 | Annual Mean Temperature |
| BIO2 | Mean Diurnal Range (Mean of monthly (max temp - min temp)) |
| BIO3 | Isothermality (BIO2/BIO7) (×100) |
| BIO4 | Temperature Seasonality (standard deviation ×100) |
| **BIO5** | Max Temperature of Warmest Month |
| **BIO6** | Min Temperature of Coldest Month |
| BIO7 | Temperature Annual Range (BIO5-BIO6) |
| BIO8 | Mean Temperature of Wettest Quarter |
| BIO9 | Mean Temperature of Driest Quarter |
| BIO10 | Mean Temperature of Warmest Quarter |
| BIO11 | Mean Temperature of Coldest Quarter |
| **BIO12** | Annual Precipitation |
| BIO13 | Precipitation of Wettest Month |
| **BIO14** | Precipitation of Driest Month |
| BIO15 | Precipitation Seasonality (Coefficient of Variation) |
| BIO16 | Precipitation of Wettest Quarter |
| BIO17 | Precipitation of Driest Quarter |
| BIO18 | Precipitation of Warmest Quarter |
| BIO19 | Precipitation of Coldest Quarter |